



Charter Schools Institute

The State University of New York

Proposal Transmittal Form

1. School Information

Proposed Name of Charter School

Proposed Location (School District or CSD & Region for NYC)

Enter Planned Enrollment & Grades	Grades Served	Proposed Enrollment
Year 1	K-2	108
Year 2	K-3	144
Year 3	K-4	180
Year 4	K-5	216
Year 5	K-6	252

Desired School Opening Date Desired Initial Charter Term

2. Proposed Affiliations

Educational Service Provider or Management Company (if any)

Public Contact Info (Name & Phone #)

Partner Organization (if any)

Public Contact Info (Name & Phone #)

3. Lead Applicant Contact Information

Lead Applicant Name

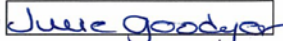
Mailing Address

City State Zip Code

E-Mail Address Home Phone #

Cell Phone # Office Phone # Office Fax #

Lead Applicant Media/Public Contact Phone # (required)

Lead Applicant Signature 

Note: Authenticated Digital Signatures accepted. If a handwritten signature is used, at least one copy of the submitted proposal must bear an original (e.g., not photocopied) signature. By signing this Proposal Transmittal Form, the Lead Applicant certifies that the information contained in this Proposal to establish a charter school pursuant to the New York Charter Schools Act of 1998 (as amended) with the State University of New York Board of Trustees is true and accurate to the best of his or her knowledge.

Submit Completed Proposal to:

Charter Schools Institute
State University of New York
41 State Street, Suite 700
Albany, New York 12207

Phone: (518) 433-8277

Fax: (518) 427-6510

Web: www.newyorkcharters.org

FOR OFFICIAL USE ONLY: Received By: Date Received

B. Proposal Summary

Complete the electronic copy of the Proposal Summary Form pictured below, which can be found at link to the Institute's website:

<http://www.newyorkcharters.org/documents/ProposalSummaryForm.pdf>



Charter Schools Institute

The State University of New York

Proposal Summary Form

1. Charter School Name

Icahn Charter School 7

2. Charter School Location

CSD 9, Bronx, New York

3. Anticipated Opening Date

September 2011

4. Management Organization Name (if applicable)

5. Other Partner Organization(s) (if applicable)

Foundation for a Greater Opportunity

6. Student Population and Grades Served

	School Year	Grades Served	Total Enrollment
Year 1	2012-2013	K-2	108
Year 5	2016-2017	K-6	252

7. Applicant(s)

	Name	Bio
X	Julie Goodyear	Ms. Goodyear is the Executive Director of Foundation for a Greater Opportunity, prior to which she worked at Choate Rosemary Hall. She has been the applicant and is on the Boards of Icahn Charter Schools 1, 2, 3, 4 and 5. She received her B.A. from NYU and her M. A. from Wesleyan University.
X	Gail Golden	Ms. Golden is a member of the boards of Icahn Charter Schools 1, 2, 3, 4 and 5 and the Foundation for a Greater Opportunity. She graduated from New York University with a Degree in International Studies.

Add New Applicant

8. Proposed Board of Trustees

	Name	Bio

X	Carl Icahn	Carl C. Icahn grew up in Bayswater, Queens, where he attended Far Rockaway High School. He is a graduate of Princeton University, with a degree in Philosophy and is a recipient of Princeton's John Guthrie McCosh Award in Philosophy. He is on the Boards of Icahn Charter Schools 1, 2, 3, 4 and 5.
X	Gail Golden	Ms. Golden is a member of the boards of Icahn Charter Schools 1, 2, 3, 4 and 5 and the Foundation for a Greater Opportunity. She graduated from New York University with a Degree in International Studies. Since 1978, Gail Golden has served in various capacities at Icahn & Co., Inc., as a registered representative and a member of the National Association of Securities Dealers, including positions as Director of Public and Investor Relations and Director of Human Resources. Ms. Golden has served as Vice President of Administration of Icahn Associates Corp., a privately owned holding company, since May 1985. She has also served as Chief Executive Officer of Lowestfare.com, Maupintour Travel and Gutsy Women Travel, the last of which was sold in December 2005.
X	Julie Goodyear	Ms. Goodyear is the Executive Director of Foundation for a Greater Opportunity, prior to which she worked at Choate Rosemary Hall. She has been the applicant and is on the Boards of Icahn Charter Schools 1, 2, 3, 4 and 5. She is on the Executive Committee of the New York City Coalition of Charter Schools. She received her B.A. from NYU and her M.A. from Wesleyan University.
X	Seymour Fliegel	Seymour Fliegel is the President of the Center for Educational Innovation-Public Education Association. After serving as a teacher, assistant principal and principal, he became the director of Alternative Education for Community School District Four and began the transformation of New York City public schools. After 22 years in District Four, five of which he served as the Deputy Superintendent, he became Superintendent of Community School District 28 in Queens. Outside of his work at the Center for Educational Innovation, Mr. Fliegel serves on the Advisory Boards of the Gilder Lehrman Institute of American History, Donna Hanover Giuliani's Cool Schools, Public School Artworks and the Young Women's Leadership School Foundation.
X	Karen Mandelbaum	Karen Mandelbaum graduated from Kean Teacher's college in New Jersey. She is also on the board of the Women's Division of the Albert Einstein Medical school. She is committee member of the Friends of Israel Museum; Vice President of the Board of the Livingston Symphony Orchestra; and on the Board of the ADL Women's Division.

X	Edward Shanahan	Edward Shanahan has been President/Headmaster of Choate Rosemary Hall, an independent school in Wallingford, Connecticut since 1991. Before that he was Dean of the College at Dartmouth College (1982-1991), and Dean of Students at Wesleyan University (1972-1982). He was also Chair of the New England Commission on Higher Education, and Chair of the New England Association of Schools and Colleges. Luke's Education Foundation (Bronx, NY); Bermuda-based, Schools, Colleges, University Underwriters, Ltd. (SCUUL); and the Connecticut Association of Independent Schools (CAIS).
X	Robert Sancho	Robert Sancho is Vice President of Development and External Affairs at Bronx-Lebanon Hospital Center in the Bronx. He began his professional career as an educator, teaching Spanish at JHS 98 in the Bronx. He went on to serve as a Deputy Superintendent for Community School District #4. Mr. Sancho earned his B.A. at Inter-American University of Puerto Rico and his M.S. in Urban Affairs at Hunter College, where he was the recipient of the Urban Affairs Minority Scholarship. On a national level, he serves on the Board of Directors of the Congressional Hispanic Caucus Institute in Washington, DC.
X	Parent Representative	To be named with PGA convenes and elects officers. A PGA officer will sit on the charter school board.
Add New Trustee		

9. Overview of the Proposed Program

- a. Robert Sancho is Vice President of Development and External Affairs at Bronx-Lebanon Hospital Center in the Bronx. He began his professional career as an educator, teaching Spanish at JHS 98 in the Bronx. He went on to serve as a Deputy Superintendent for Community School District #4. Mr. Sancho earned his B.A. at Inter-American University of Puerto Rico and his M.S. in Urban Affairs at Hunter College, where he was the recipient of the Urban Affairs Minority Scholarship. On a national level, he serves on the Board of Directors of the Congressional Hispanic Caucus Institute in Washington, DC.
- b. Foundation for a Greater Opportunity's goal is to open successful, high-achieving charter schools in New York City. We have opened 4 schools that are thriving (with our fifth to open September 2011). The Icahn Charter School model works as evidenced by the testing results and stability of each of our schools. We want to continue to open more similar charter schools to give families in New York City educational choice, including our successful program.
- c. The key design elements of the Icahn Charter Schools include: small class size; longer school day and longer school year; a rigorous academic program using the Core Knowledge curriculum; individualized learning that stems from an assessment-driven program; supportive school culture; financial stability.
- d. We anticipate 188 days of instruction. The typical hours of instruction are 8:15am-4:00pm. There will be an after-school program from 4:00pm-6:00pm for children whose parents work late and for children in need of extra schoolwork. There will be eighteen Saturday Academies.
- e. English Language Arts, Math, Science, Social Studies, Geography, Art (fine arts), Music, Physical Education, Health Education.
- f. E.D. Hirsch's Core Knowledge Curriculum, that has been fine tuned by Jeffrey Litt for the Icahn Schools
- g. What makes our program distinct is the size of the classes (18 students per class, 36 students per grade) and individualized education (due to the small classes; an assessment-driven program;

Targeted Assistance program generated out for the assessments and devised for each child in need through the Collaboration of the Director of Assessment, the classroom teacher, the Targeted Assistance teacher, the Staff Developer(s) and the Principal.

h. The School will have a Principal who is the Instructional Leader. The School will have both on-staff Staff Developers and hired consultants. The School will also have access to the other instructional leaders from all the Icahn Charter Schools, including the Superintendent who is a known expert in Core Curriculum. The Principal and Staff Developers and the Icahn Network of instructional personnel will visit classes, will hold staff development meetings and will work in group settings and individually with the teachers.

i. Before the children arrive in September, the teachers will have many days of Staff Development. Initially, all Icahn Network teachers convene together for Staff Development. After a few days of the group meeting, the School staff will convene as a school for more Staff Development. There is ongoing Staff Development during the school year. The Icahn Charter Schools are fortunate to have two very experienced Core Knowledge trainers within our Network.

j. The Icahn School Board makes policy and oversees the operation of the School. They hire a Superintendent to make sure the School runs smoothly. The Board also hires the Principal. The Principal hires the staff. Also at the Icahn Network level is the Director of Operations. He will have in his office two Business Managers and a Human Resources Manager for all the school. The Icahn Network also has a Director of Assessment who works with each school. Each school shares the costs (based on the student population) of this Icahn Network group. The Principal reports to the Board and to the Superintendent. The Director of Assessment reports to the Superintendent. The Director of Operations reports to the Board and to the Superintendent.

k. Foundation for a Greater Opportunity is a partner in the opening of this school. The Foundation has partnered with each of the Icahn Charter Schools. It provides initial start-up costs and arranges for facilities. The services are provided at no cost.

l. The School plans to open in Community School District 9, in the Bronx, where we currently have two charter schools. We would like to be given DOE space, however since the school will not open until 2012, DOE does not yet know its availability. We have submitted a Letter of Intent to DOE. If there is no DOE space, we will procure other space, as we have for each of our schools. In each case, the Foundation has found space for each of its schools. There is a real estate branch of Icahn Associates who will be key to finding non-DOE space if necessary. Those services are provided free of charge.

m. Charter Schools in New York are required to work with students at risk of academic failure. The key reason that we plan to be in CSD 9 is because it has traditionally been a low performing district. The test results from our current schools provide evidence of the Icahn Charter School model's ability to work with children from low performing districts and enable the students to become high achievers.

C. Requests and Related Guidance

BACKGROUND INFORMATION

1. Applicants and Founding Group

1(a) Applicant Information

Provide a brief description of the applicant(s) -- relevant background and experience, including whether they are a parent, teacher, administrator and/or community resident.

Julie Goodyear. Ms. Goodyear is the Executive Director of the Foundation for a Greater Opportunity. She received her BA from New York University and her MA from Wesleyan University. She is a parent. She has written each of the applications for each of the Icahn Charter Schools. She is Secretary of each of the Icahn Charter Schools, and in that role has been involved in all stages of the Icahn Charter Schools program. She is on the Executive Committee of the New York City Charter School Coalition.

Gail Golden. She received her BA from New York University. Ms. Golden is a parent and resident. She is the Chairman of each of the Icahn Charter School boards, and in that role has been involved in all stages of the Icahn Charter Schools.

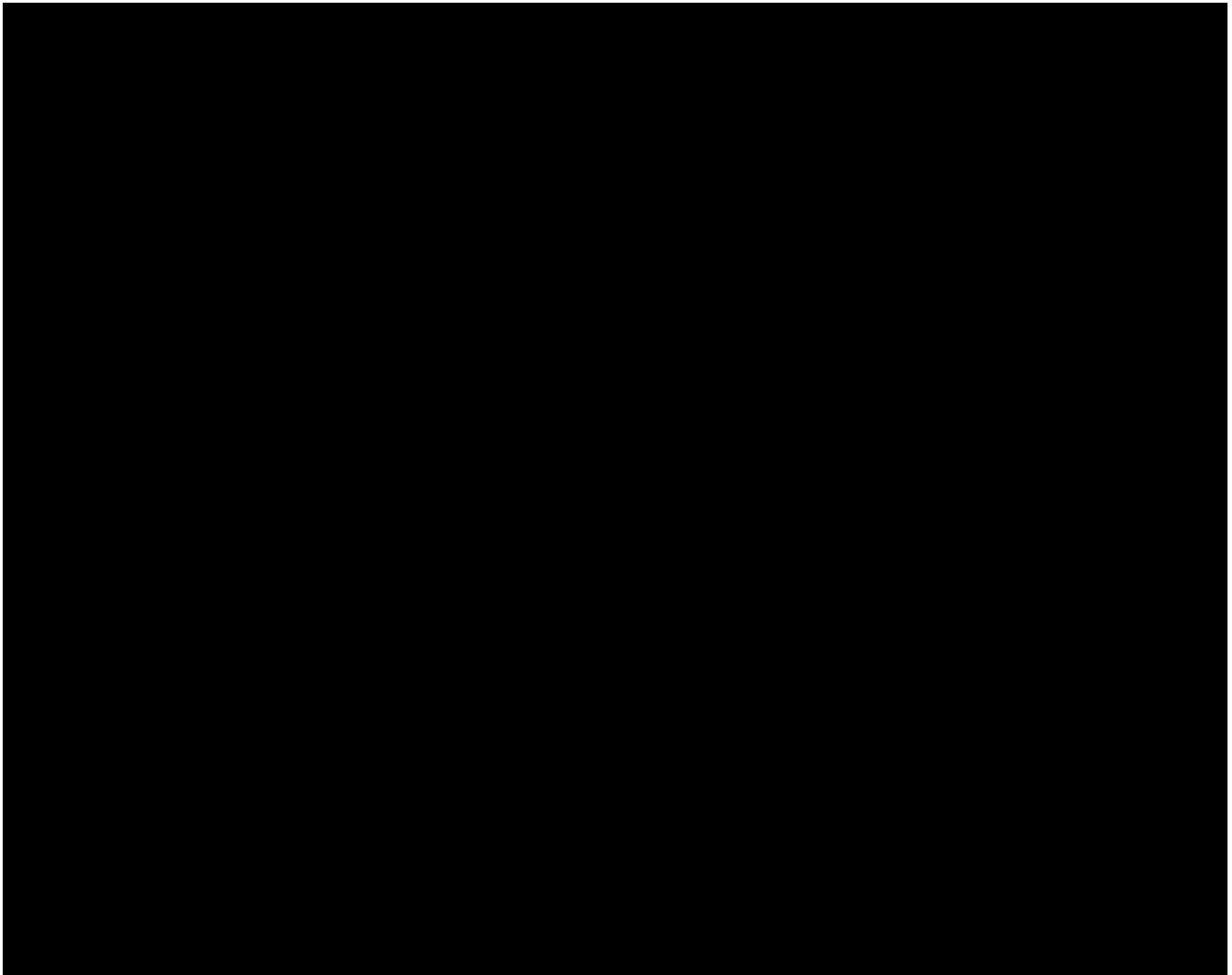
1(b) Founding Group Members

Use the following table to list the active members of the founding group (including the applicants) who developed this proposal. Include a brief description of their relevant experience or skills, their role in the group or contributions to the proposal, and their proposed role, if any, in the school if it is approved, e.g., school leader, teacher, board member, service provider, etc.

Name	Relevant Experience/Skills and Role in Founding Group	Proposed Role(s) in School (if any)
Julie Goodyear	Has written each of the other Icahn Charter School applications. Oversees the writing of the application. Oversees the collaboration between the partnering Foundation for a Greater Opportunity and the Charter School. Applies for grants for the School. Board member (Secretary) for the other Icahn Charter Schools	School board member, secretary.
Gail Golden	Has been applicant on most Icahn Charter School applications. Board member (Chairman) for the other Icahn Charter Schools	School board member, Chairman
Jeffrey Litt	First principal of first Icahn	Superintendent of all

	Charter School. Currently Superintendent of all Icahn Charter Schools. Wrote the curriculum used in the Icahn Charter Schools.	Icahn Charter Schools, therefore will oversee this Icahn Charter School.
Richard Santiago	Was Business Manager of first Icahn Charter School. When the number of Icahn Charter Schools increased, became Director of Operations for all Icahn Charter Schools. Oversees the finances of all Icahn Charter Schools.	As Director of Operations for all Icahn Charter Schools, will oversee the finances of this Icahn Charter School.
Steven Sorokin	Started as Staff Developer for Icahn Charter School 1. Became Director of Assessment, which is his current position for all Icahn Charter Schools	As Director of Assessment for all Icahn Charter Schools, will instruct staff of new school on best methodology to improve student learning.

1(c) In addition, please attach a resume or biographical statement for each member of the founding group.



Education:

1995-1996 M.A.L.S.: Wesleyan University, Middletown, CT
Special Concentration: The American Self
Thesis topic: The Psycho-Social Traits of American Rescuers in the
Holocaust

Previous: Architectural History, Yale University
B.A.: French, New York University

Miscellaneous:

2008 Panelist, National Charter School Policy Forum, US Department of
Education, Washington, DC
Icahn Charter School Awards:
 High Performing/Gap Closing School District, NYSED 2006
 2006 Black Board Award
 Recognition by US Dept. of Education for Closing the Gap (one of
 7 charter schools nationwide)

RICHARD SANTIAGO

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

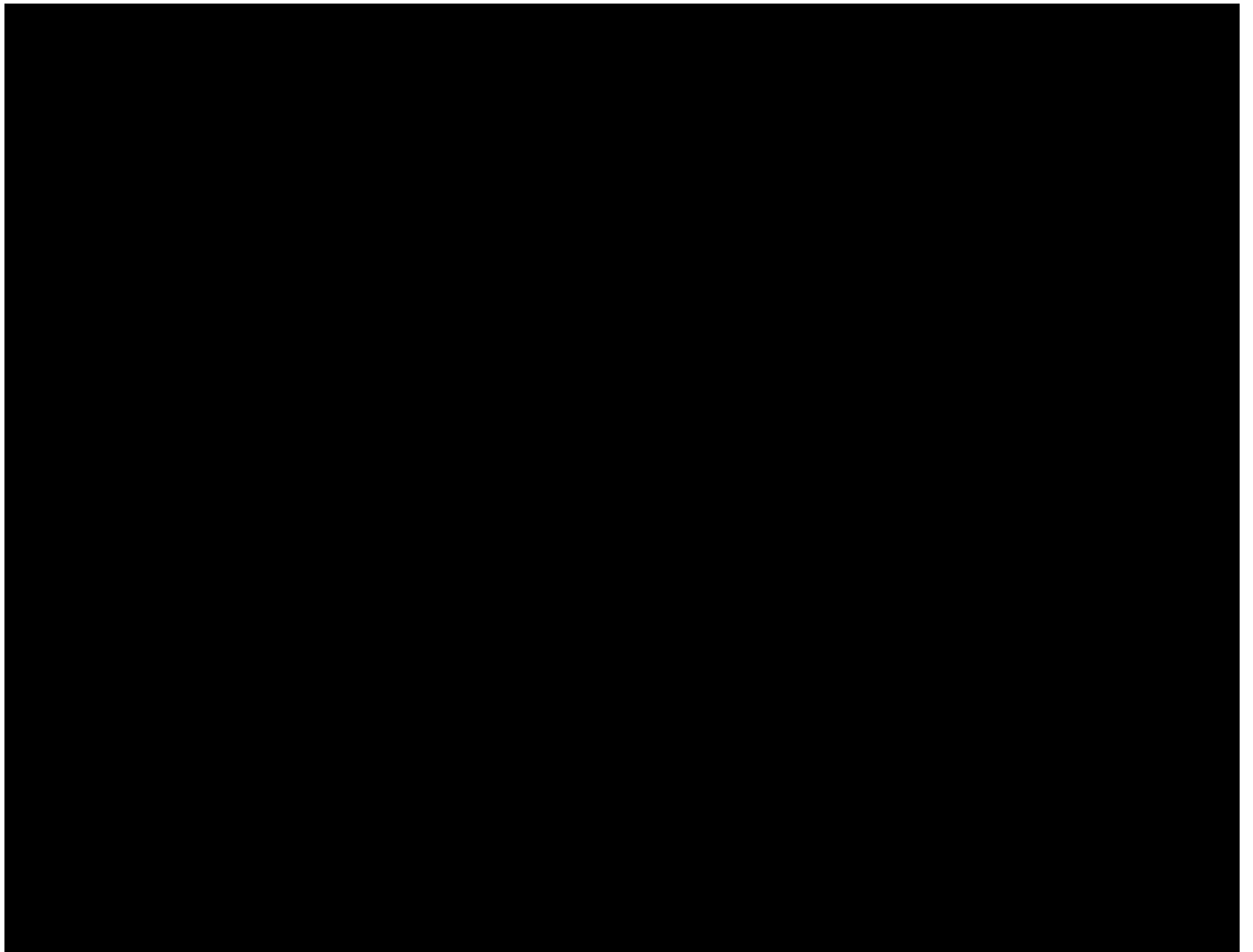
ADP Payroll

Language: Spanish

[REDACTED]
Cortlandt Manor, New York 10567
[REDACTED]

[REDACTED]

[REDACTED]



[REDACTED]

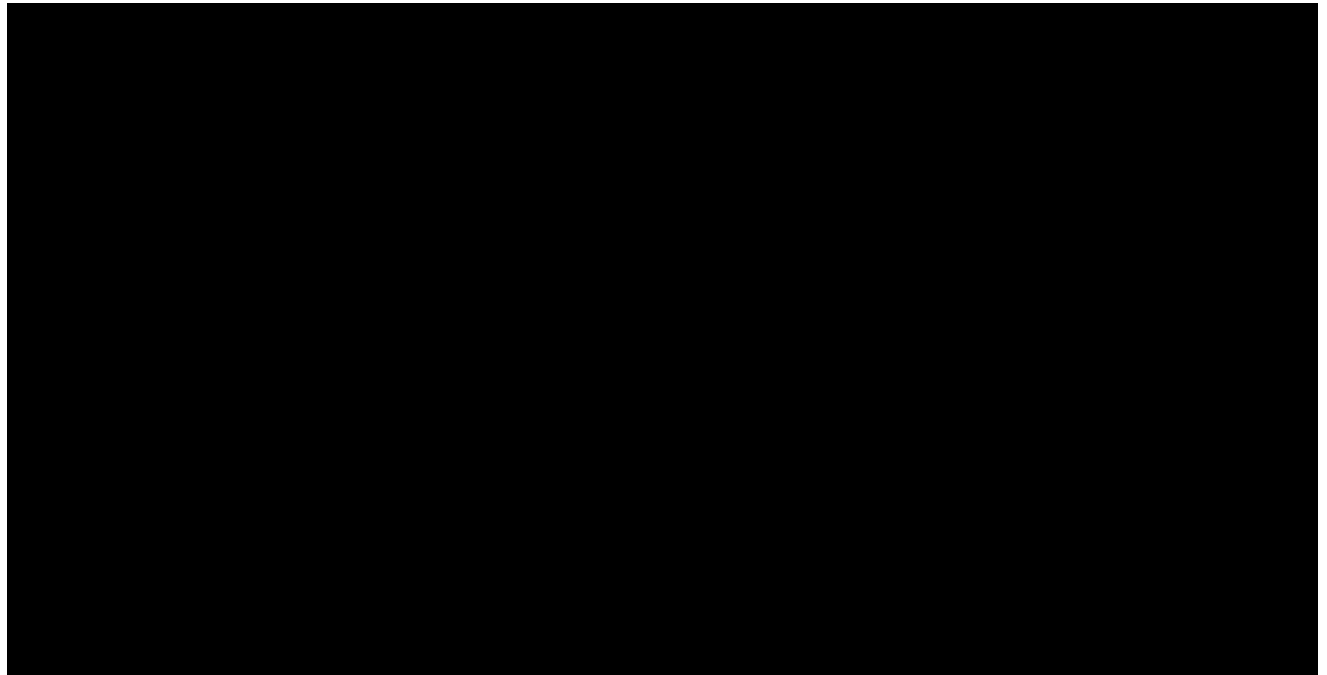
[REDACTED]



Steven Sorokin

New City, New York 10956

Married, two children



2. Mission Statement

Attach the mission statement for the proposed charter school.

Icahn Charter School 7, using the Core Knowledge curriculum developed by E.D. Hirsch, will provide students with a rigorous academic program offered in an extended day/year setting. Students will graduate armed with the skills and knowledge to participate successfully in the most rigorous academic environments, and will have a sense of personal and community responsibility.

3. Enrollment

3(a) Enrollment Plan

Use the following table to submit student enrollment information for the first five operational years of the proposed charter school. Be sure to include the following:

- ages of the students to be served in each grade (for kindergarten, indicate the date by which a student must turn five in order to be eligible to enroll in the charter school (December 1 or 31));
- number of students to be served in each grade;
- total number of enrolled students for each year of the charter term;
- classes per grade; and
- average number of students per class.

Total enrollment by year and grade:

Students must be 5 by Dec. 31st to start kindergarten.

Grades	Ages	Number of Students				
		Year 1 2012-13	Year 2 2013-14_	Year 3 2014-15	Year 4 2015-16	Year 5 2016-17
K	5	36	36	36	36	36
1	6	36	36	36	36	36
2	7	36	36	36	36	36
3	8		36	36	36	36
4	9			36	36	36
5	10				36	36
6	11					36
7						
8						
9						
10						
11						
12						

Grades	Ages	Number of Students				
		Year 1 2012-13	Year 2 2013-14_	Year 3 2014-15	Year 4 2015-16	Year 5 2016-17
Ungraded						
Total Students		108	144	180	216	252
Classes Per Grade		2	2	2	2	2
Average Number of Students Per Class		18	18	18	18	18

Kg...enter 5 years by Dec . 31, 2012 36 students

1st enter 6 years 2012 36 students

2nd enter 7 years 2012 36 students

3rd enter 8 years 2013 36 students

4th enter 9 years 2014 36 students

5th enter 10 years 2015 36 students

6th enter 11 years 2016 36 students

There will be two classes per grade.

Children entering in kindergarten must be five years old by December 31st of their kindergarten year.

3(b) Enrollment Rationale

Provide the rationale for the enrollment plan submitted as your response to Request No. 3(a) above. In your rationale please address the following:

- **the reason for choosing to serve the grades specified and the number of students in each grade;**
- **the extent to which the proposed charter school's grade configuration aligns with the school district of its proposed location; and**
- **the pattern of growth over time, including assumptions for each grade regarding student attrition and any plans to replace students or limit the intake of students.**

We will have two classes per grade of 18 students in each class. We based the size of each class on the Tennessee Class Size Study of 1988. The research in that study concluded that if children are in small classes, the benefits of the early small classes will remain throughout their education. Our current school has classes of 18 and the children are achieving admirable results.

When we began our first charter school, Icahn Charter School, we had anticipated only having an elementary K-4 school. We began with grades K-2 in the first year and intended to add a grade for the next two years of the charter. After working with the children and seeing their improvement each year, and also after taking into account the comparative state test score results in the neighboring schools, we felt that our children would benefit from staying in our program through middle school. Moreover, our parents fervently encouraged us to include grades 5-8. We have come to the conclusion that it is best for our children and families that we create K-8 schools.

We believe in small schools. The culture of a small school permeates all elements of the school. There is no anonymity. Administration and staff know each other. Children, staff and parents know each other. Each person's success is a school success. Everyone is a visible and acknowledged stakeholder in the school's success. The administration is responsible for the success of each teacher and each student. Size is the key to our success because it assures that the faculty has the tools to enable children to achieve and the faculty is responsible for the success of the children. The Principal is responsible for the success of the faculty. It is a team effort. No one gets lost. We know this model works for us and are confident that we can replicate its academic, disciplinary, parental and fiscal health in our new school.

Stand alone middle schools have historically failed within this CSD which is a historically economically disadvantaged area. From the January 3-9 edition of Crain's:

"The unemployment rate in the borough stood at 12.4% in November, compared with the city's rate of 9.1%. Median household income lags at \$35,000, versus \$56,000 citywide. The proportion of residents living below the poverty line, 27%, is almost double the 14% level for the NYC population overall."

Children in middle schools are zoned from several elementary schools, each with different strengths and areas in need of strengthening. The academic needs of the students, coupled with the onset of adolescence, have proven to be an overwhelming problem to middle schools. The Icahn Charter Schools' practice of organizing Kg.-8 schools affords the students with the opportunity to form strong bonds with teachers and support staff. It also ensures that any academic areas in need of strengthening are addressed immediately, rather than undergoing a waiting period while the child's needs are assessed. The Icahn Charter Schools have clearly demonstrated that areas of common concern in middle schools, i.e.: discipline, gang involvement, cutting of classes, truancy, etc, are not present in our schools since the child and staff develop a strong sense of family and trust. Guidance, as a proactive step, is provided to our students and their families to ensure healthy choices in behaviors.

Although it has been our experience in our other schools that there is little student attrition, where there is attrition, depending on the time of year (if it is late in the year, we might wait until the following year), we will go to our Wait List and offer a space to the top person.

3(c) Ultimate Enrollment Plan

Provide the grade span and enrollment size the school ultimately intends to serve (even if it would occur after the initial charter period) and the year it will reach that point.

Icahn Charter School 7 will ultimately become a K-8 school, with 36 students in each grade and a total enrollment of 324 students.

3(d) Collective Bargaining Waiver

If the charter school would enroll more than 250 students at any point during the first two (2) years of operation, indicate whether you are requesting a waiver from the requirement that all employees must be members of existing collective bargaining organizations in the school district where the charter school would be located.

We will not enroll more than 250 students during the first two years of operation.

4. Community Need and Impact

4(a) Community Description

Describe the community from which the proposed school will recruit and draw its students. Your response should include:

- **community and school demographics;**
- **rationale for selecting that community;**
- **local public schools and grade configurations; and**
- **existing educational options.**

Community School District 9 is situated in the poorest congressional district in the nation. There has been no change in the community's designation as the poorest congressional district in the nation since the mid '80's. The poverty level is significantly below the rest of NYC, as is the median income. As quoted above from Crain's, "The unemployment rate in the borough stood at 12.4% in November, compared with the city's rate of 9.1%. Median household income lags at \$35,000, versus \$56,000 citywide. The proportion of residents living below the poverty line, 27%, is almost double the 14% level for the NYC population overall."

Most residents have limited formal education and single parent households are the norm. The 42nd and 48th police precincts are known to have considerably high crime rates. Housing consists mainly of large public housing projects and tenements.

The CSD has local public schools consisting of elementary schools, stand alone middle schools and high schools. The district has more elementary than middle schools and typically 3-4 elementary schools feed into one middle school. With this system, historically, the group falls to the lowest common denominator in academic skills for middle school outcomes. We believe in the K-8 model, because it enables us to work with middle schoolers we knew as elementary children and because all our children are accustomed to working hard. In the recent announcement of schools that DOE is closing, the Bronx had more schools on the list than the other boroughs. Catholic schools are also being closed. Several middle schools have been renamed by the former Board of Education and current Department of Education, as a result of reorganization due to persistent academic failure.

District 9 has long been of interest to us because we believe that all children can learn at the highest levels, regardless of geographic location or economic disadvantage. By starting our first school in this CSD, we could prove our conviction. Charter schools are supposed to work with children at risk of academic failure, which is the assumption in CSD 9. Because we currently have two schools in the CSD, we know the community well and the community knows us (and obviously supports our program as our admission lottery is so robust). The CEC has been very encouraging of our increasing our representation in the CSD.

There are other charter schools in the neighborhood, however their students are not as high achieving as ours. In fact, several of those schools have asked for our advice on how to improve their programs. Based on the number of children on our wait list, it is clear that families would like more Icahn Charter Schools, even though there are other charter schools in the neighborhood. Following the policy of the NYC DOE, the neighborhood schools are zoned, so any neighborhood child can enroll there. Beyond the zoned schools, there are limited choices for the residents since children are zoned to schools based upon their home address.

Each spring at Icahn Charter School, as we pick the applicants' names out of the box in the admission lottery for our approximately 30 kindergarten seats, when we get to the one hundredth name the room gets more and more silent as we realize that there is no way that these children will be able to come to our school and know that we have not yet gone through a fraction of the applicants. This year, we had more than 265 applicants for our first Icahn Charter School kindergarten (and over seven hundred applicants for all grades). It is a depressing reality check. A pall descends on the room. We ask ourselves if we should increase the size of our school to help more children, but we realize that the small size of our school is the pivotal factor in the success of the children. Each year, someone invariably says, "We could open nine more charter schools right here and still not be able to accommodate all the children who want to come to our school." We are confident that there is support for more schools like ours.

The testing results of Icahn Charter School have been significantly higher than the neighboring school results. In a comparison of scores of Icahn Charter School with the neighboring schools, the success of our program is obvious. Our children have made a dramatic improvement over what the children achieve in the schools our children would have attended.

4(b) Target Population

Describe the specific population of students that the proposed charter school intends to serve.

It has always been the goal of the Icahn Charter Schools to prove that children can excel academically, socially and emotionally if provided with a rigorous instructional program and an ongoing support system.. The Foundation for a Greater Opportunity has intentionally chosen a section of New York City in which the students would be designated as being at risk of academic failure, as described previously. When people think of the Bronx, they usually assume that the children of the Bronx are educationally disadvantaged. We intend to prove, once again, that the size of a family's bank account has no relevance to the size of the child's intellect or academic ability.

We decided to create small schools because we believe that especially for children from the inner city, where anonymity is the norm, a small environment gives the child the support and individualized program that will assure academic success. The size of the school is the primary resource for addressing the issues of children at risk of academic failure. The Tennessee Class Size Study, described earlier, has proved the benefits of small class size for minority children.

4(c) Need for the Proposed Charter School

Explain the need for this charter school in this community, including the performance of the local schools.

When we opened our first charter school, we intended to be a K-4 school, based on the Tennessee Class Size Study, whose research indicated that if children are in small classes in grades K-4 the positive impact of those years will reverberate throughout the rest of their education. However, as our children approached 4th grade and we looked at the local middle schools they would attend, we knew that the difference in the program would be significant (as the local middle schools were under review). Also, parents pleaded with us to continue through at least 8th grade.

A score of 35% passing NYS exams is seen as a high achievement in the district. Reorganization efforts have failed as evidenced by the newly announced closing of Taft High School (Urban Assembly- a recent initiative). Many of the schools have been closed and reopened by former chancellors with the school being given a new identification. Fortunately, one new high school has opened locally that is serving our students well—the Bronx Center for Science and Mathematics. It actively recruits our students and is recognized as a college bound program. The graduates of our middle school program are highly desired by specialized high schools, private schools, special programs within public high schools. Because we give the Regents courses to our eighth graders, our graduates are very well prepared for high school, in fact they are advanced. No graduate of our 8th grade has had to go to his/her zoned school.

It is not our intent to our open charter schools to prove a negative, but rather to prove a positive. We do not want to open more schools so as to embarrass neighboring schools, whose results are lower than ours, but rather to prove that all children can learn at the highest levels. The fact that this CSD has historically produced low testing results, means that while a particular area may or may not need more seats, there is a place for more seats in a successful program like ours. When we started thinking about replicating, the then head of the NYC DOE charter school office described his office's goals—to create seats in neighborhoods where there were not enough seats and to create seats in neighborhoods where the academic programs already in place were not educating the children well. Locations have wanted us in their district because we fill the latter criteria—the children in our school will receive an excellent education that will carry through their high school years (and through college as well, although our first graduating class is not in college yet).

Below are the recent results of our neighboring schools:

2009-2010 NYS ELA Percent Level 3 or Higher By All Students*						
School	CS 4	CS 42	CS 55	MS 313	MS 339	ICAHN CHARTER

						SCHOOL 1
Grade 3	32.5	23.3	15.0			72
Grade 4	33.3	47.9	20.2			61
Grade 5	18.2	27.6	18.9			50
Grade 6	8.7			20.0	14.4	61
Grade 7	17.2			9.4	14.7	100
Grade 8	47.5			29.8	12.6	79
Total	26.2	32.9	18.0	19.7	13.9	71

2009-2010 NYS Math Percent Level 3 or higher by all Students						
School	CS 4	CS 42	CS 55	MS 313	MS 339	ICAHN CHARTER SCHOOL 1
Grade 3	45.0	29.6	24.8			81.2
Grade 4	56.4	52.6	42.9			89.7
Grade 5	48.5	36.2	43.7			72.9
Grade 6	26.1			22.1	26.3	82.5
Grade 7	41.4			35.9	11.3	97.2
Grade 8	40.0			35.7	20.2	100.0
Total	42.9	39.4	37.1	31.2	19.2	87.25

We have chosen this community, primarily because of the obvious need to have a meaningful educational program. Our students significantly outperform their peers in the district. Our schools provide “significant educational benefit” to the children. It is not merely that the test results are higher than local schools, but also that our children thrive academically and extra-curricularly at our schools. It should also be noted that our Superintendent is intimately familiar with the community, elected officials, community based organizations and community leaders, since he served as teacher, dean, assistant principal and principal in the district, years ago.

4(d) Programmatic Impact

Describe the programmatic impact of the establishment of the proposed charter school on existing public and nonpublic schools in the same geographic area.

There is no evidence of a negative programmatic impact of our program in New York City or the Bronx or CSD9. Our school is so small—just 36 students per grade—that the departure of those students is not noticed. However, our schools have achieved a reputation for high student achievement and we do get calls from other school leaders asking for advice (primarily charter school leaders). We believe that when the students in charter schools like ours (or any public school) are high achieving, it can be a motivator to other school leaders to figure out how they can produce similar results, for we are all working with the same students with the similar budgets.

4(e) Five Percent Districts

If the proposed charter school will be located in a district where more than five percent of students are enrolled in charter schools, either provide evidence that the school district of location approves of the establishment of the proposed charter school or explain how the establishment of the proposed charter school will have a “significant educational benefit” to the students who attend that school.

Not Applicable.

5. Partner Organization

Describe any partner organizations that will have a significant relationship with the proposed school. For each partner organization provide the following:

- **name of the organization;**

Foundation for a Greater Opportunity

- **description of the nature and purpose of the proposed school's relationship with the organization;**

Foundation for a Greater Opportunity has as a mission to help underserved children. The Foundation has had a long commitment to charter schools in New York. It opened its first charter school in the Bronx in 2001.

As was the template with its first five charter schools, the Foundation will provide initial financial support if necessary to Icahn Charter School 7 (ICS 7) to help bridge any financial gap that can occur between the time when a charter is granted and when there are revenues to support the school's operation. The Foundation will advance the necessary money to cover the difference between revenues and expenses during the initial years of operation. The charter school will repay the advance by the end of the five year charter.

The Foundation will also make arrangements for facilities for the school, as it has for its other schools. For the first ICS, the Foundation paid to build the K-4 building, which the school leases at below fair market value. For the middle school for ICS, the Foundation paid 20% of the building cost (Foundation share is \$3.2 million) and DOE paid 80%. DOE will own the building. FGO will have a 30 year lease for \$1.00 year. For the next school, Icahn Charter School 7 collaborated with Civic Builders. FGO contributed 2% of the building cost and is receiving a 15 year lease for ICS2.

- **description of the process and criteria used to select the partner organization, including other organizations considered;**

The Foundation for a Greater Opportunity was created to help under-resourced children receive a quality education. When New York State passed the charter school law in 1998, the Foundation committed to opening charter schools. Julie Goodyear, the Foundation's Executive Director, wrote the first application for an Icahn Charter School to open in 2001, and has continued to write applications to open more Icahn Charter Schools. The Foundation's mission is to open high-achieving charter schools. Its board members support the mission. The Icahn Charter Schools benefit from the Foundation's support.

- **proof of the legal status of the organization (e.g. New York not-for-profit corporation, university, college, museum or educational institution) and whether or not the organization has authority to do business in New York.**

N. Y. S. DEPARTMENT OF STATE
DIVISION OF CORPORATIONS AND STATE RECORDS

ALBANY, NY 12231-0001

FILING RECEIPT

ENTITY NAME: FOUNDATION FOR A GREATER OPPORTUNITY

DOCUMENT TYPE: AMENDMENT (FOR. NFP)
PURPOSES

COUNTY: NEWY

FILED:07/29/2010 DURATION:***** CASH#:100729000202 FILM #:100729000190

FILER:

PATTERSON BELKNAP WEBB
& TYLER LLP
1133 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

ADDRESS FOR PROCESS:

REGISTERED AGENT:



SERVICE COMPANY: CORPORATION SERVICE COMPANY - 45

SERVICE CODE: 45

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CASH	0.00
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CHARGE	0.00
DRAWDOWN	90.00
OPAL	0.00
REFUND	0.00

457561KXX

DOS-1025 (04/2007)

STATE OF NEW YORK

DEPARTMENT OF STATE

I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.



WITNESS my hand and official seal of
the Department of State, at the City of
Albany, on July 29, 2010.

A handwritten signature in black ink, appearing to read "Daniel E. Shapiro".

Daniel E. Shapiro
First Deputy Secretary of State

Rev. 06/07

- proof of tax-exempt status under Internal Revenue Code section 501(c)(3);

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
G.P.O. BOX 1680
BROOKLYN, NY 11202

DEPARTMENT OF THE TREASURY

Date: MAR 26 1997

Employer Identification Number:

13-3913393

Case Number:

116313062

Contact Person:

MARGARET EVANS

Contact Telephone Number:

(617) 565-7776

FOUNDATION FOR A GREATER
OPPORTUNITY
C/O ROCHELLE KORMAN ESQ
KALKINES ARKY ZALL AND BERNSTEIN
1675 BROADWAY 27TH
NEW YORK, NY 10019

Accounting Period Ending:

December 31

Form 990 Required:

Yes

Addendum Applies:

Yes

Dear Applicant:

Based on information supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

We have further determined that you are not a private foundation within the meaning of section 509(a) of the Code, because you are an organization described in section 509(a)(3).

If your sources of support, or your purposes, character, or method of operation change, please let us know so we can consider the effect of the change on your exempt status and foundation status. In the case of an amendment to your organizational document or bylaws, please send us a copy of the amended document or bylaws. Also, you should inform us of all changes in your name or address.

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Since you are not a private foundation, you are not subject to the excise taxes under Chapter 42 of the Code. However, you are not automatically exempt from other federal excise taxes. If you have any questions about excise, employment, or other federal taxes, please let us know.

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(3) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(3) organization.

Letter 947 (DO/CG)

FOUNDATION FOR A GREATER

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for federal estate and gift tax purposes if they meet the applicable provisions of Code sections 2055, 2106, and 2522.

Contribution deductions are allowable to donors only to the extent that their contributions are gifts, with no consideration received. Ticket purchases and similar payments in conjunction with fundraising events may not necessarily qualify as deductible contributions, depending on the circumstances. See Revenue Ruling 67-246, published in Cumulative Bulletin 1967-2, on page 104, which sets forth guidelines regarding the deductibility, as charitable contributions, of payments made by taxpayers for admission to or other participation in fundraising activities for charity.

In the heading of this letter we have indicated whether you must file Form 990, Return of Organization Exempt From Income Tax. If Yes is indicated, you are required to file Form 990 only if your gross receipts each year are normally more than \$25,000. However, if you receive a Form 990 package in the mail, please file the return even if you do not exceed the gross receipts test. If you are not required to file, simply attach the label provided, check the box in the heading to indicate that your annual gross receipts are normally \$25,000 or less, and sign the return.

If a return is required, it must be filed by the 15th day of the fifth month after the end of your annual accounting period. A penalty of \$10 a day is charged when a return is filed late, unless there is reasonable cause for the delay. However, the maximum penalty charged cannot exceed \$5,000 or 5 percent of your gross receipts for the year, whichever is less. This penalty may also be charged if a return is not complete, so please be sure your return is complete before you file it.

You are not required to file federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T, Exempt Organization Business Income Tax Return. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

You need an employer identification number even if you have no employees. If an employer identification number was not entered on your application, a number will be assigned to you and you will be advised of it. Please use that number on all returns you file and in all correspondence with the Internal Revenue Service.

In accordance with section 508(a) of the Code, the effective date of this termination letter is October 7, 1996.

This determination is based on evidence that your funds are dedicated to the purposes listed in section 501(c)(3) of the Code. To assure your

Letter 947 (DO/CG)

FOUNDATION FOR A GREATER

continued exemption, you should keep records to show that funds are expended only for those purposes. If you distribute funds to other organizations, your records should show whether they are exempt under section 501(c)(3). In cases where the recipient organization is not exempt under section 501(c)(3), there should be evidence that the funds will remain dedicated to the required purposes and that they will be used for those purposes by the recipient.

If distributions are made to individuals, case histories regarding the recipients should be kept showing names, addresses, purposes of awards, manner of selection, relationship (if any) to members, officers, trustees or donors of funds to you, so that any and all distributions made to individuals can be substantiated upon request by the Internal Revenue Service. (Revenue Ruling 56-304, C.B. 1956-2, page 306.)

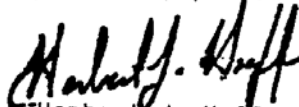
If we have indicated in the heading of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

Because this letter could help resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

We have sent a copy of this letter to your representative as indicated in your power of attorney.

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

Sincerely yours,


Herbert J. Huff
District Director

Addendum

Letter 947 (DO/CG)

-4-

FOUNDATION FOR A GREATER

Since you have not indicated that you intend to finance your activities with the proceeds of tax exempt bond financing, in this letter we have not determined the effect of such financing on your tax exempt status.

Letter 947 (DO/

- **letter of intent or commitment from a bona fide representative of the partner organization indicating that the organization will be involved in the charter school and the terms and extent of its involvement; and**

Foundation for a Greater Opportunity

Charter Schools Institute
41 State Street, Suite 700
Albany, NY 12207

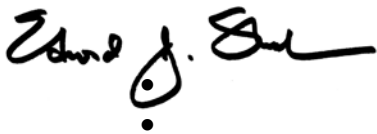
February 2011

Dear Charter Schools Institute:

Foundation for a Greater Opportunity was authorized by SUNY to open its first charter school, Carl C. Icahn Charter School, in New York City in 2001. The results of that school were so encouraging that we have applied to open more charter schools. We opened our second charter school, Icahn Charter School 2, in September 2007, our third charter school, Icahn Charter School 3 in September 2008 and our fourth, Icahn Charter School 4, in September 2009. We will open Icahn Charter School 5 in September 2011. We would like to open two more charter schools in the fall of 2012—Icahn Charter School 6 and Icahn Charter School 7.

The purpose of Foundation for a Greater Opportunity is to support organizations that assist children from low income, financially needy families including educational programs, with specific commitment to charter schools in New York City. To date, the Foundation has constructed the facilities for our charter schools and has advanced operating expenses when necessary in a school's initial years. The Foundation's board members are experienced educators, who take pride in being associated with the Icahn Charter Schools, and who intend to continue sponsoring the Icahn Charter Schools. We hope that you will continue to authorize and support our school, particularly the chartering of Icahn Charter Schools 6 and 7 for a September 2012 opening.

Sincerely yours,



Edward J. Shanahan
President

767 Fifth Avenue, New York, NY 10153 .

- **name of a contact person for the partner organization, along with the address, phone number, facsimile number (if applicable), and e-mail of such contact person for the partner organization.**

Julie Goodyear, Foundation for a Greater Opportunity, 767 Fifth Avenue, New York, NY 10153;

[REDACTED]

INTERNAL REVENUE SERVICE
DISTRICT DIRECTOR
G.P.O. BOX 1680
BROOKLYN, NY 11202

DEPARTMENT OF THE TREASURY

Date: MAR 26 1997

FOUNDATION FOR A GREATER
OPPORTUNITY
C/O ROCHELLE KORMAN ESQ
KALKINES ARKY ZALL AND BERNSTEIN
1675 BROADWAY 27TH
NEW YORK, NY 10019

Employer Identification Number:
13-3913393
Case Number:
116313062
Contact Person:
MARGARET EVANS
Contact Telephone Number:
(617) 565-7776

Accounting Period Ending:
December 31
Form 990 Required:
Yes
Addendum Applies:
Yes

Dear Applicant:

Based on information supplied, and assuming your operations will be as stated in your application for recognition of exemption, we have determined you are exempt from federal income tax under section 501(a) of the Internal Revenue Code as an organization described in section 501(c)(3).

We have further determined that you are not a private foundation within the meaning of section 509(a) of the Code, because you are an organization described in section 509(a)(3).

If your sources of support, or your purposes, character, or method of operation change, please let us know so we can consider the effect of the change on your exempt status and foundation status. In the case of an amendment to your organizational document or bylaws, please send us a copy of the amended document or bylaws. Also, you should inform us of all changes in your name or address.

As of January 1, 1984, you are liable for taxes under the Federal Insurance Contributions Act (social security taxes) on remuneration of \$100 or more you pay to each of your employees during a calendar year. You are not liable for the tax imposed under the Federal Unemployment Tax Act (FUTA).

Since you are not a private foundation, you are not subject to the excise taxes under Chapter 42 of the Code. However, you are not automatically exempt from other federal excise taxes. If you have any questions about excise, employment, or other federal taxes, please let us know.

Grantors and contributors may rely on this determination unless the Internal Revenue Service publishes notice to the contrary. However, if you lose your section 509(a)(3) status, a grantor or contributor may not rely on this determination if he or she was in part responsible for, or was aware of, the act or failure to act, or the substantial or material change on the part of the organization that resulted in your loss of such status, or if he or she acquired knowledge that the Internal Revenue Service had given notice that you would no longer be classified as a section 509(a)(3) organization.

Letter 947 (DO/CG)

FOUNDATION FOR A GREATER

Donors may deduct contributions to you as provided in section 170 of the Code. Bequests, legacies, devises, transfers, or gifts to you or for your use are deductible for federal estate and gift tax purposes if they meet the applicable provisions of Code sections 2055, 2106, and 2522.

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In accordance with section 508(a) of the Code, the effective date of this termination letter is October 7, 1996.

This determination is based on evidence that your funds are dedicated to the purposes listed in section 501(c)(3) of the Code. To assure your

FOUNDATION FOR A GREATER

continued exemption, you should keep records to show that funds are expended only for those purposes. If you distribute funds to other organizations, your records should show whether they are exempt under section 501(c)(3). In cases where the recipient organization is not exempt under section 501(c)(3), there should be evidence that the funds will remain dedicated to the required purposes and that they will be used for those purposes by the recipient.

If distributions are made to individuals, case histories regarding the recipients should be kept showing names, addresses, purposes of awards, manner of selection, relationship (if any) to members, officers, trustees or donors of funds to you, so that any and all distributions made to individuals can be substantiated upon request by the Internal Revenue Service. (Revenue Ruling 56-304, C.B. 1956-2, page 306.)

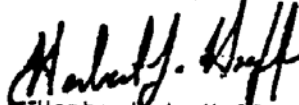
If we have indicated in the heading of this letter that an addendum applies, the enclosed addendum is an integral part of this letter.

Because this letter could help resolve any questions about your exempt status and foundation status, you should keep it in your permanent records.

We have sent a copy of this letter to your representative as indicated in your power of attorney.

If you have any questions, please contact the person whose name and telephone number are shown in the heading of this letter.

Sincerely yours,


Herbert J. Huff
District Director

Addendum

-4-

FOUNDATION FOR A GREATER

Since you have not indicated that you intend to finance your activities with the proceeds of tax exempt bond financing, in this letter we have not determined the effect of such financing on your tax exempt status.

Letter 947 (DO/

FILING RECEIPT

=====

ENTITY NAME: FOUNDATION FOR A GREATER OPPORTUNITY

DOCUMENT TYPE: AMENDMENT (FOR. NFP)
PURPOSES

COUNTY: NEWY

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FILED:07/29/2010 DURATION:***** CASH#:100729000202 FILM #:100729000190

FILER:

PATTERSON BELKNAP WEBB
& TYLER LLP
1133 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

ADDRESS FOR PROCESS:

REGISTERED AGENT:



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REFUND	0.00

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DOS-1025 (04/2007)

STATE OF NEW YORK

DEPARTMENT OF STATE

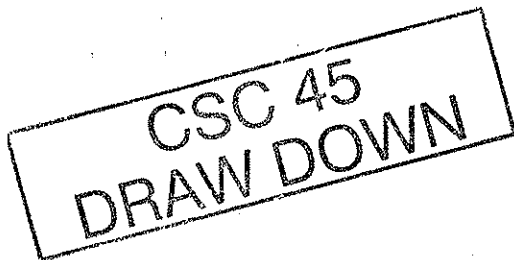
I hereby certify that the annexed copy has been compared with the original document in the custody of the Secretary of State and that the same is a true copy of said original.



WITNESS my hand and official seal of
the Department of State, at the City of
Albany, on July 29, 2010.

A handwritten signature in black ink, appearing to read "Daniel E. Shapiro".

Daniel E. Shapiro
First Deputy Secretary of State



100729000190

CERTIFICATE OF AMENDMENT

OF

APPLICATION FOR AUTHORITY

OF

FOUNDATION FOR A GREATER OPPORTUNITY

Under Section 1309 of the Not-for-Profit Corporation Law

It is hereby certified that:

1. The name of the corporation as it appears on the index of names of existing domestic and authorized foreign corporations of any type or kind in the Department of State of the State of New York is Foundation for a Greater Opportunity.

2. The jurisdiction of incorporation of the corporation is Delaware.

3. The date upon which the corporation was authorized to conduct activities in the State of New York is February 26, 1998.

4. The amendment effected by this Certificate of Amendment of Application for Authority is to update the purposes of the corporation.

5. Article Fifth of the Application for Authority is amended in its entirety to read as follows:

FIFTH: The purposes of the corporation to be pursued within the State of New York, and the activities which the corporation proposes to conduct within the State of New York are as follows:

- A. To provide financial and other forms of assistance and support to students, children and their parents, and low-income families, such assistance and support to include educational opportunities and assistance (including, but not limited to, pre-kindergarten through post-secondary schools, their facilities and equipment, scholarships, and athletic programs), healthcare services, social services, housing, legal assistance, and cultural opportunities. The purposes specified herein are to be furthered and the activities pursuant thereto are to be undertaken exclusively to benefit and to support organizations that operate programs which provide such assistance and support to students, children and their parents, and low-

income families and that are described in Section 509(a)(1) or 509(a)(2) of the Internal Revenue Code of 1986, as amended ("I.R.C.").

- B. To engage in any and all other lawful activities incidental to and in pursuit of the foregoing purposes, except as restricted herein.

Nothing herein shall authorize the corporation, directly or indirectly, to engage in or include among its purposes any of the activities mentioned in the Not-for-Profit Corporation Law Section 404(a) through (c) and (e) through (v).

Except as authorized by Title VIII or other applicable statute, nothing herein shall authorize the corporation to engage in the practice of any profession in New York, engage in the training of any profession in New York or to use a professional title or term of any profession in New York in violation of Title VIII of the Education Law.

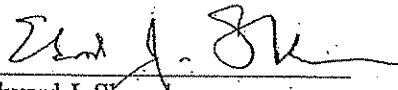
The corporation will restrict the provision of counseling services to instruction, advice, support, encouragement or information to individuals, families, and relational groups, provided that this shall not include the diagnosis or treatment of mental, emotional, nervous, or behavioral disorders.

6. The corporation is authorized to conduct in the jurisdiction of its incorporation the activities it proposes to conduct in the State of New York as hereinbefore certified.

Signed on May 19, 2010

FOUNDATION FOR A GREATER
OPPORTUNITY

By:


Edward J. Shanahan
President

STATE OF NEW YORK
THE STATE EDUCATION DEPARTMENT
Albany, New York

**CONSENT TO FILING WITH THE DEPARTMENT OF STATE
(General Use)**

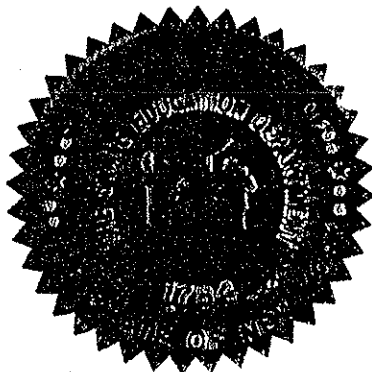
Consent is hereby given to the filing of the annexed certificate of amendment

of **Foundation for a Greater Opportunity**

[name of entity]

pursuant to the applicable provisions of the Education Law, the Not-for-Profit Corporation Law, the Business Corporation Law, the Limited Liability Company Law or any other applicable statute.

This consent is issued solely for purposes of filing the annexed document by the Department of State and shall not be construed as approval by the Board of Regents, the Commissioner of Education or the State Education Department of the purposes or objects of such entity, nor shall it be construed as giving the officers or agents of such entity the right to use the name of the Board of Regents, the Commissioner of Education, the University of the State of New York or the State Education Department in its publications or advertising matter.



IN WITNESS WHEREOF this instrument is
executed and the seal of the State Education
Department is affixed.

DAVID M. STEINER
Commissioner of Education

By:

Seth D. Gilboord
Seth D. Gilboord

Commissioner's authorized designee

JUL 22 2010

Date

**THIS DOCUMENT IS NOT VALID WITHOUT THE SIGNATURE OF THE
COMMISSIONER'S AUTHORIZED DESIGNEE AND THE OFFICIAL SEAL OF THE
STATE EDUCATION DEPARTMENT.**

CSC 45
DRAW DOWN

100729000190

2010 JUL 29 AM 9:45

FILED

RECEIVED
2010 JUL 26 PM 3:04

CERTIFICATE OF AMENDMENT
OF
APPLICATION OF AUTHORITY
OF
FOUNDATION FOR A GREATER OPPORTUNITY

Under Section 1309 of the Not-for-Profit Corporation Law.

RECEIVED
2010 JUL 28 PM 1:09
Filed by:

Patterson Belknap Webb & Tyler LLP
1133 Avenue of the Americas
New York, New York 10036

100
STATE OF NEW YORK
DEPARTMENT OF STATE
FILED

JUL 29 2010

TAX \$ _____

BY: *[Signature]*

CUSTOMER REF. #

457561 KXK

Nancy

6. Management Organization

Describe any organization that will have significant responsibility for managing the proposed school's educational program, staffing, operations and/or other aspects of the school. Provide the following:

NOT APPLICABLE

- **name of the organization;**
- **detailed explanation of the extent of the organization's proposed role in the governance, management and/or operation of the school;**
- **description of the process and criteria used to select the management organization, including other organizations that were considered, and the rationale for selecting this organization;**
- **description of the role of the management company in selecting proposed members of the school's board of trustees;**
- **draft management contract or, at minimum, term sheet indicating the fees proposed to be paid by the proposed school to the management organization, the length of the proposed contract, the terms of the contract's renewal, and provisions for termination; and**
- **copies of the last two contracts that the management organization has executed with operating charter schools (in New York or other states) and, if applicable, the status of those charter schools' applications for tax-exempt status under section 501(c)(3) of the Internal Revenue Code.**

7. **Proposal History**

7(a) **Community Outreach**

Explain and provide evidence of the following:

- **the methods used to inform stakeholders in the intended community about the proposed charter school;**

Jeffrey Litt wrote to the local CEC to inform them of our intention to open more charter schools in the District, and requested time at a public meeting. Ted Garcia, the Chairperson of Community Education Committee 9, put Mr. Litt on the agenda for Thursday, February 10, 2011. Jeffrey Litt, Daniel Garcia held public hearings to inform the community. We posted on our website information about our plan to submit a proposal to open two charter schools. We posted flyers in our schools and around the community. We placed an ad in The Bronx News. We held open meetings.

- **the strategies used to solicit community input regarding the educational and programmatic needs of students and your proposal to meet those needs;**

Because we have already opened two charter schools in this district and two others in other CSDs in the Bronx, and have received overwhelming support for those schools (evidence our waiting list numbers) and requests that we open more schools, we have not recently needed to research the needs of the community. Our application numbers and wait list numbers are quantitative evidence of support for our program. (1739 applicants for 74 seats.) We held open public meetings, during which we solicited community response. We appeared at a Community Education Committee meeting, where we solicited response. We posted flyers with contact information for comment and put notification in The Bronx Times.

- **the form and nature of feedback received from community stakeholders and the process for incorporating that feedback into the submitted proposal; and**

Please refer to previous answer. Below is the announcement by the Community Education Council 9 for the meeting where we presented our information:



Community Education Council District 9
450 St. Paul's Place, Suite 204, Bronx, NY 10456
Phone (718) 861-0058 - Fax (718) 410-7017
E-mail: Cec9@schools.nyc.gov

AGENDA

DATE: *Thursday, February 17, 2011*

LOCATION: M.S. 323 Bronx Writing Academy
270 East 167th Street, Bronx
BRONX, NY 10456

Business Session 5:30 PM – 6:15 PM

1. Call to order.
2. Roll Call.
3. Superintendent Evaluation Executive Session Discussion.
4. Plan agenda for next month: Topic(s) / Guest speaker(s)
5. Plan Presidents' Council Quarterly Meeting
6. Old Business / New Business
7. Adjournment.

CALDENDAR SESSION 6:30 PM - 8:45 PM

1. Call to order
2. Welcome Parents & Staff of M.S. 323 (*Principal Samuels*)
3. Superintendent Report, Dolores Esposito
Diane Johnson, Bronx Health REACH/NY CEED
4. Icahn Charter Schools, Jeffrey Litt, Superintendent
5. Network Leaders: Maria Quail & Lawrence Block
6. President's Report – Theodore Garcia
7. Parent Outreach Committee – Lenora Julius
8. Public Session (2 Minutes Per Person to speak on an issue)
9. Announcements
10. Adjournment



Our next Community Education Council District 9
Meeting will be held on Tuesday, March 15, 2011
At M.S. 219 New Venture
3630 Third Avenue, Bronx, NY 10456



We're on Facebook! Look for us at: DistrictNine CEC

450 St. Paul's Place, Suite 204 • Bronx, NY 10456 • (718) 861-0058 • Email: CEC9@schools.nyc.gov

- the extent to which community input regarding the educational and programmatic needs of students was incorporated into the application.

An integral part of our schools' cultures is responsiveness to parents, so we listened carefully to parents in all our schools before we opened and especially when a school is in operation, which constitutes community input. To the extent that the input can enhance our program, we incorporate it. When we felt the input would decrease the effectiveness of our successful program, we did not incorporate it.

(b) Withdrawn or Rejected SUNY Proposals

Indicate whether this proposal was previously withdrawn from or rejected by the SUNY Trustees. If so, provide:

- the name of the proposed charter school when previously submitted;
- the application cycle date of the previous submission;
- a summary of what has changed in the proposal since its previous

submission and the reasons therefore.

Not Applicable

- (c) Previous Submissions and/or Submissions to Other Authorizers**
Indicate whether you have previously or currently have applied for a charter from a charter entity other than the SUNY Trustees. If so, provide:
- **the name of the charter entity;**
 - **the name(s) of the proposed school(s) and the date(s) when the application(s) were submitted; and**
 - **the status of those applications. If the application was denied by a charter entity other than the SUNY Trustees, provide a copy of the letter from the charter entity stating the reasons for denial. If the application was withdrawn from consideration, please provide the reasons for the withdrawal. If the application was granted, but the charter school is no longer in existence, please provide an explanation.**



Icahn Charter Schools

1506 Brook Avenue Bronx, New York 10457
Telephone (718) 716-8105 Fax (718) 294-6596
www.ccics.org

Jeffrey Litt, Superintendent
Migdalia Cano, Exec. Ass't.

Richard Santiago, Director of Operations
Steve Sorokin, Director of Assessment

January 28, 2011

MAIL & EMAIL:

Ted Garcia, President
Community Education Council District #9
[REDACTED]
Bronx, New York 10456

Dear Mr. Garcia:

I am following up on my previous letter to you of January 20, 2011. As I stated, we will be submitting to CSI on February 1 to open two more of our Icahn Charter Schools. Our location of preference is District 9. I would like to take advantage of your generous offer to have me come to speak at one of your meetings to describe to your committee and to attendees the details of our program.

As you know, our current Icahn Charter Schools serve their local Community School Districts. Admission is by lottery, with preference given to local CSD children and to siblings. We will start with Kindergarten through 2nd grade in 2012, adding a grade each year until we are fully populated at K-8. We create small schools, with 18 students in each class, two classes per grade and a total enrollment of 324. As a small school, we are able to meet our goal of high student achievement because we provide individualized learning for our students. Beyond the small classes, we provide Targeted Assistance for those students who need remediation in any area. We have a longer school day and a longer school year. The Icahn Charter Schools' mission is: The Icahn Charter Schools, using the Core Knowledge curriculum developed by E.D. Hirsh, will provide students with a rigorous academic program offered in an extended day/year setting: Students will graduate armed with the skills and knowledge to participate successfully in the most rigorous academic environments, and will have a sense of personal and community responsibility.

I hope you will be able to provide me time at an upcoming meeting so that I can describe our program and so that the people at the meeting can give me their comments. We are also requesting comments be sent by mail to 1525 Brook Avenue, Bronx, NY 10457.

Very truly yours,

Jeff Litt,
Superintendent of Schools





Notice of Public Hearing To Open a New Charter School Icahn Charter School #VII

Date of Public Hearing: Tuesday, February 15, 2011

Time: Speaker Registration: 7:00 PM – 7:30 PM
Presentation, Comments, and Questions: 7:30 PM

Location: Icahn Charter School 1
1506 Brook Avenue
Bronx, New York 10457

Event: This public hearing is open to anyone interested in making comments and/or learning about the following charter replication application for **Icahn Charter School # VII** to be located in /Community School District #9:

Replication Application for **Icahn Charter School #VII**, a newly proposed K – 8 school, which will be designed on the belief that all students deserve a rigorous academic program, and that given a rigorous program, all students will learn more and increase their capacity to learn. Icahn Charter School #VII will be a school of high academic standards, using E.D. Hirsch's Core Knowledge curriculum in small classes of not more than 18 students in a class and two classes on the grade. The school will be located in Community School District #9 in the Bronx.

Comments are welcome; speakers must register within 30 minutes of the hearing's start time. Written comments _____cted at the hearing or may be submitted via email to _____



Icahn Charter Schools are chartered by the New York State Board of Regents and the State University of New York Charter Schools Institute and are a result of the collaborative efforts of the Foundation for A Greater Opportunity and the Center for Educational Innovation-Public Education Association. The Icahn Charter Schools are a public school open to all children on a space available basis, by lottery.

Notice of Public Hearing To Open a New Charter School Icahn Charter School #VII

Date of Public Hearing: Thursday, February 17, 2011

Time: Speaker Registration: 7:00 PM – 7:30 PM
Presentation, Comments, and Questions: 7:30 PM

Location: Icahn Charter School III
108 West 174th Street
Bronx, New York 10453

Event: This public hearing is open to anyone interested in making comments and/or learning about the following charter replication application for **Icahn Charter School # VII** to be located in /Community School District #9:

Replication Application for **Icahn Charter School #VII**, a newly proposed K – 8 school, which will be designed on the belief that all students deserve a rigorous academic program, and that given a rigorous program, all students will learn more and increase their capacity to learn. Icahn Charter School #VII will be a school of high academic standards, using E.D. Hirsch's Core Knowledge curriculum in small classes of not more than 18 students in a class and two classes on the grade. The school will be located in Community School District #9 in the Bronx.

Comments are welcome; speakers must register within 30
aring's start time. Written comments will also
e hearing or may be submitted via email to:



Notice of Public Hearing To Open a New Charter School Icahn Charter School #VII

Date of Public Hearing: Tuesday, February 15, 2011

Time: Speaker Registration: 7:00 PM – 7:30 PM
Presentation, Comments, and Questions: 7:30 PM

Location: Icahn Charter School 1
1506 Brook Avenue
Bronx, New York 10457

Event: This public hearing is open to anyone interested in making comments and/or learning about the following charter replication application for **Icahn Charter School # VII** to be located in /Community School District #9:

Replication Application for **Icahn Charter School #VII**, a newly proposed K – 8 school, which will be designed on the belief that all students deserve a rigorous academic program, and that given a rigorous program, all students will learn more and increase their capacity to learn. Icahn Charter School #VII will be a school of high academic standards, using E.D. Hirsch's Core Knowledge curriculum in small classes of not more than 18 students in a class and two classes on the grade. The school will be located in Community School District #9 in the Bronx.

Comments are welcome; speakers must register within 30 minutes of the hearing's start time. Written comments will also be collected at the hearing or may be submitted via email to:

[REDACTED]



Icahn Charter Schools
1506 Brook Avenue Bronx, New York 10457
Telephone (718) 716-8105 Fax (718) 294-6596
www.ccics.org

Jeffrey Litt, Superintendent
Migdalia Cano, Exec. Ass't.

Richard Santiago, Director of Operations
Steve Sorokin, Director of Assessment

January 20, 2011

SENT VIA FIRST CLASS MAIL

and EMAIL to

Ted Garcia, President
Community Education Council District #9
[Redacted]
Bronx, New York, 10456

Dear Mr. Garcia:

I hope this letter finds you well and that the New Year brings you and your family all the happiness, peace and joy that you so much deserve. I also wish to once again, thank you for your hospitality by inviting me to speak before the council and community recently.

As you are aware, there are five (5) Icahn Charter Schools. Our flagship school has two buildings located in District 9 on Brook Avenue, with one serving Kg-4 and the other serving grades 5-8. Icahn Charter School III has been temporarily housed at the former PS 204 location. This location has been provided to us for the 2010-2011 school year only. That school will be housed in a new facility in District 11 with Icahn Charter School IV and Icahn Charter School V which will open for the first time in September 2011.

I am writing pursuant to the New York State Charter School Law to inform you that Icahn Charter Schools will be applying to the State University of New York Charter Schools Institute for Icahn 6 and 7 by the end of February 2011. Although, we have not identified the exact location, we are actively seeking available property or a building that could be purchased and converted to meet the needs of our schools, within District 9.

I am hereby requesting speaking time at your next meeting since the law requires that a public hearing be held to inform the community. The Icahn Charter Schools and I are most grateful for your support in the past and look forward to continuing our strong working relationship. I look forward to your reply.

Very truly yours,

Jeff Litt,
Superintendent of Schools

CC: Julie Goodyear, Secretary
Board of Trustees



ACADEMIC SUCCESS

8. Academic Program

8(a) Key Design Elements

Provide a concise overview of the proposed charter school's key design elements, i.e., those aspects of the school critical to its success.

The Icahn Charter School 7 will be a replication of the other Icahn Charter Schools, which are all based on Icahn Charter School 1. The Icahn Charter School program goals are simple—to educate children to be intelligent, hard-working people who enjoy learning and make wise decisions. While this may seem simplistic, they are goals that are achievable, and once achieved, enable the student to be participatory and productive in this very complex world. The key design elements of the Icahn Charter Schools include: small class size; longer school day and longer school year; a rigorous academic program using the Core Knowledge curriculum; individualized learning that stems from an assessment-driven program; supportive school culture; financial stability.

As stated previously, the small class size was determined by the research in the Tennessee Class Size Study, where the research proved that small class size in the lower grades had a positive continuing impact on the students. The small class size impacts everything that happens at the school. Teachers and students and the students' families know each other well and all work together for the child's benefit. The principal and other administrators know the staff well, and know all the students in the school as well. Particularly for the student population that attends our schools, being in a small school, small class setting when the inner city is their usual environment, is a healthy and enabling setting. It allows children to focus on learning and to work productively.

The longer school day and longer school year provide students and teachers with ample time to absorb the material. The US school calendar was based on an agricultural calendar, which no longer applies. Especially for economically under-resourced children, who may have no books in their home, having more hours in school gives them more tools to participate fully in the marketplace in the long term, and for the short term to focus on proving that they can achieve at the highest academic levels.

Because of the longer day and longer year, the high standards that are part of the rigorous Core Knowledge curriculum can be achieved. The Core Knowledge curriculum was chosen because it benefits students and teachers. The curriculum has proven itself to be especially effective with under-resourced children. Core Knowledge is known to be strong in social studies and history, but it also provides stellar education in the other areas as all subject matters are intertwined and interdisciplinary. The connectivity and depth of the Core Knowledge curriculum especially benefits inner city children. For the teachers, the Core Knowledge curriculum provides a strong base for their lessons, but also allows a teacher to add to the base, so as is inherent in the charter school philosophy, the teacher has some autonomy along with the responsibility.

Core Knowledge is rigorous. Children learn to read early and absorb advanced vocabulary and concepts. However, it would be wrong to picture Icahn Charter School 7 students burdened by excessive school work, for part of the School's culture will be that learning is fun. Books are treasures. Knowledge is key. A math fair, a Shakespeare school production, the 100 Book Challenge, raising butterflies all make learning fun. Students and teachers derive joy from knowing that the children are learning. The assessment-driven program enables teachers to know what level of material each child should have, so the child can see progress. Through assorted assessments (described later), if a child can do more advanced work, that is provided. If the assessments indicate that a child needs remediation, that can be provided in-class or by the Targeted Assistance teacher.

At the heart of the individualized instruction is Targeted Assistance. Targeted Assistance at the Icahn Schools is a program of small-group or individual instruction to assure that each child is at least at grade level. If it is determined that a child needs Targeted Assistance, the classroom teacher, the Staff developer, the Principal and the Icahn network Director of Assessment will devise a plan for the child. This individual work is key to a child reaching grade level, and beyond. Also, a child may attend the after-school program for additional help. The school will also have Saturday Academy for the testing grades for students who need additional work.

In order to assure that children achieve, assessments are a daily part of the Icahn Charter School program. Even for Kindergarten, there is also ongoing assessment. Teachers will use weekly assessments, some of which are teacher generated, which compare students to other students in that class. There are also commercially printed assessments that teachers use to compare our students to a national norm. Another form of assessment is the writing exercise. Writing is taken very seriously in Icahn Charter Schools. Teachers and administrators discuss and plan writing strategies. Specific rubrics are created. Thanks to the Icahn network, there are many faculty working on refining and enhancing our assessments. SuccessMaker is a personalized program that enables the teacher to keep track of a child's progress. Targeted Assistance is another form of assessment. In small groups or in individual sessions, the Targeted Assistance teacher can easily determine a child's strengths and weaknesses. Parents will be informed of their child's results in the assessments. If a child is not up to standard, assignments will be sent home as additional remediation techniques.

The school culture is one of celebration—celebration of learning, celebration of success, celebration of participation in a successful school, celebration of collaborative relationships with teachers and parents. There is a strict code of conduct (attached in #16) that enables students to learn self-discipline, citizenship and that ensures that the school atmosphere is one where the path to learning is smooth and joyful. New teachers are trained in the school's expectations and students and families are provided with handbooks and group discussions on the importance of Icahn Charter School expectations.

In order to assure that children achieve, assessments are a daily part of the Icahn Charter School program. Even for Kindergarten, there is also ongoing assessment. Teachers will use weekly assessments, some of which are teacher generated, which compare students to other students in that class. There are also commercially printed assessments that teachers use to compare our students to a national norm. Another form of assessment is the writing exercise. Writing is

taken very seriously in Icahn Charter Schools. Teachers and administrators discuss and plan writing strategies. Specific rubrics are created. Thanks to the Icahn network, there are many faculty working on refining and enhancing our assessments. SuccessMaker and Targeted Assistance are other forms of assessment. In small groups or in individual sessions, the Targeted Assistance teacher can easily determine a child's strengths and weaknesses. Parents will be informed of their child's results in the assessments. If a child is not up to standard, assignments will be sent home as additional remediation techniques.

Because we expect our children to lead full lives, we also provide extra-curricular activities. Exactly which extra-curriculars are offered depend on the Principal and the staff of the particular school. Icahn Charter School 1 has a competition winning step team because a teacher at the school wanted to start that program. The number of options increases in the upper grades, but for the K-2 and then the K-6 of this charter, the children may have the option of basketball, flag football, cheerleading, track and field and chess.

Because charter schools historically have struggled with finances, both because charter schools have tight budgets and because the financial discipline is not ingrained in every academic, it has been important since the opening of the first Icahn Charter School that our school be financially healthy. To that end, we have always had a financial leader and an instructional leader, who work together to help each other ensure that their respective areas of responsibility are as effective as possible.

There are many elements that assure that each of the key design pieces work. Some of them will be described later in the application. The six key elements described above are at the heart of the Icahn Charter School model. They were part of the original application for the first Icahn Charter School and continue to be part of each of our schools. We have fine tuned them and expanded on them, thanks to the leeway that the Icahn network can provide. When we open a new school, instead of having to create each form, write each manual and syllabus and assessment instrument, devise staff development, all those pieces are already in place, so the new principal and staff can concentrate on working with their students. Additionally, when a new school opens, there is an experienced, large, talented team of Icahn staff to support the new school so that the key elements can be in place immediately.

8(b) Rationale and Supporting Research/Evidence

Explain how these elements specifically will allow the school to achieve its mission with the student population(s) it intends to serve and how the educational program will increase student achievement and decrease student achievement gaps, especially in English language arts and mathematics. Provide any research or examples of existing programs that support your claims.

The effectiveness of the Icahn Charter School program is evidenced in the testing results below. As the new school will be a replication of Icahn Charter School 1, it is informative to provide the comparative testing results for ICS1 as evidence of the strength of the Icahn Program.

English Language Performance of Charter School and Local District
by Grade Level and School Year

Grade	Percent of Charter School Students at Levels 3 and 4 and Enrolled in At Least their Second Year Compared to Local District Students							
	2006-07		2007-08		2008-09		2009-10	
	Charter School	Local District	Charter School	Local District	Charter School	Local District	Charter School	Local District
3	81	39	83	41	93	52.5	72	28.2
4	90	40	88	42	88	56.2	61	36.8
5	80	33	100	48	100	55.9	50	26.9
6	87	37	89	32	100	56.0	61	23.0
7	74	31	92	44	100	53.7	100	19.1
8			55	23	82	39.3	79	24.0
All	83	37	84	39	94	52.3	71	26.1

Mathematics Performance of Charter School and Local District
by Grade Level and School Year

Grade	Percent of Charter School Students at Levels 3 and 4 and Enrolled in At Least their Second Year Compared to Local District Students							
	2006-07		2007-08		2008-09		2009-10	
	Charter School	Local District	Charter School	Local District	Charter School	Local District	Charter School	Local District
3	100	71	100	81	100	86.5	81.2	36.8
4	94	60	97	68	94	77.1	90.6	38.8
5	100	48	100	65	100	72.4	76.4	41.6
6	100	45	100	55	100	65.3	83.7	36.9
7	97	37	100	56	100	68.6	96.8	34.8
8			88	45	100	62.5	100.0	30.5
All	98	53	97	61	99	72.0	88.1	42.7

BRONX NEIGHBORHOOD SCHOOLS

2009-2010 NYS ELA Percent Level 3 or Higher By All Students*

School	CS 4	CS 42	CS 55	MS 313	MS 339	ICAHN CHARTER SCHOOL 1
Grade 3	32.5	23.3	15.0			72
Grade 4	33.3	47.9	20.2			61
Grade 5	18.2	27.6	18.9			50
Grade 6	8.7			20.0	14.4	61
Grade 7	17.2			9.4	14.7	100
Grade 8	47.5			29.8	12.6	79
Total	26.2	32.9	18.0	19.7	13.9	71

* Source - <http://www.emsc.nysed.gov/irts/ela-math/2010/2010ELAandMathDistrictandBuildingAggregatesmedia.pdf>

MATH:

2009-2010 NYS Math Percent Level 3 or higher by all Students						
School	CS 4	CS 42	CS 55	MS 313	MS 339	ICAHN CHARTER SCHOOL 1
Grade 3	45.0	29.6	24.8			81.2
Grade 4	56.4	52.6	42.9			89.7
Grade 5	48.5	36.2	43.7			72.9
Grade 6	26.1			22.1	26.3	82.5
Grade 7	41.4			35.9	11.3	97.2
Grade 8	40.0			35.7	20.2	100.0
Total	42.9	39.4	37.1	31.2	19.2	87.25

Charter School Performance on 2009-10 State Social Studies Exam By All Students and Students Enrolled in At Least Their Second Year

Grade	Population	Percent at Each Performance Level					Number Tested
		Level 1	Level 2	Level 3	Level 4	Level 3/4	
5	All Students	0	6	58	36	94	36
	Students in At Least 2 nd Year	0	N/A	N/A	N/A	<u>N/A</u>	N/A
8	All Students	0	0	54	46	100	28
	Students in At Least 2 nd Year	0	0	N/A	N/A	<u>100</u>	N/A

Charter School Performance on 2009-10 State Science Exam By All Students and Students Enrolled in At Least Their Second Year

Grade	Population	Percent at Each Performance Level					Number Tested
		Level 1	Level 2	Level 3	Level 4	Level 3/4	
4	All Students	0	3	44	54	97	39
	Students in At Least 2 nd Year	0					
8	All Students	0	0	54	46	100	28
	Students in At Least 2 nd Year	0	0			<u>100</u>	

Icahn Charter Schools' small size is probably what distinguishes them most from other schools. The smaller class size that will be key in the design of Icahn Charter School 7 (ICS 7). As stated previously, the Icahn program was based on the Tennessee Class-size Study of April 1988 (http://www.futureofchildren.org/usr_doc/vol5no2ART8.pdf), which determined that in schools with small classes (13-17) there were significant academic gains over schools with larger classes. We intend to have classes with a maximum of eighteen students. There may be times when for reasons of staffing or student mobility, it is not possible to keep the number at exactly eighteen, but that is our target number. The results of the Study would be especially applicable to our student body.

“The small-class advantage was greater for minorities or for students attending inner-city schools in each year of the study...In most comparisons, the benefit to minority students is about twice as large (study's underlining) as that for whites. On the criterion-reference tests, the small-class advantage for minority students was even more pronounced than on the norm-referenced tests: a 17% advantage in grade-1 reading, and a 7% and 10% advantage in mathematics. The differential impact of small classes on minority and white students had the effect of reducing the achievement gap on every test (not to the detriment of either group). For example, the difference in mastery rates between whites and minorities in grade-1 reading was ‘reduced from 14.3% in regular classes to 4.1% in small classes’ Finn, J. & Achilles, C., Answers and questions about class size: a statewide experiment, 27 American Educational Research Journal 557, 568 (1990).”

The Tennessee Class Size Study also proved that small classes have been especially advantageous to minority students. The results of the Tennessee Class-Size Study indicated that the “benefit to minority students is about twice as large as that for whites...the difference in mastery rates between whites and minorities in grade-1 reading was ‘reduced from 14.3% in regular classes to 4.1% in small class.’ (Finn & Achilles, 1990, p. 568)”

Even when minority students enter larger classes after 4th grade, the benefits of the smaller classes in the K-4 years remain. In fact, even after small classes had been disbanded, students who had been in small classes were rated as superior on the three engagement behavior scales

mentioned earlier. Since our student population will be primarily minority students, the small classes are especially beneficial.

Other research also supports small schools:

WHY SMALLER IS BETTER

<http://www.ericdigests.org/1997-2/small.htm>

Educators, researchers, and survey responses received from teachers, students, and parents suggest several reasons for the superior performance of small schools. Cotton's 1996 synthesis of 103 studies and reviews describes a number of these underlying conditions. For example, the need, in small schools, for everyone's involvement in school activities¹ appears to be related to other social and affective areas. People in small schools come to know and care about one another to a greater degree² than is possible in large schools, and rates of parent involvement³ are higher. Staff and students are found to have a stronger sense of personal efficacy. Small-school students tend to take more of the responsibility for their own learning, learning activities are more likely to be individualized,⁴ classes are typically smaller,⁵ and scheduling is much more flexible.⁶

Many practices common in small schools are in operation largely because they are much easier to implement and manage in small environments than in large ones. Looking at instructional practices in small schools, researchers find that teachers are more likely to form teaching teams, integrate their subject-matter content, employ multiage grouping and cooperative learning, and use performance assessments. Finally, small schools tend to exhibit greater emphasis on learning that is experiential and relevant to the world outside of school.

From the same website is confirmation of the Icahn Charter School's belief in small schools for inner city children:

SCHOOL SIZE AND EDUCATIONAL EQUITY

We know that the states with the largest schools and school districts have the worst achievement, affective, and social outcomes (Jewel, 1989; Walberg, 1992). We also know that the students who stand to benefit most from small schools are economically disadvantaged and minority students. To put it another way, these students experience the

¹ Teachers at ICS1 typically volunteer to start extra-curricular programs.

² Teachers at ICS1 know the children in their own classes and also the children in the school. Teachers know the parents/guardians.

³ Parents will be expected to be part of the child's schooling. Monthly syllabus will be sent home so parents will know what is happening in the classroom. Parent teacher conferences will occur regularly.

⁴ Icahn Charter Schools infuse the program with individualized attention. Whether it is targeted assistance on topics where a student needs extra help, or whether it is the Einstein Club for the faster learners, the educational program is organized around a student's need.

⁵ Carl C Icahn schools have smaller classes and only two sections per grade.

⁶ In our small schools, we are able to identify children's needs early and address them, whether it is by carving out a small group of students within a classroom or in the Targeted Assistance room. Whatever configuration works best for the students is arranged.

greatest amount of harm from attending large schools (Cotton, 1996; Fowler, 1995; Howley, 1994; Lee & Smith, 1996). Yet, these are the very students who are primarily concentrated in large schools within large school districts (Jewell, 1989; Lee & Smith, 1996). Jewell writes, If minority students must struggle more to achieve a solid public education and if large districts and large schools find it increasingly difficult to achieve solid educational results for their students, we may be acting contrary to the interests of all concerned by organizing our public education system in a manner which assigns high proportions of minority youngsters to large schools within very large school districts. (p. 152)

We are confident that our small school template works and want to replicate it at our next schools. While other schools may find success with larger classes, our confidence in our model stems from the small school program.

Additional supporting evidence includes the AFT online that promotes small class size (<http://www.aft.org/topics/classsize/>):

Benefits of Small Class Size

Compelling evidence demonstrates that reducing class size, particularly for younger children, has a positive effect on student achievement overall and an especially significant impact on the education of disadvantaged children. The American Federation of Teachers is a strong advocate for reducing class size to help raise student achievement, especially in high-poverty, at-risk schools. In addition to increasing student achievement, smaller classes:

- Improve classroom atmosphere, students receive more individualized attention and teachers have flexibility to use different instructional approaches/assignments.
- Have fewer students to distract each other; lower level of noise.
- Enable teachers to know the students better and can offer more extra help; recognize learning problems/special educational needs.
- Have fewer discipline problems. By spending less time on discipline, teachers report spending more time on instruction.

Class size reduction is most effective when:

- Classes are between 15 and 19 students;

Other supporting research includes:

Project STAR

Tennessee's Project STAR (Students-Teacher Achievement Ratio) was designed to determine the short- and long-term effects of small class size in grades K-3 on student performance.

Student Achievement Guarantee in Education (SAGE) Program

SAGE began in Wisconsin in 1996 by phasing in class size reduction in grades K-3 in

school districts serving high-poverty students. The aim is to achieve a student/teacher ratio of 15:1.

Rouse Study

The Milwaukee Parental Choice Program is a publicly funded voucher program. In her study, Rouse compares the achievement of Milwaukee voucher students and students in three types of Milwaukee Public Schools: regular schools, magnet schools, and schools participating in the Preschool to Grade 5 Grant Program (P-5 schools).

Wenglinsky Study

Educational Testing Services (ETS) researcher Harold Wenglinsky compared 1992 fourth- and eighth-grade NAEP math results to class size and other policy initiatives. For purposes of the analysis, Wenglinsky defined small class size as fewer than 20 students.

Class-Size Reduction (CSR)

During the mid-1990s, the California Legislature passed the Class-Size Reduction (CSR) incentive program, which provided funds to schools statewide that set class size to 20 students in grades K-3.

The culture of a small school has a ripple effect. The administration knows the staff well. Staff and students know each other well. Staff and parents know each other well. Children (and teachers) thrive on the interaction. Education can be individualized, which we believe is crucial for children at risk of academic failure. We will continue the program of Targeted Assistance, a lynchpin of our current program, which is individualized tutoring for students whose testing results indicate they need extra work. We will provide programs for remedial work and to prepare for the state tests. We will be providing energetic staff development for our teachers prior to opening and during the academic year, improving their teaching skills and the results they achieve with our students. There will be a student mentoring program, with each staff member working with a handful of children to motivate and encourage academic excellence. Every program will be geared to maximum impact for each child, including special education children and ELL children.

Longer school Day, Longer school year:

Another key element in the Icahn program is the longer school day and longer school year. There has been much research supporting the idea of longer school days and longer school year. Children who attend the ICS 7 will be gaining ground on more affluent children by being in small classes with teachers who know them well for more hours a day and more days a year than most New York City students. The usual three-month summer break presents significant hurdles for economically disadvantaged students. The research of Karl Alexander, a sociologist at John Hopkins University, on the "Summer Effect," described in Education Week, March 22, 2000, confirms the harm of the summer hiatus.

The "Summer Effect"

Students from low-income families tend to lose ground academically over the summer, compared with peers who are better off, said Karl Alexander, a sociologist at Johns Hopkins University in Baltimore.

Mr. Alexander drew his conclusion from a long-term study of 800 Baltimore students who started 1st grade in 1982. During the school year, he and his colleagues found, poor and more affluent students learn at the same rate, judging by their scores on tests given in the fall and spring.

But the wealthier students tended to keep on learning over the summer—probably because they are more likely to attend camps, to visit libraries, or take vacations of longer distances, Mr. Alexander said. The poorer students, in contrast, would tread water academically from June to August.

Over the course of several years, Mr. Alexander points out, slight differences each fall can add up to a significant disadvantage for the lower-income children. "When you add it all together you've got an environment for some children that helps them move ahead compared with an environment for other children that's not as enriching," he said.

Education Week, March 22, 2000

A school year that extends into the summer, as ICS 7 will, lessens the time teachers of our students will need to make up for skills lost during the typical long summer break. Our children will have a school year of 188-193 days, with fruitful, engaging learning and activities that will improve their skills and stimulate their interest in school.

Core Knowledge:

Another element intrinsic to Icahn Charter Schools is the curriculum, which was chosen for its positive impact for children at risk of academic failure. Core Knowledge provides a rigorous curriculum and provides the background knowledge necessary for school success and success as adults. Lessons will be taught by thematic approach with a major focus on higher order thinking skills. Children in need of additional academic support will receive individual/small group instruction during Targeted Assistance. Student progress will be closely monitored and further strategies developed by teachers and the Principal and Staff Developer(s).

Core Knowledge is a proven program for students at risk, as it has been at our other Icahn Charter Schools. Dr. Hirsch's passion for the program stems from his belief that it is an equalizer. The intention is to give students at risk of academic failure the same knowledge that affluent children accumulate. Our proposed neighborhood is economically disadvantaged, populated predominantly by students of color. Research confirms the continued racial divide in test scores, wage equality and academic achievement in college. Jencks and Phillips report in The Black-White Test Score Gap, [Jencks, C. & Phillips, M., eds., The Black-White Test Score Gap (Brookings Institute Press 1998)] "the typical American black still scores below 75 percent of American whites on most standardized tests." (Jencks and Phillips explain that the statistics are similar for Hispanic and Native Americans, but the preponderance of research has focused on African-Americans.) Ron Suskind, Wall Street Journal reporter and author, in Hope in the Unseen, describes the anguish of a determined, but under-resourced Washington, D.C. student as

he arrives at Brown University with his 960 combined SAT score. “By Friday at dawn, a preemptive panic has set in. Maybe it was last night’s SAT exchange. Maybe it was not knowing who Freud was in a lunchtime discussion Thursday...” (p. 170, Broadway Books, 1999) E.D. Hirsch, the creator of the Core Knowledge program, suggests that a major reason for these discrepancies stems from a generally lower learning curve in schools of economic disadvantage. Vocabulary and exposure are key to enabling economically disadvantaged students to achieve. Core Knowledge addresses that discrepancy and narrows the economic divide.

Two schools using the Core Knowledge Program with similar populations to the students who would attend ICS 7 have shown decided improvement. At the Paul Cale Elementary School in Albemarle County, Virginia, the gap between the economically disadvantaged students and their classmates is narrowing. “Only one school in the district—Cale—stood out dramatically from the rest, far above what would be predicted by the socioeconomic composition of its students.” The principal of Cale, Gerald Terrell, attributed the encouraging results to Core Knowledge. In the four years since beginning to use Core Knowledge, “scores for all students have consistently gone up, especially in social studies, science, and math... We are scoring well above the national norms in social studies, above the 75th percentile... Our scores defy what you might expect.”

A similar result is found at the Hawthorne Elementary School in San Antonio, Texas. Most Hawthorne students are economically disadvantaged and have LEP needs, yet their standardized tests results are impressive. The testing shows the cumulative benefits of Core Knowledge. Whereas in 3rd grade the students are below the city pass rate (at 34%), by Grade 5, they are significantly above the district’s 56% rate—at 67%. A Johns Hopkins researcher writes, “The data appears to indicate that, despite the early deprivation that makes itself apparent to the teachers of children who enter school far below the academic standing of their more advantaged peers, potential failure to thrive over time can be ameliorated for children of teachers committed to the principle put simply by [E.D.] Hirsch that knowledge does, in fact, build on knowledge in rather dramatic ways.”

Without intervention, Hirsch states, “The widening gap is also the result of discouragement in the have-nots as they witness themselves falling behind. Many of the most desperately needed policy reforms in American education need to be based on the principle that small early deficits or advantages in intellectual capital build to insuperable gaps after just a few years of schooling.”

Using “The Longitudinal Study of Youth” as his measure, Hirsch believes that it is through increased knowledge that the economic divide in this country will be eliminated. The study found that “the more you know, the better you do in life. This has enormous implications for social justice and education, since the scientists found that general knowledge correlates with annual income. And furthermore it correlates with annual income regardless of which racial or ethnic group you come from. Knowledge makes people competent regardless of race, class, or ethnicity. It is the great social equalizer.” The most applicable evidence of the success of the Core Knowledge program is the success of our current schools.

Each of our charter schools will use the Core Knowledge Curriculum as the framework for all subjects, including major subject areas as well as art and music. Core Knowledge has been shown to be effective with at risk children. Our first school is further evidence of the

effectiveness of Core Knowledge for at-risk children. The Core Knowledge website cites its findings [“An Overview of Research on Core Knowledge (January 2004), http://www.coreknowledge.org/CK/about/research/eval12_2002.htm].” In an Oklahoma City study reported on the Core Knowledge website,

“students were randomly matched by grade level, sex, race/ethnicity, free-lunch eligibility, Title-I eligibility, special-education eligibility, and pre-score on the Iowa Test of Basic Skills (ITBS). This matching procedure yielded 339 matched pairs of Core Knowledge students and non-CK students. The two groups were statistically indistinguishable, except that the members of one group were taught Core Knowledge while the members of the other group were not. The Core Knowledge students were found to have outperformed their peers in almost all categories on the ITBS. Core Knowledge students achieved ‘significant’ or ‘highly significant’ advantages in reading comprehension (57.6 vs. 53.1), reading vocabulary (58.8 vs. 54.7), language usage (62.0 vs. 56.3), math concepts (59.3 vs. 56.3), math computation (64.2 vs. 60.7), and social studies (60.4 vs. 56.0).”

Continuing from the same article [“An Overview of Research on Core Knowledge (January 2004), http://www.coreknowledge.org/CK/about/research/eval12_2002.htm].” as it moves on to discuss the results of this research when using the Oklahoma state tests as the assessment,

“The Core Knowledge students scored higher on all four of the reading objectives and all six of the history and geography objectives. In reading, Core Knowledge students averaged 26.65 correct answers out of a possible 36, or 76%, while non-Core Knowledge students averaged only 22.88 correct answers, or 63%. In history and geography, Core Knowledge students averaged 46.66 correct answers (70%), versus 40.64 (61%) for the control group.

These last findings are interesting because they show that Core Knowledge can improve student performance, not only on norm-based tests like the ITBS but also on criterion-based tests like the Oklahoma CRTs — even when those tests are not based on the Core Knowledge curriculum.”

Also from the Core Knowledge website [“An Overview of Research on Core Knowledge (January 2004), http://www.coreknowledge.org/CK/about/research/eval12_2002.htm], research from Colorado schools is documented:

“One of the states in which the Core Knowledge idea has caught on is Colorado. There are currently more than 50 schools using Core Knowledge in the state. The following chart shows that Core Knowledge schools are doing quite well on the state’s CSAP exam. The results of the 2002 exam are summarized below. They show that large percentages of Core Knowledge schools are posting scores ten, twenty, and even thirty points above the state average. This is additional evidence that implementation of Core Knowledge can go hand-in-hand with success on state exams.

	Percentage of schools . . .
number of	above state at least 10 % at least 20 % at least 30 %

	schools	average	points above state average	points above state average	points above state average
3rd Grade Reading	41	80%	63%	32%	0%
3rd Grade Writing	41	80%	66%	54%	24%
4th Grade Reading	41	78%	71%	46%	17%
4th Grade Writing	41	80%	59%	44%	24%
5th Grade Math	42	76%	64%	55%	26%
5th Grade Reading	42	88%	64%	43%	21%
5th Grade Writing	42	79%	55%	50%	33%
6th Grade Math	37	84%	68%	46%	24%
6th Grade Reading	36	81%	64%	39%	11%
6th Grade Writing	36	81%	67%	42%	25%
7th Grade Math	31	81%	61%	36%	29%
7th Grade Reading	31	84%	65%	39%	16%
7th Grade Writing	32	78%	66%	38%	22%
8th Grade Math	29	69%	55%	48%	24%
8th Grade Reading	29	79%	66%	38%	10%
8th Grade Science	29	79%	62%	45%	14%
8th Grade Writing	29	69%	52%	41%	21%

Prior to the opening of school, all staff will receive intensive staff development in the implementation of Core Knowledge. Jeffrey Litt, Superintendent of our Icahn Charter Schools, is recognized as an expert in the field and has trained teachers and administrators throughout the country. Part of his work in our network is to help with the opening of our new schools. Our Superintendent has hosted hundreds of educators in his prior role as Principal of the Mohegan School, the second school in the nation to pioneer Core Knowledge, and at Icahn Charter School. He will oversee the pre-opening staff development. The Principal we hired for ICS 3 is an experienced Core Knowledge professional development trainer. She provided the professional development in Core Knowledge for ICS 3 before it opened. We will have approximately 1 ½ weeks of professional development in Core before opening. Mr. Santiago, our Assistant Principal for Operations at ICS1, also will help open our new schools for financial/business matters. We anticipate that each principal, including the principal of ICS 7, will infuse his or her individual school with the principal's own imprint, but the majority of the elements of each Icahn School's program will be from the replication model.

Icahn Charter School 7 (ICS 7) will provide an environment in which all staff members share one vision and demonstrate the significance of their role. All personnel will develop their professional skills to the highest extent and have the opportunity for input and collaboration. While the Core Knowledge curriculum is detailed and deep, it also encourages teacher input, which enhances their stake in the work. The principal will visit each class on a daily basis for the purpose of informal and formal observations. A professional library will be developed and will include current and relevant texts and journals for professional use. Each of our schools will have access to Mr. Litt's expertise throughout the school year, and the expertise of other staff in the Icahn network.

The highly structured curriculum of Core Knowledge in ICS1 will serve as a model to practicing teachers and administrators. We will use the curriculum initially created when Mr. Litt was

Principal at the Mohegan School, and further developed at Icahn Charter School. Mr. Litt's program was documented in various educational journals and news media. The successful implementation by our administrator resulted in numerous awards, including:

- The Thousand Points of Light, by President George Bush
- The RJR Nabisco China Breakers Award
- The Business Week/McGraw Hill Choice School Award
- The A+ Break the Mold Award by the US Department of Education
- The Cool School Award, by Donna Hanover Giuliani
- Designation as an Annenberg School
- PBS WNET Channel 13 recently profiled our current school in New York Voices, using it as an example of a successful charter school.

http://www.thirteen.org/nyvoices/features/charter_schools.html

Another key element in our program is our ability to prove the success of our curriculum from our focus on assessment. Our schools are assessment-driven, data-driven schools (with the intimacy engendered by our small school environment). The methods to be used to assess the needs of individual students will include:

- Teacher observations
- Individual performance on exams (teacher created and standardized)
- Informal reading inventories
- Samples of student work
- Portfolio assessment
- Ongoing assessment

The size of the classes will enable each teacher to effectively assess students, with depth and breadth.

In keeping with our belief of providing a rigorous and advanced curriculum, our middle school students take three (3) NYS Regents exams (Foreign Language, Integrated Algebra and Biology). This was the Superintendent's initiative to strengthen the students' academic record and provide an edge for admission to better schools. In his words, "our students will have a significant advantage in the college admission process, since they will have more credits in science and mathematics, as well as being trilingual." Our alumni visit us weekly to report their school success and many boast of their placement in advanced classes, ahead of their high school grade. Our middle school students are engaged in the study of Shakespeare, robotics, E readers and sixth graders receive a desktop computer for their home, following parent education workshops.

Parents are told from the beginning that our goal is to have their child admitted to a specialized high school and college is not optional. The effect of our model is widely known to CSI, with most, if not all of our graduates receiving admission to specialized high schools, specialized programs, scholarships to private schools, scholarships to parochial schools, and placement in advanced classes.

Individualized learning

The entire program at the school will be based on a rigorous academic program with individualized learning to meet each child's needs. A strong academic program with early intervention and a nurturing school environment assure that our students will learn the skills they need for academic success. A critical piece in our program is assuring that each child's needs are met is the early intervention and nurturing of our Targeted Assistance program. As in our previous schools, we will use the assessment data to determine which students need to be put in our Targeted Assistance program. The assessment data we will collect we anticipate will include ITBS, class tests, class writing, teacher-scored work. If a child were deemed below standard in any category, the classroom teacher and Targeted Assistance teacher would schedule work in those appropriate areas. Some children would go into the Targeted Assistance Program and some children would receive individual remediation by the classroom teacher including additional assignments.

In Targeted Assistance, the teacher and Staff Developer and Targeted Assistance teachers will jointly decide on remediation. The teacher (and Staff Developer) will work individually with a student in those areas that need remediation. The expertise of the already opened Icahn Charter Schools will lend itself to the new school. Targeted Assistance will be provided for 40 minutes daily to all students who fail to achieve level 3 or 4 on our practice tests, as well as children whose teachers feel are not solidly grounded, even if the child has received a 3 on the practice test. The Targeted Assistance teacher will articulate with the classroom teacher as to the needed instruction following the error analysis from the Director of Assessment or Principal or Success Maker. Staff development will be provided on an on-going basis. Children are placed in Targeted Assistance and promoted from Targeted Assistance as they demonstrate a weakness or adequate growth respectively. These children will be required to attend Saturday Academy and all after school tutoring programs as the school is able to provide it.

Along with Targeted Assistance, in our school's insistence on providing individualized learning, Title I services will be provided for all students who demonstrate a deficiency in either Mathematics or English Language Arts or in both subjects. Proficiency is measured by administering the IOWA Test of basic skills in early October. Groups are based upon the deficiencies measured by the test instrument and grouped accordingly. Service in the first year is to be provided by one Targeted Assistance Teacher. The teacher's time will be divided between English Language Arts and Mathematics based upon the results of the IOWA examination. In successive years the program will build to two teachers whose areas of remediation will also be determined by IOWA testing.

School culture

School culture is another key element in our school's program. In Attachment 16, the School's Code of Conduct is included. School research has shown that students at risk can find success in school if they are given a safe, focused school with energetic, well-trained administrators and teachers. The ambiance in the school will be one of respect. Students and teachers will greet each other in the hallways. Before the students arrive at school in the fall, they will have had a chance to meet the Principal and other teachers, who will convey their sense of pride in what is about to begin. It will be an honor to attend the School. The pride felt in attending the School

will manifest itself in students' attitudes about their schoolwork, about their teachers and about their classmates.

Historically, the American public school system provided an education that ensured a comfortable living for graduates. With each new generation, the bar became higher. The income gap between those who have a college degree and those who have only a high school diploma widens yearly. Thomas Friedman's book, The World is Flat, highlights the competition that our nation's workforce currently faces as technology facilitates outsourcing. Unless we produce educated, hard-working graduates of our educational system, middle class jobs will go overseas. Even with a high school diploma, a high school graduate in the United States is at a major economic disadvantage. Our society has changed; critical thinking is required in the workplace. We plan to judge our success by the scores of our students on the New York State required tests. We understand that the New York State Standards are reflective of critical thinking skills. More than likely, children who cannot meet state standards are not critical thinkers. Small classes enable teachers to assess a child's critical thinking skills with accuracy and address weaknesses. Children without these skills are doomed to be left behind in the American marketplace. The more asked of a child at an earlier age, the better able the child will be to think critically and analytically, and the easier it will be for the child to succeed in school and in a career. Knowledge builds on knowledge. Success builds on success. The Core Knowledge Program emphasizes accumulating knowledge at an early age and building on it. This knowledge lays the foundation for critical thinking.

Knowing that we will work with students deemed at risk of academic failure, we plan to tailor our program to develop positive work habits and responsibility for personal success. As demonstrated in our current school, where the children have adjusted to a rigorous instructional program, it becomes the norm for students to work hard. They see their teachers working hard. They see their Principal and Assistant Principals working hard. They see the building staff working hard. Everyone is involved in each child's education. Research shows that children respond to adults who take an interest in their lives. With our small school model, everyone knows each other, and there are several adults each year for each child who work hard for that child and show the child the road to achievement.

Icahn Charter Schools promote working hard as early as kindergarten. As an example, our kindergarten children begin the writing process rather than drawing simple pictures as is common in many schools. Children are expected to complete all assignments and come prepared to learn. The use of rubrics ensures that the students meet state standards. By beginning a rigorous program of instruction in kindergarten, our children learn that they are expected to strive for high achievement. In those cases where the child demonstrates a need for remediation, based on ITBS and Fox in the Box baseline scores, student achievement is supported by small group instruction. Frequent teacher assessments serve to determine whether or not areas previously in need of remediation have been mastered. The brain is a muscle. The more it is used, the more adept it becomes, regardless of economic wherewithal.

Economic disadvantage need not be a stultifying academic sentence. We plan to provide opportunities for field trips and in-school programs that will introduce neighborhood children to the world around them. Even children from the tallest apartment buildings in the City who are

used to anonymity—or perhaps especially children from the tallest apartment buildings in the City—cannot zone out and ignore the variety of lessons provided. When the largest class is 18 students, with only 9 grades in the school, children cannot fade into the background. Once children from economically disadvantaged households have the vocabulary and knowledge to compete in the world and the expectation that they will be successful, as has happened at our first charter school, they have just the same likelihood of success as their more advantaged neighbors.

At our current charter schools, based on the results cited earlier, we have changed the assumed risk of failure to an anticipation of the joy of success. We believe that success should be celebrated. In a small school, the impact of the celebration of success can spread throughout the school, as the improvement of any child will be noticed by the entire community.

It is common for children in large school traditional settings to become disengaged from the learning process, especially in a large school where a child may not be known by any adult. Often these children are overlooked, and the pattern of failure and the pattern of disengagement increases. Therefore, as in our schools, we will carefully monitor each child's performance and provide the support system that is necessary to ensure that our children are engaged. Student progress will be assessed frequently. The Core Knowledge curriculum will be the pedagogical framework of each classroom, with teacher imprint as well. Teacher effectiveness will also be assessed. Teachers will receive letters of commendation for their files. "Thank you" cards will be created for the principal to put in a teacher's mailbox, acknowledging specific moments. When possible, there will also be financial recognition. However, because charters have strict accountability requirements, if a teacher's results are not up to expectations, the teacher will be counseled as to how to improve the results. If the results still do not rise high enough, the teacher will either be moved to another area where his/her talents will be better used (cluster teacher, for example) or will not be re-hired.

Financial Stability:

Through its relationship with Foundation for a Greater Opportunity, ICS 7 will be able to maximize its revenues for academic purposes. With the Foundation's support for advancing start-up costs and extra early year costs until the last years of the charter, the Foundation will enable the revenue dollars to be spent on the academic program. The Foundation's board is interested in student achievement. If a school must use a disproportionate share of its initial revenue to pay rent and stay in the black, staff and student achievement will necessarily be limited.

There are many other areas where the connection with Foundation for a Greater Opportunity provides support for its charter schools. Foundation for a Greater Opportunity is a Supporting Organization Foundation created by Carl Icahn. The Foundation is housed in Icahn Associates' office. The Executive Director of the Foundation, Julie Goodyear, provides her services to the Icahn Charter Schools at no cost to the schools. Support comes from a variety of Icahn Associates' staff, as well. There is legal representation at every board meeting. A tax lawyer submits for the tax ID number and the not-for-profit status document (hundreds of pages). Outside pro bono educational and labor law work is provided by Sonnenschein Nath &

Rosenthal LLP. Lawyers are available whenever the school needs to consult. It is never a question of, “Can I afford the billable hours it will cost to get an answer to this question?” that so many charter schools have to consider. Icahn Associates’ CFO oversees the treasurer, accounting and finance operation of the Schools. The Icahn back office arranges for back office for the charter schools. An insurance expert is on staff at Icahn Associates and available to the schools. Icahn Sourcing is the branch of Icahn Associates that finds the most reasonable costs for supplies. The charter schools are able to leverage off the relationships with Icahn Associates’ vendors.

When there are real estate needs, there are real estate employees and lawyers available. When it was necessary to write a contract for the middle school expansion of the first charter school in collaboration with DOE/SCA, Icahn lawyers spent three years working through the intricacy demanded by DOE/SCA. We were told by one of the Icahn lawyers that it was the longest deal in which she had ever been involved. When there is a question about a lease, the real estate lawyers are a quick phone call away. While this work adds to the associates’ work, they frequently comment that it is rewarding for them to be involved in providing better educational opportunity for New York City’s children.

These arrangements free up the school staff to focus on education.

8(c) Statutory Purpose

Explain how the school is likely to materially further one or more of the following purposes of the Charter Schools Act (Education Law § 2850(2)):

- **Improve student learning and achievement;**

Our curriculum has clearly demonstrated that student achievement greatly exceeds the district schools as well as most other schools in NYS.

- **Increase learning opportunities for all students, with special emphasis on expanded learning experiences for students who are at-risk of academic failure;-**

Academic failure is not an option at Icahn Charter Schools. Our continued use of data, targeted remediation, articulation among classroom and subject specialists, Saturday Academy and repeated assessments, increases the learning opportunities.

- **Encourage the use of different and innovative teaching methods;-**

Our focus is on the use of technology, individualized lessons, student focus groups, providing children with laptops, clickers, Ipods, Ipads and desktops for 6th graders to keep at home, daily use of Success Maker and links to be used at home are indicators of innovative teaching methods.

- **Create new professional opportunities for teachers, school administrators and other school personnel.**

Teachers are constantly afforded professional development workshops as well as consultants in the areas of writing, technology and mathematics. We are proud of the career ladder afforded our staff as indicated by the fact that the last four principals hired for new our new schools came from the ranks of teacher/Staff Developer/dean at Icahn I.

- **Provide parents and students with expanded choices in the types of educational opportunities that are available within the public school system; and-**

As a result of our educational program, parents have the unique opportunity to make a choice as to which high school program they wish their child to attend, since our students are accepted to multiple competitive schools and competitive programs as well as private and parochial schools on scholarship.

- **Provide schools with a method to change from rule-based to performance-based accountability systems by holding the schools established under this article accountable for meeting measurable student achievement results.-**

Icahn staff thrives under the system of accountability, rather than rules based. As the superintendent explains to the staff, “we are all shareholders, if the third, fourth and fifth grade does well but the sixth, seventh and eighth do poorly, we close. If we achieve highly in Mathematics but poorly in ELA, we close.” The staff has clearly demonstrated that they accept what we refer to as an opportunity to demonstrate how well inner city kids can do. Teachers are empowered to be creative, be risk takers and share their innovative techniques.

9. Calendar and Schedules

9(a) School Calendar

Provide a copy of the proposed school's calendar for its first year of operation, including:

- **total number of days of instruction for the school year;**
- **first and last day of classes;**
- **organization of the school year (i.e. semesters, trimesters, quarters, etc.), especially important for schools that will ultimately include 9th through 12th grades;**
- **all planned holidays and other days off, as well as planned half days; and**
- **dates for summer school, if planned.**

We base our calendar on the New York City Department of Education's calendar. Since that calendar is not yet available for 2012, we are submitting our current calendar for reference.

REVISED 6/3/10
2010-2011 School Calendar

Thurs.-Fri.	Sept. 2-Sept. 3	All Staff Report for Staff Development There will be no classes.
Monday	September 6	School Closed (Labor Day) (Staff and Students)
Tues.-Wed.	Sept. 7-Sept. 8	All Staff Report for Staff Development There will be no classes.
Monday	September 13	School Session Begins For all Students 12:00p.m. Dismissal for Kindergarten Students Only.
Tuesday Only.	September 14	12:00p.m. Dismissal for Kindergarten Students
Monday School Opens Tuesday, October 12 th .	October 11	School Closed (Columbus Day)
Tuesday (Election Day)	November 2	All Staff Report for Staff Development

There will be no classes.

Thursday November 11 School Closed (Veteran's Day)
School Opens Friday, November 12th.

Thurs. & Fri. Nov. 25 & 26 School Closed (Thanksgiving Recess)
School Opens Monday, November 29th.

Fri.-Fri. Dec. 24-Dec. 31 School Closed (Winter Recess)
School Opens Monday, January 3rd.

Monday January 17 School Closed (Dr. Martin Luther King Jr. Day)
School Opens Tuesday, January 18th.

Mon.-Fri. Feb. 21-25 School Closed (Midwinter Recess)
School Opens Monday, February 28th.

Mon.-Tues. April 18-April 26 School Closed (Spring Recess)
School Opens Wednesday, April 27th.

Mon.-Mon. May 23-May 30 School Closed (Memorial Week)
School Opens Tuesday, May 31st.

Thursday June 9 All Staff Report for Staff Development
There will be no classes.

Monday July 4 School Closed (Independence Day)
School Opens Tuesday, July 5th.

Friday July 15 Last Day for Students, Teachers and
Paraprofessionals, 12:00p.m. Dismissal

REVISED 6/3/10
2010-2011 School Calendar
Total number of days

September	14
October	20
November	18
December	17
January	20
February	15
March	23

April	14
May	20
June	21
July	10
Total	188

9(b) School Schedules

Provide and explain sample school schedules for a typical week of instruction, including:

- **sample weekly schedule for teachers; and**
- **sample weekly schedule for students.**

Your narrative should include:

- **length of the school day (including the approximate start and dismissal times of the school day);**
- **for schools that will ultimately include all or select grades within the kindergarten through 8th grade range, the minimum number of hours the school will devote to core academic subjects in each grade, i.e., English language arts, mathematics, science, and social studies, and the total number of hours/minutes of instruction per week (exclusive of lunch, recess, study hall, etc.); and**
- **for schools that will ultimately include 9th through 12th grades (or select grades within that range), the course structure(s) that will allow students to fulfill high school graduation requirements established by the Board of Regents.**

Each school day will begin at 8:15am and ends at 4:00pm, with the after-school program ending at 6pm. After-school programming is for children in need of remediation and children whose parent/guardian work late. The school year will extend into mid-July for all children, except kindergarten, where the school year ends at the end of June. There will be 18 Saturday Academies starting in the second year of the School, for those children who are in need of remediation.

Below are teacher schedules for Icahn Charter School 1, which this school will be replicating:

TEACHER PROGRAM: E. Figueroa

Class: K-121 Date: September, 2010

DAY/ PERIOD	8:30 - 8:45	8:45-9:00	9:00-9:30 Whole class 9:30-10:10 group	10:10-11	11-11:50	11:50- 12:40	12:45-1:15	1:15-2:20	2:20 - 3:10	3:10 - 3:20snack 3:20-3:30 pack-up 3:30-4:00 recess/dismiss
MON	Arrival/ Handwriting practice	a.m. meeting	Whole class/ small group	SS	Read aloud/ writing response	LUNCH	100 Book Challenge	Math	Science/ Art	Snack/ Recess/ dismissal
TUES	arrival Handwriting practice	a.m. meeting	Whole class/ small group	Math (Mrs. K)	Read aloud/ writing response	LUNCH	100 Book Challenge	Science/ Art	SS	Snack/ Recess/ dismissal
WED	arrival Handwriting practice	a.m. meeting	Whole class/ small group	SS	Read aloud/ writing response	LUNCH	100 Book Challenge	Math	Science/ Art	Snack/ Recess / dismissal
THURS	arrival Handwriting practice	a.m. meeting	Whole class/ small group	Science/ Art	Read aloud/ writing response	LUNCH	100 Book Challenge	Math	Snack/ Inside recess	SS/ 4pm dismissal
FRI	arrival Handwriting practice	a.m. meeting	Whole class/ small group	SS	Read aloud/ writing response	LUNCH	100 Book Challenge	Math	Science/ Art	Snack/ Recess/ dismissal

TEACHER PROGRAM:

Mrs. Sierra

Class: 123

Date: September 2010

DAY/PERIOD	8:30-9:20 1	9:20-10:10 2	10:10-11:00 3	11:00-11:50 4	11:50-12:40 5	12:40-1:30 6	1:30-2:20 7	2:20-3:10 8	3:10-4:00 9
MONDAY	Unpack/HW Review	E.L.A.	E.L.A.	Social Studies (Ms. Franklin)	Lunch & Recess	100 Book Challenge	Math	Math	Science
TUESDAY	Unpack/HW Review	E.L.A.	Social Studies (Ms. Franklin)	E.L.A.	Lunch & Recess	100 Book Challenge	Math	Math	Science
WEDNESDAY	Unpack/HW Review	E.L.A.	E.L.A.	Art/Music	Lunch & Recess	100 Book Challenge	Math	Math	Social Studies (Ms. Franklin)
THURSDAY	Unpack/HW Review	E.L.A.	Social Studies (Ms. Franklin)	Art/Music	Lunch & Recess	100 Book Challenge	Math	Math	Assessment
FRIDAY	Unpack/HW Review	E.L.A.	Social Studies (Ms. Franklin)	E.L.A.	Lunch & Recess	100 Book Challenge	Math	Math	Assessment

2010-2011 Class/Teacher Schedule

TEACHER PROGRAM: Ms. Cook

Class: 2-105

Date: September 8, 2010

DAY/PERIOD	8:30 - 9:20 1	9:20 - 10:10 2	10:10 - 11:00 3	11:00 - 11:50 4	11:50 - 12:40 5	12:40 - 1:30 6	1:30 - 2:20 7	2:20 - 3:10 8	3:10 - 4:00 9
MONDAY	Morning Routine: Daybooking Homework Check	Phonics/ Grammar	Guided Reading/ SuccessMaker	Math	Lunch	Shared Reading/ Writing	Science	Social Studies	100 Book Challenge/ Copy down HW/ Pack up
TUESDAY	Morning Routine: Daybooking Homework Check	Read Aloud/ Word Work	Guided Reading/ SuccessMaker	Math	Lunch	Shared Reading/ Writing	Art	Social Studies	100 Book Challenge/ Copy down HW/ Pack up
WEDNESDAY	Morning Routine: Daybooking Homework Check	Phonics/ Grammar	Guided Reading/ SuccessMaker	Math	Lunch	Shared Reading/ Writing	Science	Social Studies	100 Book Challenge/ Copy down HW/ Pack up
THURSDAY	Morning Routine: Daybooking Homework Check	Read Aloud/ Word Work	Guided Reading/ SuccessMaker	Math	Lunch	Shared Reading/ Writing	Science	Social Studies	100 Book Challenge/ Copy down HW/ Pack up
FRIDAY	Morning Routine: Daybooking Homework Check	Phonics/ Grammar Active Learning Review	Weekly Assessments (spelling, Grammar, Reading)	Math	Lunch	Shared Reading/ Writing	Music	Social Studies	100 Book Challenge/ Copy down HW/ Pack up

TEACHER PROGRAM: Mrs. D. Starks

Class: 3-107 _____

Date: October 1, 2010

DAY/PERIOD	8:30 - 9:20 1	9:20 - 10:10 2	10:10 - 11:00 3	11:00 - 11:50 4	11:50 - 12:40 5	12:40 - 1:30 6	1:30 - 2:20 7	2:20 - 3:10 8	3:10 - 4:00 9
MONDAY	Morning prep Skills work Target skills	Reading	Math	100 Book Challenge Skills Work	Composition	Lunch	Art	Recess	Social Studies
TUESDAY	Morning prep Skills work Target skills	Reading	Math	100 Book Challenge Skills Work	Composition	Lunch	Music	Recess	Social Studies
WEDNESDAY	Morning prep Skills work Target skills	Reading	Math	Social Studies	Composition	Lunch	100 Book Challenge Skills Work	Recess	Science
THURSDAY	Morning prep Skills work Target skills	Reading	Math	100 Book Challenge Skills work	Composition	Lunch	Recess	Social Studies	Science
FRIDAY	Morning prep Skills work Target skills	Reading	Math	Social Studies	Composition	Lunch	100 Book Challenge Skills Work	Recess	Art

2010-2011 Class/Teacher Schedule

TEACHER PROGRAM: Mr. Geelan

Class: 4-108

DAY/PERIOD	8:30 - 9:20 1	9:20 - 10:30 2	10:30 - 11:00 3	11:00 - 11:50 4	11:50 - 12:40 5	12:40 - 1:30 6	1:30 - 2:20 7	2:20 - 3:10 8	3:10 - 4:00 9
MONDAY	Morning Discussions P.O.T.D.	Math	Reading Writing Language Arts	Reading Writing Language Arts	Test Prep (11:30) Ind. Reading (12:10 - 12:40)	Lunch	Social Studies	Recess (2:20-2:50)	Science (2:50-3:30) End of Day Reflections Journal Writing
TUESDAY	Morning Discussions P.O.T.D.	Math	Reading Writing Language Arts	Reading Writing Language Arts	Test Prep	Lunch	Recess (1:30-2:00) Ind. Reading (2:00-2:20)	Social Studies	Science (3:10-3:40) End of Day Reflections Journal Writing
WEDNESDAY	Morning Discussions P.O.T.D.	Math	Reading Writing Language Arts	Social Studies	Reading Writing Language Arts	Lunch	Recess (1:30-2:00) Ind. Reading (2:00-2:30)	Test Prep (2:30-3:00)	Science (3:00-3:40) End of Day Reflections Journal Writing
THURSDAY	Morning Discussions P.O.T.D.	Math	Reading Writing Language Arts	Reading Writing Language Arts	Test Prep	Lunch	Recess (1:30-2:00) Ind. Reading (2:00-2:30)	Science (2:30-3:10)	Social Studies
FRIDAY	Morning Discussions P.O.T.D.	Math	Reading Writing Language Arts	Social Studies	Reading Writing Language Arts	Lunch	Recess (1:30-2:00) Ind. Reading (2:00-2:30)	Test Prep (2:30-3:00)	Science (3:00-3:40) End of Day Reflections

2010-2011 Class/Teacher Schedule

TEACHER PROGRAM:

Class: Mr. Meyer

Date: September 8, 2010

DAY/PERIOD	8:30 - 9:20 1	9:20 - 10:10 2	10:10 - 11:00 3	11:00 - 11:50 4	11:50 - 12:40 5	12:40 - 1:30 6	1:30 - 2:20 7	2:20 - 3:10 8	3:10 - 4:00 9
MONDAY	Morning Routine	ELA Reading Grammar	Math	Math	ELA Writing Spelling	Lunch	Science	Test Prep -Recess 250-310	Prep
TUESDAY	Morning Routine	ELA Reading Grammar	Math	Prep	Math	Lunch	Science	ELA Writing Spelling	Vocabulary
WEDNESDAY	Morning Routine	ELA Reading Grammar	Math	Math	ELA Writing Spelling	Lunch	Science	Test Prep -Recess 250-310	Prep
THURSDAY	Morning Routine	ELA Reading Grammar	Math	Math	ELA Writing Spelling	Lunch	Science	Prep	Vocabulary or Computer Lab
FRIDAY	Morning Routine	Math	Prep	Math	ELA Reading Grammar	Lunch	Science	ELA Writing Spelling	Test Prep

TEACHER PROGRAM: Ms. Anderson

Class: 6-303 Date September 17, 2010

DAY/PERIOD	1	2	3	4	5	6	7	8	9
MONDAY	8:45-9:30 Reading (Vocabulary from Treasures)	9:30-11:00 Math (Ms. White) Grammar and Writing (ME)	11:15-11:45 Reading (S.T.A.R.S.)	11:45-12:30 Spelling	12:40-1:30 LUNCH	1:45-2:20 Science	2:20-3:10 Prep	3:10-3:30 Copy Homework and Pack Up	3:30-4:00 Recess and Dismissal
TUESDAY	8:45-9:30 Reading (Vocabulary from Treasures)	9:30-10:30 Reading (Treasures)	10:30-11:00 Reading (S.T.A.R.S.)	11:00-12:30 Math (Ms. White) Grammar and Writing (ME)	12:40-1:30 LUNCH	1:30-2:20 Prep	2:20-3:15 Grammar	3:15-3:30 Copy Homework and Pack Up	3:30-4:00 Recess and Dismissal
WEDNESDAY	8:45-10:00 Reading (Treasures)	10:10-11:00 Prep	11:00-12:30 Math (Ms. White) Grammar and Writing (ME)	12:40-1:30 LUNCH	1:45-3:15 Writing	3:15-3:30 Copy Homework and Pack Up	3:30-4:00 Recess and Dismissal		
THURSDAY	8:45-9:30 Reading	9:30-11:00 Math (Ms. White) Grammar and Writing (ME)	11:00-11:50 Prep	11:50-12:30 Reading Continued	12:40-1:30 LUNCH	1:45-3:00 Science	3:00-3:15 Independent Reading	3:15-3:30 Copy Homework and Pack Up	3:30-4:00 Recess and Dismissal
FRIDAY	8:45-10:00 Reading	10:00-11:00 Writing	11:00-12:30 Math (Ms. White) Grammar and Writing (ME)	12:40-1:30 LUNCH	1:45-2:20 Grammar	2:20-3:10 Prep	3:10-3:30 Copy Homework and Pack Up	3:30-4:00 Recess and Dismissal	

Subject Allocation by Grade & Periods 2010 – 2011
Icahn Charter School 1
 July 17, 2010

Grade	ELA/Writing	Mathematics	Social Studies	Science	Independent Rdg
Kindergarten	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
1 st Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk

2 nd Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
3 rd Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
4 th Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
5 th Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
6 th Grade	9 periods wk	9 periods wk	5 periods wk	5 periods wk	5 periods wk
7 th Grade	8 periods	8 periods	8 periods	7 periods	
8 th Grade	8 periods	8 periods	8 periods	7 periods	

A period = 50 minutes

These are minimum allocations of time to subject area

It might be helpful to read a description of a typical day of a student in third grade by her teacher at Icahn Charter School. We anticipate replicating this model. As will be noted in this sample, ICS1 has more than the required number of instructional hours. Even starting in kindergarten, the degree of rigor of our instructional program requires additional time to ensure the child has sufficiently mastered the content and skills addressed. Additionally, lessons are connected throughout the day, commonly referred to as "webbing". As such, a unit on Columbus will be covered in social studies, science (as an example--imagining how food was preserved without refrigeration), mathematics (as an example--illustrating the path that Columbus took and estimating distance), and ELA (with the introduction of new vocabulary words). In this way, lessons are not fragmented as they often are in non core schools. Even our non-academic periods, like group activities or daily preparations or recess, focus on following directions, teamwork, sportsmanship, taking turns, etc.

“The day starts at 7:45 for breakfast for those students whose parents need to drop the child at the school early. The Principal walks around the multi-purpose room talking with students. If it’s nice weather, after breakfast students go outside. If it’s not nice weather, the children stay in the multi-purpose room.

At 8:30, the class day starts out at 8:30 with greetings and welcome at the door.

8:30-8:45	Jane is asked to make her daily preparations. She puts her homework on the desk, sharpens her pencils and starts working on her assignment. Morning assignments (In School Assessment--ISA) are written on the board before the children enter the room.
8:45-9:10	Jane completes her morning assignment.
9:10-10:30	Language Arts begins. On Monday mornings this means that Jane will be given her spelling pretest (ISA) and receive her vocabulary words. Different skill building strategies are also tackled as language arts progresses. She might be asked to review the skill of using context clues (ISA) or the skill of the proper way to use a dictionary (ISA).

10:30-11:00	Grammar time. Jane's world becomes subjects, predicates, sentence combining and adverbs.
11:00-11:45	Math time. Jane is taught various skills and strategies to solve the hardest to the easiest problems.
11:45-12:30	Lunch.
12:30-1:15	Writing time. Jane is asked to put her wonderful ideas on paper. She's quiet as she focuses and begins to write. (ISA) Usually Mondays are a "stormy day" because Mondays are when topics are introduced and students brain "storm" their ideas.
1:15-2:00	Social Studies time. Jane visits unknown and known worlds, from ancient ruins to modern buildings in Manhattan.
2:00-2:30	Recess.
2:30-3:30	Art time. Monday is the day for art. Jane learns how to bring her ideas to paint and easel (ISA).
3:30-4:00	Preparing to go home. Jane copies her homework assignments and packs up her books.

It might also be informative to read "A Day in the Life" of a Kindergarten teacher at our current school. This might help visualize our concept of what we intend to replicate for the entry level experience in our school. It might also help to differentiate our program (and how it improves student achievement) from conventional public school requirements—which require 2.5 hours per day for half- day kindergarten and 5 hours per day for full day kindergarten and grades 1-6, exclusive of lunch and recess time.

The day starts at 7:45 for breakfast for those students whose parents need to drop the child at the school early. Mr. Litt walks around the multi-purpose room talking with students. If it's nice weather, after breakfast students go outside. If it's not nice weather, the children stay in the multi-purpose room.

8:30-8:45	Arrival, put away coats, take out homework, self-selected books
8:45	The Success Maker computers are turned on for students to begin individual 15 minute sessions (two students at a time) on the Success Maker computers. Throughout the day, every student in the class must complete the assignment as prescribed by the Success Maker program. (Reports are printed weekly for teacher evaluation.)
8:45-9:00	Morning meeting, review calendar, weather, group activity (attendance song, count-down to the 100 th)

9:00-9:10	Students listen to theme-related stories, review parts of the book, author, illustrator, predict the story events												
9:10-9:30	Students respond to story through adaptations, retelling, acting out, drawings, dictations, complete a sentence starter												
9:30-10:15	Students receive Social Studies instruction with Social Studies teacher												
10:15-11:00	Students receive English Language Arts instruction—review/teach sight words, letter of the day, phonics/phonemic awareness												
11:00-11:45	Lunch and lunch recess												
11:45-12:30	Literacy centers. 6 centers are created, 3 students from each kindergarten class (total of 6 students) are grouped together; students in centers are rotated daily and include: <table><tr><td>listening center</td><td>pocket chart</td><td>buddy reading</td></tr><tr><td>dramatic center</td><td>read the room</td><td>conference w/ teacher</td></tr><tr><td>art center</td><td>magnets</td><td>overhead</td></tr><tr><td>big books</td><td>writing center</td><td></td></tr></table> These centers and activities are changed periodically and only 6 are opened weekly Activities in centers help reinforce the literacy skills being taught during ELA instruction	listening center	pocket chart	buddy reading	dramatic center	read the room	conference w/ teacher	art center	magnets	overhead	big books	writing center	
listening center	pocket chart	buddy reading											
dramatic center	read the room	conference w/ teacher											
art center	magnets	overhead											
big books	writing center												
12:30-12:45	Students have quiet/independent reading. Students may also select free writing work, if preferred.												
12:45-1:45	Students receive math instruction; lesson begins with direct instruction as teacher introduces/reviews/models the skill for the day/week for approximately 15 minutes; students engage in hands-on math activities using a variety of math manipulatives to reinforce skills being taught												
1:45-2:45	Students receive science or art instruction. Lessons begin with students at the rug listening to a story that introduces/reviews the science topic or art lesson and then students return to their seats to participate in hands-on science activities/experiments or recreate works of art in the style of famous artists. Students may also create individual books based on the science/art lesson learned; the books are used to assess students’ understanding of the lessons.												
2:45-3:00	Students wash up for snack												
3-3:15	Snack and clean-up												
3:15-3:30	Students pack up and teacher reviews the homework												
3:30-3:50	Students are taken to the playground for afternoon recess												
3:50-4:00	Students gather belongings, line up and are dismissed for the day												

10. Curriculum

**** Note: In addition to the guidance below, Appendix A of this RFP includes a detailed discussion of SUNY's curriculum requirements and related guidance, as well as a curriculum framework template.****

10(a) Curriculum Process

Discuss the process that will be used to further develop and implement the school's curriculum. More specifically:

- **Explain how the curriculum has been aligned to the New York State Core Curriculum, bearing in mind that the state has adopted the Common Core State Standards ("CCSS") as its core curriculum for English language arts and mathematics.**

Icahn Charter Schools are very excited about the New York State Core Curriculum. In fact, our superintendent has played a significant role in pushing for a national curriculum, dating back to the President Clinton era, and was reported in the NY Times. We have aligned our curriculum in both ELA and Mathematics to meet the NYS Core Curriculum, in grades Kg.-6, which we have attached. We are particularly proud that in several ELA areas, our curriculum is more rigorous.

- **Explain how teachers will know what to teach and when to teach it, including the curriculum resources that will support instructional planning (e.g., curriculum frameworks, maps, scope and sequences, pacing guides, etc.) and who will be responsible for creating or selecting these resources.**

Each teacher receives a complete yearly curriculum in all subject areas. The selection of resources is a joint venture of the principal, Staff Developer and teacher. In the area of ELA, the Core Knowledge sequence prescribes literature to be covered, poetry, biographies and highly recognized children's stories. Professional development will start the year, prior to the return of students. Our schools are fortunate in having a tremendous supply of resources in all areas.

- **Describe the instructional materials that will be used in the classroom. If commercial or other pre-existing programs or materials will be used, explain the process for their selection. If any have already been selected, provide any evidence regarding their alignment to the school's curriculum framework (New York State Core Curriculum reflecting the adoption of the CCSS) and effectiveness with the intended student population. If instructional materials will be created, explain the process for their development and who will be responsible for it.**

The Core Knowledge sequence prescribes the resources to be used and has proven quite successful in our schools, as evidenced by our achievement.

- **Explain how the curriculum will be appropriate for the students the school intends to serve, as well as students with disabilities, English language learners and students below or above grade level. Explain how teachers will use the curriculum materials that are developed to meet the needs of these students.**

The theory behind Core Knowledge is that every child need as coherent background knowledge to comprehend written work and participate fully in American society. While there will certainly be children who need academic strengthening, our philosophy, as explained elsewhere in the application is to treat each child as gifted. ELL's receive daily ESL instruction from a certified ESL teacher, using both teacher made and commercial materials. We have been successful in serving special needs children with this curriculum by tailoring it to the individual needs of the child.

- **Describe the process the school will use to evaluate, review and revise the curriculum on at least an annual basis to ensure its effectiveness, alignment to state standards and alignment from grade to grade. Describe who will be responsible for this process and how teachers will be involved.**

Since piloting Core Knowledge in 1991 as the second principal in the nation to do so, our superintendent has seen annual revisions and has, in fact, amended our curriculum regularly. It is common in Core Knowledge to advance a topic to a succeeding grade or, in fact, move it to the preceding grade. This is determined by the field evaluations of more than 1000 recognized CK schools. The principals, superintendent and Staff Developers, along with subject specialists will be involved as a result of their first hand knowledge of the effectiveness of the current syllabus.

- **Describe the process the school will use to create or select new curriculum resources and instructional materials for new grades or courses, including who will be involved.**

As a recognized Core Knowledge organization, we follow the resources and materials that are recommended by the Core Knowledge Foundation, recognizing that the concept is to have a "shared body of knowledge." Professional staff is involved in the review process including the principal, superintendent, Staff Developer, subject teachers.

- **Describe the school's procedures for evaluating whether the curriculum is successfully implemented and effective for all students.**

Through the constant program of assessment on both previous exams, Test Ready, unit tests, teacher prepared tests and the increase of scale scores, we determine the effectiveness.

10(b) Curriculum Framework

Provide evidence that the proposed school’s curriculum would allow students to meet or exceed the performance standards established by the Board of Regents.

At a minimum, submit curriculum materials (see suggested template at Appendix A of this RFP) for all grade levels for which the proposed school would be authorized to provide instruction in its first year of operation aligned to New York State Standards (reflecting the adoption of the CCSS) for each of the four core content areas: English language arts, mathematics, science and social studies. These minimum requirements do not preclude an applicant from providing a complete curriculum framework for all grades proposed throughout the initial charter period to demonstrate the articulation of the instructional program over that time period. In addition, the proposal must provide at least a narrative description of the curriculum in any other content area in which the school would provide instruction in its first year of operation, e.g., art, music, foreign language.

The curriculum materials should include a key or explanation of the document’s organization, and should include a list of source documents for any references used in the curriculum itself. Given that curricular materials tend to be large documents, a table of contents is recommended.

10(c) Curriculum Implementation Work Plan

Provide a detailed work plan to demonstrate how the applicant team would use the curriculum framework included as Attachment 10(b) to develop the tools that teachers would use to implement the curriculum. At a minimum, your response to this request should include a specific timeline for implementation, identify all key tasks, the personnel that would either lead or participate in the process, and explain the outcome (for example, curriculum maps, scopes and sequence, instructional handbooks, etc.) of the implementation work plan from potential charter approval to start-up.

We are submitting as an attachment our entire curriculum, including required revisions in ELA and mathematics to align with the New York State Core Standards. The specific answers to the questions above are included in the curriculum.

11. Pedagogy

Describe the pedagogical approach the school will use to implement its curriculum. Specifically:

- **Describe the instructional methods or techniques to be employed in the proposed school, including any specific requirements for implementing this pedagogical approach, e.g., co-teaching or aides, technology, physical space, etc.**
- **Explain how these instructional methods will achieve the school's mission and goals and allow students to meet or exceed state performance standards.**
- **Identify any research or existing models that support the use of this pedagogy with the student population you intend to serve.**
- **Explain how the school's instructional methods are appropriate for and meet the needs of all students in your school, including students with disabilities and English language learners.**
- **If the proposed school has a unique curriculum focus or design, explain how the instructional methods will support its implementation.**

As an E.D. Hirsch Core Knowledge school, the focus of our practice is on content and not necessarily the delivery approach of that content. We subscribe to the practice of exceptional student outcomes. It is at the teacher's discretion to apply the pedagogy that works for him/her given their circumstance. This being said, there are many models of pedagogy that are acceptable practices of teaching and one is not necessarily better than another, but rather this information in the hands of a skilled teacher translates in to the flexibility of being able to go from one model to another based on teacher judgment, (i.e. teacher comfort level with a particular practice, the set of students that the teacher is working with, the content coupled with the set of students, etc...). Acknowledging this fact, there are certain key elements of teaching to which we subscribe as a school community.

The best way to begin to describe the "pedagogy" at an Icahn School is to begin with a definition of terms. Pedagogy as defined by the dictionary is "The science of teaching". The science of teaching can be compared to a three-legged stool, it embraces: the **what**, the **how** and the **why** of teaching. The "what" equates to what is taught/learned (Content). The "how" equates to how it is taught or learned (approaches to learning). And, the "why" equates to why it is taught or learned (philosophy or rationale). At Icahn, the "what" is Core Knowledge"; the "how" is an eclectic approach, and the "why" is Core Knowledge has a track record of exemplary student outcomes that is supported by literature in the field of education and the educational research. Key to this process is that the teacher must create effective and stimulating opportunities for learning that enable and lead to exemplary student outcomes. Icahn teachers are exposed to and supported in their mastery of various instructional methods: Directed Learning, Differentiation of Instruction, Mooney's work on "To, With, and By", Bloom's Taxonomy, Project-Based Learning, Mastery

Learning Model, the Effective Integration of Technology to Content, and the Renzulli Triad Model.

Our approach to instruction requires the use of a highly qualified teacher per classroom, a minimum of two Targeted-Assistance Teachers (One for Mathematics, another for English Language Arts [ELA]), two kindergarten paraprofessionals, one per kindergarten class, and a shared paraprofessional between each 1st grade classroom.

We require as part of our technology enhancement: a SmartBoard for every classroom, a minimum of three desktop computers per classroom, a computer lab and/or a computer mobile lab cart, iPads, iTouches, Senteos, Kindles and access to the internet.

As previously indicated, Icahn teachers are exposed to and supported in their mastery of various instructional methods: Directed Learning, Differentiation of Instruction, Mooney's work on "To, With, and By", Bloom's Taxonomy, Project-based Learning, Mastery Learning Model, the Effective Integration of Technology to Content, and the Renzulli Triad Model. All of these aforementioned instructional practices are considered educationally scientifically researched-based programs recognized in the literature and/or by the U.S. Department of Education as Best Practices that when used make a significant difference in student achievement.

Icahn Charter Schools' mission and goals are focused on creating an academic culture that enables students to achieve at high academic standards. All of the instructional practices employed by the staff promote active thinking, real world learning, and student choices related to learning.

Through the use of Core Knowledge, instruction is focused on advanced proficiency in reading, writing, mathematics, social studies, and science as an essential educational foundation to acquiring knowledge. Literacy instruction is weighted heavily on comprehension, word attack strategies and building academic vocabulary. Writing is developed through the 6 + 1 Traits of Writing Model, which helps the students express themselves through writing by building writing skills within a meaningful and purposeful context.

Mastery Learning proposes that all children can learn when provided with the appropriate learning conditions in the classroom. The application of mastery learning is based on Benjamin Bloom's Learning for Mastery Model. Mastery learning is predominantly a group-based, teacher-paced instructional approach, in which students learn by cooperating with their classmates. Some mastery learning strategies require students to work independently, rather than with fellow students.

The process is focused on the mastery of the curriculum. This type of learning works well with the traditional content-focused curriculum (i.e. Core Knowledge) that is grounded in well-defined learning objectives and organized in units. Instructionally since this approach can go from group work to independent work it lends itself to meet the needs of the student who is challenged, to the high achieving student and all of those in between. Mastery learning evaluates students in small chunks or units on criterion-referenced instruments.

It is through this blended delivery system of pedagogy and instructional practices that our staff is able to achieve our school mission and goals and make them a reality for our students. They are able to effectively reach all the students of varying core competency levels, readiness, interests, and experiences. Teachers will begin where students are and move them forward to a quality point academically and socially. Teachers will deliver meaningfully tiered planned lesson instruction, establish relevancy, use technology to meet individual needs and ensure that academic frustration levels are minimized in the process by offering targeted-assistance.

There are a myriad of ways that the Icahn instructional methods meet the needs of all the sub-categories of students that make up our school (i.e. Students with classified needs, Students with academic challenges, the average students, and the high-achieving students). The practices of Differentiated Instruction, Technology Integration, Targeted-Assistance, English as a Second Language and Special Education Teacher Support Services are a few of the primary approaches used by staff to effectively meet the special needs and interests of all the students.

Differentiated Instruction. This instructional method is about “responsive teaching” rather than a “one-size-fits-all” teaching practice. The Icahn teacher using differentiated instruction proactively plans varied approaches to what students need to learn, how they will learn it, and/or how they can express what they have learned in order to increase the likelihood that every student’s needs and interests are effectively met.

Technology Integration. The Icahn staff will be continually trained on how to effectively integrate technology into their instructional practices in order to enhance the teaching/learning experiences. As stated in Quick Key #3 to No Child Left Behind, (<http://www.learningpt.org/pdfs/qkey3.pdf>) “Effective research-based technology integration can enhance student learning in language arts, mathematics, science, social studies, foreign language, English as a second language, and technology literacy. Teachers can engage students in their own learning with 21st century tools...”

Targeted-Assistance. A Reading and Mathematics Teacher Specialist provides targeted-assistance at each Icahn school. The teachers will assist selected students with academic challenges with the intent of bringing them to proficiency and/or advanced levels of achievement in their areas in need of strengthening. Students will be cycled in and out of the program based upon ongoing review and consultation with the school’s Child Study Team. Serving small groups of students the teaching specialists will use effective methods and instructional strategies that are based on scientifically based research to bring the students to advanced levels of achievement. The specialists will be employing strategies such as: Differentiated Instruction, Bloom’s Higher Order Thinking Skills, Computer-Assisted Instruction, building comprehension and academic vocabulary skills...

English as a Second Language (ESL). A licensed ESL teacher will meet daily with our identified English Language Learners (ELL) in a pull-out/push-in model in order to provide each student with the English Language skills necessary to function successfully in any academic and social setting. The goal of the program is to provide the ELL student with the instruction necessary to allow them to progress through school at a rate commensurate with their native-English speaking peers. This is accomplished through the ESL teacher by tailoring the

instruction to meet the linguistic, academic, and affective needs of the ELL students. This is another area where technology is used to enhance the teaching and learning experience (i.e. SuccessMaker).

Special Education Teacher Support Services (SETTS). The highly trained SETTS teacher will be charged with the responsibility of designing, assessing, and evaluating the progress of their students as it relates to their IEP goals. They will provide small group instruction and/or co-teach as needed by pushing-in or pulling-out of the classroom.

The Icahn philosophy of varying the instructional methods addresses the issue that as human beings and as students, we are obviously not all alike. Given this information, it seems natural that an eclectic approach to teaching and learning which is grounded in the educational literature and in the research is the only way to meet the needs of all our students. Our approaches allow us to be flexible as educators and adjust the curriculum and our presentation of knowledge to students accordingly, rather than expecting students to modify themselves to the curriculum.

As an E.D. Hirsch Core Knowledge school the focus of our practice is on content and not necessarily the delivery approach of that content. The Core Knowledge Foundation acknowledges that it is the exposure to the content and not the pedagogical model to be used that will make the difference. The varied approaches to teaching and learning that have been outlined and are in practice at Icahn, and will be at the new school, speak to the differences in learning modalities of our student community. These are the recognized best practices in place today for optimal learning for all.



Icahn Charter School #1

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Daniel Garcia, Principal

Richard Santiago, A.P. Operations

Steve Sorokin, Director of Assessment

Lawford Cunningham, Staff Developer

Xioel Terrero, Guidance Counselor

Michelle Allen, Dean of Students

SEPTEMBER 2009 FIRST GRADE SYLLABUS

Language and Literacy:

- "Little Engine That Could"
- "The Three Little Pigs"
- "Aunt Minnie and the Twister"

Phonemic Awareness/Phonics:

- short a
- beginning sounds
- Initial short /i/i

Writing

- Shared Writing
- Interactive Writing
- Independent writing

Poetry:

- "Little Sally Walker" (Core Knowledge)

Sayings and Phrases:

- An apple a day keeps the doctor away. (Core Knowledge)
- Do unto others as you would have them do unto you. (Core Knowledge)

Mathematics:

- Chapter 1: Describe and Compare Numbers

History and Geography:

- Early Explorers and Settlers

Science:

- Earth Science: Weather and Seasons





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NOVEMBER 2009 FIRST GRADE SYLLABUS

Language and Literacy:

- Goldilocks and the Three Bears
- It Could Always Be Worse (Core Knowledge)
- Little Red Hen

Phonemic Awareness/Phonics:

- Short e
- Contractions (n't)
- Short o
- Inflectional ending -ed

Writing

- "How-to" Independent Writing
- Personal Narratives
- Trait: Organization

Poetry:

- Thanksgiving Day (Over the River and Through the Woods) by Lydia
- Maria Child (Core Knowledge)

Sayings and Phrases:

- If at first you don't succeed, try, try, again (Core Knowledge)

Mathematics:

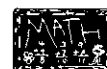
- Conclude Chapter 2: Addition Concepts
- Introduce Chapter 3: Develop Subtraction Concepts

History and Geography:

- Exploring the West

Science:

- Mammals





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DECEMBER 2009 FIRST GRADE SYLLABUS

Language and Literacy:

- "Where Animals Live"
- "The Fun Kids Band"
- "On My Way to School"

Phonemic Awareness/Phonics:

- Digraphs /sh /sh, /th /th
- Short u
- Contraction (n't)

Writing

- How To Sentences
- Writing Theme: Writing a Story
- Writing Trait : Organization, Word Choice

Poetry:

- The Purple Cow (Gelett Burgess)
- Sing a Song of People (Lois Lensci)

Sayings and Phrases:

- The more the merrier (Core Knowledge)

Mathematics:

- Chapter 4: Organize and Use Data

History and Geography:

- Three World Religions

Science:

- Habitats (Core Knowledge)

Music

- Music can tell a story (Core Knowledge)
- Traditional Christmas Songs





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JANUARY 2010 FIRST GRADE SYLLABUS

Language and Literacy:

- On My Way to School
- The Frog Prince (Core Knowledge)
- Rumpelstiltskin (Core Knowledge)

Phonemic Awareness/Phonics:

- l blends
- Long a
- Short i

Writing

- Writing personal narratives
- Letter writing

Poetry:

- The Owl and the Pussy Cat (Core Knowledge)

Sayings and Phrases:

- Hit the nail on the head. (Core Knowledge)

Mathematics:

- Chapter 4 – Organize and use data
- Continue with Addition/Subtraction Concepts and Strategies

History and Geography:

- Mexico Today

Science:

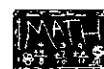
- Living Things and Their Environments

Art: Texture (Core Knowledge)

- Oh What a Feeling (Core Knowledge)

Music:

- Music Can Make You Move (Core Knowledge)





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FEBRUARY 2010 FIRST GRADE SYLLABUS

Language and Literacy:

- Kate's Game
- Kids Can Help
- Short Shadows, Long Shadows
- Rapunzel (Core Knowledge)

Phonemic Awareness/Phonics:

- Vowel, consonant, vowel
- S blends
- contractions

Writing:

- Verbs
- Personal Narratives
- Trait: Fluency & Presentation

Poetry:

- "My Shadow" by Robert Louis Stevenson (Core Knowledge)

Sayings and Phrases:

- Never leave for tomorrow what you can do today (Core Knowledge)

Mathematics:

- Continue Addition/Subtraction Concepts and Strategies
- Identify Coins

History and Geography:

- Early Civilizations of the Americas

Science:

- Intro: Solar System (Core Knowledge)

Art:

- Kinds of Pictures: Portrait and Still Life (Core Knowledge)

Music:

- Jazz (Core Knowledge)





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March 2010 FIRST GRADE SYLLABUS

Language and Literacy:

- Smile. Mike!
- Gram and Me
- Birds
- Recycling

Phonemic Awareness/Phonics:

- Long U, long I
- Long a, ay, ai
- Words with - oke, -ose, -ote
- Words with -er and est

Writing

- Persuasive Writing
- Writing a Report

Poetry:

- I Know All the Sounds the Animals Make (Jack Prelutsky)
- The Pasture (Robert Frost)

Sayings and Phrases:

- Let the cat out of the bag
- There's no place like home

Mathematics:

- Identify Coins
- Measure Time

History and Geography:

- Early Civilizations of the Americas

Science:

- Solar System (Core Knowledge)

Art:

- Portrait and Still Life

Music:

- For He's a Jolly Good Fellow





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April 2010 **FIRST GRADE SYLLABUS**

Language and Literacy:

- Pelican Was Hungry
- June Robot Cleans Up
- What's the Weather?
- The Wolf in Sheep's Clothing (Core Knowledge)

Phonemic Awareness/Phonics:

- Long o (vowel, consonant, vowel)
- Long u (vowel, consonant, vowel)
- Long a (ay, ai)
- Phoneme blending

Writing

- Persuasive Writing
- Writing a Report

Poetry:

- Seagull

Sayings and Phrases:

- A wolf in sheep's clothing (core knowledge)

Mathematics:

- Continue with Money and Time
- Recognize Number Patterns

History and Geography:

- Mesopotamia

Science:

- Living Things and Their Environments:
Oceans and Undersea Life (core knowledge)

Music:

- "Take Me Out to the Ball Game" (core knowledge)





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May 2010 FIRST GRADE SYLLABUS

Language and Literacy:

- Meet Ben Franklin
- Little Rabbit: A Tale from India
- Watch It Go
- The Boy Who Cried Wolf (core knowledge)

Phonemic Awareness/Phonics:

- Long a (ay, ai)
- Long e (ee, ea, y)
- Long o (oa, ow)

Writing

- Persuasive Writing
- Writing a Report

Poetry:

- "The Pasture" by Robert Frost (core knowledge)

Sayings and Phrases: (Core Knowledge)

- April showers bring May flowers

Mathematics:

- Understand Place Value (core knowledge)
- Solve Two digit Addition and Subtraction Problems

History and Geography:

- Ancient Egypt

Science:

- Force and Motion

Art:

- Get in Shape! Geometric Art (core knowledge)

Music:

- Student generated L.E.A.P songs





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JUNE 2010 FIRST GRADE SYLLABUS

Language and Literacy:

- Little Rabbit: A Tale from India
- Olivia
- The Kite
- Kids Inventions
- Whistle for Willie
- The Tale of Peter Rabbit (Core Knowledge)

Phonemic Awareness/Phonics:

- Long e (ee, ea, y)
- Long o (oa, ow)
- Long I (I, y, igh)
- R- Controlled Vowel /ar/
- R- Controlled Vowel /or/

Writing

- Writing a Report

Poetry:

- Michael, Row the Boat Ashore (Core Knowledge)

Sayings and Phrases:

- Practice makes perfect (Core Knowledge)

Mathematics:

- Place Value (continuation)
- Describe Fractional Parts

History and Geography:

- Ancient Egypt

Science: Living Things and their Environments

- Oceans and Undersea Life (Core Knowledge)

Art: Murals

- Paintings on Walls (Core Knowledge)

Music:

- Melody and Harmony (Core Knowledge)





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SEPTEMBER 2009 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- David's New Friends
- Mr. Putter and Tabby Pour the Tea
- Fighting the Fire

Reading Strategies:

- Make and Confirm Predictions
- Main Idea and Details
- Summarize

Author Study:

- Patricia Polacco

Writing:

- Personal Narrative

Spelling/Phonics

- Short a and Short i
- Short e, o, u
- Short a, Long a

Sayings and Phrases: Core Knowledge

- Back to the drawing board.
- Better late than never.

Mathematics:

- Number Sense
- Place Value to 100 and Patterns

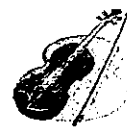
We will be doing a continuation of Time and Money throughout the year

Science:

- Parts of a Plant
- Life Cycles of plants, butterfly, frog

Art:

- Lines, shapes and colors





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NOVEMBER 2009 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- A Harbor Seal Pup Grows Up
- A Trip to the Emergency Room
- Farfallina and Marcel

Reading Strategies:

- Identify Sequence of Events
- Summarize

Spelling/Phonics

- Blends sl, dr, sk, sp, st
- Long a: ay, ai
- Long i: igh, I, ie, y

Grammar:

- Plural Nouns
- Proper Nouns
- Possessive Nouns

Writing:

- How to Paragraph

Sayings and Phrases:

- Easier said than done
- Don't judge a book by its cover.

Mathematics:

- Subtraction Concepts
- Model Two-digit Addition

We will be doing a continuation of Time and Money throughout the year.

History and Geography:

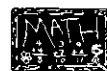
- Americans Move West

Science: Living Things

- Continue the study of Social insects
- Animals

Visual Arts:

- Animals Real and Imagined





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DECEMBER 2009 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- There's Nothing Like Baseball
- Unit 5 Review
- Head, Body, Legs

Reading Strategies:

- Make Inferences
- Cause and Effect

Writing:

- Continue Explanatory
- Persuasive Writing

Spelling/Phonics

- Long o- oa, ow, oe
- Long e- ee, ea, ey, y

Grammar:

- Plurals and Possessives
- Action Verbs
- Parts of Speech

Sayings and Phrases: Core Knowledge

- Eaten out of house and home
- Get a taste of your own medicine.

History and Geography

- Immigration and Citizenship

Mathematics:

- Adding two-digit numbers
- Introduce subtracting two-digit numbers

We will be doing a continuation of Time and Money throughout the year

Science:

- Continuation of the study of Animals

Visual Arts:

- Animals real and imagined

Poetry:

- The Night Before Christmas
- Rudolph is Tired of the City





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JANUARY 2010 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- Officer Buckle and Gloria
- Meet the Super Croc
- Dancing as a Team
- Click, Clack, Moo Cows That Type

Reading Strategies:

- Making Inferences
- Summarize

STORIES WILL BE READ FROM THE TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Persuasive Writing

Spelling/Phonics:

- Long u
- Diagraphs ch, sh, th, wh
- Diagraphs ch, tch, sh, th
- Blends scr, spr, str

Grammar:

- Present-tense verbs
- Past-Tense verbs
- The verb have
- Sentence Combining

Sayings and Phrases:

- Two heads are better than one.
- In hot water.

Mathematics:

- Subtracting Two Digit Numbers
- Measure Time and Temperature

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History and Geography:

- Immigration and Citizenship





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FEBRUARY 2010 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- Splish! Splash! Animal Baths
- Goose's Story
- A Way to Help Planet Earth

Reading Strategies:

- Generate Questions
- Compare and Contrast
- Cause and Effect
- Description

Core Knowledge: Sayings and Phrases:

- Easier said than done
- Eaten out of house and home

STORIES WILL BE READ FROM THE TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Expository Writing

Mathematics:

- 3 Digit Addition and Subtraction
- Introduce Organizing and Using Data

We will be doing a continuation of Time and Money throughout the year.

History and Geography:

- Civil Rights Leaders

Spelling/Phonics:

- R – controlled vowels ar, or
- R – controlled vowels er, ir, ur
- Variant vowel oo, ou

Grammar:

- Linking Verbs
- Helping Verbs
- Irregular Verbs

Science:

- Animal Habitats





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March 2010 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- Goose's Story
- A Way To Help Planet Earth
- Super Storms
- Nutik, the Wolf Pup

Reading Strategies:

- Cause and Effect
- Generate Questions
- Make and Confirm Predictions
- Make Inferences

STORIES WILL BE READ OUT OF TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Expository Writing – Writing a Report

Spelling/ Phonics:

- R-controlled vowels /er/, /ur/, /ir/
- Variant Vowel long u /oo/, /ou/
- Variant vowel long u /ui/, /ew/, /ue/
- Variant vowel o /au/, /aw/

Grammar:

- Helping Verbs
- Irregular Verbs
- Contractions

Mathematics:

- Organize and Use Data
- Determine the Value of Money
- Measure Length and Weight

We will be doing a continuation of Time and Money throughout the year.

Core Knowledge Sayings and Phrases:

- His bark is worse than his bite
- A penny for your thoughts

History and Geography:

- Civil Rights Leaders

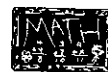
Science:

- Animals Study – habitats, food chains, adaptations, endangered species

Music:

- Patriotic music

Visual Arts: Continuation of.....Looking at Visual Arts – painting and sculpture





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April 2010 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- Dig Wait Listen – A Desert Toad's Tale
- Pushing Up the Sky
- Columbus Exploring New Lands

Reading Strategies:

- Summarize
- Visualize
- Main Ideas and Details

STORIES WILL BE READ OUT OF TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Expository Writing – Compare and Contrast
- Poetry

Spelling/ Phonics:

- Diphthong /ou/ ow, ou
- Diphthong /oi/ oi, oy
- Schwa a

Grammar:

- Pronouns
- Pronouns – I/me, we/us
- Possessive Pronouns

Mathematics:

- Measurement – Length and Area
- Measurement – Capacity and Weight

We will be doing a continuation of Time and Money throughout the year.

Core Knowledge Sayings and Phrases:

- Keep your fingers crossed
- Practice what you preach

History and Geography:

- Civil Rights Leaders

Science:

- Digestive System, Nutrition

Visual Arts: Continuation of.....

- Abstract Art





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May 2010 SECOND GRADE SYLLABUS

Language and Literacy:

- The Ugly Vegetables
- The Moon
- Unit Review

Reading Strategies:

- Sequence of Events
- Classify and Categorize
- Main Idea and Details

STORIES WILL BE READ OUT OF TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Expository Writing – Compare and Contrast (continued)

Spelling/ Phonics:

- Silent consonants /n/ gn
- Hard/Soft consonants /k/ c, /g/ g /j/ g

Grammar:

- Pronoun – Verb agreement
- Contractions

Mathematics:

- Measurement (continued)
- Understanding geometric figures and Spatial Reasoning.

We will be doing a continuation of Time and Money throughout the year.

Core Knowledge Sayings and Phrases:

- Turn over a new leaf
- Where there's a will there's a way

History and Geography:

- Japan Today/Ancient China

Science:

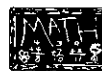
- Digestive System, Nutrition (continued)
- Magnetism

Visual Arts: Continuation of.....

- Abstract Art

Music: Elements of Music

- Recognizing keyboard instruments





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JUNE 2010 SECOND GRADE SYLLABUS

Language and Literacy: Stories

- Mice and Beans
- Stirring up Memories
- Music of the Stone Age
- African American Inventors

Reading Strategies:

- Story Structure – Fantasy and Reality
- Text Structure – Draw Conclusions
- Text Structure – Make Judgments
- Re-read - Compare and Contrast

STORIES WILL BE READ FROM THE TEXT (GUIDED, INDIVIDUALLY, AND IN GROUPS). LITERATURE WILL BE INTEGRATED THROUGHOUT PHONICS, COMPREHENSION, GRAMMAR, AND SPELLING LESSONS. THERE WILL BE A VOCABULARY TEST, A READING ASSESSMENT, AND A SPELLING TEST EVERY FRIDAY.

Writing:

- Expository Writing – Writing a Book Report

Spelling/Phonics:

- Endings -dge, -ge, lge, -nge, rge
- R- controlled vowels /ar/are, air, ar
- R- controlled vowels /ur/er, eer, ere, ear
- R- controlled vowels /or/ or, ore, oar

Grammar:

- Adjectives
- Articles a and an
- Adjectives that compare
- Adverbs

Sayings and Phrases: Core Knowledge

- Easier said than done
- Turn over a new leaf

Mathematics:

- Model Multiplication and Division
- Model Fractions

We will be doing a continuation of Time and Money throughout the year.

History and Geography:

- Ancient China
- Ancient India

Science:

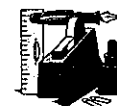
- Magnetism (continued)
- Simple Machines

Music:

- Scales in C Major

Visual Arts:

- Architecture





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SEPTEMBER 2009 THIRD GRADE SYLLABUS

Language and Literacy:

- James and The Giant Peach by Roald Dahl

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- Catch a Little Rhyme by Eve Merriam
- Trees by Sergeant Joyce Kilmer

Sayings and Phrases:

- Actions speak louder than words.
- Beat around the bush.

Mathematics:

- Place value system

History and Geography:

- Canada Today

Science:

- Looking at plants and animals

Art:

- American Indian Art

Music:

- Elements of Music – Reading and writing music





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NOVEMBER 2009 THIRD GRADE SYLLABUS

Language and Literacy:

- Charlie and the Chocolate Factory by Ronald Dahl

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- Eletelephone by Laura Richards
- First Thanksgiving For All by Nancy Byrd Turner

Writing:

- Persuasive Writing

Sayings and Phrases:

- Let bygones be bygones.
- On its last leg.

Mathematics: Geometry and Graphing

- Three Dimensional Objects
- Pictographs, Bar Graphs, Line Plots

History and Geography:

- Exploration of North America

Science:

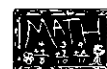
- Our Solar System

Art:

- Three Dimensional Art Work

Music:

- Elements of Music





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Lawford Cunningham, Staff Developer
Xioel Terrero, Guidance Counselor
Michelle Allen, Dean

DECEMBER 2009 THIRD GRADE SYLLABUS

Language and Literacy:

- The Lion, the Witch and the Wardrobe by C.S.Lewis

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- The Twelve Days of Christmas
- Adventures of Isabel by Ogden Nash
- Jimmy Jet and his TV Set by Shel Silverstein

Sayings and Phrases:

- Last Straw
- A feather in your cap.

Mathematics: Geometry and bar graphs

- Measurement: Length, capacity, and weight

History and Geography:

- Exploration of North America

Science:

- continued....the Solar System
- The skeletal system

Art:

- Drawing with scissors Henri Matisse

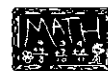
Writing:

- Writing response to literature : Book Review
- Fictional Narrative: Fairy Tales

Music:

- Aaron Copland, "Hoedown" from Rodeo: "Simple Gifts" from Appalachian Spring

**PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS
TEST WILL BE CONDUCTED EACH DAY**





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JANUARY 2010 THIRD GRADE SYLLABUS

Language and Literacy:

- The Lion, the Witch and the Wardrobe (continued)

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- The Bee by Isaac Watts
- The Crocodile by Lewis Carroll
- Father William by Lewis Carroll

Writing:

- Fictional Narrative Fairytales

Sayings and Phrases:

- Clean bill of health.

Mathematics:

- Measurement (continued)
- Fractions

History and Geography:

- The Thirteen Colonies

Science:

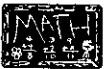
- Ecosystems

Art: Elements of art working together

- Rosa Bonheur : The Horse Fair
- Edward Hicks : The Peaceable Kingdom
- Horace Pippin : Victorian Interior

Music:

- Verse, refrain, timbre, and phrasing





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FEBRAURY 2010 THIRD GRADE SYLLABUS

Language and Literacy:

- The Watsons Go To Birmingham 1963 by Christopher Paul Curtis

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- Dream Variation by Langston Hughes

Writing:

- Explanatory Writing : "How to Do"

Sayings and Phrases:

- Touch and go

Mathematics:

- Division facts (0-5)
- Time
- Money

History and Geography:

- The Thirteen Colonies

Science:

- The Human Body: How the ear works

Art:

- Tar Beach by Faith Ringgold
- Balance and Symmetry in art

Music:

- Elements of Music: Review musical notes on a C Major scale using "Do re mi" etc.

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March 2010 THIRD GRADE SYLLABUS

Language and Literacy:

- The Friendship

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- "Dreams" by Langston Hughes

Sayings and Phrases:

- On its last leg
- Rule the roost

Writing: Descriptive Writing

- Compare and Contrast

Mathematics:

- Decimals
- Division Facts

History and Geography:

- The Thirteen Colonies

Science: Vision: How the eye works

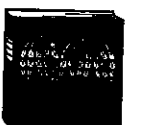
- Light and Optics

Art:

- Edvard Munch : The Scream

Music:

- Understand names of lines and spaces in the treble clef; middle C





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April 2010
THIRD GRADE SYLLABUS

Language and Literacy:

- Charlotte's Webb by E.B. White

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry: Myths and Mystical characters

- Damon and Pythias
- Androcles and the Lion

Sayings and Phrases:

- The show must go on
- When in Rome, do as the Romans do

Writing: Descriptive Writing

- Compare and Contrast

Mathematics:

- Dividing with Remainders

History and Geography:

- Ancient Rome

Science:

- The Nervous System

Art:

- Ancient Rome and Byzantine Civilization
- The Pantheon

Music:

- Singing in Rounds
"Hey, Ho, Nobody Home"





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May 2010 THIRD GRADE SYLLABUS

Language and Literacy:

- Peter Pan by J.M. Barrie

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- Home Sweet Home by John Ciardi
- Limerick by David McCord

Sayings and Phrases:

- Beauty is only skin deep
- The bigger they are, the harder they fall

Writing: Expository Writing

- Research Report

Mathematics:

- Review mathematic problem solving skills

History and Geography:

- Ancient Rome

Science:

- The Respiratory System

Art: Weaving

- The art of painting without brushes

Music:

- Italian composers: Vivaldi and Handel





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JUNE 2010 **THIRD GRADE SYLLABUS**

Language and Literacy:

- Peter Pan by J.M. Barrie (continued)

Students will focus on story elements.

THERE WILL BE A COMPREHENSION TEST EVERY FRIDAY AS WELL AS A VOCABULARY/SPELLING TEST. THE STUDENTS WILL WRITE SENTENCES FROM THE DICTATION OF THEIR SPELLING WORDS EVERY FRIDAY.

Poetry:

- Monarch Butterfly by Marilyn Singer
- The Caterpillar by Christina Kossetti

Writing:

- Continuation of Animal Research project

Sayings and Phrases:

- Birds of a feather flock together

Mathematics:

- Review Mathematics problem solving skills

History and Geography:

- The Vikings

Science:

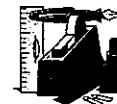
- The Digestive System

Art: continuation

- Weaving: The art of painting without brushes

Music:

- Classical Composer – Frederick Chopin





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SEPTEMBER 2009 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Freaky Friday
- Tales of a Fourth Grade Nothing
- The Mystery of the Missing Lunch

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Pronouns

- Subjects and Predicates

Writing:

- Personal Narrative
- Each day students are to do a writing prompt pertaining to stories read.

Sayings and Phrases:

- Look before you leap.
- Honesty is the best policy.

Mathematics:

- Place value and money
- Addition and subtraction

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: Geography

- Latitude and Longitude
- Time Zones
- Mountains of the World
- Mountains as Barriers

Science: Earth Science: Shaping Earth, Air and Weather

- Places where Earth's water can be found
- The Water Cycle

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATHEMATICS TESTS WILL BE CONDUCTED EACH DAY.





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NOVEMBER 2009 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Chapter Book : Super Fudge
- Mighty Jackie: The Strike Out Queen
- My Dairy from Here to There
- First Thanksgiving
- The First Thanksgiving

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Nouns

- Common and Proper Nouns
- Singular and Plural Nouns

Writing: Persuasive Essay

- Identify the features of a persuasive essay
- Each day students are to do a writing prompt pertaining to stories read.

Sayings and Phrases:

- Don't count your chickens before they hatch.
- An ounce of prevention is worth a pound of cure.

Mathematics:

- Multiplication and Division Facts
- Factors and Multiples

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: The American Revolution

- Taxes and Protest
- Crisis and Conflict
- Fighting Begins
- Checks and Balances

Science: The Earth and Its Resources

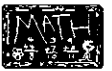
- Shaping Earth
- Saving Earth's Resources

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

Art: Famous Paintings and Landscapes

- Gilbert Stuart (Core Knowledge)
- George Washington
- Students will create Landscape Drawings

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATHEMATICS TESTS WILL BE CONDUCTED EACH DAY.





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DECEMBER 2009 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Time for Kids: Focus on China
- How Ben Franklin Stole the Lightning
- Stealing Beauty
- Dear Mr. Winston

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Nouns

- Irregular Plural Nouns
- Possessive Nouns

Writing:

- Persuasive letter writing
- Concrete poetry
- Each day students are to do a writing prompt pertaining to stories read

Sayings and Phrases:

- Haste makes waste
- Live and let live

Mathematics:

- Properties of Multiplication
- Multiplying two digit numbers

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: The American Revolution

- The March to Victory
- After Yorktown

Science: Earth Science

- Weather and Erosion
- Changes caused by natural events

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

Speeches: Sojourner Truth

- Ain't I a Woman (Core Knowledge)

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATHEMATICS TESTS WILL BE CONDUCTED EACH DAY.





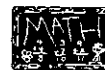
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JANUARY 2010 FOURTH GRADE SYLLABUS



Language and Literacy: Stories

- Roadrunner's Dance
- My Brother Martin
- Time For Kids: Kid Reporters at Work
- Mystic Horse

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Verbs

- Action Verbs
- Past and Future tense verbs
- Helping Verbs

Writing:

- Each day students are to do a writing prompt pertaining to stories read
- Dialogue Writing

Sayings and Phrases: (Core Knowledge)

- Can't hold a candle to.
- When it rains, it pours.
- You can lead a horse to water, but you can't make it drink.

Mathematics:

- Divide by one-digit numbers
- Division patterns
- Geometric figures

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: The U.S. Constitution

- The Three Branches
- Checks and Balances

Early Presidents

- George Washington (our first president)

Science:

- Minerals, rocks and soil
- Resources from the past (fossils)
- Pollution and conservation

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.



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FEBRUARY 2010 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Treasure Island
- Snowflake Bentley
- Dear Mrs. LaRue

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Verbs (CONTINUED)

- Linking Verbs

Writing: Response to Literature

- Stray by Cynthia Rylant

Sayings and Phrases: (Core Knowledge)

- The bigger they are, the harder they fall
- Seeing is believing

Mathematics: Geometry

- Identify and describe Geometric Figures
- Measuring Angles
- Area and Perimeter

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography:

- Early Presidents : Washington - Jackson
 - The Early Republic
 - Successes & Failures

Science: Physical Science: Matter

- Properties of Matter
- Classify Matter

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATHEMATICS TESTS WILL BE CONDUCTED EACH DAY





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March 2010 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Adelina's Whales
- At Home in the Coral Reef
- The Blind Hunter
- Time for Kids: The Power of Oil

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING,
COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Pronouns

- Subject and Object Pronouns
- Pronoun – Verb Agreement

Writing: Personal Narratives

- Haikus
- Character Sketches

Each day students are to do a writing prompt pertaining to stories read.

Sayings and Phrases:

- Bull in a china shop
- Beauty is only skin deep

Mathematics: Measurement

- Measuring capacity, length, and weight
- Measure length, area, and temperature

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE
GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: Early Presidents

- James Monroe, John Quincy Adams, and Andrew Jackson

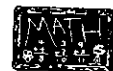
Science:

Physical Science: Electricity

- Earth Layers
- Explore the different forms and sources of energy

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

PREPARATION FOR THE NEW YORK STATE SCIENCE, ENGLISH LANGUAGE ARTS AND
MATH TESTS WILL BE CONDUCTED EACH DAY.





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April 2010 **FOURTH GRADE SYLLABUS**

Language and Literacy : Stories

- Because of Winn Dixie
- Ranita The Frog Princess
- Exploring the Undersea

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar: Adjectives

- Common and Proper adjectives
- Adjectives that compare

Writing: Descriptive Writing

- Identify the features of a compare/contrast essay
- Poetry

Each day students are to do a writing prompt pertaining to stories read.

Sayings and Phrases:

- Birds of a feather flock together
- Laugh and the whole world laughs with you. Weep and you weep alone.

Mathematics: Fractions

- Parts of a whole
- Equivalent Fractions
- Compare and Order Fractions

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: American Reformers

- Problems with the new country
- Attempts to fix them

Science: Life Science: Kingdoms of Life

- Cells: Describe Life Processes
- Classify Living Things

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

PREPARATION FOR THE NEW YORK STATE SCIENCE, ENGLISH LANGUAGE ARTS AND MATH TESTS WILL BE CONDUCTED EACH DAY.





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May 2010

FOURTH GRADE SYLLABUS

Language and Literacy :Stories

- Ranita the Frog Princess
- Exploring the Undersea Territory
- Chapter Book: Pippi Longstocking

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar:

- Adjectives
- Adverbs

Writing: Descriptive Writing: Compare and Contrast

- Descriptive poster of writing focusing on word choice (Adjectives)

Each day students are to do a writing prompt pertaining to stories read.

Sayings and Phrases:

- Break the ice
- Through thick and thin

Mathematics: Decimals

- Comparing and ordering decimals
- Adding and subtracting decimals
- Rounding and estimating decimals

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography: Europe in the Middle Ages

- From Dark Ages to Feudalism
- Castles, Knights, and Serfs

Art:

- Architectural Balance
- Architectural Wonders of the World

Music:

- Opera

Science: Life Science: Kingdoms of Life

- The Plant Kingdom: The function of roots, stems, and leaves
- The Life Cycle of a Flowering Plant

A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

PREPARATION FOR THE NEW YORK STATE SCIENCE, ENGLISH LANGUAGE ARTS AND MATH TESTS WILL BE CONDUCTED EACH DAY.





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JUNE 2010 FOURTH GRADE SYLLABUS

Language and Literacy: Stories

- Me and Uncle Romie
- The Gold Rush Game
- Wild Horses
- Chapter Book: Fudge-a-mania

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS AND INDEPENDENT READING.

A VOCABULARY TEST WILL BE GIVEN EVERY FRIDAY.

Grammar:

- Adjectives continued
- Articles (a, an, the)

Writing:

- Expository Writing
- Each day students are doing a writing prompt pertaining to the stories read

Sayings and Phrases: (Core Knowledge)

- Bury the hatchet
- Etc.
- RSVP

Mathematics: Geometry

- Rounding and Estimating Decimals (continued)
- Problem Solving Strategies

A MATH QUIZ WILL BE GIVEN AFTER EACH LESSON AND A CHAPTER TEST WILL BE GIVEN AFTER THE CHAPTER IS COMPLETED.

History and Geography:

- Europe in the Middle Ages
- Rivalries and Wars
- The Road to the Renaissance

Science:

- The Plant Kingdom (continued)
- Invertebrates and Vertebrates

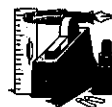
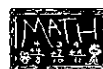
A SCIENCE QUIZ WILL BE GIVEN AFTER EACH SECTION

Art:

- Abstract Art
- Surrealism

Music:

- Music and Dance from Around the World





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SEPTEMBER 2009 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Miss Alaineaus
- Davy Crockett Saves the World
- Forests of the World

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED, INDIVIDUAL, AND GROUP APPROACHES. LITERATURE WILL BE INTEGRATED THROUGHOUT THE LANGUAGE ARTS EXPERIENCE, EMPASIZING COMPREHENSION, GRAMMAR AND SPELLING.

VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Baseline assessments
- Writing prompts
- Organization

Grammar:

- Punctuation

Sayings and Phrases:

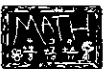
- Don't bite the hand that feeds you.
- Well begun is half done.

Mathematics: Number Patterns and Algebra

- Divisibility Patterns
- Prime Factors
- Powers and Exponents
- Exponents
- Order of Operations

History and Geography:

- Comprehensive preparation for the 5th grade NYS Social Studies Exam





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Michelle Allen, Dean

OCTOBER 2009 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Ultimate Field Trip 5: Blasting Off to Space
- Pipolo and the Roof Dogs
- Shiloh
- Rattlers!

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED, INDIVIDUAL, AND GROUP APPROACHES. LITERATURE WILL BE INTEGRATED THROUGHOUT THE LANGUAGE ARTS EXPERIENCE, EMPASIZING COMPREHENSION, GRAMMAR AND SPELLING.

VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Memoirs
- Organization

Grammar:

- Combining Sentences and Complex Sentences
- Run-on Sentences
- Correcting Fragmented Sentences

Sayings and Phrases:

- Chip on your shoulder.
- Few and far between.
- Forty winks.

Mathematics: Adding and Subtracting Decimals

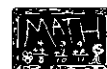
- Representing Decimals
- Comparing and Ordering Decimals
- Rounding Decimals
- Estimating Sums and Differences

History and Geography:

- Comprehensive preparation for the 5th grade NYS Social Studies Exam

Science: Cells and Living Things

- Animal and plant cells
- Classifying Life





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NOVEMBER 2009 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- The Night of San Juan
- Black Cowboy, Wild Horses
- Sleds on Boston Common

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED, INDIVIDUAL, AND GROUP APPROACHES. LITERATURE WILL BE INTEGRATED THROUGHOUT THE LANGUAGE ARTS EXPERIENCE, EMPASIZING COMPREHENSION, GRAMMAR AND SPELLING.

VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Memoirs

Grammar:

- Plural Nouns
- Possessive Nouns
- Action Verbs

Sayings and Phrases:

- Read between the lines.
- Vice versa.
- What will be will be.

Mathematics: Fractions

- Fractions and Decimals
- Adding Fractions
- Subtracting Fractions

History and Geography:

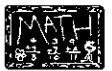
- Comprehensive preparation for the 5th grade NYS Social Studies Exam
(Monday, November 16, 2009 & Tuesday, November 17, 2009)

The Mayans, Incans & Aztecs

- Science & Civilization
- Religion & War
- People of the Mountain

Science: Cells and Living Things

- Plant Classification
- Animal Systems



Trip to Philadelphia on Tuesday, November 10, 2009



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DECEMBER 2009 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- When Esther Morris headed West
- Beyond the Horizon
- My Great-Grandmother's Gourd

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED, INDIVIDUAL, AND GROUP APPROACHES. LITERATURE WILL BE INTEGRATED THROUGHOUT THE LANGUAGE ARTS EXPERIENCE, EMPASIZING COMPREHENSION, GRAMMAR AND SPELLING.

VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Autobiographies

Grammar:

- Linking Verbs
- Contractions

Sayings and Phrases:

- Count your blessings.
- A penny saved is a penny earned.

Mathematics: Fractions and Algebra

- Multiplying Fractions
- Dividing Fractions
- Properties of Addition and Multiplication

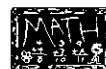
History and Geography: Maya, Aztec and Inca Civilizations

- People of the Mountain
- Collapse of Empires

Science: Parents and Offspring

- Plant Life Cycles
- Animal Life Cycles
- Traits and Heredity

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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JANUARY 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Zathura
- Goin' Someplace Special

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Native American Research
- Response to Literature

Grammar:

- Pronouns
- Irregular verbs

Sayings and Phrases:

- The grass is always greener on the other side of the hill.
- Make a mountain of a molehill.

Mathematics: Algebra

- Adding Integers
- Subtracting Integers
- Multiplying Integers
- Dividing Integers

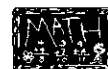
History and Geography: Westward Expansion before the Civil War

- Manifest Destiny
- Wars of Expansion

Science: Interactions in Ecosystems

- Relationships in Ecosystems
- Adaptation and Survival
- Changes in Ecosystems

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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FEBRUARY 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Carlos and the Skunk

Books: The Autobiography of Fredrick Douglass

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Native American Research
- Response to Literature

Grammar:

- Proofreading

Sayings and Phrases:

- Those who dare to fail miserably can achieve greatly..

Mathematics: Algebra

- The Distributive Property
- Solving Addition and Subtraction Equations
- Functions

History and Geography: The Civil War

- Slavery
- Conflict & Compromise
- Secession & War

Science: Protecting Earth's Resources

- Earth's Surface
- Earth's Soil, Minerals and Rocks
- Fossils and Energy

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MARCH 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Getting Out the Vote

Books: The Autobiography of Fredrick Douglass
Maniac Magee by Jerry Spinelli

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Native American Research/PowerPoint Presentations
- Response to Literature

Grammar:

- Proofreading
- Pronoun-Verb Agreement

Sayings and Phrases:

- Accomplishments will prove to be a journey, not a destination.
- It is amazing what you can accomplish if you do not care who gets the credit.

Mathematics: Ratio and Proportion

- Ratio
- Proportion
- Percent

History and Geography: The Civil War

- Emancipation
- Turning Points
- Surrender and Assassination

Science: The Universe

- The relationship between the Earth and the Sun.
- The relationship between the Earth and the Moon.

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APRIL 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Hurricanes

Books: The Autobiography of Fredrick Douglass
Maniac Magee by Jerry Spinelli

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Proofreading/Editing
- Response to Literature

Grammar:

- Possessive Pronouns
- Hyphens

Sayings and Phrases:

- It's never to late to mend.
- Time heals all wounds.

Mathematics: Geometry

- Classify, measure and draw angles
- Bisect line segments and angles
- Name two dimensional figures

History and Geography: Westward Expansion After The Civil War

- Transcontinental Railroads
- Cowboys and Outlaws

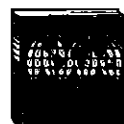
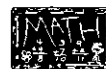
Science: Matter and its Changes

- Properties of matter
- Elements

Music:

- Music notes
- Learning how to play the recorder

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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MAY 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- The Catch of the Day

Books: The Outsiders

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED, INDIVIDUAL, AND GROUP APPROACHES. LITERATURE WILL BE INTEGRATED THROUGHOUT THE LANGUAGE ARTS EXPERIENCE, EMPASIZING COMPREHENSION, GRAMMAR AND SPELLING.

VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Short Fiction

Grammar:

- Pronouns
- Homophones

Sayings and Phrases:

- Every cloud has a silver lining.
- To kill two birds with one stone.
- Out of the frying pan and into the fire.

Mathematics: Geometry

- Area of parallelograms
- Area of triangles
- Area of circles

History and Geography: Westward Expansion After The Civil War

- The Transcontinental Railroads
- Cowboys, Indians and Outlaws

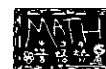
Science: Matter and its Changes

- Mixtures
- Compounds and Chemical Changes

Art:

- Historical and Cultural Dances

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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JUNE 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- Spirit of Endurance
- Weslandia

Books: The Adventures of Tom Sawyer

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Short Fiction

Grammar:

- Adjectives
- Articles: A, An and The

Sayings and Phrases:

- Envy is as evil as arrogance.
- The loss of enemies does not compromise for the loss of friends.

Mathematics: Probability

- Find and interpret the theoretical probability of an event.
- Find outcomes using lists, tree diagrams and combinations.
- Math Fair

History and Geography: The Modern Era

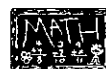
- Two World Wars
- The Roaring Twenties
- The Great Depression

Science: Motion and Energy

- Motion
- Forces and Motion

Music: Classic Composers

- Bach
- Mozart





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JULY 2010 FIFTH GRADE SYLLABUS

Language and Literacy: Stories

- The Catch of the Day

Books: The Outsiders

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VOCABULARY EXAMS WILL BE GIVEN ON FRIDAY AS WELL AS A GRAMMAR ASSESSMENT TEST.

Writing:

- Short Fiction

Grammar:

- Pronouns
- Homophoneds

Sayings and Phrases:

- Every cloud has a silver lining.
- To kill two birds with one stone.
- Out of the frying pan and into the fire.

Mathematics: Geometry

- Area of parallelograms
- Area of triangles
- Area of circles

History and Geography: Creating the Modern Era

- The Great Depression
- World War II

Science: Matter and its Changes

- Mixtures
- Compounds and Chemical Changes

Art:

- Historical and Cultural Dances





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SEPTEMBER 2009 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Take Action

Stories:

- The Summer of the Swans
- Lost City: The Discovery of Machu Pichu

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

VOCABULARY, SPELLING, PHONICS, AND GRAMMAR WILL BE INTEGRATED THROUGHOUT THE READING INSTRUCTION.

Writing:

- Students will review and apply the steps of the writing process (plan, organize, draft, revise, publish and present).
- Students will learn how to incorporate details into their writing to enrich and develop their ideas.
- Students will write memoirs.
- Students will write to respond to literature, as preparation for the New York State English Language Arts Test.

Sayings and Phrases:

- Necessity is the mother of invention.
- Procrastination is the thief of time.
- An ounce of prevention is worth a pound of cure.

Mathematics:

- Problem Solving
- Decimal Patterns and Algebra
- Statistics: Analyzing Data

History and Geography:

- General Geographic Terms
- Ancient Greece
- Introduction to Greek City – States
- Athens & Sparta

Science:

- Students will define science and identify questions that science cannot answer.
- Students will compare and contrast theories and laws.
- Students will identify a system and its components.
- Students will identify the three main branches of science.





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OCTOBER 2009 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Take Action

Stories:

- Gecko Glue, Cockroach Scouts, and Spider Silk Bridges
- The Magic Gourd

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Memoires
- Personal Narratives

Saying and Phrases:

- Nothing Will Come of Nothing
- Rome Wasn't Built in a Day
- There's More Than One Way to Skin a Cat

Mathematics: Statistics: Analyzing Data

- Frequency Tables
- Making Predictions
- Line Plots
- Stem-and-Leaf Plots
- Box-and-Whisker Plots
- Bar Graphs and Histograms

Mathematics: Algebra/Integers

- Absolute Value
- Comparing and Ordering
- Geometry: The Coordinate Plane
- Adding, Subtracting, Multiplying, and Dividing using Integers

History and Geography:

- Athens & Sparta
- Athens Golden Age
- Socrates, Plato & Aristotle

Science: The Nature of Science

- Introduction to Science
- The Scientific Method





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NOVEMBER 2009 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Take Action

Stories:

- The Magic Gourd
- The Interrupted Journey

Theme: Saving the Day

- How Tia Lola Came To Stay

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Friendly Letter
- Response to Literature

Saying and Phrases:

- Truth is stranger than fiction.
- He who hesitates is lost.

Mathematics: Algebra/Integers

- Absolute Value
- Comparing and Ordering
- Geometry: The Coordinate Plane
- Adding, Subtracting, Multiplying, and Dividing using Integers

Mathematics: Equations and Functions

- Writing expressions and equations
- Solving Addition, Subtraction, and Multiplication Equations
- Solving two-step Equations
- Functions and Linear Equations
- Lines and Slopes

History and Geography: Ancient Rome

- The Roman Republic
- Caesar and Augustus
- Christianity and Empire's Fall

Science: Body Systems

- Skeletal System
- Muscular System
- Circulatory System
- Organs and Digestive System
- Respiratory System
- Immune System

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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DECEMBER 2009 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Take Action

Stories:

- The Interrupted Journey

Theme: Saving the Day

- The Night of the Pomegranate

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Students will respond to literature from a variety of genres.

Saying and Phrases:

- A bird in the hand is worth two in the bush.
- Don't cut off your nose to spite your face.
- Don't look a gift horse in the mouth.

Mathematics: Fractions, Decimals, and Percents

- Greatest Common Factor
- Least Common Multiple
- Comparing and Ordering Rational Numbers
- Perimeter and Area
- Circles and Circumference

History and Geography: The Enlightenment

- Science and Philosophy
- Problems with Government

Science: Beyond Earth

- Exploring Space

PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS TEST AND MATHEMATICS TEST WILL BE CONDUCTED EACH DAY.





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JANUARY 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Stories:

- How Tia Lola Came To Stay
- The Night of the Pomegranate

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Students will practice writing short and long response for the ELA.
- Students will respond to literature from various genres.

Saying and Phrases:

- A leopard can't change its spots.
- A friend in need is a friend indeed.

Mathematics:

Applying Fractions:

- Reviewing the conversion between fractions, decimals, and percents.
- Estimating with fractions.
- Adding and subtracting fractions.
- Multiplying and dividing fractions and mixed numbers.

Ratios and Proportions:

- Ratios, rates.
- The percent proportion.

History and Geography: The French Revolution

- The Three Estates
- Problems with the System

Science: Exploring Space

- Early Space Missions

INTENSE PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATH TEST WILL BE CONDUCTED EVERYDAY.





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FEBRUARY 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Stories:

- Zoo Story – (Time for Kids Article)
- Rumpelstilskin's Daughter

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Persuasive writing

Saying and Phrases:

- Rule of thumb.
- To have a bee in your bonnet.
- If wishes were horses, beggars would ride.

Mathematics:

Ratios and Proportions:

- Rates
- Algebra-Solving Proportions
- Geometry-Scale Drawing
- Percent of a Number
- The Percent Proportion

Applying Percent:

- Percent and Estimation
- Percent of Change
- Sales Tax and Discount
- Simple Interest

History and Geography: The French Revolution

- Napoleon's Ambition
- The Romantic Revolution

Science:

- The Solar System and Beyond

INTENSE PREPARATION FOR THE NEW YORK STATE ENGLISH LANGUAGE ARTS AND MATH TEST WILL BE CONDUCTED EVERYDAY.





Icahn Charter School #1

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Bronx, New York 10457
Telephone (718) 716-8105
Fax (718) 716-6716
www.ccics.org

Daniel Garcia, Principal
Richard Santiago, A.P. Operations
Steve Sorokin, Director of Assessment

Lawford Cunningham, Staff Developer
Xioel Terrero, Guidance Counselor
Michelle Allen, Dean

MARCH 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Stories:

- Rumpelstiltskin's Daughter
- The Great Serum Race

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Students will write to respond to literature as continual practice for the upcoming ELA exam.

Saying and Phrases:

- Rule of thumb.
- To have a bee in your bonnet.
- If wishes were horses, beggars would ride.

Mathematics: Applying Percent

- Percent and Estimation
- Percent of Change
- Sales Tax and Discount
- Simple Interest

History and Geography: The Industrial Revolution

- Revolution in Europe
- Capitalism and Socialism
- Problems and profit

Science:

- The Solar System and Beyond

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APRIL 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Stories:

- The Great Serum Race
- The Emperor's Silent Army
- The Case of the Phantom Poet

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Students will write to respond to literature as continual practice for the upcoming ELA exam.
- Students will respond to literature from various genres.

Saying and Phrases:

- A fool and his money are soon parted.
- Good fences make good neighbors.

Mathematics: Applying Percent

- Percent and Estimation
- Percent of Change
- Sales Tax and Discount
- Simple Interest

Geometry

- Angles
- Making Circle Graphs
- Angle Relationships
- Triangles

History and Geography: The Industrialism in America

- Oil and Electricity
- The Effects of the Railroads
- Monopolies and Trusts

Science: Earth Science

- Forces Shaping Earth

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MAY 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Stories:

- Juan Verdades
- Nothing Ever Happens on 90th Street

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COMPARATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Writing for Information

Saying and Phrases:

- A fool and his money are soon parted.
- Good fences make good neighbors.

Mathematics: Probability

- Simple Events
- Tree Diagrams
- The Fundamental Counting Principle
- Permutations
- Combinations
- Theoretical and Experimental Probability
- Independent and Dependent Events

Geometry

- Angles
- Making Circle Graphs
- Angle Relationships
- Triangles
- Quadrilaterals

History and Geography: The Industrialism in America

- The Growth of Cities and Corruption
- Immigrants in search of a new life

Science: Earth Science

- Forces Shaping Earth

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JUNE 2010 SIXTH GRADE SYLLABUS

Language and Literacy:

Theme: Saving the Day

Historic Novel:

- Ashes of Roses

STORIES WILL BE READ FROM THE TEXT THROUGH GUIDED READING, COOPERATIVE LEARNING GROUPS, AND INDIVIDUAL READING.

GRAMMAR, SPELLING, VOCABULARY, AND PHONICS WILL BE INTEGRATED THROUGHOUT LITERACY INSTRUCTION.

Writing:

- Research Report

Saying and Phrases:

- Time heals all wounds.
- When there's a will, there's a way.
- Every cloud has a silver lining.

Mathematics: Geometry

- Similar Figures
- Polygons and Tessellations
- Translations
- Reflections

Applying Percent

- Percent and Estimation
- The Percent Equation
- Using Statistics to Predict
- Percent of Change
- Sales Tax and Discount
- Simple Interest

History and Geography: Immigration

- Phases of Immigration
- Americans Reactions

Science: Interactions of Matter

- Motion, Forces, and Simple Machines
- Energy



12. Assessment

12(a) Assessment System—

The Icahn Charter Schools are assessment-driven, data-driven schools. Ongoing assessment will be a driving force in the school. Virtually every month there will be some kind of standardized assessment, along with in-school assessments, as indicated in the syllabi included below. Constant assessment enables school administrators, teachers, parents and students to know the progress a student has made and if there is need for remediation. Assessments also enable lessons to be tailored to a child's needs, which is a foundation of the Icahn Charter Schools' program. With grade level goals and individual class goals, teachers will be aware of the improvement that each child needs to make. Especially in our first years, when some of the children will have come from neighboring schools, there will be catch-up along with the grade level work. Thanks to the small size of the School, it is possible to provide remedial work for children in need of improvement and also make sure the student is learning the grade level materials.

The syllabi for each month of each grade follow. On each syllabus is a description of the topics covered and an indication of the written assessment(s) that will be given each month. Beyond the written assessments, at Icahn Charter Schools, during each class a teacher assesses the child's progress in many different ways—whether it is by reading a child's facial expression (classes are small, so individual attention is fundamental), through oral questions (classes are small, so there is time for each student to speak), teacher-made written assessments, text provided assessments, published standardized assessments or state assessments.

As an indication of how seriously Icahn Charter Schools take assessment, even in Kindergarten, there is ongoing assessment, from the first academic steps of observation of a child holding a pen, to observing a child writing, to conferencing with children, to oral assessments, to written assessments. While in Kindergarten, our children are beginning to understand the rudiments of test-taking, through the use of teacher-made or pencil-driven tests, which is an important introductory step for their future test-taking.

We anticipate using the commercial assessments that we have used in our current school. The new schools will be given these assessments to put in place, saving research time to find the most effective commercial assessments. We will use published assessments as the basis of our school-developed assessments. Examples are CTB McGraw Hill Fox in the Box, a parallel assessment to E-class, ITBS, as well as weekly assessments of early childhood literacy skills on the Success Maker. ITBS will be used for in-school assessment only. The ITBS serves to illustrate year-to-year gains for all grades, as well as identifying those students in need of remediation. It is important to use ITBS as a reliable and verifiable measure of achievement according to national norms and to then use those results as the basis for the teacher developed weekly assessments. Fox in the Box assists the teacher in determining the child's need for remediation in phonics on a weekly basis. We will use published versions of old state tests. When those results are scored, they will give us reliable indicators of student performance and achievement. They will inform our school-developed assessments. The use of standardized tests is a critical instrument to assess students' learning. At this time, we anticipate using ITBS as our internal assessment measure. We plan to use it for pre- and post-testing to determine a student's weaknesses and to

determine if the individualized program created for him/her has been effective. We can also use it to see if a particular teacher's program has been effective for the entire class. However, as we come to know the intricacies of the NCLB testing, we may decide that another type of test provides us better information in preparation for the NCLB tests.

Historically, the ITBS has served as a predictor for the NYS tests since they are more rigorous than the state exams. While this test is not a perfect predictor of success on New York State tests, its rigor ensures that the results are legitimate indicators of a child's learning. The school will be confident that children are being well educated (or know in which areas they should be given Targeted Assistance) based on the ITBS test. This test has a significant value in serving as a diagnostic tool for our TA program. Over the years, we have learned that while the ITBS certainly has benefits, it is not perfectly aligned with the New York State standards and have found some disparity in ITBS results as compared to New York State testing results. If we find another test that better mirrors the NYS NCLB tests, we anticipate changing.

As indicated in the curriculum, the curriculum teaches the state standards, as evidenced by the literature covered in the classrooms as well as higher level mathematics taught in all grades. As stated in other sections, our students will take the NY State Regents, which is usually administered in high school. The effectiveness of the curriculum is routinely demonstrated in the New York State testing results. The weekly/monthly assessments, described in the monthly grade-by-grade syllabi will be used to determine if children are learning the state standards.

Within a grade, the teachers collaboratively will create weekly assessments for all subject areas. It is recognized that these teacher-made assessments may not serve as statistically reliable and verifiable and we therefore use the results to determine areas in need of review and/or remediation. Specifics of teacher-made assessments include unit tests in each grade. Teachers on the same grade will be teaching the same unit. Therefore, the teachers will develop a test for the grade to assess the effectiveness of their program. We use this system at our current school. We do not anticipate simply copying these tests for future schools because we believe the teachers in each school should have input into the development of that particular class's assessment tool. The teacher-generated test is to assess the effectiveness of the classroom instruction comparing each child in the class to other children in the class. The teacher can then create a plan to address a particular child's needs. Common rubrics are developed in each grade.

School assessments are valuable but do not serve to measure our students with national norms. Teacher assessments serve to measure the students against the 35 other children in the grade. In the Iowa tests, for example, the child is measured against children across the country. As our school's future will be determined by its achievement on state tests, using published assessments that have reliably been proved to help with state test results is important. A school's program needs both types of assessment. We will use one to augment the other.

There will be writing exercises in each grade. In our current schools in grades 3 and up, the emphasis is on the written test, not multiple choice. Children must explain their answers. All student writings are assessed on a scale of 1-4, following the school-developed rubrics, common to each grade. Our current schools' writing committees define the writing process to be followed in each grade and is a result of the collaborative planning among the teacher and Staff Developer. Specific rubrics are developed that are taught to the children so that they clearly

understand what ingredients are necessary in a well-written work. Rubrics common to the grade are developed for all subject areas. This same model will be used in future schools.

Progress Reports, which are a result of all assessments, will be sent home to parents six times a year. Progress Reports sent home so frequently are possible because the teachers only have 18 students in the class. After receiving the Progress Report, if a parent has a concern, it is easy for the teacher and parent to find a mutually convenient time to meet.

While the ultimate verification will be state testing results, daily and weekly assessments by the teachers will enable us to assess progress. We expect that by replicating the ICS1 model, we will achieve similar results. This is another example of the benefits of the Icahn Charter School template as a spring board for the successful creation of another small school. Assessment methods used at other Icahn Charter Schools, and personnel involved in those assessments, will be available to each school. Within each school, because the size of the staff is small and the number of students is small, that school's administrators will work closely with teachers to assure that each teacher uses the assessments effectively.

Again using the experience of the previous Icahn charter schools, we will use the effective assessment data to determine which students need to be put in our Targeted Assistance program. Targeted Assistance will be at the heart of the academic program, as it is in the other Icahn charter schools. The assessment data we will collect we anticipate will include ITBS, class tests, class writing, teacher-scored work. If a child were deemed below standard in any category, the classroom teacher and Targeted Assistance teacher would schedule work in those appropriate areas. Some children would go into the Targeted Assistance Program and some children would receive individual remediation by the classroom teacher including additional assignments. In Targeted Assistance, the teacher and Staff Developer and Targeted Assistance teachers will jointly decide on remediation. The teacher (and Staff Developer—whom we will hire in the second year) will work individually with a student in those areas that need remediation. Until we have a Staff Developer in the second year, the Principal will help teachers in their assessment of the data. The expertise of the already opened Icahn charter schools will lend itself to the new school.

Targeted Assistance will be provided for 40 minutes daily to all students who fail to achieve level 3 or 4 on our practice tests, as well as children whose teachers feel are not solidly grounded, even if the child has received a 3 on the practice test. The Targeted Assistance teacher will articulate with the classroom teacher as to the needed instruction following the error analysis from the Director of Assessment or principal or Success Maker, which provides instant feedback and prescriptive lessons to the student. All outcomes are tracked. Staff development will be provided on an on going basis. Children are placed in Targeted Assistance and promoted from Targeted Assistance as they demonstrate a weakness or adequate growth respectively. These children will be required to attend Saturday Academy and all after school tutoring programs.

We will also use in-house assessments. With those assessments it might be determined that a small group within a class is having trouble with the main idea. That particular group gets more main idea work. Another example of individualizing work would be use of published old state ELA tests. On the ELA, where there are different skills tested, the results of the student's ability in each skill will be assessed. If the class is working on identifying the main idea, the teacher

will work with the class to ensure they are adept at identifying the main idea. Even when most children have that concept conquered, children who still need to work on the main idea will get more work in that area, either through small group instruction or individual work with the teacher or paraprofessional or Targeted Assistance teacher. We will assign students to tutoring if the data indicates they need the remedial work.

We will also use assessment data to know which students are working beyond grade level so as to provide enrichment work.

Each grade has its own weekly, monthly and annual achievement goals. There will also be achievement goals for each child. The best method of reviewing our achievement goals is to look at the curriculum, which details by grade and subject each area's expectations.

Students will learn to read at grade level, and above. Assessment data will enable us to determine if they have reached grade level. They will be required to write frequently in class and as part of their homework. Especially in this day of technology, the ability to write correctly and with imagination distinguishes the well-educated from the under-educated. It is important to combine comfort with the machinery of technology with teacher student interaction. Our small school will ensure that teachers read each child's written work.

In our current charter schools, we were able to purchase the Success Maker. It is designed to move the focus of teaching to early achievement and growth, rather than remediation, for the early grades. Using highly innovative interactive software, instruction is tailored to each student's needs and abilities. Teachers are provided with weekly assessments and are provided with training in how to use the assessment results to guide instruction. Students are provided with an at-home library and video tapes to build reading skills and to help parents guide student learning.

Although Social Studies may not be valued across the board as much as ELA, Math and Science, we believe it is of critical importance for educated children seeking to participate fully in a global future. 94% of the 4th graders in our current charter school met or exceeded the state standard. We intend to replicate the current school Social Studies program in the new school.

A benefit of being part of the Icahn network, there is a Director of Assessment for all Icahn Charter Schools. Mr. Sorokin has worked with our schools since 2003 so he knows our program. He is in charge of choosing the assessments and collecting and analyzing the results, which he then shares with each school. When he works with each school, he helps create a plan so that each school can address whatever gaps have been discovered.

Based on the track record of Icahn Charter School, we are confident that our results in future charter schools we open will meet or exceed state standards. Future Icahn charter schools have the benefit of an effective small school model and the experienced personnel from our previous schools that will help the new schools.

Describe the diagnostic, formative and summative assessments the school will use to evaluate student knowledge and skills. Your response should:

- **Explain how these assessments will be selected or developed.**
- **Describe each assessment's purpose, design and format.**
- **Explain how the school will ensure assessment results are valid and reliable.**
- **Describe how assessment results will be collected and analyzed.**
- **Describe who will be responsible for administering the assessments and collecting and analyzing the results.**

12(b) Use of Assessment Results

At each board meeting, the school leaders present the most recent assessment results, usually with a forecasting about how those results will relate to the state testing. The Board will use those results to discuss the strengths and weaknesses of the School's implementation of the Icahn model. Because all schools are in the room, and because all schools use the same curriculum and syllabus, the discussion can include how a different school addressed a particular topic.

The Board uses these results as part of their consideration for re-hiring a principal and for bonuses payments and amounts.

At all the Icahn schools, assessment results are also used to ensure that each school will meet its Accountability Plan goals. They are also used to ensure that the five year renewal process goes smoothly.

- **Explain how assessment results will be used by the following stakeholders:**

- **Teachers—**
-

The assessment results will be used as a measure of the success of the Targeted Assistance program and individualized lessons provided to students. It will serve as an indicator to let the teacher know if the child has mastered the specific skills that were previously not mastered.

- **School Leaders-**
-

School leaders will use the assessment results to serve as an indicator as to the effectiveness of our Targeted Assistance program, effectiveness of the classroom teacher, measure the success of articulation among the classroom and TA teacher, determine the strength of the instructional program, and how the classroom teacher addresses student individual learning needs.

- **The School's Board of Trustees will determine the instructional leadership skills of the principals, effectiveness of our curriculum, focus on individual students and appropriate use of resources.**

- **Parents—**

Parents will be able to see how their child is progressing in school on a frequent basis, with an analysis of areas that need strengthening. The assessments are predictors of future success on NYS exams. It also serves to prompt parents to ensure that their child attends after school tutoring and Saturday Academy.

- **Students—**

Students will receive frequent results on all assessments, which will be rubric-based. The error analysis will provide the student with the specific skills that need strengthening so that they will focus on these skills with the Targeted Assistance and Saturday Academy teachers.

- **Describe how parents and students will be informed about academic achievement and progress.**

Part of the Icahn school culture is to involve parents intimately in the child's schooling. Parents are sent Progress Reports six times a year, which are a result of all assessments. After receiving the Progress Report, if a parent has a concern, it is easy for the teacher and parent to find a mutually convenient time to meet. Monthly syllabus will be sent home so parents will know what is happening in the classroom. Parent teacher conferences will occur regularly so that parents can participate in the child's school work by having the syllabus and the progress report at home. Parents will be informed of their child's results in the assessments. If a child is not up to standard, assignments will be sent home as additional remediation techniques.

12(c) Promotion Policy

Explain the process and criteria your school will use for promoting students from grade to grade.

We do not believe that "one size fits all." While the minimal standard for promotion has been Level 3 on all NYS exams, we also critically look at the child's progress during the year and the scale score achieved, as well as his/her growth on the ITBS. We believe that often a child need not repeat the entire grade with all the same content in other subjects, when TA and tutoring can bring the child's achievement up. Each child's achievement is individually analyzed and discussed with the parent before a decision is made. The principal makes the final determination. The basic question is whether or not the child can handle the curriculum for the succeeding grade.

13. At-Risk Students

(a) Students with Disabilities

Discuss the proposed school's methods and strategies for identifying and serving students with disabilities in compliance with all federal laws and regulations. In answering please describe:

- **The proposed charter school's process for identifying students with disabilities (child find);**
- **The school's Response to Intervention (RTI) process for identifying and providing services for students with disabilities and other students including the identification of students with specific learning disabilities, and early intervening strategies, if any, if applicable.**
- **The kinds and types of services and related services the school is likely to provide directly (both within general education classrooms and in other settings);**
- **The kinds and types of services and related services that will be provided by the school district of the student's residency or through a third party contract;**
- **The resources the school will devote to serving students with disabilities, e.g., planning time, instructional materials, technology, professional development, staff and consultants, etc.;**
- **Any research or evidence that supports the appropriateness of the school's approach to serving students with disabilities;**
- **The personnel that the school will specifically devote to serving students with disabilities (and the associated administrative responsibilities) including a special education coordinator;**
- **The process for coordination between general education teachers and special education teachers or service providers;**
- **The process that will be used to monitor the achievement and progress of students with disabilities; and**
- **The process that will be used to evaluate the efficacy of the program and ensure that the needs of these students are being met.**

ICS 7 will comply with all federal laws and regulations governing the education of students with disabilities, including being a barrier free facility to assure retention of students with disabilities. Special needs students will receive services as detailed in their Individualized Education Program (IEP) by appropriately certified personnel.

Upon registration/enrollment, parents will be asked in writing to provide IEPs from the pre-school or kindergarten. The names and dates of birth of students entering in other grades will be provided to the Committee on Special Education (CSE), which will check the Automate the Schools (ATS) system for Child Assistance Program (CAP) flags to identify students with existing IEPs. The IEPs of registered students will be reviewed for the appropriateness of Type 2 and 3 modifications enabling the child to receive services in a less restrictive environment. In cooperation with the child's IEP, the appropriate assessment will be provided to the child with an emphasis to the child achieving the level of success indicated in her/his annual goal(s). After parents have been notified, students who are suspected of requiring special education services will be referred to the CSE utilizing the New York City Department of Education Referral Form.

A Child Study Team (CST)) will be established from among a group of a special education teacher, classroom teacher, Targeted Assistance teacher, an administrator and a related service provider. The CST will meet as needed to review the needs of at-risk students, who will receive the appropriate academic and support interventions. In addition, the CST will discuss, screen and make recommendations of alternative models that will meet the needs of these students in a regular education setting prior to establishing the need to make a referral to special education.

ICS 7 will employ a certified special education teacher who will provide IEP services to special education students and will also provide intervention services to at-risk students. When needed, appropriately certified consultants will be hired to provide related services such as speech, guidance, occupational and physical therapy to assure retention. The school will directly provide speech teachers to serve IEP students requiring speech and SETS teachers. A certified special education teacher will provide the services to SETS students and a certified speech teacher will provide speech services. RSA letters will be provided for other services. Additional staff will be added as needed. Another benefit of the replication model is that when individual schools do not need full-time staff to fulfill the needs of that school, the group of Icahn schools can hire someone to be shared by all the schools. This will be similar to the DOE model of the itinerant teacher who moves from school to school based on the time needed at individual schools.

The special education teacher, under the supervision of the principal, will function as the Special Education Coordinator and will communicate with and arrange meetings with the CSE to ensure that the needs and rights of students and their families are met and secured. He/she will arrange that these meetings be held on-site and will include not only the special education teacher, but also the general education teachers, an administrator and parents. Prior to a child's beginning school, the special education teacher will review the student's IEP, ensure the currency of information, and inform the principal of required services. He/she will also make quarterly requests to the CSE for updated information regarding students. Parents will have information regarding the procedures and will be involved in all aspects of their child's education and information will be provided in writing in the home language. While the school will exhaust any possible means to resolve any disputes or disagreements related to the school's FAPE, parents will be provided with all appropriate information regarding avenues of redress.

It is the philosophy of ICS 7 that students should be provided with support services that would reduce the need for special education referrals. Charter schools were created to educate children at risk of academic failure. A dedicated effort to enroll special education children will be made

through direct contacts with neighboring schools, communication with day care centers, community boards, community based organizations and indicated in flyers.

When working with CSE staff from the Department of Education, we will make it clear that we are committed to and prepared to provide education in the least restrictive environment (LRE). Within the context of the LRE, all the instructional needs of the special education student will be met as detailed in the IEP through a New York State certified teacher and appropriate aids and materials. We believe that educating a student in the least restrictive environment is beneficial to the student; the student learns in a non-stigmatizing environment, learns from others who are at various levels of achievement, and learns more effectively. We also believe that the Core Knowledge model provides the structured learning environment that has been found to be effective with students at risk. Class size will be limited to 18 students to enhance the learning environment. Staff of ICS 7 will be alert to the potential special needs of students. In addition to providing adaptive learning methods and support to special education students, the presence of the special education teacher in the general education classroom will provide an opportunity for professional development/modeling for the general education teacher to ensure utilization of appropriate methodologies that support the reduction of dysfluency and other at-risk characteristics in general education students.

Confidential student records will be kept in a locked file in the office of the principal. Instructional and related service providers will be informed of the location and the process for gaining access. An access log will be maintained indicating the date, name of staff member and reason for reviewing the records. In accordance with state law, a copy of a student's IEP will be provided to his or her instructor, which will be appropriately secured. This protocol will provide timely access for staff who needs access to the IEP and will facilitate their understanding of their responsibility for its implementation.

A data base of student information (including, but not limited to name, HILS compliance, due process, multidisciplinary assessment, annual review, start and stop dates of service, identification of service provider and licensure) will be developed and maintained. This information will be used to ensure compliance with IDEA reporting requirements.

In concert with the philosophy of ICS 7, and in compliance with IDEA, each time an IEP is developed with the Community School District Committee on Special Education, the appropriateness of placing the child in a general education classroom with supplementary aids and services will be addressed as an option. The small size of the school is acknowledged by people in the Special Education field to be beneficial because of the individual attention to all children and because of the flexibility inherent in a small school.

Our school will ensure that all required special services are provided to the child. In all areas of school, the goal is to individualize the program for the best interests of the child. In our current school, we provide speech services and SETS. These services are provided by NY State Special Education certified teachers, and we will provide services in the new school. In addition, we expect that children will have IEP mandates requiring time extensions on tests as well as having directions read to them. We will follow IEP mandates. In consultation with CSE, the school may issue an RSA letter, in which the parent may avail themselves of free services in the cases where

the school is not able to provide such service. The school will retain appropriate data and prepare reports for the local school district or SED.

All students will be held to high academic and behavioral standards. The education of students with disabilities is made more effective by having high expectations, ensuring success in the general education curriculum, and ensuring the provision of high quality services. The implementation of these principles will ensure that students with disabilities have access to the regular education curriculum and regular assessment of their progress.

The range of services for all students begins with an array of non-special education supports and interventions to maintain students in the general education classroom. With the benefit of the current Icahn Charter Schools' experience, where they have identified several methods and strategies that are beneficial in serving students with disabilities, the new school will offer:

A variety of instructional strategies, within the context of system standards and assessments

A trained and culturally/linguistically diverse teacher and support staff population for whom needed professional development and supports are provided

Student empowerment programs, including peer learning programs, active learning opportunities for students and student-to-student support programs

Collaboration among school staff and with community members to serve all students in the school

Family and community involvement

Effective access to community and agency services to serve students and to support school staff

A school-wide approach to behavioral issues

A regular system of assessment with accountability that defines success by the learning of each and every student within the school

A system of support based on functional assessment/intervention that addresses student needs in the general education and special education setting.

ICS 7 will provide (when specified on the student's IEP) Special Education Services within general education with supplementary aids and services provided by appropriately certified personnel. Aids and services may include, but are not limited to the services of various personnel that provide direct instruction and indirect consultation. Related services (e.g., speech, occupational therapy, physical therapy, counseling) will be provided by contracted certified personnel. Supplementary aids and services permit different instructional designs to enable the disabled student to receive special education services in the general education classroom. For example, a student might receive the supplementary aids and services of Special Education Teacher Support Services and Related Services.

The Special Education Teacher Support Services at ICS 7 will be provided by the certified special education teacher who, in addition to consulting with the special education student's general education teacher, will provide specially designed and/or supplemental instruction to support the participation of the special education student in the general education classroom. The direct services provided to the student are not to provide additional academic instruction, but

rather to address educational needs directly related to the student's disability. The collaboration between the general education and the special education teachers will focus on adjusting the learning environment and/or modifying or adapting instructional methods to meet the individual needs of students. In a small school, not only will the general education and special education teachers collaborate on a child's program, but each child's situation will be known by the administration as well, so a child's needs (and the teachers' needs) are ideally served.

Supplementary aids and supports will, depending on the student's IEP, include materials, devices and instructional adaptations such as:

- Instructional practices such as cross-age tutoring and heterogeneous grouping
- Behavior intervention/support plans to address behavior that impedes learning
- Instructional adaptations including the manner in which information is presented, paced or sequenced
- Curriculum accommodation that changes how a student accesses information and demonstrates learning (e.g., the use of audio tapes instead of books)
- Curriculum modifications that change what a student is expected to learn when participating in the general education curriculum (e.g., redesigning the focus or size of the assignment)
- Individualized supports such as the rephrasing of a question or instructions, special seating arrangements, testing modifications, etc., as per the IEP.

Additionally:

- The school will adhere to all provisions of federal law relating to students with disabilities, including the IDEA, section 34 CFR 300.530-300.537, August 2006, that are applicable to it.
- The school will, consistent with applicable law, work with LEA school districts to ensure that all students with disabilities that qualify under the IDEA:
- have available a free appropriate public education (FAPE);
- are appropriately evaluated;
- are provided with an IEP;
- receive an appropriate education in the least restrictive environment;
- are involved in the development of and decisions regarding the IEP, along with their parents; and
- have access to appropriate procedures and mechanisms, along with their parents, to resolve any disputes or disagreements related to the school's or school district's provision of FAPE.
- The school will employ, at a minimum, a properly certified individual as the school's special education coordinator, whose responsibilities will include coordinating with CSEs; providing information to and obtaining information from CSEs as needed throughout the year; determining if entering students have IEPs; and working with CSEs and school districts to ensure that all

required special education and related services are being provided and that all IEPs are appropriate in the context of the charter school setting. The school may permit the special education coordinator to take on additional administrative duties to the extent that they do not interfere with the coordinator's responsibilities to ensure the school's compliance with the EDEA, section 504 of the Rehabilitation Act of 1974 and Title II of the ADA. It might also be the case that this person would be shared with other Icahn Charter Schools if there is not enough work in one school for a full-time position. This system would solve the problem that many charter schools face of DOE not providing required services and of the school not having enough work to be able to hire full-time appropriately certified staff.

- The school will make available, as required by law, a student's regular and special education teachers (and other required school personnel) for meetings convened by such student's CSE, and provide such teachers and personnel with copies of the student's IEP.
- The school will ensure that parents of children with special needs are informed of how their children are progressing on annual IEP goals and in the general curriculum at least as frequently as parents of regular education children.
- The School will abide by the applicable provisions of the IDEA and the Family Educational Rights Privacy Act of 1974 (FERPA) as they relate to students with disabilities, including, but not limited to, having procedures for maintaining student files in a secure and locked location with limited access.
- The school's special education coordinator will retain such data and prepare such reports as are needed by each disabled child's school district of residence or the State Education Department in order to permit such entities to comply with federal law and regulations.
- The school will comply with its obligations under the Child Find requirements of IDEA, including 34 I.E. § 300.111, and will provide appropriate notification to parents in connection therewith, including notifying them prior to providing a child's name to a CSE for potential evaluation
- The charter school will not convene its own CSE, make evaluations of children suspected of being disabled, create IEPs, reevaluate or revise existing IEPs or conduct due process hearings. The charter school understands that these responsibilities are left solely to the CSE of the student's district of residence and will implement IEPs as written.
- Appropriate charter school personnel will attend such training and technical assistance seminars regarding the education and servicing of special education students as is required by the State University of New York, including those sponsored by the State Education Department.

Charter schools are subject to all applicable federal laws and regulations governing the education of students with disabilities, including the Individuals with Disabilities Education Act (IDEA), the Family Educational Rights and Privacy Act (FERPA), and section 504 of the Rehabilitation Act of 1973. Charter schools in New York State are prohibited from establishing a committee or subcommittee on special education (CSE); rather, charter schools are responsible for implementing the Individualized Education Program (IEP) of any student enrolled in the school prescribed by the Committee on Special Education of the student's school district of residence.

At ICS 7, parents are considered to be primary partners in the education of their children. Thanks to the small size of the school, parents are known by the Principal and staff members, so frequent communication will be the norm. In accordance with our obligations under the Child Find requirements of IDEA, we will provide appropriate notification to parents in including notifying them prior to providing a child's name for potential evaluation. This procedure is currently utilized at our current charter school. We intend to replicate it in our new school. The parents of special education students will be kept informed in writing and in their home language of their child's progress in meeting both their long-term IEP goals and their short-term objectives. IEP progress reports will be distributed to parents concurrent with the distribution of school report cards.

The teaching staff at ICS 7 will include special education services in accordance with the child's IEP. All related services will be provided by appropriately New York State contracted providers.

The Pupil Personnel Committee's role is designed to fulfill the Child Find requirements of IDEA. They identify intervention strategies to be implemented prior to the referral of a child to the Committee on Special Education, which will determine a child's eligibility for special education services.

To ensure compliance with FERPA and IDEA regarding confidential student records, these records will be kept in a locked file in the office of the principal. Instructional and related service providers will be informed of the location and the process for gaining access. An access log will be maintained indicating the date, name of staff member and reason for reviewing the records. This protocol will provide timely access for staff that needs access to the IEP and will facilitate their understanding of their responsibility for its implementation. The principal is directly responsible for compliance with the applicable statutes. The above supports and programs are designed to be good faith efforts to attract and retain a comparable or greater enrollment of students with disabilities as the local Community School District.

The goal of our schools is to provide well trained and highly qualified personnel that will be shared among our schools. With more schools in our network of Icahn Charter Schools, there will be benefits to each school. The provision of Special Education services is a good example. When a Special Ed teacher is needed, the principals can confer about possible applicants. The pool will be larger than it has been with just one or two schools. Sharing of Special Ed personnel will not only be cost effective, but it will provide consistency in the delivery of both legally required services as well as services determined by the administration. As an example, in this school the provision Special Education Teacher Services (SETS) will be provided by a teacher who may well also work at other Icahn Charter Schools. The Icahn network of schools will have full time personnel on staff to ensure appropriate services. This parallels the NYC DOE model of itinerant personnel.

In the past, there have been DOE restrictions governing the employment of part-time personnel which have caused hurdles. With our network of schools, we can hire a full time person and provide services seamlessly without needing to be beholden to DOE's personnel and policies. Although each school will be autonomous, the support of the network in instances like Special Education will allow for efficiency and effectiveness. Because each school will be small, the

Special Education teacher will find it easy to work with the team of each school and the team at each school will have direct input and understanding of the work of the Special Education teacher. Individual small schools in a network of the group of Icahn Charter Schools will have the best of all worlds.

Charter schools are frequently criticized for smaller percentages of special ed and ELL students than conventional public schools. While we cannot speak for other charter schools, we are confident that the special ed students we serve will be well served, but that we will not place children in special ed without significant individualized work to bring them to grade level. Whereas many children are put in special ed in middle school, our schools never start a child in special ed in middle school because by the time one of our children is in middle school, s/he has already learned the skills necessary to keep pace in a general classroom.

Icahn Charter Schools have been successful in having children decertified. The ironic thing is that as a result of decertification, our percentage of special education students decrease and then we are told we are below the district average.

(b) English Language Learners

Discuss the proposed school's methods and strategies for identifying and serving students who are English language learners in compliance with all federal laws and regulations. In answering please describe:

- **The process for identifying and placing students whose first language is not English and the methods for determining the kinds of assistance that these students may need;**
- **The approach the school will take to meet the needs of English language learners (both within general education classrooms and in other settings);**
- **The resources the school will devote to serving English language learners (e.g., planning time, instructional materials, technology, professional development, staff and consultants, etc.);**
- **Any research or evidence that supports the appropriateness of this approach;**
- **The personnel that the school will devote to serving English language learners (and the associated administrative responsibilities) including an optional English language learner coordinator, and who will be responsible for evaluation the effectiveness of English language learner instruction provided;**
- **The qualifications of the personnel that will be providing instruction to**

English language learners including, if such persons will not be State certified, specific qualifications in terms of language proficiency, academic credit, teaching experience, professional development specific to English language learner instruction;

- **The process for coordination between general education teachers and staff serving English language learners;**
- **The process that will be used to monitor the achievement and progress of English language learners, including exit criteria;**
- **The process that will be used to evaluate the efficacy of the program and ensure that the needs of these students are being met; and**
- **How the school will make all necessary materials available to parents of English language learners in a language that they can understand.**

It is anticipated that some of the children in our school will be in need of English as a Second Language (ESL) instruction as a result of their status as English Language Learner. As charter schools are required to educate children at risk of academic failure, the program will be absolutely compatible with working with ELL children. With the recent change in the admission policy to require a preference for children in the Community School District, the percentage of ELL children in the school will replicate that of neighboring schools. To ensure that these students will be educated and will succeed in school, they will be in regular classes and will receive additional support in the form of English as a Second Language as per regulations and to ensure retention. As we will be a small school, even the general ed classes will enhance ELL children's learning. Additionally, the Icahn Charter School network will have a New York State certified ESL teacher available to ICS 7 to ensure appropriate assessment and education for our students. ELL students will have services provided to them following a push-in model, so as to prevent a child from being stigmatized as well as preventing a classroom subject from being supplanted. We will hire the needed staff and buy the curricular materials to ensure that students are well served. It is possible that staff will be shared by two or more Icahn charter schools, depending on each school's need. This benefits each school and each student. Students, regardless of language proficiency, will be provided the necessary curriculum and instruction to allow them to achieve to the high standards set for all students in the school.

The determination of need of English Language Learners will be based on results of a home language survey at the beginning of the school year. If English is the only language spoken in the home as indicated on the Home Language Questionnaire (HLQ), then the screening process will not continue. If the home language is other than English or student's native language is other than English, then appropriate school staff will conduct an informal interview in the Student's native language and English. The Language Assessment Battery (LAB-R) Test will be used to determine and assess need. We will look at each learner in terms of ability. We will continue to look at the population in terms of language needs.

ICS 7 will be committed to ensuring that English Language Learners are not assigned to classes for the disabled because of their lack of English skills. Notices to the families of the students will be in the family's native language. ELL students will not be excluded from curricular and extracurricular activities at ICS 7 because of an inability to speak and understand the language of instruction.

The program for ELL students will be assessed by both formative and summative methods. The regular assessment of students, focused conversations with staff and parents, and consultations with experts in the field of bilingual education as needed will help ICS 7 determine if the program for ELLs is working or needs to be modified in some way. Ultimately, it is the student's increasing ability to use English that is the true test of program success. This will be measured by the current method used by the New York City Department of Education to determine if LEP students are making progress: the New York State English as a Second Language Achievement Test (NYSESLAT) and the New York State ELA assessment. In addition, student work (e.g., projects, portfolios, written work) and use of the English language will be evaluated.

The following assessment criteria for English Language Learners will be used to measure the progress for ELL students:

English LAB scores including subtests in listening, speaking, reading and writing
Fluency in spoken English including spoken discourse
Academic language proficiency in English
Assessment on the New York State English as a Second Language Achievement Test
Teacher notes and observations

For students receiving English as a Second Language services, student achievement or progress in the English language is measured annually with the New York State English as a Second Language Achievement Test (NYSESLAT) and the New York State ELA assessment.

Differentiated instruction will be provided to students in the ESL program to ensure that individual needs are met. The program we are proposing will have sufficient flexibility to meet the needs of each student, which will ensure retention. Factors that determine instructional grouping and differentiated instructional strategies include:

Developmental level and age of the learner
Proficiency in native language and English
Experiential and cultural background
Preferred learning modalities
Guided instruction and independent/small group classroom activities will accommodate all students by providing:

- Opportunities and choices to demonstrate competency and skills in English
- An array of materials, both print and non-print, on a variety of levels
- Opportunities for independent practice
- Utilization of technology

According to Part 154 guidelines, there are multiple criteria for ESL levels, including LAB scores, student work and teacher evaluation.

The ESL program as it will be implemented in ICS 7 will meet the requirements of Title VI of the Civil Rights Act prohibiting discrimination on the basis of race, color or national origin. The above supports and programs are designed to be good faith efforts to attract and retain a comparable or greater enrollment of students who are English Language Learners as CSD 7.

(c) Struggling Students

Discuss the proposed school's methods and strategies for identifying and serving students who are struggling academically and at risk of academic failure. In answering, please describe:

- **How the school will determine and identify which students are struggling, including within the context of the school's RTI process. The applicant should define the term "struggling student" as s/he deems appropriate;**
- **How an appropriate RTI program will be implemented in the school and used to identify and address the needs of struggling learners;**
- **The strategies and/or programs the school will use to meet the needs of struggling students (both within general education classrooms and in other settings);**
- **The resources the school will devote to serving struggling students, e.g., planning time, small group instruction, tutoring, Targeted Assistance, technology, staff and consultants, etc.**
- **Any research or evidence that supports the appropriateness of this approach;**
- **The personnel that the school will devote to serving struggling students;**
- **The process that will be used to monitor the achievement and progress of struggling students; and**
- **The process that will be used to evaluate the efficacy of the program and ensure that the needs of these students are being met.**

The Foundation for a Greater Opportunity has intentionally chosen a section of New York City in which the students would be designated as being at risk of academic failure, as described previously. The size of the school is the primary resource for addressing the issues of children at

risk of academic failure. The Tennessee Class Size Study, described earlier, has proved the benefits of small class size.

The smaller class size of ICS 7 (18 students per class) has been proven to be especially advantageous to minority students. As stated earlier, the results of the Tennessee Class-Size Study indicated that the “benefit to minority students is about twice as large as that for whites...the difference in mastery rates between whites and minorities in grade-1 reading was ‘reduced from 14.3% in regular classes to 4.1% in small class.’ (Finn & Achilles, 1990, p. 568)” Even when minority students enter larger classes after 4th grade, the benefits of the smaller classes in the K-4 years remain. In fact, even after small classes had been disbanded, students who had been in small classes were rated as superior on the three engagement behavior scales mentioned earlier.

Another element intrinsic to Icahn Charter Schools chosen for its positive impact for children at risk of academic failure was this curriculum. Core Knowledge provides a rigorous curriculum and provides the background knowledge necessary for school success and success as adults. Lessons will be taught by thematic approach with a major focus on higher order thinking skills. Children in need of additional academic support will receive individual/small group instruction during Targeted Assistance. Student progress will be closely monitored and further strategies developed by teachers and the Principal and Staff Developer(s).

School research has shown that students at risk can find success in school if they are given a safe, focused school with energetic, well-trained administrators and teachers. The ambiance in the school will be one of respect. Students and teachers will greet each other in the hallways. Before the students arrive at school in the fall, they will have had a chance to meet the Principal and other teachers, who will convey their sense of pride in what is about to begin. It will be an honor to attend the School. The pride felt in attending the School will manifest itself in students’ attitudes about their schoolwork, about their teachers and about their classmates.

Outside the classroom, it is our intention to provide guidance through meetings with families and in the Parent Guardian Association of the School. In our small school, parents will be known and will know the adults involved in their children’s lives. We will also provide counseling and other identified support services when necessary.

(d) Advanced Students

Discuss the proposed school’s methods and strategies for identifying and serving students who are academically advanced and at risk of not being adequately challenged. In answering please describe:

- **How the school will determine and identify which students are advanced. The applicant should define the term “advanced student” as s/he deems appropriate;**
- **The strategies and/or programs the school will use to accelerate learning**

for advanced students (both within general education classrooms and in other settings);

- **The resources the school will devote to serving advanced students (e.g., enrichment activities, instructional materials, technology, staff and consultants, etc.);**
- **Any research or evidence that supports the appropriateness of this approach;**
- **The personnel that the school will devote to serving advanced students;**
- **The process that will be used to monitor the achievement and progress of advanced students; and**
- **The process that will be used to evaluate the efficacy of the program and ensure that the needs of these students are being met.**

13(d) Advanced Students

Discuss the proposed school's methods and strategies for identifying and serving students who are academically advanced and at risk of not being adequately challenged. In answering please describe:

We are most grateful to have this question as part of the application process. Too much emphasis has been placed on remediation and, as a result, little emphasis on the needs of the academically advanced. It is our strong belief that given the appropriate educational background, a challenging curriculum and high expectations, inner city children can, and in our schools, will exceed the outcomes of their peers in more affluent communities.

There are two primary reasons for identifying the academically capable students: 1. The obvious is to identify this sub-category of student (i.e. the advanced learner); and 2. To provide academically challenging instruction that is appropriate to the needs of the advanced learner. The intent is to recognize the student because of their advanced development and realize that they need much greater challenges than they are likely to receive without being identified as an advanced student.

How the school will determine and identify which students are advanced. The applicant should define the term "advanced student" as s/he deems appropriate;

At Icahn we simplistically and generically define the term "Advanced Student" as a student with outstanding academic talent who demonstrates the ability to perform at remarkably high levels of accomplishment when compared to others within his/her grade at the school. In grades K – 8 students will be deemed advanced based on the following criteria: 1) Observation of students within the classroom setting looking for the following attributes – Motivation, Interest, Communication Skills, Problem Solving Ability, Memory, Inquiry, Insight, Reasoning, and

Creativity. 2) In grades K – 3, the IOWA Test of Basic Skills, teacher made instruments, SuccessMaker (ELA & Math) printouts and Unit exams in ELA, Math, Social Studies, & Science will be taken into consideration as well as teacher judgment. In grades 4 - 8 we will look at NYS ELA & Mathematics Exams, the IOWA Test of Basic Skills, Teacher made instruments, SuccessMaker (ELA & Math) printouts and Unit exams in ELA, Math, Social Studies, & Science, as well as teacher judgment. All students in grades 7 & 8 have a choice of participating in a special interest daily for 50 minutes in a small group setting. The approach at Icahn is to offer all students the gifted treatment since everyone benefits from that approach accordingly. Icahn's use of E.D. Hirsch's Core Knowledge already adds a level of sophistication to the curriculum, which is generally not seen in the traditional classroom. We are always observing the whole student in order to more effectively influence the teaching and learning.

The strategies and/or programs the school will use to accelerate learning for advanced students (both within general education classrooms and in other settings);

As mentioned before, Icahn's use of E.D. Hirsch's Core Knowledge Program already adds a level of sophistication to the curriculum, which is generally not seen in the traditional classroom. The smaller class size allows for differentiation of instruction, from the student with specific challenges to the advanced student with other needs. This thought pattern approach is supported by the work of Joseph Renzulli on giftedness out of the University of Connecticut.

Icahn students participate in the National Elementary Honor Society grades 4 & 5 as well as the National Junior Honor Society grades 5 – 8. Inherent in the participation of these students as members of this organization it is a required responsibility to demonstrate both social and academic achievement on an on-going basis.

The 7th and 8th grade students at Icahn Charter School 1 participate in a daily non-graded special interest period in all the core academic subject areas (ELA, Mathematics, Social Studies, Science, and Algebra). This was student driven in terms of choice and is meant to challenge the even smaller group of students in each interest area to the maximum ability level within that interest area. Students as a result are participating and being challenged in activities such as Citywide Social Studies Debate Competitions, Citywide Mathematics Olympiad, National Mathematics Contest, Robotics, Blogging, and Podcasting, History Day, Schoolwide Mathematics Fair, Citywide Spanish Spelling Bee, the National Geography Bee, Constitution Day, and the Production of a Shakespearian Play. We anticipate replicating this at all our charter schools when they have the upper grades.

On a unit-by-unit basis staff will employ Project-Based Learning as a part of all grades, all classes, and all students. It allows all levels, but in particular the advanced students, to inquire in greater depth on a particular topic or topics in the course of a year. It also provides a service for the student who is more advanced in one area and possibly challenged in another. All students within this approach to learning develop self-directed study skills while developing self-efficacy as a learner.

A software program called "SuccessMaker" by Pearson will be employed in grades K – 8. After several sessions of being on either the ELA or the Mathematics program the software evaluates

the student and determines the level of instruction that the student is capable of handling and begins to give him/her work at that ability level. Therefore the challenged child in the 1st grade may be working at a kindergarten level while a classmate is working at a third grade level. It differentiates the instruction and allows for an instructional challenge for all the students including the advanced learner.

Icahn staff and students are using the technology available to them from Smartboards to iPads as part of the practice at an Icahn school. Staff has been trained to successfully weave technology into the teaching and learning practices seamlessly in all content areas. With the effective use of technology we achieve student engagement, academic rigor for all, and differentiation of instruction, which happens to be three of the Principles of Learning out of the University of Pittsburgh.

The resources the school will devote to serving advanced students (e.g., enrichment activities, instructional materials, technology, staff and consultants, etc.);

At Icahn we believe that every student deserves the right to be educated to the limits of his or her mind. Given this premise the following resources are available to our advanced students:

- Technology (Smartboards, Mac Laptops, iPads, Kindles, iTouches, Mac desktops in the classroom and in the Mac lab, 6th grade home computer program). Students have Access at school and from home to Discovery Education, Facts-on-File, the Encyclopedia Britannica to name a few websites.
- E.D. Hirsch's Core Knowledge, which exposes students to more information than is required at all grade levels than the National Core Standards which have been adopted by New York State Education Department.
- 100 Book Challenge (Independent reading is supported with a plethora of just right books for the advanced learner). The reader is also supported with certificates, medals, and parent/student celebrations.
- Special Content-Area Specific Consultants and/or Staff that work exclusively with a student or students on a unit of work that delves deeper on an issue than may be expected of his/her peers in the grade.
- Special Events: Math Fair, History Day, National Geographic Bee, Spanish Spelling Bee, Production of Shakespeare, National Math Counts Competition, Participation in Citywide Constitution Day, National Honors Society for Elementary and Junior High School Divisions.
- High-level Questions: Both in class discussion and on exams, the teacher attempts to ensure that the advanced learner is presented with questions that draw on advanced levels of information, and require leaps of understanding, and challenge thinking. This is frequently done as an optional piece for additional credit on class exams and is open to all

students.

- Tiered Assignments: Icahn's classes are organized heterogeneously and therefore require that the teacher plan various levels of activities to ensure that all students are challenged at their ability level.
- Compacting: Is a three pronged approach that 1) assesses what a student knows about the material to be studied and what the student still needs to master, 2) plans for learning what is not known and excuses the student from what is known, and 3) plans for freed-up time to be spent in enriched or accelerated study.
- Presently we offer the following advanced classes to our advanced students leading to High School Regents credit:

1. Integrated Algebra

2. Life Science

Any research or evidence that supports the appropriateness of this approach

The Icahn approach to Giftedness tends to mirror the work of Joseph Renzulli out of the University of Connecticut and his work on the Enrichment Triad Model. Joseph Renzulli developed a framework for organizing different learning experiences for gifted and talented students known as the Enrichment Triad Model, which in summary is:

- Type I activities are general exploratory activities. The purpose is to motivate the students and to bring the learner into touch with the kinds of topics or areas of study in which he/she may have an interest.
- Type II activities are when the teacher plans to use methods, materials, and instructional techniques that are concerned with the development of higher level of thinking and feeling processes (i.e. critical thinking, problem solving, and inquiry training). At this phase of work students are asked, prepared, and expected to face new problem-solving situations, which allows for the expansion of knowledge.
- Type III activities are designed to enable students to become real world investigators and problem solvers. It becomes essential that students/small groups be allowed to select their own activity based on their interests related to the subject area. The student evolves from the learner to the doer. This type of activity takes place over extended time and takes the form of a project or a product.

In addition teachers are using the strategy of compacting the learning as previously outlined.

The personnel that the school will devote to serving advanced students;

Icahn staff is well versed in the Renzulli Triad Model and the concept of affording all children the gifted experience. The following personnel devote various percentages of time to the advanced students: Classroom Teachers, Staff Developers, Content Area Specialists, and Consultants.

The process that will be used to monitor the achievement and progress of advanced students; and

Icahn uses a value added model for reviewing standardized test scores, teacher judgment based on in-house testing instruments, and rubrics that are applied to presentations and projects. Students taking advanced courses are graded by successful passing of the applicable Regents exam.

The process that will be used to evaluate the efficacy of the program and ensure that the needs of these students are being met.

Giftedness is not a program per se at Icahn rather it is a philosophical approach. It follows the tenet that all children should be given the gifted approach and then all children will benefit. The efficacy of the program will be evaluated based upon several components: standardized test results, teacher judgment, rubrics applied to projects and presentations, and administrator/teacher/parent questionnaires, needs assessments and/or feedback from all of the school's constituencies. These are all ways of improving our practices and our approach with the advanced learners.

It is our belief that the aforementioned evaluation tools are an integral part of the approach to serving the advanced students. Documenting the need for program options, justifying particular curricular approaches, and documenting the integration of the services with the everyday teaching of the general education class are all ways that inform the work to be done with the advanced learner at Icahn.

At Icahn through staff discussions, student results, and parent/staff feedback we are on an on-going basis monitoring the effectiveness of our approach for the advanced learner as well as any other sub category of student. It is in the on-going identification of strengths and challenges that we capitalize on what works and change and/or modify what is not yielding us the desired student outcomes.

14. Instructional Leadership

Describe instructional leadership in your school over the first five years of operation. Your response should:

- **Identify the instructional leadership positions in your school.**
- **Describe the specific roles and responsibilities of instructional leaders, particularly as they relate to curriculum, instruction, assessment, and teacher support, evaluation and professional development.**
- **Explain how expectations for teacher performance and student achievement will be established and then communicated to and instilled in staff.**
- **Describe the school's approach to teacher supervision and support. Responses might address needs assessment, professional development goals, curriculum development and instructional planning, classroom observation and clinical feedback, coaching and/or modeling.**
- **Describe the school's process and criteria for evaluating teacher performance.**
- **Explain how teachers will be held accountable for student achievement.**
- **Explain how instructional leaders will monitor the effectiveness of the academic program, including curriculum, instruction, assessment and professional development.**

ICS 7 intends to hire a principal who has passion for educating children, who believes that all children are equally educable regardless of socio-economic background, who is energetic, disciplined and creative. There will be a second major component of the leadership in the school—the work stemming from the Director of Operations Office that is responsible for the financial and personnel operations of the School. Additionally, the administration of the current schools will lend their expertise to the administration of the new school.

The trustees of Icahn Charter Schools are committed to identifying and retaining the services of the most highly qualified principals, who are held accountable for the achievement of our students, as well as the professional growth and development of the staff. The charter school model is one where autonomy and accountability reign. This model has been successful in our first schools. We believe in the model of giving the principal responsibility for the outcomes in the school, which is why we are committed to charter schools. While the replication process will save the new principals time and enable this effective model to be put in place efficiently and effectively, the charter school model ultimately puts the responsibility of the school's success with the principal. For this reason, it is imperative that effective leaders be chosen. To ensure that the new principal is well trained, the intention is to hire the person as an administrator in

Icahn Charter School 1 (which is fully populated K-8) the year before opening the new school to learn the practices of the Icahn Charter School model.

In order to find individuals with the qualities the Board seeks, the trustees have instituted a system of principals in training to acclimate to the culture and learn the specific skills required in administering an Icahn Charter School. Those selected may come from the ranks of former assistant principals or principals. We have also found teachers on the faculty who can be trained for administrative positions, eventually becoming principals.

Historically, we have been fortunate in having populated our current schools with highly experienced school administrators with proven track records. We will continue to encourage their recommendations for candidates, either from their personal experience working with possible candidates or personal networking. Although other methods of finding principals are used by other schools, such as newspaper advertising or principal training programs, the Icahn Charter Schools' method of finding known experienced, successful principals has proved a successful approach. Even when we only had one experienced principal, we were able to use him as a resource for our next principals. We currently have four principals in the Icahn Schools, capable of providing more than four times the number of possible next principals. As we expand, we will have more known, admirable candidates from whom to choose.

The charter school model is different from a conventional public school, but for an energized educator, it can be a dream come true—to implement a program you believe in (and to be responsible for its success). There are unquantifiable rewards for a principal who can prove that academic success is not tied to neighborhood or socio-economic background, but it takes energy. We look for people with energy, commitment and confidence.

We are fortunate that much of the work of a first year principal has already been organized in our current charter school. Each of our principals is responsible for the successful use of the curriculum, effective instruction, effective assessment and teacher and staff oversight. By using a replication model, we will be able to efficiently and effectively provide materials and guidance for our new principals so that all these responsibilities do not have to be initiated from scratch. Additionally, our replication model and network of schools will facilitate learning the model and also assure that there will be ongoing resources that will be available to the principal once the school opens. With every school that we open, we will have more experience to know how to avoid any pitfalls and how to focus more quickly on improving student learning.

The other instructional leaders in our schools include Staff Developers. That work is sometimes provided through a contract with a service that provides that service, such as the New York City Math Project or by hiring an individual to work in the school. The decision about which approach to take is determined by the Superintendent in consultation with the Principal.

Thanks to the replication model, there are many other instructional leaders available to each principal. Jeffrey Litt, who is the Superintendent of all the Icahn Charter Schools, was the person who adapted the original Core Knowledge curriculum to inner city schools. He has continued to refine the Icahn Core Knowledge Curriculum and will be available to this school.

The Icahn Charter School network includes a Director of Assessment. This person zeros in on the strengths and gaps at each school.

As instructional leader, the Principal will interview and hire staff. Staff development will be an ongoing priority for the principal. The “effective schools” studies reflect the view that the direct responsibility for improving instruction and learning rests in the hands of the principal. As such, our intent is that the Principal will display strong instructional leadership by:

1. Placing priority on curriculum and instruction issues;
2. Being dedicated to the goals of the school;
3. Being able to rally and mobilize resources to accomplish these goals;
4. Creating a climate of high expectations in the school, characterized by a tone of respect for teachers, students, parents and community; and
5. Functioning as a leader with direct involvement in instructional policy by communicating with teachers, supporting and participating in staff development activities and establishing incentives for the use of new instructional strategies.

The Icahn Charter Schools use these criteria for their teachers:

Qualifications for Teachers

- A clear understanding of the needs of “at risk” children
- Experience teaching in similar communities
- Superior academic achievement in undergraduate and graduate school, as applicable
- Successful experience in the classroom
- Completion of New York State exams for Teacher Certification
- The hiring goal of ICS 7 is to hire only certified personnel. In any event, no more than 30% of the teachers or five positions (whichever is fewer) will be filled by uncertified personnel, who will, at a minimum, be NCLB qualified.

Classroom teachers will have the responsibility for providing instruction in all curriculum areas. All teachers will have the responsibility for closely monitoring student progress and providing remediation where necessary to prevent the child from falling behind.

Two paras will provide coverage during the optional early morning session. In the budget, we have allowed for paras to provide supervision for the late sessions, depending on the enrollment for those sessions. Supervision will be provided to ensure completion of homework assignments, special projects and related instructional activities.

Each Icahn Charter School has staff development before the opening of school and ongoing throughout the year. The pre-opening staff development includes all Icahn Charter School staff, so the new teachers from this school can learn from teachers who were recently new to the Icahn program. Throughout the year, Icahn Charter School faculty share experiences through group staff development and Intervisitation (where teachers from one school visit another Icahn school).

Through ongoing dialogue with staff, the principal will encourage the use of a variety of instructional materials and learning strategies. The staff development sessions will afford our teachers the opportunity to refine their skills through a collaborative planning session, the development of appropriate assessment tools, the sharing of successful strategies, participation in workshops, the appropriate use of technology in the classroom and effective guidance techniques and self assessment. Teachers will have the opportunity to videotape their lessons for their private review. The Staff Developer will provide demonstration lessons as needed. There will be an emphasis on the analysis of student data to address specific instructional needs. Teachers will be trained in ongoing assessment techniques to ensure successful results on New York State exams.

In keeping with our goal of providing educational excellence in a nurturing and supportive environment, ICS 7 hiring policy will be to seek the most qualified staff without regard to race, creed, national origin, religion, citizenship, age, sex, marital status or disability. This policy will ensure equal opportunity for promotions, staff development, layoffs and termination (if necessary).

It is the Principal's responsibility to hire, support (and terminate) teachers. Principals supervise and support teachers in a variety of ways. Daily classroom visitations will afford the Principal the opportunity to observe the teacher's implementation of the instructional program and determine his/her effectiveness by student responses and participation. The Principal will provide for demonstration lessons by both the Staff Developer and subject specialists. Expectations for teacher performance and student achievement are determined through the careful monitoring of lessons, student work, achievement results and the previously determined areas in need of strengthening. These expectations are articulated and instilled in the staff through workshops, grade conferences, feedback from Staff Developers and intervisitations among our sister schools. The Principal will also conduct frequent conferences with the teachers and the Staff Developers to determine future goals and objectives.

If after working with a less than effective teacher, there is no improvement, the Principal will have to terminate the teacher. A Principal will maintain all communication with each teacher in the teacher's professional file. The School will follow a progressive discipline policy to address ineffective teaching. This will include a conference with the teacher, with a follow-up letter to the file indicating the matters covered in the conference and detailing future expectations. If after working with a less than effective teacher, there is no improvement, the Principal will have to terminate the teacher.

15. Professional Development

Describe how the school's professional development program will assist teachers in meeting students' academic needs and school goals by addressing identified shortcomings in student learning and teacher pedagogical skill and content knowledge. Your response should:

- **Describe who will be responsible for providing professional development;**
- **Explain how the needs of individual teachers will be identified and the staff responsible for identifying those needs;**
- **Describe how and when professional development will be delivered;**
- **Describe the resources, including staff and time, that will be allocated for professional development;**
- **Explain how the professional development program will meet the needs of all teachers, including novice teachers, teachers new to the school, veteran teachers, and teachers of all subjects;**
- **Explain the process for evaluating the efficacy of the professional development program.**

Research has proved that professional development is key to training effective teachers. Research has also proved that effective teachers are at the heart of a child's success in school. The Superintendent of the Icahn Charter Schools, Jeffrey Litt, has organized staff development for each of our previous schools. Each new school is included in that program. He organized the initial professional development programs when he started our first school. He now brings together all Icahn Charter School teachers before school opens for several days of professional development.

At the pre-opening program, all staff will receive intensive staff development in the implementation of Core Knowledge. Jeffrey Litt, Superintendent of our Icahn Charter Schools, is recognized as an expert in the field and has trained teachers and administrators throughout the country. He hosted hundreds of educators in his prior role as Principal of the Mohegan School, the second school in the nation to pioneer Core Knowledge, and at Icahn Charter School. He will oversee the pre-opening staff development. The principal of ICS 7 will also hold pre-opening administrative staff development for ICS 7's particular needs. The Principal of ICS3 is an experienced Core Knowledge Staff Developer. She has provided the professional development in Core Knowledge for all our schools in September before opening. We will have approximately 1 ½ weeks of professional development in Core before opening. Mr. Santiago, our Director of Operations in the Icahn Network also will help open our new schools for financial/business matters. We anticipate that each principal, including the principal of ICS 7, will infuse his or her individual school with the principal's own imprint, but the majority of the elements of each Icahn School's program will be from the replication model.

As our schools are data-driven, staff will be trained how to use data to identify areas of strength and areas in need of strengthening, both for the students and the teachers. Additionally, the staff will be taught how to do an error analysis of practice tests...both commercial and past NYS exams, and then how to remediate the specific deficits. When deficits across the class are discovered, the Staff Developer will work with the teacher to improve the teaching of those skills. When there are individual student deficits, the staff will be taught how to design individualized lessons for those students scoring behind their peers. Classroom teachers will participate in joint lesson planning with TA teachers. The subsequent post test will be used to determine if the lessons were appropriate for the targeted children. If not, the Staff Developer and the Targeted Assistance teacher will work with the teacher and the student to further fine tune the teaching.

Icahn Charter School 7 will provide an environment in which all staff members share one vision and demonstrate the significance of their role. All personnel will develop their professional skills to the highest extent and have the opportunity for input and collaboration. While the Core Knowledge curriculum is detailed and deep, it also encourages teacher input, which enhances their stake in the work. The Principal will visit each class on a daily basis for the purpose of informal and formal observations. A professional library will be developed and will include current and relevant texts and journals for professional use. Each of our schools will have access to Mr. Litt's expertise throughout the school year, and the expertise of other staff in the Icahn network.

Through ongoing dialogue with staff in staff development, the Principal will encourage the use of a variety of instructional materials and learning strategies. The staff development sessions will afford our teachers the opportunity to refine their skills through a collaborative planning session, the development of appropriate assessment tools, the sharing of successful strategies, participation in workshops, the appropriate use of technology in the classroom and effective guidance techniques and self assessment. These various approaches have proven successful for both the novice and experienced teachers in our schools, and for all subjects. Teachers will have the opportunity to videotape their lessons for their private review. The Staff Developer will provide demonstration lessons as needed. There will be an emphasis on the analysis of student data to address specific instructional needs. Teachers will be trained in ongoing assessment techniques to ensure successful results on New York State exams.

The work with CEI-PEA, staffed by nationally recognized educators, will serve as an additional resource and bridge to teaching universities. New York City's Charter School Center frequently has seminars by experts in a particular area. Staff development activities will include dialogues with these experienced and knowledgeable educators.

The School's professional development/modeling for our teachers to ensure utilization of appropriate methodologies that support the reduction of dysfluency and other at-risk characteristics in general education students.

Following Staff Development presentations, teachers complete a written evaluation sheet, which is used to plan future sessions. The success of our Staff Development program is expected to be reflected in student achievement results, both in-house and state testing.

Because Staff Development is at the heart of a successful school, sufficient funds have always been available to each Icahn Charter School to conduct the necessary Staff Development, whether it is provided by staff at the school or provided by outside consultants. The Icahn Charter Schools have been fortunate to have received funding for pre-opening Staff Development, which has freed up money for continuing Staff Development during the school year. We intend to apply for similar funding for each new school.

16. School Culture and Discipline

Explain how you will establish and maintain a school culture that supports learning and achievement. Your response should address:

- **How the school will maintain a safe and orderly environment;**
- **The school's approach to classroom management;**
- **The school's approach to discipline (the actual discipline policy should be submitted separately as Attachment 37); and**
- **The specific roles of teachers and administrators in relation to school culture and discipline.**

It is the philosophy of the Icahn Charter Schools that a school's culture should be based on pride of individual achievement and respect for self and others. A challenging and exciting learning environment, a staff dedicated to each student's achievement, and leadership in all areas blend to provide the foundation for the Icahn School culture. The school culture is supported by the school's disciplinary system, which includes a clear understanding by children and their parents or guardians of the expectations for behavior; by each staff member serving in the capacity of role model; and by classroom discussions on the topics of proper behavior, manners, care of books and materials, care of school property, mutual respect, proper language, conflict resolution and consequences for improper behavior. During the summer Staff Development meetings, teachers will be introduced to the Icahn Charter Schools' Code of Conduct, which is the basis for the school's culture of respect.

When students behave in ways that are not acceptable under the Code of Conduct, there will be a variety of responses, depending on the level of the problem. Generally it is hoped that in-school suspension will be the most severe punishment necessary, but there may be situations in which more severe responses are necessary. We provide a list below of possible infractions and their responses. Depending on individual circumstances of the incident and the student's disciplinary record, the Principal may determine that an alternative response from the one on the chart below should be made.

Rather than give the families of our lower grade children a long list of disciplinary procedures, we prefer to give them Student Handbook that includes the rationale as to why students need to follow rules, be responsible and show respect. Particularly as we are working with young children in their formative years, we want to emphasize good behavior rather than a long list of problems and punishments.

THE ICAHN CHARTER SCHOOL CODE OF CONDUCT:

- Respect for learning;

- Respect for the feelings of others;
- The use of appropriate language at all times;
- Trip and neighborhood walk safety;
- Respect for the property of others;
- Respect for school property;
- Getting along with other children;
- Following directions from school staff;
- Arriving to school on time; and
- Appropriate ways to solve problems with peers.

These topics will be included in regular classroom lessons in a uniform manner to ensure continuity in all classes:

- Respect for learning
 - We always come to school on time
 - We complete our homework every night
 - We do our work neatly and carefully
 - We listen when the teacher or classmate is speaking
 - We raise our hand when we wish to ask or answer a question
- Respecting the feelings of others
 - Be polite and friendly to others
 - Never tease anyone
 - Never call anyone by a name that is hurtful
 - Try to help someone when they make a mistake
- The use of appropriate language at all times
 - We never use curse words
 - We talk to each other with respect at all times
 - We do not call people names that hurt their feelings
- Trip and neighborhood walk safety
 - We always wear our name tag on trips and walks
 - We stay on line with our partner
 - We do not run
 - We sit still on busses or trains
 - We walk quietly so that we do not disturb others
 - We always take a partner when using a bathroom
- Respect for the property of others
 - We do not take anything from someone without asking
 - We treat other people's property with respect
 - We always return things we borrow
- Respect for school property
 - We never write in library books
 - We do not tear pages from any book
 - We do not write on walls or desks
 - We do not throw books or school property
 - We behave properly in the bathroom

- We keep our school neat and clean
 - We pick up something that we dropped
 - We do not touch student displays
- Getting along with other children
 - We do not yell at other children
 - We never hit other children
 - We talk to someone about our feelings
 - We ask a teacher to help us if we have a problem
- Following directions from school staff
 - We never leave the classroom without permission
 - We stay with our class at all times
 - We always talk to teachers with respect
- Arriving to school on time
 - We always come to school on time
 - We come to school straight from home
 - We come to school ready to learn
 - If we are late or absent, we bring a note from our parent
- Proper ways to solve problems with peers:
 - We explain to others how we feel
 - We ask a teacher to help us solve a problem

All students and their families will receive the Student/Family Handbook detailing the responsibilities of the school community, i.e.: students, parents, teachers and the administration. The Handbook will be presented to the students the first day of school. A copy of the Handbook will be sent home for parent/guardian use.

Part of the school culture is based on high attendance to ensure that maximum learning will take place. Absences will be carefully monitored. All students' absences will be met with a phone call to the home on the first day of the absence. All calls will be logged, including the excuse given to the school by the parent/guardian. In the event that the parent cannot be reached, repeated calls will be made to the home. In the rare event that this does not prove successful, a certified return receipt letter will be sent to the parent reminding them of the school policy that all children maintain an attendance rate of 90% or better. If the registered letter is undeliverable or refused by the parent or guardian, another attempt will be made. The Principal has the responsibility of notifying the Administration for Children's Services and will file an educational neglect complaint. In the event that it is determined that the family has moved and this information is verified, the child will be removed from the school register and the records forwarded upon request. In the event that a child is absent for more than 10% of the school year, for non-medical reasons, the Principal may decide to notify the parent that expulsion may be appropriate.

ACCOUNTABILITY

17. Accountability Plan

17(a) Goals and Measures

Using the Institute template submit a draft Accountability Plan for the proposed school that includes at a minimum the Institute's required goals and measures. If the school will open with early elementary or high school grades, provide benchmark indicators that can be used to measure progress towards the required goals. The Accountability Plan may also contain any optional goals and measures you choose to include. Guidelines for Creating a SUNY Accountability Plan and a plan template can be found on the Institute's website at: <http://newyorkcharters.org/schoolsAccountability.htm>

17(b) Graduation Requirements

If the proposed school will serve students in the 12th grade within the charter term, describe your school's specific requirements for graduation beyond the basic Regents requirements including whether or not the proposed school would offer or require an advanced Regents diploma.

Not applicable.

Icahn Charter School
ACCOUNTABILITY PLAN
PROGRESS REPORT

Trustee's Name	Board Position
Carl C. Icahn	President
Gail Golden	Chair
Julie Goodyear	Secretary
Robert Sancho	Member
Seymour Fliegel	Member
Edward J. Shanahan	Member
Karen Mandelbaum	Member

INTRODUCTION

School Enrollment by Grade Level and School Year

ENGLISH LANGUAGE ARTS

Goal 1: English Language Arts

All Icahn Charter School 1 Students will become proficient readers of the English language.

Background

Goal 1: Absolute Measure

75 percent of all tested students who are enrolled in at least their second year will perform at or above Level 3 on the New York State English language arts examination.

75 percent of all tested students who are enrolled in at least their second year will perform at or above a Scale Score of 650 on the New York State English language arts examination.

Method

The school will administer the New York State Testing Program English language arts assessment to students in 3rd through 8th grade. Each student's raw score will be converted to a grade-specific scaled score and a performance level. The criterion for success on this measure requires students who have been enrolled in at least their second year (defined as enrolled by BEDS day of the previous school year) to score at Levels 3 or 4.

State English Language Arts Exam
Number of Students Tested and Not Tested

Grade	Total Tested	Not Tested ¹			Total Enrolled
		IEP	ELL	Absent	
3	0	0	0	0	0
4	0	0	0	0	0
5	0	0	0	0	0
6	0	0	0	0	0
7	0	0	0	0	0
8	0	0	0	0	0
All	0	0	0	0	0

Results

Evaluation

Additional Evidence

Goal 1: Absolute Measure

Each year, the school's aggregate Performance Index (PI) on the State English language arts exam will meet the Annual Measurable Objective (AMO) set forth in the state's NCLB accountability system.

Method

The federal No Child Left Behind law holds schools accountable for making an annual yearly progress towards all students being proficient by the year 2013-14. As a result, the state sets an Annual Measurable Objective (AMO) each year to determine if schools are making satisfactory progress toward the goal that 100 percent of students will ultimately be proficient in the state's learning standards in English Language Arts. To achieve this measure, all tested students must have a Performance Index (PI) value that equals or exceeds this year's English language arts AMO, which for 2009-10 is 155.² The PI is calculated by adding the sum of the percent of all tested students at Levels 2 through 4 with the sum of the percent of all tested students at Levels 3 and 4. Thus, the highest possible PI is 200.

Results

Evaluation

Additional Evidence

Goal 1: Comparative Measure

Each year, the percent of all tested students who are enrolled in at least their second year and performing at or above Level 3 on the state English language arts exam will be greater than that of all students in the same tested grades in the local school district.

Method

Tested students who were enrolled in at least their second year are compared to all tested students in the surrounding public school district. Comparisons are between the results for each grade in which the school had tested students and the results for the respective grades in the local

school district, as well as between the total result of students in at least their second year at the school and the total result for all students at the corresponding grades in the school district.

Results

Evaluation

Additional Evidence

Goal 1: Comparative Measure

Each year, the school will exceed its predicted level of performance on the state English language arts exam by at least a small Effect Size (performing higher than expected to a small degree) according to a regression analysis controlling for students eligible for free lunch among all public schools in New York State.

Method

The Charter Schools Institute conducts a Comparative Performance Analysis, which compares the school's performance to demographically similar public schools state-wide. Regression analysis is used to control for the percentage of students eligible for free lunch among all public schools in New York State. The school's actual performance is then compared to the predicted performance of public schools with a similar free lunch percentage. The difference between the school's actual and predicted performance, relative to other schools with similar free lunch statistics, produces an Effect Size. An Effect Size of 0.3 is considered performing higher than expected to a small degree, which is the requirement for achieving this measure.

Results

Evaluation

Additional Evidence

Goal 1: Growth Measure

Each grade-level cohort will reduce by one-half the gap between the percent of students at or above a Scale Score of 650 on the state exam and 75 percent of students at or above a Scale Score of 650 on the next state exam. If a grade-level cohort exceeds 75 percent at or above a Scale Score of 650, that cohort is expected to show at least an increase in the percentage.

Method

This measure examines the change in performance of the same group of students from one year to the next and the progress they are making towards performing above a Scale Score of 650. Each grade level cohort consists of those students who took the state exam and also have a state exam score the previous year. It includes students who repeated the grade. Students who repeated the grade should be included in their current grade level cohort, not the cohort to which they previously belonged. In addition, the aggregate of all cohorts is examined to determine the growth of all students who took a state exam in both years.

Results

Goal 1: Optional Measure

Each year, the percent of students performing at or above Level 3 on the State ELA exam in each tested grade will be greater than that of the following similar schools.

Method

The Charter Schools Institute conducts a Comparative Performance Analysis, which compares the school's performance to demographically similar public schools state-wide. Regression analysis is used to control for the percentage of students eligible for free lunch among all public schools in New York State. The school's actual performance is then compared to the predicted performance of public schools with a similar free lunch percentage. The difference between the school's actual and predicted performance, relative to other schools with similar free lunch statistics, produces an Effect Size. An Effect Size of 0.3 is considered performing higher than expected to a small degree, which is the requirement for achieving this measure.

Results

Action Plan

MATHEMATICS

Goal 2: Mathematics

All Icahn Charter School 1 students will demonstrate steady progress in the understanding and application of mathematical skills and concepts.

Background

Goal 2: Absolute Measure

75 percent of all tested students who are enrolled in at least their second year will perform at or above a Scale Score of 650 on the New York State mathematics examination.

Method

The school administered the New York State Testing Program mathematics assessment to students in 3 through 8 grade. Each student's raw score has been converted to a performance level and a grade-specific scaled score. The criterion for success on this measure requires students to have a Scale Score of 650 or above.

Results

Evaluation

Additional Evidence

Goal 2: Absolute Measure

Each year, the school's aggregate Performance Index (PI) on the State mathematics exam will meet the Annual Measurable Objective (AMO) set forth in the state's NCLB accountability system.

Method

The federal No Child Left Behind law holds schools accountable for making an annual yearly progress towards all students being proficient by the year 2013-14. As a result, the state sets an Annual Measurable Objective (AMO) each year to determine if schools are making satisfactory progress toward the goal that 100 percent of students will ultimately be proficient in the state's learning standards in Mathematics. To achieve this measure, all tested students must have a Performance Index (PI) value that equals or exceeds this year's Mathematics AMO, which for 2009-10 is 135³. The PI is calculated by adding the sum of the percent of all tested students at Levels 2 through 4 with the sum of the percent of all tested students at Levels 3 and 4. Thus, the highest possible PI is 200.

Results

Evaluation

Additional Evidence

Goal 2: Comparative Measure

Each year, the percent of all tested students who are enrolled in at least their second year and performing at or above Level 3 on the state mathematics exam will be greater than that of all students in the same tested grades in the local school district.

Method

Tested students who were enrolled in at least their second year are compared to all tested students in the surrounding public school district. Comparisons are between the results for each grade in which the school had tested students and the results for the respective grades in the local school district, as well as between the total result of students in at least their second year at the school and the total result for the corresponding grades in the school district.

Results

Evaluation

Additional Evidence

Goal 2: Comparative Measure

Each year, the school will exceed its predicted level of performance on the state mathematics exam by at least a small Effect Size (performing higher than expected to a small degree) according to a regression analysis controlling for students eligible for free lunch among all public schools in New York State.

Method

The Charter Schools Institute conducts a Comparative Performance Analysis, which compares the school's performance to demographically similar public schools state-wide. Regression analysis is used to control for the percentage of students eligible for free lunch among all public schools in New York State. The school's actual performance is then compared to the predicted performance of public schools with a similar free lunch percentage. The difference between the school's actual and predicted performance, relative to other schools with similar free lunch statistics, produces an Effect Size. An Effect Size of 0.3 is considered performing higher than expected to a small degree, which is the requirement for achieving this measure.

Results

Evaluation

Additional Evidence

Goal 2: Growth Measure

Each grade-level cohort will reduce by one-half the gap between the percent of students at or above a Scale Score of 650 on the 2008-09 state exam and 75 percent of students at or above a Scale Score of 650 on the 2009-10 state exam. If a grade-level cohort exceeds 75 percent at or above a Scale Score of 650 in 2008-09, that cohort is expected to show at least an increase in the percentage.

Method

This measure examines the change in performance of the same group of students from one year to the next and the progress they are making towards the absolute measure of 75 percent of

students performing at or above a Scale Score of 650. Each grade level cohort consists of those students who took the state exam three years. It includes students who repeated the grade. Students who repeated the grade should be included in their current grade level cohort, not the cohort to which they previously belonged. In addition, the aggregate of all cohorts is examined to determine the growth of all students who took a state exam in both years.

Results

Evaluation

Additional Evidence

Goal 2: Optional Measure

Each year, the percent of students performing at or above Level 3 on the State Mathematics exam in each tested grade will be greater than that of similar schools.

Method

Tested-students are compared to all tested students in the surrounding similar schools. Comparisons are between the result of each grade in which the Icahn Charter School had tested students and the result of the respective grades in the surrounding schools.

Results

Evaluation

Summary of the Mathematics Goal

Action Plan

SCIENCE

Goal 3: Science

All Icahn Charter School students will demonstrate competency in understanding and application of scientific reasoning.

Background

Goal 3: Absolute Measure

Each year, 75 percent of all tested students who are enrolled in at least their second year will perform at or above Level 3 on the New York State science examination.

Method

The school administered the New York State Testing Program science assessment to students in 4th and 8th grade in spring. Each student's raw score has been converted to a performance level and a grade-specific scaled score. The criterion for success on this measure requires students who have been enrolled in at least their second year (defined as enrolled by BEDS day of the previous school year) to score at Levels 3 or 4.

Results

Evaluation

Additional Evidence

Goal 3: Comparative Measure

Each year, the percent of all tested students who are enrolled in at least their second year and performing at or above Level 3 on the State science exam will be greater than that of all students in the same tested grades in the local school district.

Method

Tested students who were enrolled in at least their second year are compared to all tested students in the surrounding public school district. Comparisons are between the results for each grade in which the school had tested students and the results for the respective grades in the local school district.

Results

Evaluation

Additional Evidence

Goal 3: (Optional) Comparative Measure

Each year, the percent of students performing at or above Level 3 on the Science exam in each tested grade will be greater than that of similar schools.

Method

Icahn Charter School 1 tested-students are compared to all tested students in the surrounding similar schools. Comparisons are between the result of the 4th grade and 8th grade in which Icahn Charter School 1 had tested students and the result of the respective grades in similar schools.

Results

Summary

Action Plan

SOCIAL STUDIES

Goal 4: Social Studies

All Icahn Charter School 1 students will demonstrate a thorough understanding of Social Studies and the impact of history of modern day

All Icahn Charter School 1 students will demonstrate a thorough understanding of Social Studies and the impact of history of modern day

Background

Goal 4: Absolute Measure

Each year, 75 percent of all tested students who are enrolled in at least their second year will perform at or above Level 3 on the New York State social studies examination.

Method

The school will administer the New York State Testing Program social studies assessment to students in 5th grade and 8th grade. Each student's raw score has been converted to a performance level and a grade-specific scaled score. The criterion for success on this measure requires students who have been enrolled in at least their second year (defined as enrolled by BEDS day of the previous school year) to score at Levels 3 or 4.

Results

Evaluation

Additional Evidence

Goal 4: Comparative Measure

Each year, the percent of all tested students who are enrolled in at least their second year and performing at or above Level 3 on the State social studies exam will be greater than that of all students in the same tested grades in the local school district.

Method

Tested students who were enrolled in at least their second year are compared to all tested students in the surrounding public school district. Comparisons are between the results for each

grade in which the school had tested students and the results for the respective grades in the local school district.

Results

Evaluation

Additional Evidence

Goal 4: (Optional) Comparative Measure

Each year, the percent of students performing at or above Level 3 on the Social Studies in each tested grade will be greater than that of similar schools.

Method

Icahn Charter School 1 tested-students are compared to all tested students in the surrounding similar schools. Comparisons are between the result of the 5th and 8th grade in which Icahn Charter School 1 had tested students and the result of the respective grades in similar schools.

Results

Summary

Action Plan

NCLB

Goal 5: NCLB

Under the state's NCLB accountability system, the school's Accountability Status will be "Good Standing" each year.

Goal 5: Absolute Measure

Under the state's NCLB accountability system, the school's Accountability Status will be "Good Standing" each year.

Method

Since all students are expected to meet the state's learning standards, the federal No Child Left Behind legislation stipulates that various sub-populations and demographic categories of students among all tested students must meet the state standard in and of themselves aside from the

overall school results. New York, like all states, established a system for making these determinations for its public schools. Each year the state issues School Report Cards which indicate each school's status under the state's NCLB accountability system. For a school's status to be "Good Standing" it must not have failed to make Adequate Yearly Progress (AYP) for two consecutive years.

Results

Evaluation

Additional Evidence

APPENDIX B: OPTIONAL GOALS

The following sections are for optional goals; data tables are provided for commonly used optional measures.

Goal 6: Parent Satisfaction

Parents will demonstrate a strong commitment to the school.

Goal 6: Absolute Measure

Each year, parents will express satisfaction with the school's program, based on the school's Parent Survey in which at least two-thirds of all parents provide a positive response to each of the survey items.

Method

A parent survey is provided to all parents/guardians of students who attend Icahn Charter School 4. The survey contains fifteen (15) questions on the school's performance with options to select from A to D; with A equaling poor and D equaling excellent. After the collection of the surveys, all questions are tallied with notification of how many surveys were not returned to the school. Below is a copy of the survey provided to the parents/guardians.

PARENT SURVEY JUNE 2010

Please mark each item next to the response that you feel is appropriate.

Por favor poner una seña al lado de cada respuesta que sea apropiada para usted.

1. I feel welcome when I visit this school.

Me siento bien recibida(o) cuando visito la escuela.

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

2. This school provides a safe environment for learning.

La escuela mantiene un ambiente seguro para que los estudiantes puedan aprender.

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

3. My child has up-to-date instructional tools (books, computers, videos, etc.) that are used effectively.

Mi niña(o) tiene materiales instructivos de lo mas reciente (libros, computadoras, videos, etc.) que son utilizados efectivamente.

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

4. The school holds high academic expectations for my child.

La escuela tiene esperanzas académicas de el nivel mas alto para mi niña(o).

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

5. The school holds high expectations of discipline for my child.

La escuela tiene esperanzas de comportamiento de el nivel mas alto para mi niña(o).

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

6. I regularly read progress reports and notices sent home from school.

Yo regularmente leo los noticieros y cartas que la escuela me manda.

- ☐ Poor – nunca
- ☐ Satisfactory – satisfactorio
- ☐ Good – bien
- ☐ Excellent – excelente

7. Homework assignments are a valuable contribution to my child's learning.

Las tareas asignados son una contribución valerosa para la educación de mi niña(o).

- ☐ Poor – nunca

- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

8. My child has enough supplies, materials, and text books to help with his/her studies.

Mi niña(o) tiene suficiente materiales para ayudarle con su estudios.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

9. My child is receiving a quality education.

Mi niña(o) esta recibiendo una educación de alta calidad.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

10. The school keeps me informed about what goes on at the school.

La escuela me mantiene informada(o) de todo lo que sucede en la escuela.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

11. The school clearly tells me what the school's goals are.

La escuela me explica claramente lo que aspira lograr.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

12. School property and building are clean and well maintained.

La escuela y las aceras están limpias y bien mantenidas.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

13. I would like my younger children to attend this school.

Me gustaría que mis hijas/hijos menores asistieran esta escuela.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien

- Excellent – excelente
- N/A

14. I would recommend my child's school to other parents.

Yo recomendaría esta escuela a otros padres.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

15. My child's attendance is monitored by the school calling about absences.

La escuela me llama cuando mi niña(o) faltado clase.

- Poor – nunca
- Satisfactory – satisfactorio
- Good – bien
- Excellent – excelente

Current grade of my child _____

Grado presente de mi niña(o) _____

My child will be returning to this school. Yes____ No____

Mi niña(o) regresara a esta escuela. Si____ No____

If no, please explain: _____

Si su niña(o) no regresara, favor de explicar: _____

Other Comments:

Otros Comentarios:

Results

Number of Responses	Number of Families	Response Rate
80	69	73.39%

2009-10 Parent Satisfaction Survey Response

QUESTIONS	POOR	SATISFACTORY	GOOD	EXCELLENT	N/A
1					
2					

3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
TOTAL					

2009-10 Parent Satisfaction on Key Survey Results

Item	Percent of Respondents Satisfied
Receive Progress Reports and Notices	
Homework is a valuable contribution to child's learning	
Students have enough supplies and materials for learning	
Students are receiving a quality education	
School clearly defines goals	
Would recommend school to other parents	

Evaluation

Goal 7: Parent and Student Satisfaction

Students and parents will demonstrate a higher level of responsibility for their academic progress.

Goal 7: Absolute Measure

Each year, the school will have a monthly student's attendance rate of at least 90%

Method

When a student is absent, the school contacts the parent/guardian by 9:15am and records the parent/guardian's response for tracking purposes.

Results

Evaluation

Grade	YTD Attendance Rate
Kindergarten	
First Grade	
Second Grade	
School Average	

APPENDIX C: ADDITIONAL EVIDENCE

Afterschool Program

The after school program is offered to children in all grades who do not have an adult to receive them at our regular 4:00pm dismissal. The two hour program provides tutoring, homework assistance, snacks, and to the degree possible, recreation.

Targeted Assistance

Our Targeted Assistance (TA) program provided service for 40 minutes per day, five days per week to 45 students. The participating students were selected as a result of low pretest scores on the ITBS. Classroom teachers and TA teachers have articulation periods that afford the opportunity for joint planning and monitoring of student achievement.

18. Progress Monitoring

18(a) Accountability Plan Goals

Explain how the school will monitor its progress towards meeting its Accountability Plan goals and how that information will be shared with and used by stakeholders, including parents, teachers, board members and school leaders.

There are four areas that we deem the most important measures in determining a school's success. First and foremost, we seek academic achievement, especially as calculated by state test results. School attendance is also important as children not in school cannot learn at the pace necessary to achieve at the level of our expectation. Parental satisfaction is important to us because we believe parents must be partners with the school in their children's academic life. The fourth measure is financial stability. Without financial health, charter schools flounder. They cannot focus on their mission to help children at risk of academic failure achieve academic success. Our current charter schools have already proved each of the four key elements is possible. Our model of a small school enables the Principal to oversee each of these areas of importance, to interact daily with all stakeholders, to encourage engagement and monitor achievement. The charter school template—of a principal being responsible for the outcomes of the school in response to being given autonomy as a leader—is particularly effective in our small school model, for a principal can truly be involved in all aspects of school. We intend to replicate that model by using the expertise already at our Foundation's disposal in our current charter schools.

Academic data is collected constantly through the on-going assessments. Attendance is collected every day and that data is maintained. We hand out a Parent Survey each spring and are persistent in collecting the completed surveys so we can put the data into the computer. Achievement data and attendance are reviewed by the board at each meeting. The Parental Survey is reviewed by the Board at the end of the year. The financial health of the schools is monitored by each Business Manager, by the Director of Operations, by the Superintendent, by the Board's treasurer, by the entire Board and by the School's auditors.

18(b) Mission Accomplishment

Explain the process and criteria that will be used to monitor and evaluate the extent to which the school is achieving its mission throughout the charter term.

Icahn Charter Schools provide data-driven instruction in all areas. The students, parents, staff, administration and board of trustees are focused on academic outcomes. This is accomplished through the use of unit tests designed by teachers, previously administered standardized tests and commercial products such as Test Ready. Additionally, and as previously discussed, the use of

Success maker provides instant feedback and prescriptive lessons to the student. All outcomes are tracked.

We are particularly proud of the constant focus on student outcomes by the board of trustees. Each month, Principals and the Superintendent present the results of practice tests in the areas of ELA, Mathematics, Science (where applicable) and Social Studies. As part of the presentation, the board is provided with strategies that are being implemented to increase a particular child's performance.

At the schools, all new students to the school take the Iowa Test of Basic Skills each October. The results determine who will be part of our Targeted Assistance program. The entire student body takes the ITBS each June. These results also determine who will participate in Targeted Assistance. All Targeted Assistance students attend Saturday Academy for three hours each week for nineteen (19) weeks.

Articulation periods between the classroom teacher, Director of Assessment, Staff Developer and Targeted Assistance teachers ensure that lessons are targeted to the specific areas in need of strengthening. This is accomplished by our very specific method of student assessment. Once a test is administered and scored, an error analysis is conducted to determine the specific skills in need of strengthening. As mentioned above, carefully designed lessons are then provided to the student. The child, after receiving a sufficient amount of time in remediation, takes another test to demonstrate the new areas of success.

Students in the eighth grade take ninth grade NYS Regents exams in Integrated Algebra, Biology, as well as the NYS Regents Competency in Foreign language. Our pass rate has been 100%.

Our strong record of success to date is a result of leaving nothing to chance. Icahn Charter Schools do not believe in one size fits all and use a combination of strategies to bring each child to the highest level. As presented in response to question 11, Project Based Learning, Bloom's taxonomy, Mastery Learning, the Renzulli Triad Model, Differentiated Instruction, as well as extensive use of technology, are used to monitor, evaluate and strengthen the achievement levels.

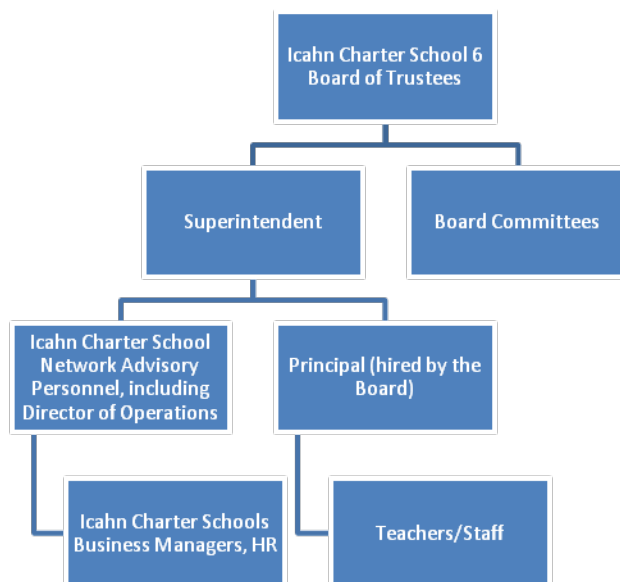
Finally, the Superintendent holds weekly EdStat meetings with the Principals to analyze all student results and evaluate the effectiveness of the instructional program. As a result, students demonstrating significant growth are "promoted" out of Targeted Assistance and others might be brought in the program to address a specific area in need of strengthening.

ORGANIZATIONAL VIABILITY

19. Organizational Chart

Provide an organizational chart for the school and a narrative description of the chart.

- The chart should clearly indicate the reporting structure of school leader(s) to the board of trustees and staff to the school leader(s). If the charter school intends to contract or partner with an entity for management or educational services, the organizational chart should also reflect that relationship.**



- The narrative should explain the lines of reporting and accountability, your rationale for choosing this structure, and the roles of any management or partner organizations.**

The Superintendent will report to the Icahn Charter School 7 Board. The Superintendent is responsible for the success of each of the Icahn Charter Schools. Mr. Litt is the Superintendent. As he opened the first school, he is intimately aware of the academic program and all the operations of an Icahn Charter School. The Board also looks to him to provide names of new principals. The Board reviews the applicants for the principalship and listens to the Superintendent's opinion and then chooses a principal.

Because we now have a network of Icahn Charter Schools, we have a group of advisory personnel within our schools. That includes a Director of Operations and a Director of Assessment. Within the Director of Operations' office are three people—one Human Resources

specialist and two Business managers. The entire office oversees all the Icahn Charter Schools' financial and HR operations, with their time divided as necessary. The Superintendent's and the two Directors' salaries and the Director of Operations' personnel salaries are shared by all schools based on the student population in each school.

There will be advisory personnel to help the new school open and operate. The new principal will also have the support of one (or more) of our experienced principals and administrators, in this case, Jeffrey Litt and Richard Santiago and Steven Sorokin. Msrs. Litt and Santiago opened our first school and have been running it and the newer schools successfully since 2001. Mr. Sorokin joined in 2003. One of the many advantages of replicating is that with our small school replication model, the great majority of the work has already been completed—the curriculum with its monthly syllabi, report card forms, text choices, etc; the staff and student handbooks; the standardized tests selections; staff benefit programs, but the advisory personnel are still critical to the operation's organization. Msrs. Litt and Santiago attend board meetings, as do individual principals, so the Board will be kept abreast of each school's activities.

Beyond the official advisory personnel, every person who works for an Icahn Charter School is expected to be supportive of the needs of other schools in terms of sharing successful program information, sharing best practices. It is also beneficial to have a network of schools because if there is a need for a particular expertise or skill, but that work would not be full-time at one school, we can share the person's time and salary between schools.

20. Governance

20(a) School Board Roles and Responsibilities

Describe the roles and responsibilities of your school's board of trustees. Your response should at least explain the role of the board in:

- **Selecting school leader(s) (and partner or management organizations, if any);**
- **Monitoring school performance;**
- **Evaluating school leaders (and partner or management organizations, if any); and**
- **Holding school leaders (and partner or management organizations, if any) accountable for achievement of the school's mission and goals.**

The Board of Trustees of ICS 7 will be responsible for setting overall policy for the school in all areas, including but not limited to policies regarding the school's finances, educational program, enrollment, public relations, personnel and general management. They will conduct, manage and control the affairs and activities of the Corporation, and to make rules and regulations. The Board will hire the Superintendent and the Principal of each school. This board has been the Board for the other Icahn Charter Schools, which gives them experience overseeing a charter school. The Board understands that each school must be viewed as independent of the other schools on whose board the member sits. No board member (except the parent/guardian representative) will have any particular affiliation with any of the schools, preventing conflict of interest

Following are additional specific responsibilities and obligations of ICS 7's Board of Trustees:

1. Raising private funds for the school from foundation, corporate and individual sources;
2. Overseeing the long-term planning of the school;
3. Advocating on behalf of the school to individuals and organizations involved with school reform and to individuals and organizations in the wider New York community;
4. Overseeing the legal strategy of the school and response to legal issues;
5. Hiring the Superintendent; Supervising the Principal; hiring subsequent Principals;
6. Assuring that the School meets its programmatic goals through monthly meetings where the Principal presents interim testing results leading up to the state testing results; overseeing the finances of the School by looking at budgets and approving expenses; overseeing school matters such as attendance, attrition of students and teachers, and the overall success of the Principal and Superintendent.
7. Overseeing the school's communications strategy with parents, press and other members of the community; and
8. Designating a Financial Committee to handle financial matters and designating a Grievance Committee to hear filed complaints.

The Principal will report to the Board of Trustees. The Trustees will delegate the management of other school staff to the Principal. This arrangement has worked well at the current charter school. The daily management of the school should be left to the in-house principal. By hiring a competent principal, the board should not need be involved in the daily management of the school.

Because charter schools' lives are determined by the health of the program, the Board will monitor the academic, financial, and operational programs carefully. For example, at each board meeting, the Principal will bring an update on the assessments given in the previous month. The treasurer receives annual financials and approves expenditures over \$10,000, which assures that the Board knows of any larger expenditure.

The primary path for the Board to monitor a school's performance is through the ongoing and annual assessments. The Board pours over the most recent assessments at each meeting, and will do so with this school. Questions can be about an individual teacher's results or an individual child's results or about a whole grade's results. The Board has been very proud of the student and teacher achievement and will be equally attentive to the new school's results. The Board will not assume that because we have replicated successfully in the past that it is a given that every new school will be equally successful without equal attention to detail.

As the person with the most experience, the Board will look to the Superintendent to guide each new school's programs so that the students are high achieving. The Board will also look to the new principal as the leader of the new school. The beauty of the Icahn Charter School network is that there is not just one person responsible for the success of each school. Also, each principal understands that the Icahn network must have each of its schools held in high regard so they help each other run efficiently (while still indulging in a little friendly competition).

20(b) School Board Design

Describe and provide rationale for the proposed design of the school's board of trustees. Your response should address:

- **Number of trustees;**
- **Qualifications to be a trustee;**
- **Trustee recruitment and selection process and criteria;**
- **New trustee orientation process;**
- **Officer positions;**

- **Standing committees (if any);**
- **Ex-officio members (voting and non-voting);**
- **Frequency of board and committee meetings;**
- **Delegation of authority;**
- **Procedures for publicizing and conducting school board meetings and taking and maintaining board and committee meeting minutes;**
- **Procedures for handling complaints, including from staff and parents;**
- **Board training and development.**

There will be 8 trustees, 7 listed in this application and an officer from the Parent Guardian Association. Trustees will be appointed who are experienced educators or experienced financial people or community members. As we already have a board that serves the other charter schools, there will be no need for recruitment, but if a position opened up, we would recruit based on the field of expertise of the departing trustee (ie, if a financial person left, we would find another financial person). At the first meeting each year, the officers will be elected. The Parent/Guardian will be elected to the Board after s/he is elected an officer of the PGA.

We will create subcommittees of the Board of Trustees to deal with specific areas of school management and performance. Those committees will meet when there is a topic that requires their attention.

There will be a Financial Committee of independent board members to make necessary financial decisions.

There will be a Grievance Committee. Any complaints for alleged violations of the law or the school's charter regarding the management and operation of the school shall be brought first to the Board of Trustees, who shall be required to submit them in a timely manner to the Grievance Committee. There will be a form for the person filing the grievance to complete giving the pertinent information. The Grievance Committee shall consider the allegations and make non-binding recommendations to the Trustees for a response to the complaint. The Trustees shall then make a decision about whether to take action in response to the complaint and if so what action should be taken.

20(c) Proposed Founding Board of Trustees

Complete the following table for all members of the proposed founding school board, including any currently vacant seats.

A minimum of five members must be identified when the proposal is submitted.

Name	Voting	Ex-Officio	Officer Position and/or Committee Membership	Length of Initial Term
Gail Golden	X	☐	Chairman	1
Julie Goodyear	X	☐	Secretary	1
Carl Icahn	X	☐	President	1
Seymour Fliegel	X	☐		1
Edward Shanahan	X	☐		1
Karen Mandelbaum	X	☐		1
Robert Sancho	X	☐		1
Officer of Parent Guardian Association	x	☐		
Keith Cozza	☐	☐		
Tina March	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		
	☐	☐		

Explain the capacity of this founding board to govern the proposed school and ensure the achievement of its mission, including the relevant skill sets and experiences of the proposed board members.

Note: Each proposed trustee should submit a resume or biographical statement in response to this request. Each proposed trustee who is named must also complete, sign and submit the “Request for Information from Prospective Charter School Board Members” form in response to this request. This form can be found on the Institute’s website at: <http://newyorkcharters.org/schoolsBOT.htm>.

The board members for ICS 7 have been chosen with a keen eye to providing the school with excellent and sound educational and fiscal management. They are also on the board of other Icahn Charter Schools. The Board has proven itself to be effective in all areas. Because the intended members for this board have proved themselves to be effective at overseeing a successful charter school, we are requesting a waiver to cover those five members who share a Foundation for a Greater Opportunity affiliation. The Foundation for a Greater Opportunity intentionally chose its Executive Director and board members with educational backgrounds. The Foundation is committed to creating charter schools in New York City, which makes its board members the logical members for the charter school.

The current trustees of ICS1 understand the program at ICS1. Our next charter schools will be replications of ICS1, so by using the same board, we are assuring an efficient, well-informed, seamless replication.

Carl C. Icahn grew up in Bayswater, Queens, where he attended Far Rockaway High School. He is a graduate of Princeton University, with a degree in Philosophy and is a recipient of Princeton's John Guthrie McCosh Award in Philosophy. Mr. Icahn's Wall Street career began in 1961, as a Registered Representative with Dreyfus & Company. In 1963 he left Dreyfus for Tessel, Paturick & Co., where he was Manager of the Option Department. In 1964 he joined Gruntal & Co. and in 1968, he started Icahn & Co., Inc., a registered broker-dealer and a member of the National Association of Securities Dealers, where he is still President and Chairman.

Mr. Icahn, has served as Chairman of the Board and a Director of Starfire Holding Corporation (formerly Icahn Holding Corporation), a privately-held holding company, and Chairman of the Board and a Director of various subsidiaries of Starfire, since 1984. Mr. Icahn is and has been since 1994, a majority shareholder, the Chairman of the Board and a Director of American Railcar Industries, Inc. ("ARI"), a Missouri corporation. ARI is primarily engaged in the business of manufacturing, managing, leasing and selling of railroad freight and tank cars. Since November 1990, Mr. Icahn has been Chairman of the Board of American Property Investors, Inc., the general partner of American Real Estate Partners, L.P., a public limited partnership that invests in real estate and holds various other interests, including the interests in its subsidiaries that are engaged, among other thing, in oil and gas business and casino entertainment business. In January 2003, Mr. Icahn became Chairman of the Board and a Director of XO Communications, Inc., a telecommunications company. In May 2005, Mr. Icahn became a director of Blockbuster Inc., a provider of in-home movie rental and game entertainment. Mr. Icahn is also on the Board of Directors of other public and private companies.

Mr. Icahn has many charitable interests, focusing primarily on education and medicine. In 2001, a foundation established by Mr. Icahn supported the opening of the Icahn Charter School in the Bronx. Also in the educational area, Mr. Icahn established the Icahn Scholars Program at Choate Rosemary Hall in Wallingford Connecticut to fund 72 students per year at Choate. He has given substantial sums to Choate, which supports the Icahn Scholars Program and the Carl C. Icahn Science Center, Choate's science building, designed by I.M Pei, and to his alma mater, for the Carl C. Icahn Laboratory for Princeton University's Institute for Integrated Genomics. Mr. Icahn donated to Mt. Sinai Hospital where he established the Icahn Medical Institute (a 17 story building on Madison Ave.). Mr. Icahn also donated to the Randall's Island Sports Foundation for the construction of "Icahn Stadium", a new track and field stadium.

Mr. Icahn's foundation, the Children's Rescue Fund, built Icahn House in the Bronx, N.Y. It is a sixty-five-unit complex for homeless families consisting of single pregnant women and single women with children. Icahn House is designed to provide emergency shelter to those who are homeless due to domestic violence, eviction, unemployment, and natural disasters; and to provide support services and assistance while finding permanent homes.

He serves as a Trustee on the Board of the Mt. Sinai School of Medicine and Mt. Sinai Hospital, as well as a Trustee of the Randall's Island Sports Foundation, Choate Rosemary Hall, and has recently joined the Board of Directors of the Lincoln Center for the Performing Arts.

Mr. Icahn has received numerous awards including the Starlight Foundation's Founders Award and the 1990 Man of the Year Award and was named The Guardian Angel 2001 Man of the Year.

Gail Golden has served as Vice Chairman of the Board of Directors of Lowestfare.com, Inc., since August 1998 and Vice Chairman of Lowestfare.com, LLC, since February 1999. From August 1998 to November 1999, Ms. Golden served as President of Lowestfare.com, Inc., and February 1999 to November 1999, as President of Lowestfare.com, LLC. From August 1995 to January 1999, Ms. Golden served as the Chief Executive Officer of Lowestfare.com, LLC. Ms. Golden served as Chief Executive Office and President of Global Travel Marketing. Ms. Golden has served as Vice President of Administration of Icahn Associates, Corp., a privately owned holding company, since May 1985. Since 1978, Ms. Golden has served in various capacities at Icahn & Co., Inc., including Director of Public and Investor Relations and Director of Human Resources. Ms. Golden also serves in various executive capacities for privately-owned entities controlled by Mr. Icahn. Ms. Golden is a Director and Vice -President and Secretary of the Icahn Charitable Foundation and the Icahn Family Foundation; in addition, she is Director and Secretary of the Foundation for a Greater Opportunity, and a Director of the Randall's Island Sports Foundation.

Seymour Fliegel is the President of the Center for Educational Innovation-Public Education Association, one of the nation's leading educational reform think tanks. After serving as a teacher, assistant principal and principal, he became the director of Alternative Education for Community School District Four and began the transformation of New York City public schools that he describes in his book, Miracle in East Harlem. After 22 years in District Four, five of which he served as the Deputy Superintendent, he became Superintendent of Community School District 28 in Queens. Outside of his work at the Center for Educational Innovation, Mr. Fliegel serves on the Advisory Boards of the Gilder Lehrman Institute of American History, Donna Hanover Giuliani's Cool Schools, Public School Artworks and the Young Women's Leadership School Foundation. Also, he has served on the nominating committee for the Dana Award for Pioneering Achievements in Education. Mr. Fliegel is a member of the board of the Foundation for a Greater Opportunity.

Karen Mandelbaum graduated from Kean Teacher's college in New Jersey. She is also on the board of the Women's Division of the Albert Einstein Medical school. She is committee member of the Friends of Israel Museum; Vice President of the Board of the Livingston Symphony Orchestra; and on the Board of the ADL Women's Division.

Robert Sancho is Vice President of Development and External Affairs at Bronx-Lebanon Hospital Center in the Bronx. He began his professional career as an educator, teaching Spanish at JHS 98 in the Bronx. He went on to serve as a Deputy Superintendent for Community School District #4. While he worked in District #4, the district advanced in reading and math ranking from thirty-second (last place) to thirteenth in citywide ranking. Mr. Sancho earned his B.A. at

Inter-American University of Puerto Rico and his M.S. in Urban Affairs at Hunter College, where he was the recipient of the Urban Affairs Minority Scholarship. He was also the 1990 recipient of the Award for Outstanding Leadership in the public and private sector by the National Network of Hispanic Women. Mr. Sancho is an adviser to the Lehman Center for the Performing Arts and a member of the Board of Directors of the Bronx Council on the Arts. He is a member of the Multi-Cultural Committee of the Metropolitan Museum of Art. On a national level, he serves on the Board of Directors of the Congressional Hispanic Caucus Institute in Washington, DC.

Edward Shanahan has been President/Headmaster of Choate Rosemary Hall, an independent school in Wallingford, Connecticut since 1991. Before that he was Dean of the College at Dartmouth College (1982-1991), and Dean of Students at Wesleyan University (1972-1982). He was also Chair of the New England Commission on Higher Education, and Chair of the New England Association of Schools and Colleges. He is the past Chairman of the Board of United Educators, the largest US educational risk retention group. He currently sits on the Boards of St. Luke's Education Foundation (Bronx, NY); Bermuda-based, Schools, Colleges, University Underwriters, Ltd. (SCUUL); and the Connecticut Association of Independent Schools (CAIS). Mr. Shanahan is President of the Board of the Foundation for a Greater Opportunity.

Tina March is the Chief Financial Officer for Icahn Management Co. and is responsible for financial reporting, accounting, administration and investment operations for the Icahn hedge funds. She has been with Icahn Associates since December 2003. Prior to joining the Icahn organization, Ms. March held senior finance and accounting positions with Summit Asset Management Co. and Rho Asset Management Co., both private investment companies with concentrations in venture capital and private equity. Ms. March also had previous experience as controller for the investment firm, Henry Kaufman & Co.

Ms. March is a C.P.A. and received her B.A. in 1974 from Dickinson College and an M.B.A. in 1980 from Rutgers University. She is the Treasurer of the Icahn Charter School and is a board member of the Odysseus Foundation.

Keith Cozza is the Chief Compliance Officer of Icahn Capital L.P. and Chief Financial Officer of Icahn Associates Corp. He joined the firm in October 2004. Mr. Cozza oversees the organization's accounting and finance operations. His responsibilities include maintaining real-time investment transaction processing, reconciliation and reporting, cash management and financial statement preparation. Prior to joining Icahn, Mr. Cozza worked at Grant Thornton LLP, a public accounting firm where his responsibilities included auditing various Icahn controlled entities. He will assist with the Treasury functions.

Mr. Cozza received his B.S. in Accounting from the University of Dayton in 2000.

GAIL GOLDEN

Since 1978, Gail Golden has served in various capacities at Icahn & Co., Inc., as a registered representative and a member of the National Association of Securities Dealers, including

positions as Director of Public and Investor Relations and Director of Human Resources. Ms. Golden has served as Vice President of Administration of Icahn Associates Corp., a privately owned holding company, since May 1985.

She has also served as Chief Executive Officer of Lowestfare.com, Maupintour Travel and Gutsy Women Travel, the last of which was sold in December 2005.

Ms. Golden is a member of the boards of Icahn Charter Schools 1, 2, 3, 4 and 5 and the Foundation for a Greater Opportunity. She graduated from New York University with a Degree in International Studies.

Julie Goodyear is the Executive Director of the Foundation for a Greater Opportunity and the Icahn Scholars Program. She was Associate Director of Admissions at Choate Rosemary Hall from 1985-1995. From 1983-1984, she worked at Collège du Lemman in Versoix, Switzerland. She has a B.A. from New York University and an M.A.L.S. from Wesleyan University.

JULIE CLARK GOODYEAR

Address: Foundation for a Greater Opportunity, 767 Fifth Avenue, NY NY 10153

Work Experience:

1996-	Foundation for a Greater Opportunity. Executive Director. Founder, 2001 Carl C. Icahn Charter School Founder, 2006 Carl C. Icahn Charter School Bronx North Founder, 2007 Carl C. Icahn Charter School South Bronx Founder, 2008 Icahn Charter School 4 Founder, 2010 Icahn Charter School 5 Secretary, Carl C Icahn Charter Schools
	Executive Committee, New York Coalition of Charter Schools Various Committees including Facilities Committee
1996- * *	Icahn Charitable Foundation, Educational Foundation. Executive Director and Recruiter for Icahn Scholars Program
1985-1995	Choate Rosemary Hall
Previous-	College du Lemman, Versoix, Switzerland Afro-American Center, Choate Rosemary Hall Farmington, CT Museum The New Yorker Magazine

Education:

1995-1996 M.A.L.S.: Wesleyan University, Middletown, CT
Special Concentration: The American Self
Thesis topic: The Psycho-Social Traits of American Rescuers in the Holocaust

Previous: Architectural History, Yale University
B.A.: French, New York University

Miscellaneous:

2008 Panelist, National Charter School Policy Forum, US Department of Education, Washington, DC
Carl C. Icahn Charter School Awards:
High Performing/Gap Closing School District, NYSED 2006
2006 Black Board Award
Recognition by US Dept. of Education for Closing the Gap (one of 7 charter schools nationwide)

21. Personnel

21(a) Staffing Chart and Rationale

Use the table below to provide a list of all staff positions (instructional and non-instructional) in the school during the first five years of operation and provide a narrative that explains the rationale for your staffing structure and numbers. Identify and distinguish classroom teachers, teaching aides or assistants, special education teachers and ESL teachers, as well as any other specialty teachers.

	Number in Position				
	Year 1	Year 2	Year 3	Year 4	Year 5
Grades Served:	KG-2	KG-3	KG-4	KG-5	KG-6
Enrollment:	108	144	180	216	252
Position					
Superintendent	.08	.08	.08	.08	.08
CFO/Director of Operations	.08	.08	.08	.08	.08
Principal	1.00	1.00	1.00	1.00	1.00
Director of Assessment	.08	.08	.08	.08	.08
Operation support staff (4)	.32	.32	.32	.32	.32
Executive Assistant to Superintendent	.08	.08	.08	.08	.08
School Secretary	1.00	1.00	1.00	1.00	1.00
Staff Developer		1.00	1.00	1.00	1.00
Teachers	7.00	10.00	13.00	17.00	21.00
Assessment Teacher				1.00	1.00
Special Ed. Teacher	.50	.50	.50	.50	.50
Teaching Aides	2.00	2.00	2.00	2.00	2.00
ESL Teacher	.50	.50	.50	.50	.50
Office Aide		1.00	1.00	1.00	1.00
Afterschool personnel	3.00	3.00	3.00	3.00	3.00
Security	1.00	1.00	1.00	1.00	1.00
Custodial	1.00	1.00	2.00	2.00	2.00
Total	17.64	22.64	26.64	31.64	35.64

This staffing model is a replication of the staffing of our other schools. We will open with K-2, with two classrooms per grade, and increase a grade a year until the end of the five year charter when we will be K-6, still with two classes per grade.

Some positions are not needed in the first year(s) of the school, either because the student population is small (Staff Developer and Office Aide) or because there is not testing until later grades (Assessment Teacher).

There are afterschool positions to accommodate the students who stay for the afterschool program either because they are in need of additional remediation or because the parent/guardian works later than our 4:00 dismissal.

When percentages of a position are listed, that indicates that the position is a shared one with the other Icahn Charter Schools.

21(b) School Leader

Describe the qualifications required for your school leader.

- **If you have already identified a school leader, explain the process that was used to recruit this person and the criteria that were used to select him or her. In addition, attach a resume or biography for this person.**
- **If you have not yet identified a school leader, explain the process and criteria that will be used to select this person, including who will be involved and the role of the board (and management organization, if any) in the process.**

As stated above, ICS 7 intends to hire a principal who has passion for educating children, who believes that all children are equally educable regardless of socio-economic background, who is energetic, disciplined and creative. We intend to hire experienced educators. We anticipate hiring the person the year before the new school opens to give him/her experience with our model and in our culture. The small size of our school accelerates understanding the culture.

The charter school model is different from a conventional public school, but for an energized educator, it can be a dream come true—to implement a program you believe in (and to be responsible for its success). There are unquantifiable rewards for a principal who can prove that academic success is not tied to neighborhood or socio-economic background, but it takes energy. We look for people with energy, commitment and confidence.

The trustees of Icahn Charter Schools are committed to identifying and retaining the services of the most highly qualified principals, who are held accountable for the achievement of our students, as well as the professional growth and development of the staff. The charter school model is one where autonomy and accountability reign. This model has been successful in our first schools. We believe in the model of giving the principal responsibility for the outcomes in the school, which is why we are committed to charter schools. While the replication process will save the new principals time and enable this effective model to be put in place efficiently and effectively, the charter school model ultimately puts the responsibility of the school's success with the principal. For this reason, it is imperative that effective leaders be chosen. To ensure that the new principal is well trained, the intention is to hire the person as an administrator in the first school the year before opening the new school to learn the practices of the Icahn Charter School model.

We are fortunate that much of the work of a first year principal has already been organized in our current charter school. By using a replication model, we will be able to efficiently and effectively provide materials and guidance for our new principals. Additionally, our replication model and network of schools will facilitate learning the model and also assure that there will be ongoing resources that will be available to the principal once the school opens. With every school that we open, we will have more experience to know how to avoid any pitfalls and how to focus more quickly on improving student learning.

The Board will hire people dedicated to enabling children to achieve. The application for employment will include expression of non-discrimination policies, including that ICS 7 does not discriminate on the basis of sex in the educational program it operates, and is required by federal Title IX of the Education Amendments of 1972 not to discriminate in such a manner.

In order to find individuals with the qualities the Board seeks, the trustees will develop a cadre of principals in training to acclimate to the culture and learn the specific skills required in administering a Icahn Charter School. Those selected may come from the ranks of former assistant principals or principals. We also anticipate that we will find teachers on the faculty who can be trained for administrative positions, eventually to be principals.

Our intent is that the Principal will display strong instructional leadership by:

- Placing priority on curriculum and instruction issues
- Being dedicated to the goals of the school
- Being able to rally and mobilize resources to accomplish these goals
- Creating a climate of high expectations in the school, characterized by a tone of respect for teachers, students, parents and community
- Functioning as a leader with direct involvement in instructional policy by communicating with teachers, supporting and participating in staff development activities and establishing incentives for the use of new instructional strategies.

Historically, we have been fortunate in having populated our current schools with highly experienced school administrators with proven track records. We will continue to encourage their recommendations for candidates, either from their personal experience working with possible candidates or personal networking. Although other methods of finding principals are used by other schools, such as newspaper advertising or principal training programs, the Icahn Charter Schools' method of finding known experienced, successful principals has proved a successful approach. Even when we only had one experienced principal, we were able to use him as a resource for our next principals. We currently have four principals in the Icahn Schools, capable of providing more than four times the number of possible next principals. As we expand, we will have more known, admirable candidates from whom to choose.

21(c) Management

Explain the management structure of the school. Your response should address:

- **Roles and responsibility for managing at least the academic program, finances, hiring and operations;**
- **Management practices and procedures, i.e., how the school will set priorities and make key organizational decisions;**
- **If the school will work with a management organization, explain the relationship between employees of the school and that organization; and**
- **Evaluation procedures for staff in management positions.**

The Superintendent is responsible for managing all aspects of all the Icahn Charter Schools. The principal of each school is also responsible for managing all aspects of the academic program and for hiring staff. The academic program is the top priority in each school. The Superintendent provides weekly professional development for principals and personally monitors all assessment results and suggests program modifications where required. Another key priority is the operational/financial aspect of each school, which is monitored daily by the Director of Operations. The Director of Assessment provides support and guidance to each school's Assessment Coordinator.

The Board looks to the Superintendent to evaluate the staff in management positions. The Board also evaluates each principal. Paramount in the evaluation are student achievement results, financial health of the school, parental satisfaction and attention to staff retention percentages.

The Director of Operations is responsible for managing the overall finances of all the Icahn Charter Schools. There are also two Business Managers and a Human Resources Manager. The Director of Operations is responsible for managing the overall finances and operation of all the Icahn Charter Schools. Tasks include budgeting, reporting, audits, contracts, HR, Facility, compliance, insurance, technology, review the overall health of financial condition, approving general ledger entries and ensuring replication. There are also 4 operational support staff who will assist in the day to day operations. These positions are shared with other Icahn Schools. Two of the four positions are Business Managers who will assist the Director of Operations maintain segregation of duties and be responsible for preparing general ledger entries, purchase orders, accounts payable and accounts receivable. The Board Treasurer will review the financials and review expenses over \$10,000.

Hiring for the School will be done by the Principal, with oversight by the Superintendent (and the Director of Operations for the financial person at the school).

Operations are run by the Principal of the school, the financial person at the school and the Director of Operations. For example, the Principal and financial person must meet the budget

limits at all times and the Principal must be sure that the academic goals will be met. When a decision needs to be made about purchasing something or hiring someone to assure that the academic program is successful, the Principal would speak with the School's financial person, the Superintendent and the Director of Operations. Depending on the cost of the additional item, the Director of Operations would present the item for approval to the treasurer of the Board.

Decisions are always based primarily on whether the action will enhance student learning and success. Because this will be a replication school, many of the decisions have already been put in place based on what was successful at our previous schools. When a new decision must be made, the daily operations of the school are left to the Principal. However, the principals of our schools meet weekly with the Superintendent, so there is another layer of oversight. The Board sets policy but the daily operations of the school are left to the principal. The Board counts on the Superintendent to guide the Principals.

The Board uses assorted elements to evaluate the staff in management positions. First, the test results indicate if the academic program is working. The Board looks at staff retention. The Board considers outside evaluations like DOE Progress Reports. The Board looks at the Parent Survey for parent support or complaints. The Board also looks online at sites like greatschools.com for parent comments (all the while knowing that those comments can be misleading). The Board looks to its treasurer for evaluations of the School's financial health and to the independent auditor.

21(d) Staff Recruitment and Retention

Describe how you will recruit and retain staff, particularly high quality teachers. Your response should provide:

- **The qualifications you will require of teachers and other staff;**
- **The process you will use to recruit and hire teachers and other staff; and**
- **The strategies you will use to retain high quality teachers.**

Note: Personal policies will be submitted separately as Attachment 41.

Qualifications for Teachers

- A clear understanding of the needs of "at risk" children
- Experience teaching in similar communities
- Superior academic achievement in undergraduate and graduate school, as applicable
- Successful experience in the classroom
- Completion of New York State exams for Teacher Certification
- The hiring goal of ICS 7 is to hire only certified personnel. In any event, no more than 30% of the teachers or five positions (whichever is fewer) will be filled by uncertified personnel, who will, at a minimum, be NCLB qualified.

Classroom teachers will have the responsibility for providing instruction in all curriculum areas. All teachers will have the responsibility for closely monitoring student progress and providing remediation where necessary to prevent the child from falling behind.

In keeping with our goal of providing educational excellence in a nurturing and supportive environment, ICS 7 hiring policy will be to seek the most qualified staff without regard to race, creed, national origin, religion, citizenship, age, sex, marital status or disability. This policy will ensure equal opportunity for promotions, staff development, layoffs and termination (if necessary).

The Principal is responsible for employees' performance evaluations. Each year each staff member will undergo a thorough performance review with the Principal. At this time the employee will receive formal feedback on their performance. The Principal will survey the staff to obtain feedback on the staff's evaluation of the management's employee expectations.

At any time during the school year as it is merited, the school will issue formal commendations to teachers and staff members whose performance has been exemplary. Our current schools have impressive records of teacher retention. The Board policy is to try to keep salary levels comparable to DOE salaries for equivalent positions and to provide bonuses at the end of the year for those teachers whose student results have been at or above our commitment. The Principals understand the importance of acknowledging the hard work of the staff, so the school culture is one of recognition of success and hard work.

As we have increased personnel in the Icahn network, we have also been able to promote from within the schools, so staff members know that their hard work can result in promotions. This also helps retain talented staff.

The school will use the following kinds of mechanisms to advise teachers and other staff if their performance is below expectations: oral and written warnings, disciplinary probation and suspension. Employees may also be terminated for misconduct and/or poor job performance (see termination section below).

All teachers will receive on-going required staff development through workshops, case conferencing, intervisitations and mentoring. Teachers who demonstrate a deficiency in any aspect of their responsibilities will receive additional assistance. If the deficiency continues, the teacher will be dismissed. The Principal is directly responsible to the Board of Directors. In the event of failure in the performance of his/her duties, he/she will be dismissed.

21(e) Staff Input

Please describe how staff will be involved in the charter school, in particular, in the governance and management of the charter school.

We anticipate replicating the staff and administrative organization of our current charter school. Our commitment is to small schools because small schools do not need a large hierarchical structure, and function well precisely because there is constant interaction. Everyone's voice is heard. The administrators are involved with teachers, parents, staff and children all day every day.

Through the small school environment, staff involvement is constant. Principals chosen to lead our schools understand that the school culture must include embracing staff involvement because a small school must have enthusiastic participants in the program or a sour flavor can build. Some of the techniques that principals use include: daily classroom visits, direct instruction through small groups, modeling lessons, supervising lunch periods, hosting parent events and leading professional development workshops.

As the Icahn Charter School network has grown, we have been able to promote from within the organization. The principals of Icahn Charter Schools 4 and 5 started as teachers in Icahn Charter School 1. Parent volunteers have become para-professionals and secretaries. Teachers have become Staff Developers. This kind of promotion encourages longevity.

Board members visit the schools so staff recognizes board members and have access to them in person and in writing. Board members solicit staff comments, however, the quantitative evidence that comes with so miniscule attrition is the best proof of staff satisfaction with their roles in the school.

22. Parent Involvement

Describe how the school will involve parents in the education of their child and in the governance and operation of the school.

22(a) administration of the charter school.

Parent involvement in the school is crucial. In our current charter schools, parents are seen throughout the building. Parents arrive as school opens and help children get settled in school. To ensure that parents know the child's program intimately, every month, parents receive a syllabus (attached above). Parents for whom English and/or Spanish is not the primary or preferred language will be provided with notices and other school information in a language that is understood. They also receive a report six times a year from the teacher on the child's progress. This kind of parent outreach and connection is possible because of the school's size.

Parents will be told, and re-told, by the Principal that they are necessary to their child's school success. The administrators and the child's teachers will establish relationships with parents, facilitated by the size of the school. Parents will be recognized in the hallways, not just anonymous adults in the school. Like their children, when there is a personal relationship with the school staff, the parents will feel compelled to be involved. It will be emphasized that research has proven over and over again that parental involvement in a child's education is critical to a child's success in school, which includes making sure the child is not absent, arrives on time, does the homework. Parents will know that they do not need to make an appointment to see the Principal. Parents will feel a part of the school by helping chaperone field trips. They will organize school events. Awards will be given at the end of school ceremony for parents who are particularly generous with their time.

The school will have a Parent Guardian Association. The parents will elect an officer who will sit on the charter school board. Parents will be given a survey to complete at the end of the year to indicate their satisfaction with the school.

Parents in each of our schools also know the Superintendent as he comes to PGA meetings and makes his contact information available. He also hosts dinner meetings several times each year. The Superintendent also publishes a newsletter, "Eye on Icahn," to keep all parents informed of happenings in each of our schools.



Public Hearing Pointers

- Icahn Charter School #1 is completing its 10th year in Community School District #9.
- There are four Icahn Charter Schools currently open.
- Icahn Charter School #5 will open September of 2011.
- All Icahn Charter Schools are replications of our original school, Icahn Charter School # 1 in District #9.
- Our schools have received widespread recognition on public television and citywide newspapers for high academic achievement.
- The Daily News has reported that, "It is harder to get into an Icahn Charter School than Harvard University."
- Icahn Charter Schools are proud of their relationship with the Community Education Council of District #9.
- Icahn Charter School #1 has hosted visitors from throughout the city as well as Puerto Rico, Great Britain, Sweden and is about to be filmed by Japanese Television as well as public television in New York.
- Icahn Charter Schools are committed to serving inner city children with its highly recognized outstanding curriculum and school culture, specifically in District #9.
- Our graduates are accepted to highly competitive high schools as well as private and parochial schools on scholarships.
- We are currently applying for Icahn Charter Schools #6 & #7 to the State University of New York and wish to have these schools located in Community School District #9.



23. Community Support and Demand

(a) District Support

Describe any explicit support for this proposal from the district in which the school intends to be located and provide supporting evidence. In addition, describe the school's intended strategies for establishing and maintaining an ongoing relationship with the local school district, including any foreseen opportunities or challenges.

New York City Department of Education is asking all applicant teams to go through a recommendation process that they will be putting in place. This involves submitting a notice of intent to DOE, at which point DOE plans to ask school representatives to go to a DOE panel interview. After this interview, DOE will provide Chancellor recommendations for selected applicant teams. Julie Goodyear submitted a letter of intent. Recy Dunn emailed Ms. Goodyear to the effect that they received it and we are going through their process. Although there is no guarantee that our school will be one that receives Chancellor recommendation, Chancellor Klein was always very supportive of our schools and our schools are always at the top of the list of NYC high achieving schools and DOE/SCA has provided matching facilities grants for each of our charters. Since this school will be a replication school, we see no reason to think that we will not receive Chancellor recommendation.

The local Community Education Committee has long encouraged us to open more charter schools in their district.

23(b) Community Support

Describe any explicit support for this proposal from community stakeholders or others and provide supporting evidence.

CEC 9 and 11 have told Mr. Litt that they want as many Icahn Charter Schools as they can have. We have the support of Community Boards 3, 5 and 11, as well as elected officials from the City Council and New York State Assembly (Msrs. Vacca and Benjamin, in particular). Additionally, Jeremy Warneke, District Manager of Community Board 11, has also expressed very strong support of our program, as well as Xavier Rodriguez, District Manager of Community Board 5, and John Dudley, District Manager of Community Board 3.

Mr. Litt requested speaking time at the monthly Community Education Council 9 meeting. Ted Garcia, the Chairperson of the Community Education Council 9, eagerly put Mr. Litt on the calendar.



Community Education Council District 9
450 St. Paul's Place, Suite 204, Bronx, NY 10456
Phone (718) 861-0058 - Fax (718) 410-7017
E-mail: Cec9@schools.nyc.gov

AGENDA

DATE: *Thursday, February 17, 2011*
LOCATION: M.S. 323 Bronx Writing Academy
270 East 167th Street, Bronx
BRONX, NY 10456

Business Session 5:30 PM – 6:15 PM

1. Call to order.
2. Roll Call.
3. Superintendent Evaluation Executive Session Discussion.
4. Plan agenda for next month: Topic(s) / Guest speaker(s)
5. Plan Presidents' Council Quarterly Meeting
6. Old Business / New Business
7. Adjournment.

CALDENDAR SESSION 6:30 PM - 8:45 PM

1. Call to order
2. Welcome Parents & Staff of M.S. 323 (*Principal Samuels*)
3. Superintendent Report, Dolores Esposito
Diane Johnson, Bronx Health REACH/NY CEED
4. Icahn Charter Schools, Jeffrey Litt, Superintendent
5. Network Leaders: Maria Quail & Lawrence Block
6. President's Report – Theodore Garcia
7. Parent Outreach Committee – Lenora Julius
8. Public Session (2 Minutes Per Person to speak on an issue)
9. Announcements
10. Adjournment



Our next Community Education Council District 9
Meeting will be held on Tuesday, March 15, 2011
At M.S. 219 New Venture
3630 Third Avenue, Bronx, NY 10456



We're on Facebook! Look for us at: DistrictNine CEC

450 St. Paul's Place, Suite 204 • Bronx, NY 10456 • (718) 861-0058 • Email: CEC9@schools.nyc.gov

The Superintendent, Mr. Litt and the Director of Operations, Mr. Richard Santiago, attended the meeting on Thursday, February 17, 2011. Mr. Litt presented the following information to the audience:



Public Hearing Pointers

- Icahn Charter School #1 is completing its 10th year in Community School District #9.
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- Icahn Charter Schools are committed to serving inner city children with its highly recognized outstanding curriculum and school culture, specifically in District #9.
- Our graduates are accepted to highly competitive high schools as well as private and parochial schools on scholarships.
- We are currently applying for Icahn Charter Schools #6 & #7 to the State University of New York and wish to have these schools located in Community School District #9.



Icahn Charter Schools are chartered by the New York State Board of Regents and the State University of New York Charter Schools Institute and are a result of the collaborative efforts of the Foundation for A Greater Opportunity and the Center for Educational Innovation-Public Education Association. The Icahn Charter Schools are a public school open to all children on a space available basis, by lottery.

The audience was very pleased when Mr. Litt explained that children with special needs are more than welcome.

23(c) Student Demand

Describe the student demand for the school that would allow you to meet your intended enrollment figures and provide supporting evidence.

Each spring at each of our schools' lotteries, as we pick the applicants' names out of the box in the admission lottery for our approximately 30 kindergarten seats, when we get to the one hundredth name the room gets more and more silent as we realize that there is no way that these children will be able to come to our school and know that we have only gone through a small percentage of the applicants. It is a depressing reality check. A pall descends on the room. We ask ourselves if we should increase the size of our school to help more children, but we realize that the small size of our school is the pivotal factor in the success of the children. Each year, someone invariably says, "We could open nine more charter schools right here and still not be able to accommodate all the children who want to come to our school." We are confident that there is support for more schools like ours.

23(d) Proposal Opposition

Describe any known opposition to this proposal, including the individuals or organizations and their rationale for opposing your school, and explain any efforts you have made to address or respond to their concerns. Indicate whether opposition to your school could impede your ability to successfully implement your program and, if so, how you intend to overcome those challenges.

In trepidation that this statement may jinx our situation, we have no knowledge of any opposition to our proposal.



Notice of Public Hearing To Open a New Charter School Icahn Charter School #VII

Date of Public Hearing: Tuesday, February 15, 2011

Time: Speaker Registration: 7:00 PM – 7:30 PM
Presentation, Comments, and Questions: 7:30 PM

Location: Icahn Charter School 1
1506 Brook Avenue
Bronx, New York 10457

Event: This public hearing is open to anyone interested in making comments and/or learning about the following charter replication application for **Icahn Charter School # VII** to be located in /Community School District #9:

Replication Application for **Icahn Charter School #VII**, a newly proposed K – 8 school, which will be designed on the belief that all students deserve a rigorous academic program, and that given a rigorous program, all students will learn more and increase their capacity to learn. Icahn Charter School #VII will be a school of high academic standards, using E.D. Hirsch's Core Knowledge curriculum in small classes of not more than 18 students in a class and two classes on the grade. The school will be located in Community School District #9 in the Bronx.

Comments are welcome; speakers must register within 30 minutes of the hearing's start time. Written comments will also be collected at the hearing or may be submitted via email to: jlitt@ccics.org.



Icahn Charter Schools are chartered by the New York State Board of Regents and the State University of New York Charter Schools Institute and are a result of the collaborative efforts of the Foundation for A Greater Opportunity and the Center for Educational Innovation-Public Education Association. The Icahn Charter Schools are a public school open to all children on a space available basis, by lottery.

Notice of Public Hearing To Open a New Charter School Icahn Charter School #VII

Date of Public Hearing: Thursday, February 17, 2011

Time: Speaker Registration: 7:00 PM – 7:30 PM
Presentation, Comments, and Questions: 7:30 PM

Location: Icahn Charter School III
108 West 174th Street
Bronx, New York 10453

Event: This public hearing is open to anyone interested in making comments and/or learning about the following charter replication application for **Icahn Charter School # VII** to be located in /Community School District #9:

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Comments are welcome; speakers must register within 30 minutes of the hearing's start time. Written comments will also be collected at the hearing or may be submitted via email to: jlitt@ccics.org.

24(a) Enrollment

Explain how the proposed school will meet or exceed the enrollment targets established by the SUNY Trustees for (i) students with disabilities, (ii) students who are English language learners, and (iii) students who are eligible to participate in the federal free and reduced-price lunch program. Your response should address:

- **The recruitment strategies you will employ to attract students to your school, including outreach to parents in the community for whom English is not their primary language;**

We will use the recruitment strategies that have proven successful for us in the past. These include the distribution of flyers throughout the community in apartment buildings, shopping areas, community based organizations, community board, local councilman's office, speaking at community meetings and communicating with local community leaders. The neighborhood we are seeking to have the school has Spanish speaking families and we will provide flyers and registration forms in their native language.

- **Any at-risk admissions factors or preferences you would offer that would increase the likelihood of enrolling targeted students; and**

We are -specifically seeking to enroll children considered at risk, particularly those who qualify for free and reduced lunch. Given the fact that the community is designated as the poorest congressional district in the country, we are confident that our targets will be met. Icahn Charter schools have as their goal to provide our program to those children who would be attending failing schools in the community.

- **Methods for evaluating the efficacy of your recruitment and enrollment efforts during the charter period.**

Each grade will have a waiting list of children with those children within the local district having priority. Our free and reduced lunch rate will serve as an indicator of the efficacy of our efforts, as well as the number of children with special needs and ESL students.

24(b) Retention

Explain how the proposed school will meet or exceed the retention targets established by the SUNY Trustees for (i) students with disabilities, (ii) students who are English language learners, and (iii) students who are eligible to participate in the federal free and reduced-price lunch program. Your response should address:

- **Retention strategies or specific programmatic elements at the school that will assist in retaining the three target populations; and**
- **Methods to monitor and evaluate the retention of students in the specified sub-populations.**

Consistent with the move towards the new RFP process, charter applications must now show how the school would meet specified criteria including the two new eligibility requirements: that a charter school has conducted a prescribed community outreach process and that it will be able to meet a set of target rates for the enrollment and retention of students with disabilities, English Language Learners, and students who are eligible for the free and reduced price lunch program. The Board of Regents and SUNY will now prescribe these targets, which will be “comparable” to the rates in the local CSD.

An Icahn School targets outreach to all students. In order to meet the requirements of the new law on retention targets we are canvassing all of Community School District 9. We are certain to capture all categories of students in equal proportions to the District by doing so: i.e. Free & Reduced Lunch (FRL) students, students with disabilities and English Language Learners (ELL) and to families who are traditionally less informed about educational choice options. This practice will ensure that we recruit higher percentages of these students than traditional public schools in CSD 9. By implementing a variety of strategies, Icahn will reach families with varying needs throughout the community. For example, there are already several charter schools in Community District 9 including two of our own, so many families are well-informed about the application process. We will also reach these families through (1) our district website (2) informational literature distributed at educational fairs in CSD 9, community centers, housing projects and apartment buildings, daycare centers, local businesses and churches. All informational literature will be disseminated in two languages, English & Spanish.

The process of going to venues such as daycare centers, public housing, Churches, etc. is to assure ourselves of reaching the specified targeted sub-population identified in the law, which by definition in the literature tends to be a less informed parent on educational issues. Since we are a staple in this community in the educational forum, the leaders tend to know us and refer their followers to us.

All of our informational material and presentations at articulation meetings will include information about the school’s program of supports for students with special needs of all kinds and the families of such students will be encouraged to apply to the school.

Icahn’s efforts with the Spanish speaking community are done through the parent’s native language-- in this case Spanish. We have sufficient staff on board to accommodate this outreach and as such avail ourselves of their talent. We are working with and through local Bronx organizations such as BronxWorks, formerly Citizen’s Advice Bureau and United Bronx Parents, as another avenue of recruitment for this targeted group.

Icahn will seek guidance from SUNY Charter School Institute in terms of the specific targets for the enrollment and retention of FRL students, ELLs and students with disabilities. These targets

will be adopted by the School. We intend to at least mirror the corresponding percentages in CSD 9. The Principal will report enrollment numbers for these categories of students to the Superintendent each fall as soon as possible after school opens and again in the spring. If the percentage of students in any of these categories is lower than the target percentage in the fall, the Principal will prepare and present to the Superintendent a written outreach plan designed specifically to recruit students who belong to the underrepresented group during the recruitment period that will start the following January. If any of the targeted categories is persistently underrepresented the principal in consultation with the Superintendent may consider and seek approval for adding a lottery preference.

An Icahn school is committed to serving and retaining all of our students, including students with disabilities, students who enter the school well below grade level, ELLs and FRL students by doing whatever it takes to meet their individual needs. All of our students will participate in the Core Knowledge Curriculum, which is academically rigorous and aligned with the new NYS Core Standards. A culture of high expectations for all students, a longer school day and school year, extended time for literacy and mathematics, mastery planning, integration of technology, menu driven professional development, and data-driven instruction are all elements of our school program that will allow us to “meet each student where they are and move them forward both academically and socially”. In addition we will use a variety of specific, research-based instructional strategies to ensure that all of our students will maximize their academic potential. These include:

Our small class size (18 maximum) will allow us to “meet each student where they are.” We will have two classes on each grade, each of which will be heterogeneously grouped, with a highly qualified general education teacher. Kindergarten classes will have teacher assistants and first grade classes will share an assistant. Grades K – 8 will have, when needed, a Literacy Specialist, and/or a Math Specialist to assist with tiered planning and service to students with greater challenges. Consultant Content-area Specialists, SETTS Teachers, and the Staff Developer will further reduce the teacher to student ratio as required. The Child Study Team will, on an on-going basis, monitor student achievement toward the desired outcomes.

Icahn teachers will differentiate instruction to meet the individual learning needs of each of our students. Teachers will use frequent formative assessments to continuously monitor their students’ learning. Staff will plan instructional strategies and curricular modifications that address each student’s individual learning needs under the supervision of the Director of Assessment and the Staff Developer. Strategies will include providing tiered practice and assessments so that all students will be able to understand essential concepts and acquire essential skills, providing more time, either in class or as part of homework, for students who need it and compacting or exempting students from assignments that they have mastered to further meet the needs of the high achieving student. Our staffing plan provides teachers the opportunity to work with small groups during a great portion of the day. Students will be assigned to groups based on their specific needs but group membership will be flexible depending on the activity involved. Students may also be paired or assigned to work alone to solidify understanding in ways that are efficient for them. Spencer Kagan’s Cooperative learning practices are employed throughout the school day. Technology is an additional tool used by the staff to meet every student’s needs individually.

All Icahn Schools use a comprehensive response to Targeted-Assistance that identifies and provides individualized support to students who are struggling and/or achieving at higher levels. Icahn will use a Targeted-Assistance model to address the needs of students who are at-risk or struggling academically. Diagnostic assessments (IOWA Test of Basic Skills) at the end of the year and/or beginning of each year for newly admitted students and frequent in-house assessments will allow teachers to identify quickly any student who appears to be struggling. The teacher will refer a struggling student to the Child Study Team (CST), consisting of the student's classroom teacher, the Director of Assessment, the Guidance Counselor, the Staff Developer, the Targeted-Assistance Teachers, SETTS Teacher and the Principal. If the CST determines that a student is in need of intervention, the student is assigned and a written intervention plan is developed in consultation with the classroom teacher. The plan will have specific goals and a timeline. Teachers will provide differentiated instruction targeted to the students' weaknesses in the classroom setting while the intervention specialist targets other goals that support the student in the area of challenge. The classroom teacher, in on-going articulation with the Targeted-Assistance teacher, will continuously monitor their progress and adjust instruction accordingly. Teachers will again refer students who, after an appropriate period of intervention, are still not meeting the goals set out in their individual intervention plans to the CST for further analysis and discussion. It is at this time that the team may decide to refer the student to the Committee on Special Education (CSE) for evaluation. It may also be deemed necessary to assist a student by working with their classroom teacher during their school lunch recess, after school or during Saturday Academy for a cycle of time. The Principal and his/her team will be accountable for monitoring and maintaining records of the progress of all students assigned to intervention and will report to the superintendent on the effectiveness of the program on an on-going basis.

Icahn will comply with federal and state law with respect to the identification of ELLs. The parents of students who are admitted will be asked to complete the Home Language Questionnaire (HLQ) provided by the NYCDOE's Office of Bilingual Education (OBE). The HLQ will be provided in Spanish, or another language if appropriate. A student will be considered as a potential ELL if the survey indicates that:

- A language other than English is spoken at home;
- The student is foreign-born and speaks or understands a language other than English;
- The student speaks or understands a foreign language because of foreign ancestry;
- English is spoken in the student's home but the student speaks a language other than English because of foreign birth or ancestry.

If the results show that one of the above criteria is met, a member of the school staff will interview the student and his or her parents to determine the level of the student's proficiency in spoken English, using the sample questions provided by the OBE. An incoming student who is found to speak a language other than English at home and who speaks little or no English will be assessed using the Language Assessment Battery Revised (LAB-R). Any student who scores below proficient level will be assigned to the school's ELL program. Any ELL student requiring more than the services we are presently offering to a non-ELL student may be considered by the CST for a referral to CSE based on the student's performance and will be evaluated using the same standards for referral that are used for native English speakers.

Icahn will assess the developing language proficiency of ELLs regularly. All students identified

as ELL will take the NYS English as a Second Language Achievement Test (NYSESLAT) annually to evaluate their proficiency. Students will also participate in all assessments administered as a regular part of the school's educational program. Teachers will disaggregate and analyze the results of all of these assessments regularly and will modify instruction accordingly. The Principal and his/her team will be responsible for monitoring and for maintaining records of all students in the ELL program and will report to the Superintendent regularly on the effectiveness of the program. Students whose proficiency in English has progressed sufficiently to allow them to be transferred out of the program will be referred by their English as a Second Language teacher to CST for termination of the service. The Principal and his/her team will review the most recent results of the NYSESLAT and of all regular assessments and will decide if the student should be transitioned out of the program. Classroom teachers will continue to monitor the progress of students transitioned out of the program using any and/or all assessments as well as teacher observations.

At Icahn we will bring ELLs to proficiency in English quickly using the support of a licensed ESL Teacher. ELL students will be taught the same curriculum as English-speaking students and will be expected to achieve the same high standards. They will have full access to all of the programs and services of the school and will not be assigned to special education based on their inability to speak English. Students already identified as special needs students who are also ELLs will be assigned to receive ESL as well. ELLs who have other disabilities will receive the same services as other students with disabilities. All instruction will be in English. However, teachers will be trained in strategies to meet the needs of ELL students and will use differentiated instruction to ensure that students are able to comprehend content. The Principal and his/her team will have overall responsibility for coordinating and monitoring the approach for ELL students and will report to the Superintendent regularly on the effectiveness of the approach.

An Icahn school will provide supports for students with disabilities. Icahn will devote significant resources to the special needs student. A classroom teacher and/or a Targeted Assistance teacher may refer students who they deem need more than resources presently being given the student to the Child Study Team. If the CST believes that a student may have a disability, they will in consultation with the student's parent refer the student to the CSE for evaluation. Our on staff special needs providers will work with the general education teachers to develop specific modifications and instructional strategies targeted to the individual needs of each student. The Principal and his/her team will oversee the special education approach at Icahn. The Principal and his/her team will be responsible for disaggregating and analyzing assessment data for students with disabilities, for maintaining IEP records and for ensuring compliance with federal and state law with respect to students with disabilities. The Principal will report to the Superintendent regularly on the effectiveness of the program for students with disabilities.

Icahn is committed to providing a comprehensive research-based program of supports for all of its students of special needs. Our approach is to address the unique needs of these learners using a variety of strategies, including tiered classroom lessons, visual supports, replacement of behaviors that interfere with learning, clarifying social expectations, integration of technology, and many others.

The Icahn organization will ensure student retention by working closely with parents. We will

retain our students if their families are comfortable communicating with the school at-large and are confident that their child's needs are being met. We generally earn this confidence since we have particular practices in place such as: teachers call or speak with parents frequently; they seek input from parents about their students' needs and interests as well as informing them about progress; six narrative progress reports are sent home during the course of a year; a monthly syllabus is sent home of what the student is learning in all content areas; the Principal and out of classroom staff are always willing to meet parents informally and formally as they visit the school; parents are invited to evening "learn with your student" workshops. and all written materials are translated into families' home language (Spanish) and translators are available at school events.

All of the aforementioned practices have yielded excellent results at our former sites and we anticipate that they will have the same effect at our new site.

25. Facility

25(a) Facility Needs

Describe the facility needs of the proposed school for each year of the charter period, including any unique features necessary to implement your school design and academic program. Your response should address:

- **The desired location of the school facility;**
- **The number of general education classrooms required each year;**
- **Any additional classroom space required for special education or ESL services, specialty classes and intervention or enrichment programs;**
- **Space requirements for administrative functions, food services and physical education.**

While facilities are always the most challenging element to opening one of our charter schools, each time it has opened a school, the Foundation has been able to provide a facility that provided for the school's needs. We would like to be in CSD 9 because we have two schools in that CSD already. The familiarity enhances our ability to operate smoothly and also to work collaboratively. It is also an area that meets our desire to serve under-resourced children.

The following is a breakdown of the number of general education classrooms needed each year:

2012-2013	6
2013-2014	8
2014-2015	10
2015-2016	12
2016-2017	14

We also always provide small office space for small group instruction/tutoring, usually 3 spaces when a school is K-8.

We also need general office space and a multi-purpose space.

25(b) Facility Selection

Describe the efforts to date to secure a facility for the school.

- If a facility has been identified, describe the facility and how it meets your needs, including its location and whether it is new construction, part of an existing public or private school building, or must be renovated for use.

- If a facility has not been identified, explain your plans for securing a suitable facility and preparing it for use by the time you intend to open the school including any contingency planning.
- If the proposed facility space is provided by the school district of location, the applicant must also describe its contingency plans should such space be unavailable, which is particularly important for any applicant proposing to open in the fall of 2011.

Note: Additional facility information, such as blue prints or maps, should be submitted as Attachment 25 - Facility Documents.

We have been in touch with DOE via a letter of intent. Because we will not open until 2012, they are not able to make any commitment.

We also have three real estate people in the Icahn Associates company who are looking for real estate in CSD 9.

The Foundation is currently renovating a property on Pelham Parkway for its Icahn Charter Schools 3, 4 and 5, in collaboration with SCA.

In each case, for each school, the Foundation has provided facilities that have enabled the schools to thrive.

(c) Conflicts of Interest

If the charter school or its applicants or partners would own or lease its facility, provide a description of the ownership or lease arrangement of the facility, indicating specifically any potential conflicts of interest and arrangements by which such conflicts will be managed or avoided.

Not applicable.

26. Food Services

Describe the plans for food services to be provided by the charter school.

Food service will be arranged with the NYC Department of Education.

27. Health Services

Describe the plans for health services to be provided by the charter school.

The school anticipates having a dedicated medical room, and as such anticipates employing the services of the New York City Department of Health of the Department of Education for a medical provider. Nursing services will be provided in accordance with those portions of the guidance posted at

<http://emsc32.nysed.gov/sss/HealthServices/#Bulletins%20and%20Field%20Memos%20On-Line> that are applicable to charter schools through Education Law subdivision 2854(1)(b)).

In addition, 504 medications will be kept in a locked closet in the medical room. The Principal will have an extra key. We anticipate developing a relationship with a local hospital, as we have in our current school with Bronx Lebanon Hospital.

If a child becomes sick during the school day or needs emergency medical treatment, the parent will be notified. (When students register for the school, parents will be asked to provide the names of three emergency contacts. If the parent is not available, school staff will call the next person on the list.) If a parent or designee cannot be reached, appropriate action will be taken by staff, e.g., in an emergency, the child will be taken to the nearest Health Center by a person the school has designated within the school. Efforts will continue to be made to reach the parent or guardian.

The school's program of health services will include mandated immunization and health testing at each grade/age. All medicines administered to children will have a Form 504 and the school will follow applicable law. No medicine may be administered/taken without the form. Any medication requiring refrigeration will be stored in the refrigerator under lock and key. Other room temperature medications are stored in a cabinet under lock and key. The nurse follows the doctor's prescription for dispensing medication and only the nurse, persons under proper supervision of the nurse and self-directed students may administer medication. The school will be a public access defibrillation provider.

28. Transportation

Describe the transportation arrangements for students, including arrangements made for students who would not qualify for public school transportation under Education Law Section 3635, and any supplemental transportation arrangements planned with the school district.

We will make arrangements with the Office of Pupil Transportation at the Department of Education.

29. Programmatic Audits

Describe any planned program audits to be initiated by the school, including the area(s) to be audited and the purpose, objectives and timing of the audits.

When we submitted our first application, we described our plan to hire outside evaluators to come in and assess the effectiveness of our program. However, since starting our first school, we have not felt the need to plan for program audits, except for those audits that are part of contracts. We feel that the best way to “audit” our program is to see the results. We can determine via our constant assessment if the results in a particular topic or in a particular month or in a particular class are not where they should be, and respond by refining the program. With four schools already opened, we are constantly testing programs. For example, if one school’s results lag in a particular area, we can compare that school’s rollout of the program to the other schools’ rollouts. There is collaboration between schools, which also serves the same purpose as program audits in that school leaders hear the assessment and advice of other experts.

All grant funded programs will have built-in audits. At this time, we are not certain as to the specific programs that will, in fact, be in the school. We anticipate seeking funds for Teaching Matters, Writing Matters and Learning Through an Expanded Arts program (LEAP).

30. School Partnerships

Describe any low-performing schools in the area in which the proposed charter school intends to be located and explain how the charter school might partner with those schools to share best practices and innovations.

When charter schools began in New York in 1998, there were very few charter schools. It was clear that the only way to sustain the charter school option in New York City was to form a coalition, wherein schools would help each other with vendors, legal matters, efficiency. Ms. Goodyear was one of the founding members of the New York City Coalition of Charter Schools. She continues to be on the Executive Committee of the Coalition. When she started Icahn Charter School 1, she was mentored by other charter school operators and by CEI. Just this month, she was contacted by the head of the SEED schools from Washington, DC, to talk with someone who wants to become part of the New York charter school world. Mr. Litt is contacted frequently by other charter schools asking for advice, either on charter school operation or Core Knowledge curriculum. The Superintendent was recently visited by Girls Prep at the recommendation of Dr. E.D. Hirsch in that they wish to change to their curriculum to Core Knowledge to improve performance. Mr. Litt has also been visited by Children's Aid Society, who will be applying for a charter in District 12 in the South Bronx.

Our principals are receptive to working with DOE principals or private school principals. During the years when our principals have shared space with DOE schools, the relationship between principals has been a role model to other shared spaces. Currently, Ms. Carrasquillo-Silen (the principal of Icahn Charter School 3) has two DOE principals in the building. An outsider described their relationship as being "like sisters".

Our first charter school has already partnered with other public schools in the Bronx. Our school is the lead school (the grant required a high achieving school to be the lead) in the following:

- Title II-D: Shared Grant: Purpose: Using integrated technology & software in the Classroom.

Vendors: Educate, Fordham University, & Knowledge iTrust

Icahn Charter School

Amber Charter School

Brooklyn Excelsior Charter School

Bronx Light House

Harlem Children Zone

Harriet Tubman

ARRA Title II-D Grant Shared Grant: Purpose: Using Integrated software & technology in the Classroom. Apple iPad's are used to teach early reading and comprehension to the lower

grades. The grant allowed the school to participate with Headsprout: This program allows for online lessons, and stories. (Materials for Teachers & Students)

Vendors: Educate, Fordham University, & Knowledge ITrust, & HeadSprout

Icahn Charter School

Amber Charter School

Brooklyn Excelsior Charter School

Bronx Light House

Harlem Children Zone

Harriet Tubman

Saint Nicolas of Tolentine

Teach American History : Shared Grant: Purpose: The purpose of the grant is to build teacher's knowledge and understanding of U.S. History. This project is directed toward History/Social Studies Teachers. The program uses Columbia University professors & LEAP (Consultants). LEAP and Columbia University will offer Lectures on different topics of U.S. History in the Middle School (2-3 Lectures monthly) LEAP also provides outside projects in the Summer (ex. Trips to museums)

Bronx Charter School

Hyde Leadership Charter School

Bronx Charter School for Better Learning

Harriet Tubman Charter School

Grand Concourse Academy Charter School

Family Life Academy Charter School

Bronx Preparatory Charter School

Icahn Charter School 1

Our program is very simple and we discuss it openly—small classes; longer school year and longer school day; Core Knowledge curriculum (which many DOE schools use already); individualized learning; a school culture that is in a written document that is public; financial stability (which DOE schools already enjoy). While we would enjoy the opportunity to work collaboratively with other local schools, they can benefit at any time from the public nature of our program.

In our first application, we described wanting to share best practices with neighboring schools when we found a program that worked. The founders of the Icahn Charter Schools want all New York City children to receive a stellar education. When charters first started in New York City, they were viewed with suspicion by many DOE people, but as the movement was so small, there was little press coverage. After Joel Klein arrived, the climate changed such that charter schools are viewed by some as being favored (which is incorrect in terms of revenue equity, facility

equity, etc) and the press has covered the friction. If there comes a way for District schools to want to partner with charter schools, we look forward to participating with the same collegiality that we have experienced in shared DOE space.



Charter Schools Institute

The State University of New York

General Instructions and Notes for New Application Budgets and Cash Flows

- Complete ALL SIX tabs in BLUE
- Enter information into the GRAY cells
- Cells labeled in ORANGE contained guidance pertaining to that tab
- Cells containing RED triangles in the upper right corner in columns B thru G contain guidance on that particular line item
- Funding by School District information for all NYS school districts is located on the GREEN tab

* Please note that these budget templates are the same as the ones used to submit the school's yearly and renewal budgets, as well as quarterly reports.

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
1	10100	ALBANY	11,149	11,712	11,712	14,072
2	10201	BERNE KNOX	10,653	10,814	10,814	13,371
3	10306	BETHLEHEM	10,050	12,653	12,653	12,513
4	10402	RAVENA COEYMAN	11,446	11,936	11,936	13,365
5	10500	COHOES	10,516	11,070	11,070	11,791
6	10601	SOUTH COLONIE	10,750	11,422	11,422	12,137
7	10605	NORTH COLONIE	9,640	10,541	10,541	N/A
8	10615	MENANDS	16,576	16,582	16,582	15,870
9	10622	MAPLEWOOD	11,232	11,710	N/A	N/A
10	10623	NORTH COLONIE	N/A	N/A	10,541	10,708
11	10701	GREEN ISLAND	10,390	10,997	10,997	12,662
12	10802	GUILDERLAND	10,011	10,712	10,712	11,356
13	11003	VOORHEESVILLE	11,206	12,377	12,377	12,742
14	11200	WATERVLIET	8,850	9,070	9,070	9,404
15	20101	ALFRED ALMOND	9,184	10,226	10,226	10,628
16	20601	ANDOVER	10,738	11,107	11,107	12,353
17	20702	GENESEE VALLEY	9,380	9,686	9,686	11,013
18	20801	BELFAST	8,535	10,153	10,153	11,619
19	21102	CANASERAGA	10,752	11,354	11,354	12,329
20	21601	FRIENDSHIP	11,066	11,948	11,948	12,385
21	22001	FILLMORE	7,539	8,668	8,668	9,156
22	22101	WHITESVILLE	9,180	10,241	10,241	10,904
23	22302	CUBA-RUSHFORD	10,829	10,889	10,889	12,488
24	22401	SCIO	10,157	12,133	12,133	11,968
25	22601	WELLSVILLE	9,976	11,455	11,455	11,681
26	22902	BOLIVAR-RICHBG	10,620	11,418	11,418	10,885
27	30101	CHENANGO FORKS	9,392	10,119	10,119	10,503
28	30200	BINGHAMTON	8,896	9,820	9,820	10,244
29	30501	HARPURSVILLE	7,793	9,718	9,718	9,877
30	30601	SUSQUEHANNA VA	10,413	11,919	11,919	12,156
31	30701	CHENANGO VALLE	10,699	10,906	10,906	10,665
32	31101	MAINE ENDWELL	9,864	11,002	11,002	10,197
33	31301	DEPOSIT	11,710	14,020	14,020	14,304
34	31401	WHITNEY POINT	8,922	9,883	9,883	11,324
35	31501	UNION-ENDICOTT	10,331	10,955	10,955	11,048
36	31502	JOHNSON CITY	10,865	11,182	11,182	12,050
37	31601	VESTAL	10,513	11,413	11,413	12,166
38	31701	WINDSOR	9,118	9,813	9,813	10,115
39	40204	WEST VALLEY	12,044	13,408	13,408	13,623
40	40302	ALLEGANY-LIMES	8,754	9,652	9,652	10,362
41	40901	ELLICOTTVILLE	10,443	10,206	10,206	11,491
42	41101	FRANKLINVILLE	9,899	10,696	10,696	11,351
43	41401	HINSDALE	10,311	10,640	10,640	9,952
44	42302	CATTARAUGUS-LI	11,295	11,536	11,536	11,368
45	42400	OLEAN	9,145	9,933	9,933	10,976
46	42801	GOWANDA	9,677	10,020	10,020	11,326
47	42901	PORTVILLE	9,153	9,726	9,726	10,058
48	43001	RANDOLPH	8,957	9,806	9,806	10,720
49	43200	SALAMANCA	9,448	11,211	11,211	11,582
50	43501	YORKSHIRE-PIONE	10,533	10,566	10,566	11,406

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
51	50100	AUBURN	8,945	9,959	9,959	10,495
52	50301	WEEDSPORT	9,113	10,421	10,421	11,820
53	50401	CATO MERIDIAN	9,129	9,412	9,412	10,653
54	50701	SOUTHERN CAYUG	11,571	12,338	12,338	13,419
55	51101	PORT BYRON	9,418	10,138	10,138	10,865
56	51301	MORAVIA	9,540	9,940	9,940	10,202
57	51901	UNION SPRINGS	9,910	11,969	11,969	12,059
58	60201	SOUTHWESTERN	9,357	9,691	9,691	10,202
59	60301	FREWSBURG	8,436	8,965	8,965	10,206
60	60401	CASSADAGA VALL	9,694	10,976	10,976	11,359
61	60503	CHAUTAUQUA	12,818	14,330	14,330	14,457
62	60601	PINE VALLEY	10,085	11,072	11,072	11,589
63	60701	CLYMER	10,139	13,768	13,768	14,425
64	60800	DUNKIRK	11,682	12,054	12,054	12,985
65	61001	BEMUS POINT	9,766	10,726	10,726	11,810
66	61101	FALCONER	8,141	8,694	8,694	9,522
67	61501	SILVER CREEK	9,574	10,079	10,079	11,223
68	61503	FORESTVILLE	9,323	10,133	10,133	10,484
69	61601	PANAMA	10,287	10,861	10,861	11,826
70	61700	JAMESTOWN	8,983	10,157	10,157	10,164
71	62201	FREDONIA	10,159	11,242	11,242	12,037
72	62301	BROCTON	11,771	12,774	12,774	12,437
73	62401	RIPLEY	12,402	13,456	13,456	15,941
74	62601	SHERMAN	9,446	10,611	10,611	10,196
75	62901	WESTFIELD	9,929	10,983	10,983	11,891
76	70600	ELMIRA	8,624	9,965	9,965	11,012
77	70901	HORSEHEADS	8,862	9,466	9,466	10,196
78	70902	ELMIRA HEIGHTS	9,827	9,761	9,761	10,136
79	80101	AFTON	10,510	11,717	11,717	13,800
80	80201	BAINBRIDGE GUI	9,350	10,541	10,541	11,434
81	80601	GREENE	8,394	9,598	9,598	10,565
82	81003	UNADILLA	9,879	10,725	10,725	11,393
83	81200	NORWICH	8,503	9,089	9,089	9,956
84	81401	GRGETWN-SO OTS	11,634	11,700	11,700	12,871
85	81501	OXFORD	10,495	11,678	11,678	11,858
86	82001	SHERBURNE EARL	8,687	9,264	9,264	10,707
87	90201	AUSABLE VALLEY	11,112	12,302	12,302	13,185
88	90301	BEEKMANTOWN	10,124	11,410	11,410	11,708
89	90501	NORTHEASTERN	9,382	9,825	9,825	11,543
90	90601	CHAZY	9,891	10,616	10,616	11,716
91	90901	NORTHRN ADIRON	9,747	10,706	10,706	12,585
92	91101	PERU	9,860	11,126	11,126	11,849
93	91200	PLATTSBURGH	11,637	12,526	12,526	13,607
94	91402	SARANAC	8,832	9,535	9,535	11,333
95	100501	COPAKE-TACONIC	11,676	13,043	13,043	13,622
96	100902	GERMANTOWN	12,486	12,770	12,770	14,614
97	101001	CHATHAM	11,215	12,277	12,277	12,977
98	101300	HUDSON	10,975	11,982	11,982	13,401
99	101401	KINDERHOOK	9,256	10,114	10,114	11,239
100	101601	NEW LEBANON	13,101	13,441	13,441	15,792

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101	110101	CINCINNATUS	11,091	12,195	12,195	12,691
102	110200	CORTLAND	9,347	9,778	9,778	10,142
103	110304	MCGRAW	10,128	11,222	11,222	11,248
104	110701	HOMER	9,289	10,182	10,182	11,092
105	110901	MARATHON	8,493	7,853	7,853	11,911
106	120102	ANDES	14,329	15,445	15,445	21,107
107	120301	DOWNSVILLE	13,533	16,110	16,110	17,143
108	120401	CHARLOTTE VALL	8,172	9,939	9,939	10,907
109	120501	DELHI	11,428	12,859	12,859	13,930
110	120701	FRANKLIN	11,937	12,786	12,786	13,106
111	120906	HANCOCK	12,248	13,854	13,854	14,267
112	121401	MARGARETVILLE	10,942	12,416	12,416	13,376
113	121502	ROXBURY	14,123	15,068	15,068	16,963
114	121601	SIDNEY	9,571	11,217	11,217	11,628
115	121701	STAMFORD	9,430	11,560	11,560	13,915
116	121702	S. KORTRIGHT	12,416	13,857	13,857	13,381
117	121901	WALTON	9,575	9,739	9,739	10,718
118	130200	BEACON	9,227	9,650	9,650	11,093
119	130502	DOVER	10,011	10,589	10,589	11,245
120	130801	HYDE PARK	10,162	10,965	10,965	12,052
121	131101	NORTHEAST	12,969	15,151	15,151	15,342
122	131201	PAWLING	13,989	14,556	14,556	15,571
123	131301	PINE PLAINS	11,399	12,380	12,380	14,565
124	131500	POUGHKEEPSIE	11,044	11,195	11,195	12,524
125	131601	ARLINGTON	9,976	10,651	10,651	11,469
126	131602	SPACKENKILL	13,604	14,417	14,417	16,018
127	131701	RED HOOK	10,871	12,091	12,091	13,202
128	131801	RHINEBECK	13,604	14,204	14,204	16,681
129	132101	WAPPINGERS	9,186	10,055	10,055	10,887
130	132201	MILLBROOK	10,071	11,769	11,769	12,902
131	140101	ALDEN	9,267	9,737	9,737	9,862
132	140201	AMHERST	10,520	10,138	10,138	10,721
133	140203	WILLIAMSVILLE	10,131	10,494	10,494	10,904
134	140207	SWEET HOME	10,161	10,961	10,961	11,954
135	140301	EAST AURORA	12,436	9,978	9,978	10,210
136	140600	BUFFALO	9,567	10,429	10,429	12,005
137	140701	CHEEKTOWAGA	8,832	9,733	9,733	10,235
138	140702	MARYVALE	9,452	10,025	10,025	10,433
139	140703	CLEVELAND HILL	8,396	9,946	9,946	10,428
140	140707	DEPEW	9,719	10,741	10,741	10,409
141	140709	SLOAN	10,003	10,860	10,860	11,946
142	140801	CLARENCE	8,107	8,747	8,747	9,001
143	141101	SPRINGVILLE-GR	9,615	10,053	10,053	11,347
144	141201	EDEN	8,277	8,752	8,752	9,674
145	141301	IROQUOIS	8,376	9,111	9,111	9,751
146	141401	EVANS-BRANT	10,452	11,083	11,083	11,618
147	141501	GRAND ISLAND	9,379	9,823	9,823	9,915
148	141601	HAMBURG	9,216	9,519	9,519	9,716
149	141604	FRONTIER	7,657	8,271	8,271	8,759
150	141701	HOLLAND	9,150	9,966	9,966	11,032

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151	141800	LACKAWANNA	10,172	10,833	10,833	11,964
152	141901	LANCASTER	7,284	7,973	7,973	8,449
153	142101	AKRON	9,157	9,760	9,760	10,134
154	142201	NORTH COLLINS	11,962	10,361	10,361	13,023
155	142301	ORCHARD PARK	9,849	10,198	10,198	10,523
156	142500	TONAWANDA	9,165	9,779	9,779	10,051
157	142601	KENMORE	10,087	10,412	10,412	9,477
158	142801	WEST SENECA	8,555	8,948	8,948	10,179
159	150203	CROWN POINT	12,283	14,203	14,203	15,649
160	150301	ELIZABETHTOWN	11,453	13,228	13,228	13,358
161	150601	KEENE	18,960	18,529	18,529	19,701
162	150801	MINERVA	25,811	27,490	27,490	25,637
163	150901	MORIAH	10,413	10,922	10,922	11,855
164	151001	NEWCOMB	39,125	51,675	51,675	43,580
165	151102	LAKE PLACID	11,911	13,620	13,620	14,929
166	151401	SCHROON LAKE	14,073	16,058	16,058	15,368
167	151501	TICONDEROGA	11,278	13,258	13,258	13,455
168	151601	WESTPORT	12,345	11,244	11,244	13,649
169	151701	WILLSBORO	12,153	13,461	13,461	15,355
170	160101	TUPPER LAKE	8,797	10,281	10,281	11,474
171	160801	CHATEAUGAY	8,508	9,502	9,502	10,879
172	161201	SALMON RIVER	12,370	11,610	11,610	13,576
173	161401	SARANAC LAKE	11,656	13,140	13,140	13,999
174	161501	MALONE	9,922	10,134	10,134	10,520
175	161601	BRUSHTON MOIRA	8,985	10,152	10,152	11,399
176	161801	ST REGIS FALLS	9,824	11,664	11,664	13,886
177	170301	WHEELERVILLE	13,709	15,077	15,077	18,435
178	170500	GLOVERSVILLE	9,392	9,121	9,121	9,865
179	170600	JOHNSTOWN	8,923	9,818	9,818	10,408
180	170801	MAYFIELD	8,067	8,827	8,827	10,112
181	170901	NORTHVILLE	10,754	12,396	12,396	13,440
182	171001	OPPENHEIM EPHR	12,178	13,504	13,504	13,204
183	171102	BROADALBIN-PER	7,722	8,605	8,605	8,636
184	180202	ALEXANDER	9,501	10,005	10,005	11,325
185	180300	BATAVIA	11,169	12,503	12,503	12,293
186	180701	BYRON BERGEN	8,763	10,098	10,098	11,339
187	180901	ELBA	10,056	10,830	10,830	11,423
188	181001	LE ROY	8,741	9,837	9,837	10,757
189	181101	OAKFIELD ALABA	9,346	10,716	10,716	9,994
190	181201	PAVILION	9,698	10,273	10,273	10,682
191	181302	PEMBROKE	9,205	9,919	9,919	11,828
192	190301	CAIRO-DURHAM	8,126	9,731	9,731	10,345
193	190401	CATSKILL	10,226	11,424	11,424	14,130
194	190501	COXSACKIE ATHE	10,459	10,905	10,905	11,888
195	190701	GREENVILLE	10,371	11,269	11,269	13,454
196	190901	HUNTER TANNERS	12,946	14,001	14,001	16,482
197	191401	WINDHAM ASHLAN	15,266	14,868	14,868	18,838
198	200101	PISECO	22,241	26,736	26,736	N/A
199	200401	INDIAN LAKE	18,205	22,268	22,268	24,054
200	200501	INLET	22,241	26,736	26,736	N/A

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201	200601	LAKE PLEASANT	28,387	28,900	28,900	25,331
202	200701	LONG LAKE	36,121	37,270	37,270	42,198
203	200901	WELLS	19,282	18,500	18,500	21,823
204	210302	WEST CANADA VA	9,181	10,384	10,384	11,723
205	210402	FRANKFORT-SCHU	9,127	9,084	9,084	9,210
206	210501	ILION	7,829	8,025	8,025	8,450
207	210502	MOHAWK	8,656	9,642	9,642	10,758
208	210601	HERKIMER	8,531	9,185	9,185	9,525
209	210800	LITTLE FALLS	10,230	10,818	10,818	11,471
210	211003	DOLGEVILLE	8,707	9,576	9,576	10,527
211	211103	POLAND	10,141	10,558	10,558	11,690
212	211701	VAN HORNSVILLE	12,184	12,211	12,211	11,991
213	211901	TOWN OF WEBB	16,513	18,823	18,823	20,143
214	212001	MT MARKHAM CSD	9,964	10,836	10,836	11,231
215	220101	S. JEFFERSON	7,368	8,069	8,069	9,183
216	220202	ALEXANDRIA	9,983	10,338	10,338	12,100
217	220301	INDIAN RIVER	7,953	8,380	8,380	6,996
218	220401	GENERAL BROWN	8,068	8,410	8,410	8,580
219	220701	THOUSAND ISLAND	10,108	11,183	11,183	12,027
220	220909	BELLEVILLE-HEN	8,798	9,652	9,652	10,030
221	221001	SACKETS HARBOR	10,255	10,726	10,726	10,104
222	221301	LYME	9,864	10,382	10,382	13,021
223	221401	LA FARGEVILLE	9,943	10,039	10,039	9,458
224	222000	WATERTOWN	7,344	7,934	7,934	8,985
225	222201	CARTHAGE	8,303	8,911	8,911	8,557
226	230201	COPENHAGEN	8,600	9,038	9,038	9,935
227	230301	HARRISVILLE	11,192	11,794	11,794	12,372
228	230901	LOWVILLE	7,979	8,403	8,403	9,602
229	231101	SOUTH LEWIS	10,725	11,777	11,777	13,513
230	231301	BEAVER RIVER	9,035	10,065	10,065	9,873
231	240101	AVON	9,000	10,726	10,726	10,465
232	240201	CALEDONIA MUMF	8,374	9,239	9,239	10,218
233	240401	GENESEO	10,353	10,819	10,819	12,257
234	240801	LIVONIA	9,786	10,725	10,725	11,356
235	240901	MOUNT MORRIS	9,744	11,101	11,101	12,120
236	241001	DANSVILLE	9,132	9,525	9,525	10,313
237	241101	DALTON-NUNDA	10,866	11,704	11,704	13,107
238	241701	YORK	8,824	9,863	9,863	10,694
239	250109	BROOKFIELD	9,758	11,515	11,515	11,171
240	250201	CAZENOVIA	9,208	9,996	9,996	10,613
241	250301	DE RUYTER	9,206	12,001	12,001	13,049
242	250401	MORRISVILLE EA	10,009	11,015	11,015	12,114
243	250701	HAMILTON	9,678	12,465	12,465	12,897
244	250901	CANASTOTA	8,830	9,135	9,135	9,837
245	251101	MADISON	10,163	10,976	10,976	10,079
246	251400	ONEIDA CITY	8,464	10,485	10,485	11,079
247	251501	STOCKBRIDGE VA	8,517	9,838	9,838	10,638
248	251601	CHITTENANGO	9,074	10,080	10,080	10,983
249	260101	BRIGHTON	11,048	12,025	12,025	12,448
250	260401	GATES CHILI	10,332	11,150	11,150	12,359

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251	260501	GREECE	9,658	10,422	10,422	11,252
252	260801	E. IRONDEQUOIT	9,349	10,006	10,006	11,557
253	260803	W. IRONDEQUOIT	9,590	10,711	10,711	10,413
254	260901	HONEOYE FALLS	9,540	10,103	10,103	10,435
255	261001	SPENCERPORT	9,781	10,259	10,259	10,533
256	261101	HILTON	9,263	10,019	10,019	10,202
257	261201	PENFIELD	11,459	12,155	12,155	12,346
258	261301	FAIRPORT	9,679	10,220	10,220	10,647
259	261313	EAST ROCHESTER	10,970	12,418	12,418	12,585
260	261401	PITTSFORD	11,870	12,644	12,644	12,722
261	261501	CHURCHVILLE CH	8,985	9,496	9,496	10,122
262	261600	ROCHESTER	10,070	10,868	10,868	12,426
263	261701	RUSH HENRIETTA	11,226	11,738	11,738	12,330
264	261801	BROCKPORT	9,705	10,222	10,222	10,745
265	261901	WEBSTER	10,136	10,427	10,427	10,872
266	262001	WHEATLAND CHIL	12,694	14,442	14,442	15,259
267	270100	AMSTERDAM	8,584	8,887	8,887	9,443
268	270301	CANAJOHARIE	11,364	10,533	10,533	10,768
269	270601	FONDA FULTONVI	9,141	10,509	10,509	11,108
270	270701	FORT PLAIN	10,060	10,723	10,723	12,840
271	271102	ST JOHNSVILLE	9,869	10,561	10,561	11,910
272	280100	GLEN COVE	17,094	17,909	17,909	18,368
273	280201	HEMPSTEAD	16,165	17,356	17,356	18,202
274	280202	UNIONDALE	16,518	18,310	18,310	19,864
275	280203	EAST MEADOW	13,319	15,631	15,631	15,722
276	280204	NORTH BELLMORE	14,346	15,419	15,419	17,500
277	280205	LEVITTOWN	14,880	15,793	15,793	17,280
278	280206	SEAFORD	13,451	14,547	14,547	15,660
279	280207	BELLMORE	15,949	17,562	17,562	19,638
280	280208	ROOSEVELT	16,475	16,845	16,845	16,939
281	280209	FREEPORT	14,026	14,902	14,902	15,703
282	280210	BALDWIN	14,024	15,336	15,336	15,658
283	280211	OCEANSIDE	13,675	15,026	15,026	16,067
284	280212	MALVERNE	16,465	16,487	16,487	19,705
285	280213	V STR THIRTEEN	14,899	15,193	15,193	15,487
286	280214	HEWLETT WOODME	18,686	20,329	20,329	22,408
287	280215	LAWRENCE	18,845	20,562	20,562	23,002
288	280216	ELMONT	12,189	13,210	13,210	14,397
289	280217	FRANKLIN SQUAR	12,273	13,288	13,288	13,412
290	280218	GARDEN CITY	15,014	16,464	16,464	17,620
291	280219	EAST ROCKAWAY	14,837	16,680	16,680	18,375
292	280220	LYNBROOK	15,340	16,514	16,514	17,680
293	280221	ROCKVILLE CENT	16,663	17,397	17,397	18,767
294	280222	FLORAL PARK	12,106	12,852	12,852	14,937
295	280223	WANTAGH	12,237	13,441	13,441	13,593
296	280224	V STR TWENTY-F	18,799	18,886	18,886	19,237
297	280225	MERRICK	14,803	16,693	16,693	17,936
298	280226	ISLAND TREES	12,982	14,337	14,337	15,505
299	280227	WEST HEMPSTEAD	14,351	14,732	14,732	16,755
300	280229	NORTH MERRICK	15,668	16,678	16,678	17,825

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301	280230	VALLEY STR UF	16,391	17,598	17,598	19,277
302	280231	ISLAND PARK	22,245	27,655	27,655	27,985
303	280251	VALLEY STR CHS	12,487	13,762	13,762	14,838
304	280252	SEWANHAKA	10,781	12,243	12,243	12,522
305	280253	BELLMORE-MERRI	12,191	13,037	13,037	13,768
306	280300	LONG BEACH	17,016	19,842	19,842	22,042
307	280401	WESTBURY	15,640	17,435	17,435	18,224
308	280402	EAST WILLISTON	18,840	19,814	19,814	20,780
309	280403	ROSLYN	18,741	20,081	20,081	20,898
310	280404	PORT WASHINGTO	18,011	19,475	19,475	20,028
311	280405	NEW HYDE PARK	12,037	13,585	13,585	14,771
312	280406	MANHASSET	18,864	20,254	20,254	21,235
313	280407	GREAT NECK	20,853	21,183	21,183	22,466
314	280409	HERRICKS	14,999	16,522	16,522	17,029
315	280410	MINEOLA	21,204	22,566	22,566	23,709
316	280411	CARLE PLACE	18,940	19,902	19,902	20,187
317	280501	NORTH SHORE	18,005	20,288	20,288	23,323
318	280502	SYOSSET	17,670	19,526	19,526	20,242
319	280503	LOCUST VALLEY	19,500	22,104	22,104	22,507
320	280504	PLAINVIEW	15,891	16,964	16,964	17,945
321	280506	OYSTER BAY	19,270	22,633	22,633	22,533
322	280515	JERICHO	19,561	22,601	22,601	23,911
323	280517	HICKSVILLE	12,923	14,580	14,580	14,942
324	280518	PLAINEDGE	12,076	13,977	13,977	15,701
325	280521	BETHPAGE	15,652	17,066	17,066	17,350
326	280522	FARMINGDALE	14,725	15,641	15,641	16,831
327	280523	MASSAPEQUA	14,211	15,232	15,232	16,052
328	300000	NEW YORK CITY	11,023	12,443	12,443	13,527
329	400301	LEWISTON PORTE	10,323	12,236	12,236	12,229
330	400400	LOCKPORT	9,198	10,220	10,220	9,912
331	400601	NEWFANE	8,779	9,476	9,476	10,086
332	400701	NIAGARA WHEATF	9,868	9,672	9,672	10,443
333	400800	NIAGARA FALLS	9,305	10,015	10,015	10,911
334	400900	N. TONAWANDA	9,575	9,630	9,630	10,593
335	401001	STARPOINT	8,219	9,058	9,058	9,789
336	401201	ROYALTON HARTL	8,755	9,683	9,683	10,207
337	401301	BARKER	12,412	13,293	13,293	12,895
338	401501	WILSON	9,136	10,584	10,584	10,386
339	410401	ADIRONDACK	9,936	10,915	10,915	11,668
340	410601	CAMDEN	8,250	9,386	9,386	10,655
341	411101	CLINTON	11,125	11,072	11,072	11,529
342	411501	NEW HARTFORD	11,065	11,712	11,712	11,431
343	411504	NEW YORK MILLS	11,073	12,248	12,248	11,834
344	411603	SAUQUOIT VALLE	9,000	10,057	10,057	10,956
345	411701	REMSSEN	11,110	13,154	13,154	14,790
346	411800	ROME	9,456	10,778	10,778	11,413
347	411902	WATERVILLE	9,725	10,734	10,734	10,900
348	412000	SHERRILL	9,105	9,667	9,667	9,651
349	412201	HOLLAND PATENT	9,058	10,071	10,071	10,388
350	412300	UTICA	7,860	8,441	8,441	9,280

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351	412801	WESTMORELAND	10,095	11,188	11,188	11,938
352	412901	ORISKANY	9,696	10,625	10,625	10,992
353	412902	WHITESBORO	9,275	9,505	9,505	9,886
354	420101	WEST GENESEE	9,079	9,820	9,820	10,199
355	420303	NORTH SYRACUSE	9,155	9,332	9,332	10,709
356	420401	E SYRACUSE-MIN	12,617	12,805	12,805	13,674
357	420411	JAMESVILLE-DEW	10,494	10,805	10,805	10,944
358	420501	JORDAN ELBRIDG	9,588	10,342	10,342	11,623
359	420601	FABIUS-POMPEY	10,197	11,565	11,565	12,479
360	420701	WESTHILL	9,708	10,372	10,372	10,634
361	420702	SOLVAY	9,801	10,721	10,721	11,760
362	420807	LA FAYETTE	14,681	15,526	15,526	15,766
363	420901	BALDWINSVILLE	9,529	10,185	10,185	10,724
364	421001	FAYETTEVILLE	10,101	10,267	10,267	10,653
365	421101	MARCELLUS	8,562	8,871	8,871	9,775
366	421201	ONONDAGA	10,106	10,459	10,459	12,132
367	421501	LIVERPOOL	10,715	11,946	11,946	12,529
368	421504	LYNCOURT	11,989	13,521	13,521	15,497
369	421601	SKANEATELES	11,552	12,010	12,010	12,337
370	421800	SYRACUSE	8,884	10,362	10,362	11,933
371	421902	TULLY	8,785	9,585	9,585	10,036
372	430300	CANANDAIGUA	9,461	10,181	10,181	10,828
373	430501	EAST BLOOMFIEL	9,687	10,213	10,213	11,116
374	430700	GENEVA	9,208	10,458	10,458	12,688
375	430901	GORHAM-MIDDLES	10,734	11,367	11,367	11,875
376	431101	MANCHSTR-SHRTS	10,121	10,485	10,485	10,420
377	431201	NAPLES	11,957	13,488	13,488	13,183
378	431301	PHELPS-CLIFTON	9,388	10,623	10,623	11,376
379	431401	HONEOYE	9,786	10,487	10,487	12,141
380	431701	VICTOR	8,790	9,618	9,618	9,518
381	440102	WASHINGTONVILL	10,842	11,687	11,687	11,931
382	440201	CHESTER	12,179	12,532	12,532	13,170
383	440301	CORNWALL	10,775	11,413	11,413	11,262
384	440401	PINE BUSH	9,606	10,576	10,576	11,570
385	440601	GOSHEN	11,566	12,560	12,560	12,773
386	440901	HIGHLAND FALLS	12,924	13,618	13,618	14,580
387	441000	MIDDLETOWN	10,382	11,355	11,355	12,759
388	441101	MINISINK VALLE	9,146	10,099	10,099	10,552
389	441201	MONROE WOODBUR	11,671	12,538	12,538	13,089
390	441202	KIRYAS JOEL	18,317	25,769	25,769	33,354
391	441301	VALLEY-MONTGMR	9,209	9,864	9,864	11,222
392	441600	NEWBURGH	11,407	12,738	12,738	14,796
393	441800	PORT JERVIS	10,910	11,776	11,776	11,904
394	441903	TUXEDO	16,710	18,323	18,323	17,470
395	442101	WARWICK VALLEY	10,863	11,493	11,493	12,198
396	442111	GREENWOOD LAKE	14,899	15,132	15,132	18,307
397	442115	FLORIDA	11,858	13,088	13,088	14,001
398	450101	ALBION	8,014	8,887	8,887	10,580
399	450607	KENDALL	9,526	9,917	9,917	12,590
400	450704	HOLLEY	6,999	9,844	9,844	10,275

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401	450801	MEDINA	9,550	10,525	10,525	10,826
402	451001	LYNDONVILLE	8,962	9,930	9,930	10,519
403	460102	ALTMAR PARISH	10,870	11,395	11,395	11,295
404	460500	FULTON	9,852	10,413	10,413	11,616
405	460701	HANNIBAL	8,070	9,278	9,278	10,178
406	460801	CENTRAL SQUARE	8,119	9,066	9,066	9,571
407	460901	MEXICO	9,693	10,521	10,521	11,702
408	461300	OSWEGO	10,684	12,105	12,105	12,263
409	461801	PULASKI	8,770	10,270	10,270	11,580
410	461901	SANDY CREEK	10,230	10,747	10,747	12,911
411	462001	PHOENIX	10,791	11,107	11,107	12,226
412	470202	GLBSTSVLLE-MT U	8,855	9,683	9,683	11,319
413	470501	EDMESTON	8,457	9,031	9,031	11,243
414	470801	LAURENS	9,163	10,185	10,185	10,634
415	470901	SCHENEVUS	10,974	11,100	11,100	12,566
416	471101	MILFORD	10,874	11,422	11,422	12,217
417	471201	MORRIS	9,165	9,185	9,185	10,436
418	471400	ONEONTA	10,060	10,915	10,915	11,790
419	471601	OTEGO-UNADILLA	9,462	10,367	10,367	11,481
420	471701	COOPERSTOWN	10,574	11,595	11,595	11,917
421	472001	RICHFIELD SPRI	9,317	10,271	10,271	10,916
422	472202	CHERRY VLY-SPR	11,895	12,632	12,632	12,674
423	472506	WORCESTER	10,398	10,422	10,422	12,352
424	480101	MAHOPAC	12,057	13,264	13,264	13,924
425	480102	CARMEL	14,319	14,865	14,865	15,409
426	480401	HALDANE	14,121	14,783	14,783	16,483
427	480404	GARRISON	18,482	20,327	20,327	21,676
428	480503	PUTNAM VALLEY	15,825	16,294	16,294	16,888
429	480601	BREWSTER	14,336	15,649	15,649	16,808
430	490101	BERLIN	10,974	12,019	12,019	12,890
431	490202	BRUNSWICK CENT	8,818	10,274	10,274	10,501
432	490301	EAST GREENBUSH	10,890	11,464	11,464	11,659
433	490501	HOOSICK FALLS	9,553	10,071	10,071	11,782
434	490601	LANSINGBURGH	8,394	8,509	8,509	9,352
435	490801	NORTH GREENBUSH	10,026	10,735	10,735	N/A
436	490804	WYNANTSKILL	9,237	10,613	10,613	11,243
437	491200	RENSSELAER	10,247	10,996	10,996	8,883
438	491302	AVERILL PARK	8,683	9,363	9,363	10,036
439	491401	HOOSIC VALLEY	9,015	9,733	9,733	10,338
440	491501	SCHODACK	10,509	11,674	11,674	12,169
441	491700	TROY	11,481	13,360	13,360	15,986
442	500101	CLARKSTOWN	11,608	12,759	12,759	13,310
443	500108	NANUET	16,675	17,763	17,763	18,531
444	500201	HAVERSTRAW-ST	14,279	15,854	15,854	17,121
445	500301	S. ORANGETOWN	14,278	14,729	14,729	15,503
446	500304	NYACK	16,020	17,016	17,016	18,240
447	500308	PEARL RIVER	13,277	14,413	14,413	14,854
448	500401	RAMAPO	15,993	17,571	17,571	16,919
449	500402	EAST RAMAPO	14,736	16,326	16,326	16,555
450	510101	BRASHER FALLS	8,633	9,507	9,507	10,172

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451	510201	CANTON	10,471	11,114	11,114	11,252
452	510401	CLIFTON FINE	16,641	18,407	18,407	17,107
453	510501	COLTON PIERREP	14,920	16,949	16,949	18,381
454	511101	GOUVERNEUR	9,083	8,945	8,945	10,255
455	511201	HAMMOND	9,281	11,478	11,478	12,727
456	511301	HERMON DEKALB	12,838	13,114	13,114	12,646
457	511602	LISBON	11,326	11,867	11,867	12,322
458	511901	MADRID WADDING	10,391	10,883	10,883	10,491
459	512001	MASSENA	8,332	9,131	9,131	10,197
460	512101	MORRISTOWN	11,107	13,150	13,150	13,655
461	512201	NORWOOD NORFOL	10,021	10,085	10,085	10,652
462	512300	OGDENSBURG	11,998	13,053	13,053	13,953
463	512404	HEUVELTON	9,954	11,007	11,007	10,704
464	512501	PARISHVILLE	9,498	9,890	9,890	10,609
465	512902	POTSDAM	9,979	10,840	10,840	11,390
466	513102	EDWARDS-KNOX	9,158	10,001	10,001	10,536
467	520101	BURNT HILLS	9,994	10,562	10,562	10,168
468	520302	SHENENDEHOWA	9,905	10,502	10,502	11,060
469	520401	CORINTH	9,791	10,020	10,020	10,919
470	520601	EDINBURG	21,157	28,077	28,077	20,896
471	520701	GALWAY	8,609	9,042	9,042	10,157
472	521200	MECHANICVILLE	9,092	9,597	9,597	10,377
473	521301	BALLSTON SPA	10,154	11,233	11,233	11,797
474	521401	S. GLENS FALLS	9,117	9,844	9,844	10,667
475	521701	SCHUYLERVILLE	10,735	11,600	11,600	11,472
476	521800	SARATOGA SPRIN	10,177	10,496	10,496	10,532
477	522001	STILLWATER	8,313	8,971	8,971	9,269
478	522101	WATERFORD	10,199	12,183	12,183	12,844
479	530101	DUANESBURG	8,433	9,259	9,259	9,234
480	530202	SCOTIA GLENVIL	9,606	10,245	10,245	11,013
481	530301	NISKAYUNA	10,411	11,408	11,408	11,790
482	530501	SCHALMONT	11,630	12,830	12,830	13,862
483	530515	MOHONASEN	7,865	8,047	8,047	8,989
484	530600	SCHENECTADY	9,590	10,272	10,272	12,014
485	540801	GILBOA CONESVI	12,137	13,436	13,436	15,707
486	540901	JEFFERSON	11,383	11,905	11,905	12,445
487	541001	MIDDLEBURGH	11,983	13,341	13,341	12,453
488	541102	COBLESKL-RICHM	9,443	10,568	10,568	10,802
489	541201	SCHOHARIE	9,913	10,626	10,626	12,138
490	541401	SHARON SPRINGS	14,169	12,510	12,510	14,154
491	550101	ODESSA MONTOUR	9,953	9,698	9,698	11,363
492	550301	WATKINS GLEN	9,323	9,562	9,562	10,489
493	560501	SOUTH SENECA	11,031	12,642	12,642	13,574
494	560603	ROMULUS	11,185	11,830	11,830	14,567
495	560701	SENECA FALLS	9,687	10,676	10,676	11,016
496	561006	WATERLOO CENT	8,549	9,295	9,295	10,263
497	570101	ADDISON	10,537	10,215	10,215	11,263
498	570201	AVOCA	9,594	11,471	11,471	13,201
499	570302	BATH	8,726	9,370	9,370	9,780
500	570401	BRADFORD	11,995	12,185	12,185	13,266

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501	570603	CAMPBELL-SAVON	9,978	9,702	9,702	10,531
502	571000	CORNING	9,407	10,255	10,255	10,637
503	571502	CANISTEO-GREEN	11,811	11,986	11,986	13,788
504	571800	HORNELL	9,927	10,088	10,088	9,858
505	571901	ARKPORT	8,402	8,587	8,587	9,666
506	572301	PRATTSBURG	9,697	9,983	9,983	10,626
507	572702	JASPER-TRPSBRG	9,088	9,625	9,625	10,590
508	572901	HAMMONDSPORT	13,020	14,515	14,515	14,766
509	573002	WAYLAND-COHOCT	9,018	9,611	9,611	10,796
510	580101	BABYLON	15,378	17,161	17,161	16,928
511	580102	WEST BABYLON	12,571	13,840	13,840	14,848
512	580103	NORTH BABYLON	11,963	13,353	13,353	14,290
513	580104	LINDENHURST	12,446	13,409	13,409	14,253
514	580105	COPIAGUE	11,518	13,079	13,079	15,369
515	580106	AMITYVILLE	14,006	16,765	16,765	17,777
516	580107	DEER PARK	14,629	15,380	15,380	15,685
517	580109	WYANDANCH	14,812	15,791	15,791	16,666
518	580201	THREE VILLAGE	13,098	14,277	14,277	15,887
519	580203	COMSEWOGUE	12,332	12,594	12,594	13,498
520	580205	SACHEM	12,482	13,313	13,313	13,251
521	580206	PORT JEFFERSON	19,872	21,369	21,369	21,199
522	580207	MOUNT SINAI	13,761	14,326	14,326	14,841
523	580208	MILLER PLACE	13,114	14,009	14,009	12,922
524	580209	ROCKY POINT	11,446	12,271	12,271	12,823
525	580211	MIDDLE COUNTRY	11,103	12,109	12,109	13,107
526	580212	LONGWOOD	12,113	13,845	13,845	14,380
527	580224	PATCHOGUE-MEDF	11,402	12,251	12,251	12,814
528	580232	WILLIAM FLOYD	12,659	13,077	13,077	14,168
529	580233	CENTER MORICHE	13,957	14,851	14,851	14,847
530	580234	EAST MORICHES	15,728	15,102	15,102	17,372
531	580235	SOUTH COUNTRY	14,265	15,404	15,404	15,951
532	580301	EAST HAMPTON	18,628	21,330	21,330	23,725
533	580302	WAINSCOTT	13,289	19,419	19,419	N/A
534	580303	AMAGANSETT	59,305	45,754	45,754	57,648
535	580304	SPRINGS	16,860	19,627	19,627	21,775
536	580305	SAG HARBOR	20,395	23,814	23,814	24,716
537	580306	MONTAUK	21,131	23,842	23,842	31,259
538	580401	ELWOOD	13,740	14,427	14,427	14,485
539	580402	COLD SPRING HA	18,574	20,529	20,529	20,586
540	580403	HUNTINGTON	16,331	16,922	16,922	17,512
541	580404	NORTHPORT	15,387	16,459	16,459	18,014
542	580405	HALF HOLLOW HI	13,149	14,381	14,381	14,873
543	580406	HARBORFIELDS	11,957	13,134	13,134	13,773
544	580410	COMMACK	13,120	14,858	14,858	15,572
545	580413	S. HUNTINGTON	14,159	15,252	15,252	15,758
546	580501	BAY SHORE	13,930	15,048	15,048	15,355
547	580502	ISLIP	11,813	12,916	12,916	14,285
548	580503	EAST ISLIP	12,245	13,735	13,735	14,659
549	580504	SAYVILLE	12,579	15,751	15,751	16,460
550	580505	BAYPORT BLUE P	15,691	17,035	17,035	17,566

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551	580506	HAUPPAUGE	14,975	15,992	15,992	16,435
552	580507	CONNETQUOT	13,359	14,373	14,373	15,947
553	580509	WEST ISLIP	11,756	12,679	12,679	13,799
554	580512	BRENTWOOD	11,583	12,950	12,950	13,488
555	580513	CENTRAL ISLIP	16,773	18,571	18,571	19,614
556	580514	FIRE ISLAND	75,321	105,135	105,135	107,803
557	580601	SHOREHAM-WADIN	13,116	14,471	14,471	15,726
558	580602	RIVERHEAD	13,909	15,743	15,743	16,076
559	580701	SHELTER ISLAND	25,991	25,456	25,456	27,980
560	580801	SMITHTOWN	12,667	13,272	13,272	13,969
561	580805	KINGS PARK	12,556	13,065	13,065	13,928
562	580901	REMSENBURG	28,044	29,102	29,102	36,414
563	580902	WESTHAMPTON BE	16,314	18,052	18,052	18,354
564	580903	QUOGUE	34,967	38,866	38,866	46,916
565	580905	HAMPTON BAYS	12,481	14,438	14,438	16,093
566	580906	SOUTHAMPTON	21,695	24,096	24,096	23,414
567	580909	BRIDGEHAMPTON	54,109	51,579	51,579	53,186
568	580910	SAGAPONACK	13,289	19,419	19,419	N/A
569	580912	EASTPORT-SOUTH	11,176	12,376	12,376	13,276
570	580913	TUCKAHOE COMMO	24,583	24,715	24,715	28,200
571	580917	EAST QUOGUE	16,623	21,071	21,071	22,116
572	581002	OYSTERPONDS	28,674	30,893	30,893	32,931
573	581004	FISHERS ISLAND	41,189	37,296	37,296	42,471
574	581005	SOUTHOLD	14,515	15,431	15,431	17,390
575	581010	GREENPORT	14,041	14,945	14,945	16,696
576	581012	MATTITUCK-CUTC	14,814	15,260	15,260	15,967
577	581015	NEW SUFFOLK	13,289	19,419	19,419	N/A
578	590501	FALLSBURGH	15,248	16,265	16,265	19,402
579	590801	ELDRED	11,596	13,588	13,588	13,570
580	590901	LIBERTY	13,524	15,551	15,551	17,552
581	591201	TRI VALLEY	15,653	16,260	16,260	18,324
582	591301	ROSCOE	15,149	17,289	17,289	17,826
583	591302	LIVINGSTON MAN	13,770	14,627	14,627	16,085
584	591401	MONTICELLO	11,687	12,084	12,084	14,106
585	591502	SULLIVAN WEST	12,938	14,012	14,012	15,001
586	600101	WAVERLY	8,126	8,476	8,476	9,059
587	600301	CANDOR	9,861	10,252	10,252	11,287
588	600402	NEWARK VALLEY	9,255	10,412	10,412	10,287
589	600601	OWEGO-APALACHI	10,051	10,347	10,347	11,452
590	600801	SPENCER VAN ET	7,417	8,771	8,771	10,808
591	600903	TIOGA	7,712	8,451	8,451	9,445
592	610301	DRYDEN	9,582	10,200	10,200	11,011
593	610501	GROTON	8,899	9,486	9,486	10,405
594	610600	ITHACA	11,162	12,113	12,113	12,670
595	610801	LANSING	11,773	12,850	12,850	10,855
596	610901	NEWFIELD	8,554	8,923	8,923	9,830
597	611001	TRUMANSBURG	9,597	10,114	10,114	10,222
598	620600	KINGSTON	12,176	12,731	12,731	14,461
599	620803	HIGHLAND	10,690	11,914	11,914	12,457
600	620901	RONDOUT VALLEY	14,241	15,569	15,569	17,586

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601	621001	MARLBORO	13,729	14,591	14,591	15,483
602	621101	NEW PALTZ	11,835	12,290	12,290	13,284
603	621201	ONTEORA	14,239	15,687	15,687	18,571
604	621601	SAUGERTIES	10,068	11,303	11,303	11,825
605	621801	WALLKILL	9,807	10,532	10,532	10,997
606	622002	ELLENVILLE	14,662	15,427	15,427	15,150
607	630101	BOLTON	16,201	18,295	18,295	20,535
608	630202	NORTH WARREN	13,343	15,288	15,288	15,458
609	630300	GLENS FALLS	10,178	10,923	10,923	11,469
610	630601	JOHNSBURG	14,807	16,769	16,769	18,339
611	630701	LAKE GEORGE	11,546	12,636	12,636	12,521
612	630801	HADLEY LUZERNE	11,330	11,969	11,969	13,748
613	630902	QUEENSBURY	8,374	8,801	8,801	9,538
614	630918	GLENS FALLS CO	13,275	14,736	14,736	12,000
615	631201	WARRENSBURG	12,837	14,290	14,290	14,836
616	640101	ARGYLE	8,772	10,694	10,694	11,402
617	640502	FORT ANN	11,691	13,187	13,187	13,847
618	640601	FORT EDWARD	10,554	11,926	11,926	11,493
619	640701	GRANVILLE	8,841	10,678	10,678	10,360
620	640801	GREENWICH	10,146	11,995	11,995	12,131
621	641001	HARTFORD	9,645	11,389	11,389	12,205
622	641301	HUDSON FALLS	8,780	9,322	9,322	10,021
623	641401	PUTNAM	20,620	23,086	23,086	23,966
624	641501	SALEM	9,675	11,650	11,650	13,082
625	641610	CAMBRIDGE	9,689	10,634	10,634	12,350
626	641701	WHITEHALL	10,230	10,832	10,832	12,236
627	650101	NEWARK	9,666	9,934	9,934	11,100
628	650301	CLYDE-SAVANNAH	10,893	11,351	11,351	13,326
629	650501	LYONS	9,098	9,951	9,951	10,690
630	650701	MARION	9,951	10,933	10,933	11,418
631	650801	WAYNE	9,957	10,781	10,781	11,034
632	650901	PALMYRA-MACEDO	10,011	10,787	10,787	10,506
633	650902	GANANDA	8,713	9,476	9,476	9,757
634	651201	SODUS	11,350	12,258	12,258	12,623
635	651402	WILLIAMSON	9,984	11,381	11,381	12,113
636	651501	N. ROSE-WOLCOT	9,498	11,430	11,430	12,030
637	651503	RED CREEK	8,978	9,664	9,664	10,909
638	660101	KATONAH LEWISB	17,843	18,574	18,574	20,507
639	660102	BEDFORD	18,038	19,852	19,852	20,556
640	660202	CROTON HARMON	15,181	15,550	15,550	15,733
641	660203	HENDRICK HUDSO	17,048	16,618	16,618	18,174
642	660301	EASTCHESTER	16,813	17,035	17,035	17,827
643	660302	TUCKAHOE	17,306	18,600	18,600	20,009
644	660303	BRONXVILLE	18,961	21,219	21,219	22,099
645	660401	TARRYTOWN	14,846	16,455	16,455	16,449
646	660402	IRVINGTON	16,493	18,320	18,320	20,150
647	660403	DOBBS FERRY	16,909	18,231	18,231	18,927
648	660404	HASTINGS ON HU	17,018	17,463	17,463	19,404
649	660405	ARDSLEY	15,063	17,638	17,638	20,471
650	660406	EDGE MONT	15,844	16,226	16,226	17,819

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651	660407	GREENBURGH	20,815	20,451	20,451	22,343
652	660409	ELMSFORD	19,616	21,033	21,033	22,211
653	660501	HARRISON	19,289	20,737	20,737	23,457
654	660701	MAMARONECK	17,674	16,404	16,404	18,416
655	660801	MT PLEAS CENT	17,692	18,168	18,168	18,590
656	660802	POCANTICO HILL	32,101	36,989	36,989	46,333
657	660805	VALHALLA	18,472	19,877	19,877	20,983
658	660809	PLEASANTVILLE	14,471	15,490	15,490	16,558
659	660900	MOUNT VERNON	14,051	15,367	15,367	16,794
660	661004	CHAPPAQUA	17,176	18,326	18,326	19,041
661	661100	NEW ROCHELLE	13,098	15,491	15,491	16,138
662	661201	BYRAM HILLS	19,270	19,805	19,805	20,054
663	661301	NORTH SALEM	19,212	20,267	20,267	20,273
664	661401	OSSINING	15,525	16,981	16,981	18,293
665	661402	BRIARCLIFF MAN	19,367	20,102	20,102	22,861
666	661500	PEEKSKILL	15,279	16,068	16,068	16,431
667	661601	PELHAM	14,768	15,317	15,317	16,187
668	661800	RYE	19,091	18,846	18,846	18,927
669	661901	RYE NECK	16,189	18,168	18,168	18,340
670	661904	PORT CHESTER	11,600	12,674	12,674	13,413
671	661905	BLIND BROOK-RY	17,321	18,589	18,589	20,318
672	662001	SCARSDALE	19,135	20,819	20,819	22,148
673	662101	SOMERS	14,552	15,818	15,818	16,825
674	662200	WHITE PLAINS	17,123	18,811	18,811	19,443
675	662300	YONKERS	12,015	12,006	12,006	14,520
676	662401	LAKELAND	13,540	14,318	14,318	14,999
677	662402	YORKTOWN	13,595	14,859	14,859	16,743
678	670201	ATTICA	9,266	9,393	9,393	9,552
679	670401	LETCHWORTH	10,838	10,945	10,945	11,337
680	671002	WYOMING	11,116	14,555	14,555	15,376
681	671201	PERRY	9,832	10,672	10,672	11,041
682	671501	WARSAW	10,242	12,111	12,111	11,643
683	680601	PENN YAN	9,317	10,287	10,287	11,554
684	680801	DUNDEE	8,023	9,390	9,390	9,998

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1	10100	ALBANY	11,149	11,712	11,712	14,072
2	570101	ADDISON	10,537	10,215	10,215	11,263
3	410401	ADIRONDACK	9,936	10,915	10,915	11,668
4	80101	AFTON	10,510	11,717	11,717	13,800
5	142101	AKRON	9,157	9,760	9,760	10,134
6	450101	ALBION	8,014	8,887	8,887	10,580
7	140101	ALDEN	9,267	9,737	9,737	9,862
8	180202	ALEXANDER	9,501	10,005	10,005	11,325
9	220202	ALEXANDRIA	9,983	10,338	10,338	12,100
10	20101	ALFRED ALMOND	9,184	10,226	10,226	10,628
11	40302	ALLEGANY-LIMES	8,754	9,652	9,652	10,362
12	460102	ALTMAR PARISH	10,870	11,395	11,395	11,295
13	580303	AMAGANSETT	59,305	45,754	45,754	57,648
14	140201	AMHERST	10,520	10,138	10,138	10,721
15	580106	AMITYVILLE	14,006	16,765	16,765	17,777
16	270100	AMSTERDAM	8,584	8,887	8,887	9,443
17	120102	ANDES	14,329	15,445	15,445	21,107
18	20601	ANDOVER	10,738	11,107	11,107	12,353
19	660405	ARDSLEY	15,063	17,638	17,638	20,471
20	640101	ARGYLE	8,772	10,694	10,694	11,402
21	571901	ARKPORT	8,402	8,587	8,587	9,666
22	131601	ARLINGTON	9,976	10,651	10,651	11,469
23	670201	ATTICA	9,266	9,393	9,393	9,552
24	50100	AUBURN	8,945	9,959	9,959	10,495
25	90201	AUSABLE VALLEY	11,112	12,302	12,302	13,185
26	491302	AVERILL PARK	8,683	9,363	9,363	10,036
27	570201	AVOCA	9,594	11,471	11,471	13,201
28	240101	AVON	9,000	10,726	10,726	10,465
29	580101	BABYLON	15,378	17,161	17,161	16,928
30	80201	BAINBRIDGE GUI	9,350	10,541	10,541	11,434
31	280210	BALDWIN	14,024	15,336	15,336	15,658
32	420901	BALDWINSVILLE	9,529	10,185	10,185	10,724
33	521301	BALLSTON SPA	10,154	11,233	11,233	11,797
34	401301	BARKER	12,412	13,293	13,293	12,895
35	180300	BATAVIA	11,169	12,503	12,503	12,293
36	570302	BATH	8,726	9,370	9,370	9,780
37	580501	BAY SHORE	13,930	15,048	15,048	15,355
38	580505	BAYPORT BLUE P	15,691	17,035	17,035	17,566
39	130200	BEACON	9,227	9,650	9,650	11,093
40	231301	BEAVER RIVER	9,035	10,065	10,065	9,873
41	660102	BEDFORD	18,038	19,852	19,852	20,556
42	90301	BEEKMANTOWN	10,124	11,410	11,410	11,708
43	20801	BELFAST	8,535	10,153	10,153	11,619
44	220909	BELLEVILLE-HEN	8,798	9,652	9,652	10,030
45	280207	BELLMORE	15,949	17,562	17,562	19,638
46	280253	BELLMORE-MERRI	12,191	13,037	13,037	13,768
47	61001	BEMUS POINT	9,766	10,726	10,726	11,810
48	490101	BERLIN	10,974	12,019	12,019	12,890
49	10201	BERNE KNOX	10,653	10,814	10,814	13,371
50	10306	BETHLEHEM	10,050	12,653	12,653	12,513

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51	280521	BETHPAGE	15,652	17,066	17,066	17,350
52	30200	BINGHAMTON	8,896	9,820	9,820	10,244
53	661905	BLIND BROOK-RY	17,321	18,589	18,589	20,318
54	22902	BOLIVAR-RICHBG	10,620	11,418	11,418	10,885
55	630101	BOLTON	16,201	18,295	18,295	20,535
56	570401	BRADFORD	11,995	12,185	12,185	13,266
57	510101	BRASHER FALLS	8,633	9,507	9,507	10,172
58	580512	BRENTWOOD	11,583	12,950	12,950	13,488
59	480601	BREWSTER	14,336	15,649	15,649	16,808
60	661402	BRIARCLIFF MAN	19,367	20,102	20,102	22,861
61	580909	BRIDGEHAMPTON	54,109	51,579	51,579	53,186
62	260101	BRIGHTON	11,048	12,025	12,025	12,448
63	171102	BROADALBIN-PER	7,722	8,605	8,605	8,636
64	261801	BROCKPORT	9,705	10,222	10,222	10,745
65	62301	BROCTON	11,771	12,774	12,774	12,437
66	660303	BRONXVILLE	18,961	21,219	21,219	22,099
67	250109	BROOKFIELD	9,758	11,515	11,515	11,171
68	490202	BRUNSWICK CENT	8,818	10,274	10,274	10,501
69	161601	BRUSHTON MOIRA	8,985	10,152	10,152	11,399
70	140600	BUFFALO	9,567	10,429	10,429	12,005
71	520101	BURNT HILLS	9,994	10,562	10,562	10,168
72	661201	BYRAM HILLS	19,270	19,805	19,805	20,054
73	180701	BYRON BERGEN	8,763	10,098	10,098	11,339
74	190301	CAIRO-DURHAM	8,126	9,731	9,731	10,345
75	240201	CALEDONIA MUMF	8,374	9,239	9,239	10,218
76	641610	CAMBRIDGE	9,689	10,634	10,634	12,350
77	410601	CAMDEN	8,250	9,386	9,386	10,655
78	570603	CAMPBELL-SAVON	9,978	9,702	9,702	10,531
79	270301	CANAJOHARIE	11,364	10,533	10,533	10,768
80	430300	CANANDAIGUA	9,461	10,181	10,181	10,828
81	21102	CANASERAGA	10,752	11,354	11,354	12,329
82	250901	CANASTOTA	8,830	9,135	9,135	9,837
83	600301	CANDOR	9,861	10,252	10,252	11,287
84	571502	CANISTEO-GREEN	11,811	11,986	11,986	13,788
85	510201	CANTON	10,471	11,114	11,114	11,252
86	280411	CARLE PLACE	18,940	19,902	19,902	20,187
87	480102	CARMEL	14,319	14,865	14,865	15,409
88	222201	CARTHAGE	8,303	8,911	8,911	8,557
89	60401	CASSADAGA VALL	9,694	10,976	10,976	11,359
90	50401	CATO MERIDIAN	9,129	9,412	9,412	10,653
91	190401	CATSKILL	10,226	11,424	11,424	14,130
92	42302	CATTARAUGUS-LI	11,295	11,536	11,536	11,368
93	250201	CAZENOVIA	9,208	9,996	9,996	10,613
94	580233	CENTER MORICHE	13,957	14,851	14,851	14,847
95	580513	CENTRAL ISLIP	16,773	18,571	18,571	19,614
96	460801	CENTRAL SQUARE	8,119	9,066	9,066	9,571
97	661004	CHAPPAQUA	17,176	18,326	18,326	19,041
98	120401	CHARLOTTE VALL	8,172	9,939	9,939	10,907
99	160801	CHATEAUGAY	8,508	9,502	9,502	10,879
100	101001	CHATHAM	11,215	12,277	12,277	12,977

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101	60503	CHAUTAUQUA	12,818	14,330	14,330	14,457
102	90601	CHAZY	9,891	10,616	10,616	11,716
103	140701	CHEEKTOWAGA	8,832	9,733	9,733	10,235
104	30101	CHENANGO FORKS	9,392	10,119	10,119	10,503
105	30701	CHENANGO VALLE	10,699	10,906	10,906	10,665
106	472202	CHERRY VLY-SPR	11,895	12,632	12,632	12,674
107	440201	CHESTER	12,179	12,532	12,532	13,170
108	251601	CHITTENANGO	9,074	10,080	10,080	10,983
109	261501	CHURCHVILLE CH	8,985	9,496	9,496	10,122
110	110101	CINCINNATUS	11,091	12,195	12,195	12,691
111	140801	CLARENCE	8,107	8,747	8,747	9,001
112	500101	CLARKSTOWN	11,608	12,759	12,759	13,310
113	140703	CLEVELAND HILL	8,396	9,946	9,946	10,428
114	510401	CLIFTON FINE	16,641	18,407	18,407	17,107
115	411101	CLINTON	11,125	11,072	11,072	11,529
116	650301	CLYDE-SAVANNAH	10,893	11,351	11,351	13,326
117	60701	CLYMER	10,139	13,768	13,768	14,425
118	541102	COBLESKL-RICHM	9,443	10,568	10,568	10,802
119	10500	COHOES	10,516	11,070	11,070	11,791
120	580402	COLD SPRING HA	18,574	20,529	20,529	20,586
121	510501	COLTON PIERREP	14,920	16,949	16,949	18,381
122	580410	COMMACK	13,120	14,858	14,858	15,572
123	580203	COMSEWOGUE	12,332	12,594	12,594	13,498
124	580507	CONNETQUOT	13,359	14,373	14,373	15,947
125	471701	COOPERSTOWN	10,574	11,595	11,595	11,917
126	100501	COPAKE-TACONIC	11,676	13,043	13,043	13,622
127	230201	COPENHAGEN	8,600	9,038	9,038	9,935
128	580105	COPIAGUE	11,518	13,079	13,079	15,369
129	520401	CORINTH	9,791	10,020	10,020	10,919
130	571000	CORNING	9,407	10,255	10,255	10,637
131	440301	CORNWALL	10,775	11,413	11,413	11,262
132	110200	CORTLAND	9,347	9,778	9,778	10,142
133	190501	COXSACKIE ATHE	10,459	10,905	10,905	11,888
134	660202	CROTON HARMON	15,181	15,550	15,550	15,733
135	150203	CROWN POINT	12,283	14,203	14,203	15,649
136	22302	CUBA-RUSHFORD	10,829	10,889	10,889	12,488
137	241101	DALTON-NUNDA	10,866	11,704	11,704	13,107
138	241001	DANSVILLE	9,132	9,525	9,525	10,313
139	250301	DE RUYTER	9,206	12,001	12,001	13,049
140	580107	DEER PARK	14,629	15,380	15,380	15,685
141	120501	DELHI	11,428	12,859	12,859	13,930
142	140707	DEPEW	9,719	10,741	10,741	10,409
143	31301	DEPOSIT	11,710	14,020	14,020	14,304
144	660403	DOBBS FERRY	16,909	18,231	18,231	18,927
145	211003	DOLGEVILLE	8,707	9,576	9,576	10,527
146	130502	DOVER	10,011	10,589	10,589	11,245
147	120301	DOWNSVILLE	13,533	16,110	16,110	17,143
148	610301	DRYDEN	9,582	10,200	10,200	11,011
149	530101	DUANESBURG	8,433	9,259	9,259	9,234
150	680801	DUNDEE	8,023	9,390	9,390	9,998

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151	60800	DUNKIRK	11,682	12,054	12,054	12,985
152	420401	E SYRACUSE-MIN	12,617	12,805	12,805	13,674
153	260801	E. IRONDEQUOIT	9,349	10,006	10,006	11,557
154	140301	EAST AURORA	12,436	9,978	9,978	10,210
155	430501	EAST BLOOMFIEL	9,687	10,213	10,213	11,116
156	490301	EAST GREENBUSH	10,890	11,464	11,464	11,659
157	580301	EAST HAMPTON	18,628	21,330	21,330	23,725
158	580503	EAST ISLIP	12,245	13,735	13,735	14,659
159	280203	EAST MEADOW	13,319	15,631	15,631	15,722
160	580234	EAST MORICHES	15,728	15,102	15,102	17,372
161	580917	EAST QUOGUE	16,623	21,071	21,071	22,116
162	500402	EAST RAMAPO	14,736	16,326	16,326	16,555
163	261313	EAST ROCHESTER	10,970	12,418	12,418	12,585
164	280219	EAST ROCKAWAY	14,837	16,680	16,680	18,375
165	280402	EAST WILLISTON	18,840	19,814	19,814	20,780
166	660301	EASTCHESTER	16,813	17,035	17,035	17,827
167	580912	EASTPORT-SOUTH	11,176	12,376	12,376	13,276
168	141201	EDEN	8,277	8,752	8,752	9,674
169	660406	EDGEMONT	15,844	16,226	16,226	17,819
170	520601	EDINBURG	21,157	28,077	28,077	20,896
171	470501	EDMESTON	8,457	9,031	9,031	11,243
172	513102	EDWARDS-KNOX	9,158	10,001	10,001	10,536
173	180901	ELBA	10,056	10,830	10,830	11,423
174	590801	ELDRED	11,596	13,588	13,588	13,570
175	150301	ELIZABETHTOWN	11,453	13,228	13,228	13,358
176	622002	ELLENVILLE	14,662	15,427	15,427	15,150
177	40901	ELLICOTTVILLE	10,443	10,206	10,206	11,491
178	70600	ELMIRA	8,624	9,965	9,965	11,012
179	70902	ELMIRA HEIGHTS	9,827	9,761	9,761	10,136
180	280216	ELMONT	12,189	13,210	13,210	14,397
181	660409	ELMSFORD	19,616	21,033	21,033	22,211
182	580401	ELWOOD	13,740	14,427	14,427	14,485
183	141401	EVANS-BRANT	10,452	11,083	11,083	11,618
184	420601	FABIUS-POMPEY	10,197	11,565	11,565	12,479
185	261301	FAIRPORT	9,679	10,220	10,220	10,647
186	61101	FALCONER	8,141	8,694	8,694	9,522
187	590501	FALLSBURGH	15,248	16,265	16,265	19,402
188	280522	FARMINGDALE	14,725	15,641	15,641	16,831
189	421001	FAYETTEVILLE	10,101	10,267	10,267	10,653
190	22001	FILLMORE	7,539	8,668	8,668	9,156
191	580514	FIRE ISLAND	75,321	105,135	105,135	107,803
192	581004	FISHERS ISLAND	41,189	37,296	37,296	42,471
193	280222	FLORAL PARK	12,106	12,852	12,852	14,937
194	442115	FLORIDA	11,858	13,088	13,088	14,001
195	270601	FONDA FULTONVI	9,141	10,509	10,509	11,108
196	61503	FORESTVILLE	9,323	10,133	10,133	10,484
197	640502	FORT ANN	11,691	13,187	13,187	13,847
198	640601	FORT EDWARD	10,554	11,926	11,926	11,493
199	270701	FORT PLAIN	10,060	10,723	10,723	12,840
200	210402	FRANKFORT-SCHU	9,127	9,084	9,084	9,210

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201	120701	FRANKLIN	11,937	12,786	12,786	13,106
202	280217	FRANKLIN SQUAR	12,273	13,288	13,288	13,412
203	41101	FRANKLINVILLE	9,899	10,696	10,696	11,351
204	62201	FREDONIA	10,159	11,242	11,242	12,037
205	280209	FREEPORT	14,026	14,902	14,902	15,703
206	60301	FREWSBURG	8,436	8,965	8,965	10,206
207	21601	FRIENDSHIP	11,066	11,948	11,948	12,385
208	141604	FRONTIER	7,657	8,271	8,271	8,759
209	460500	FULTON	9,852	10,413	10,413	11,616
210	520701	GALWAY	8,609	9,042	9,042	10,157
211	650902	GANANDA	8,713	9,476	9,476	9,757
212	280218	GARDEN CITY	15,014	16,464	16,464	17,620
213	480404	GARRISON	18,482	20,327	20,327	21,676
214	260401	GATES CHILI	10,332	11,150	11,150	12,359
215	220401	GENERAL BROWN	8,068	8,410	8,410	8,580
216	20702	GENESEE VALLEY	9,380	9,686	9,686	11,013
217	240401	GENESEO	10,353	10,819	10,819	12,257
218	430700	GENEVA	9,208	10,458	10,458	12,688
219	100902	GERMANTOWN	12,486	12,770	12,770	14,614
220	540801	GILBOA CONESVI	12,137	13,436	13,436	15,707
221	470202	GLBTSVLLE-MT U	8,855	9,683	9,683	11,319
222	280100	GLEN COVE	17,094	17,909	17,909	18,368
223	630300	GLENS FALLS	10,178	10,923	10,923	11,469
224	630918	GLENS FALLS CO	13,275	14,736	14,736	12,000
225	170500	GLOVERSVILLE	9,392	9,121	9,121	9,865
226	430901	GORHAM-MIDDLES	10,734	11,367	11,367	11,875
227	440601	GOSHEN	11,566	12,560	12,560	12,773
228	511101	GOVERNEUR	9,083	8,945	8,945	10,255
229	42801	GOWANDA	9,677	10,020	10,020	11,326
230	141501	GRAND ISLAND	9,379	9,823	9,823	9,915
231	640701	GRANVILLE	8,841	10,678	10,678	10,360
232	280407	GREAT NECK	20,853	21,183	21,183	22,466
233	260501	GREECE	9,658	10,422	10,422	11,252
234	10701	GREEN ISLAND	10,390	10,997	10,997	12,662
235	660407	GREENBURGH	20,815	20,451	20,451	22,343
236	80601	GREENE	8,394	9,598	9,598	10,565
237	581010	GREENPORT	14,041	14,945	14,945	16,696
238	190701	GREENVILLE	10,371	11,269	11,269	13,454
239	640801	GREENWICH	10,146	11,995	11,995	12,131
240	442111	GREENWOOD LAKE	14,899	15,132	15,132	18,307
241	81401	GRGETWN-SO OTS	11,634	11,700	11,700	12,871
242	610501	GROTON	8,899	9,486	9,486	10,405
243	10802	GUILDERLAND	10,011	10,712	10,712	11,356
244	630801	HADLEY LUZERNE	11,330	11,969	11,969	13,748
245	480401	HALDANE	14,121	14,783	14,783	16,483
246	580405	HALF HOLLOW HI	13,149	14,381	14,381	14,873
247	141601	HAMBURG	9,216	9,519	9,519	9,716
248	250701	HAMILTON	9,678	12,465	12,465	12,897
249	511201	HAMMOND	9,281	11,478	11,478	12,727
250	572901	HAMMONDSPORT	13,020	14,515	14,515	14,766

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251	580905	HAMPTON BAYS	12,481	14,438	14,438	16,093
252	120906	HANCOCK	12,248	13,854	13,854	14,267
253	460701	HANNIBAL	8,070	9,278	9,278	10,178
254	580406	HARBORFIELDS	11,957	13,134	13,134	13,773
255	30501	HARPURSVILLE	7,793	9,718	9,718	9,877
256	660501	HARRISON	19,289	20,737	20,737	23,457
257	230301	HARRISVILLE	11,192	11,794	11,794	12,372
258	641001	HARTFORD	9,645	11,389	11,389	12,205
259	660404	HASTINGS ON HU	17,018	17,463	17,463	19,404
260	580506	HAUPPAUGE	14,975	15,992	15,992	16,435
261	500201	HAVERSTRAW-ST	14,279	15,854	15,854	17,121
262	280201	HEMPSTEAD	16,165	17,356	17,356	18,202
263	660203	HENDRICK HUDSO	17,048	16,618	16,618	18,174
264	210601	HERKIMER	8,531	9,185	9,185	9,525
265	511301	HERMON DEKALB	12,838	13,114	13,114	12,646
266	280409	HERRICKS	14,999	16,522	16,522	17,029
267	512404	HEUVELTON	9,954	11,007	11,007	10,704
268	280214	HEWLETT WOODME	18,686	20,329	20,329	22,408
269	280517	HICKSVILLE	12,923	14,580	14,580	14,942
270	620803	HIGHLAND	10,690	11,914	11,914	12,457
271	440901	HIGHLAND FALLS	12,924	13,618	13,618	14,580
272	261101	HILTON	9,263	10,019	10,019	10,202
273	41401	HINSDALE	10,311	10,640	10,640	9,952
274	141701	HOLLAND	9,150	9,966	9,966	11,032
275	412201	HOLLAND PATENT	9,058	10,071	10,071	10,388
276	450704	HOLLEY	6,999	9,844	9,844	10,275
277	110701	HOMER	9,289	10,182	10,182	11,092
278	431401	HONEOYE	9,786	10,487	10,487	12,141
279	260901	HONEOYE FALLS	9,540	10,103	10,103	10,435
280	491401	HOOSIC VALLEY	9,015	9,733	9,733	10,338
281	490501	HOOSICK FALLS	9,553	10,071	10,071	11,782
282	571800	HORNELL	9,927	10,088	10,088	9,858
283	70901	HORSEHEADS	8,862	9,466	9,466	10,196
284	101300	HUDSON	10,975	11,982	11,982	13,401
285	641301	HUDSON FALLS	8,780	9,322	9,322	10,021
286	190901	HUNTER TANNERS	12,946	14,001	14,001	16,482
287	580403	HUNTINGTON	16,331	16,922	16,922	17,512
288	130801	HYDE PARK	10,162	10,965	10,965	12,052
289	210501	ILION	7,829	8,025	8,025	8,450
290	200401	INDIAN LAKE	18,205	22,268	22,268	24,054
291	220301	INDIAN RIVER	7,953	8,380	8,380	6,996
292	200501	INLET	22,241	26,736	26,736	N/A
293	141301	IROQUOIS	8,376	9,111	9,111	9,751
294	660402	IRVINGTON	16,493	18,320	18,320	20,150
295	280231	ISLAND PARK	22,245	27,655	27,655	27,985
296	280226	ISLAND TREES	12,982	14,337	14,337	15,505
297	580502	ISLIP	11,813	12,916	12,916	14,285
298	610600	ITHACA	11,162	12,113	12,113	12,670
299	61700	JAMESTOWN	8,983	10,157	10,157	10,164
300	420411	JAMESVILLE-DEW	10,494	10,805	10,805	10,944

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301	572702	JASPER-TRPSBRG	9,088	9,625	9,625	10,590
302	540901	JEFFERSON	11,383	11,905	11,905	12,445
303	280515	JERICO	19,561	22,601	22,601	23,911
304	630601	JOHNSBURG	14,807	16,769	16,769	18,339
305	31502	JOHNSON CITY	10,865	11,182	11,182	12,050
306	170600	JOHNSTOWN	8,923	9,818	9,818	10,408
307	420501	JORDAN ELBRIDG	9,588	10,342	10,342	11,623
308	660101	KATONAH LEWISB	17,843	18,574	18,574	20,507
309	150601	KEENE	18,960	18,529	18,529	19,701
310	450607	KENDALL	9,526	9,917	9,917	12,590
311	142601	KENMORE	10,087	10,412	10,412	9,477
312	101401	KINDERHOOK	9,256	10,114	10,114	11,239
313	580805	KINGS PARK	12,556	13,065	13,065	13,928
314	620600	KINGSTON	12,176	12,731	12,731	14,461
315	441202	KIRYAS JOEL	18,317	25,769	25,769	33,354
316	221401	LA FARGEVILLE	9,943	10,039	10,039	9,458
317	420807	LA FAYETTE	14,681	15,526	15,526	15,766
318	141800	LACKAWANNA	10,172	10,833	10,833	11,964
319	630701	LAKE GEORGE	11,546	12,636	12,636	12,521
320	151102	LAKE PLACID	11,911	13,620	13,620	14,929
321	200601	LAKE PLEASANT	28,387	28,900	28,900	25,331
322	662401	LAKELAND	13,540	14,318	14,318	14,999
323	141901	LANCASTER	7,284	7,973	7,973	8,449
324	610801	LANSING	11,773	12,850	12,850	10,855
325	490601	LANSINGBURGH	8,394	8,509	8,509	9,352
326	470801	LAURENS	9,163	10,185	10,185	10,634
327	280215	LAWRENCE	18,845	20,562	20,562	23,002
328	181001	LE ROY	8,741	9,837	9,837	10,757
329	670401	LETCHWORTH	10,838	10,945	10,945	11,337
330	280205	LEVITTOWN	14,880	15,793	15,793	17,280
331	400301	LEWISTON PORTE	10,323	12,236	12,236	12,229
332	590901	LIBERTY	13,524	15,551	15,551	17,552
333	580104	LINDENHURST	12,446	13,409	13,409	14,253
334	511602	LISBON	11,326	11,867	11,867	12,322
335	210800	LITTLE FALLS	10,230	10,818	10,818	11,471
336	421501	LIVERPOOL	10,715	11,946	11,946	12,529
337	591302	LIVINGSTON MAN	13,770	14,627	14,627	16,085
338	240801	LIVONIA	9,786	10,725	10,725	11,356
339	400400	LOCKPORT	9,198	10,220	10,220	9,912
340	280503	LOCUST VALLEY	19,500	22,104	22,104	22,507
341	280300	LONG BEACH	17,016	19,842	19,842	22,042
342	200701	LONG LAKE	36,121	37,270	37,270	42,198
343	580212	LONGWOOD	12,113	13,845	13,845	14,380
344	230901	LOWVILLE	7,979	8,403	8,403	9,602
345	221301	LYME	9,864	10,382	10,382	13,021
346	280220	LYNBROOK	15,340	16,514	16,514	17,680
347	421504	LYNCOURT	11,989	13,521	13,521	15,497
348	451001	LYNDONVILLE	8,962	9,930	9,930	10,519
349	650501	LYONS	9,098	9,951	9,951	10,690
350	251101	MADISON	10,163	10,976	10,976	10,079

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351	511901	MADRID WADDING	10,391	10,883	10,883	10,491
352	480101	MAHOPAC	12,057	13,264	13,264	13,924
353	31101	MAINE ENDWELL	9,864	11,002	11,002	10,197
354	161501	MALONE	9,922	10,134	10,134	10,520
355	280212	MALVERNE	16,465	16,487	16,487	19,705
356	660701	MAMARONECK	17,674	16,404	16,404	18,416
357	431101	MANCHSTR-SHRTS	10,121	10,485	10,485	10,420
358	280406	MANHASSET	18,864	20,254	20,254	21,235
359	10622	MAPLEWOOD	11,232	11,710	N/A	N/A
360	110901	MARATHON	8,493	7,853	7,853	11,911
361	421101	MARCELLUS	8,562	8,871	8,871	9,775
362	121401	MARGARETVILLE	10,942	12,416	12,416	13,376
363	650701	MARION	9,951	10,933	10,933	11,418
364	621001	MARLBORO	13,729	14,591	14,591	15,483
365	140702	MARYVALE	9,452	10,025	10,025	10,433
366	280523	MASSAPEQUA	14,211	15,232	15,232	16,052
367	512001	MASSENA	8,332	9,131	9,131	10,197
368	581012	MATTITUCK-CUTC	14,814	15,260	15,260	15,967
369	170801	MAYFIELD	8,067	8,827	8,827	10,112
370	110304	MCGRW	10,128	11,222	11,222	11,248
371	521200	MECHANICVILLE	9,092	9,597	9,597	10,377
372	450801	MEDINA	9,550	10,525	10,525	10,826
373	10615	MENANDS	16,576	16,582	16,582	15,870
374	280225	MERRICK	14,803	16,693	16,693	17,936
375	460901	MEXICO	9,693	10,521	10,521	11,702
376	580211	MIDDLE COUNTRY	11,103	12,109	12,109	13,107
377	541001	MIDDLEBURGH	11,983	13,341	13,341	12,453
378	441000	MIDDLETOWN	10,382	11,355	11,355	12,759
379	471101	MILFORD	10,874	11,422	11,422	12,217
380	132201	MILLBROOK	10,071	11,769	11,769	12,902
381	580208	MILLER PLACE	13,114	14,009	14,009	12,922
382	280410	MINEOLA	21,204	22,566	22,566	23,709
383	150801	MINERVA	25,811	27,490	27,490	25,637
384	441101	MINISINK VALLE	9,146	10,099	10,099	10,552
385	210502	MOHAWK	8,656	9,642	9,642	10,758
386	530515	MOHONASEN	7,865	8,047	8,047	8,989
387	441201	MONROE WOODBUR	11,671	12,538	12,538	13,089
388	580306	MONTAUK	21,131	23,842	23,842	31,259
389	591401	MONTICELLO	11,687	12,084	12,084	14,106
390	51301	MORAVIA	9,540	9,940	9,940	10,202
391	150901	MORIAH	10,413	10,922	10,922	11,855
392	471201	MORRIS	9,165	9,185	9,185	10,436
393	512101	MORRISTOWN	11,107	13,150	13,150	13,655
394	250401	MORRISVILLE EA	10,009	11,015	11,015	12,114
395	240901	MOUNT MORRIS	9,744	11,101	11,101	12,120
396	580207	MOUNT SINAI	13,761	14,326	14,326	14,841
397	660900	MOUNT VERNON	14,051	15,367	15,367	16,794
398	212001	MT MARKHAM CSD	9,964	10,836	10,836	11,231
399	660801	MT PLEAS CENT	17,692	18,168	18,168	18,590
400	651501	N. ROSE-WOLCOT	9,498	11,430	11,430	12,030

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401	400900	N. TONAWANDA	9,575	9,630	9,630	10,593
402	500108	NANUET	16,675	17,763	17,763	18,531
403	431201	NAPLES	11,957	13,488	13,488	13,183
404	411501	NEW HARTFORD	11,065	11,712	11,712	11,431
405	280405	NEW HYDE PARK	12,037	13,585	13,585	14,771
406	101601	NEW LEBANON	13,101	13,441	13,441	15,792
407	621101	NEW PALTZ	11,835	12,290	12,290	13,284
408	661100	NEW ROCHELLE	13,098	15,491	15,491	16,138
409	581015	NEW SUFFOLK	13,289	19,419	19,419	N/A
410	300000	NEW YORK CITY	11,023	12,443	12,443	13,527
411	411504	NEW YORK MILLS	11,073	12,248	12,248	11,834
412	650101	NEWARK	9,666	9,934	9,934	11,100
413	600402	NEWARK VALLEY	9,255	10,412	10,412	10,287
414	441600	NEWBURGH	11,407	12,738	12,738	14,796
415	151001	NEWCOMB	39,125	51,675	51,675	43,580
416	400601	NEWFANE	8,779	9,476	9,476	10,086
417	610901	NEWFIELD	8,554	8,923	8,923	9,830
418	400800	NIAGARA FALLS	9,305	10,015	10,015	10,911
419	400701	NIAGARA WHEATF	9,868	9,672	9,672	10,443
420	530301	NISKAYUNA	10,411	11,408	11,408	11,790
421	580103	NORTH BABYLON	11,963	13,353	13,353	14,290
422	280204	NORTH BELLMORE	14,346	15,419	15,419	17,500
423	142201	NORTH COLLINS	11,962	10,361	10,361	13,023
424	10605	NORTH COLONIE	9,640	10,541	10,541	N/A
425	10623	NORTH COLONIE	N/A	N/A	10,541	10,708
426	490801	NORTH GREENBUSH	10,026	10,735	10,735	N/A
427	280229	NORTH MERRICK	15,668	16,678	16,678	17,825
428	661301	NORTH SALEM	19,212	20,267	20,267	20,273
429	280501	NORTH SHORE	18,005	20,288	20,288	23,323
430	420303	NORTH SYRACUSE	9,155	9,332	9,332	10,709
431	630202	NORTH WARREN	13,343	15,288	15,288	15,458
432	131101	NORTHEAST	12,969	15,151	15,151	15,342
433	90501	NORTHEASTERN	9,382	9,825	9,825	11,543
434	580404	NORTHPORT	15,387	16,459	16,459	18,014
435	90901	NORTHRN ADIRON	9,747	10,706	10,706	12,585
436	170901	NORTHVILLE	10,754	12,396	12,396	13,440
437	81200	NORWICH	8,503	9,089	9,089	9,956
438	512201	NORWOOD NORFOL	10,021	10,085	10,085	10,652
439	500304	NYACK	16,020	17,016	17,016	18,240
440	181101	OAKFIELD ALABA	9,346	10,716	10,716	9,994
441	280211	OCEANSIDE	13,675	15,026	15,026	16,067
442	550101	ODESSA MONTOUR	9,953	9,698	9,698	11,363
443	512300	OGDENSBURG	11,998	13,053	13,053	13,953
444	42400	OLEAN	9,145	9,933	9,933	10,976
445	251400	ONEIDA CITY	8,464	10,485	10,485	11,079
446	471400	ONEONTA	10,060	10,915	10,915	11,790
447	421201	ONONDAGA	10,106	10,459	10,459	12,132
448	621201	ONTEORA	14,239	15,687	15,687	18,571
449	171001	OPPENHEIM EPHR	12,178	13,504	13,504	13,204
450	142301	ORCHARD PARK	9,849	10,198	10,198	10,523

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451	412901	ORISKANY	9,696	10,625	10,625	10,992
452	661401	OSSINING	15,525	16,981	16,981	18,293
453	461300	OSWEGO	10,684	12,105	12,105	12,263
454	471601	OTEGO-UNADILLA	9,462	10,367	10,367	11,481
455	600601	OWEGO-APALACHI	10,051	10,347	10,347	11,452
456	81501	OXFORD	10,495	11,678	11,678	11,858
457	280506	OYSTER BAY	19,270	22,633	22,633	22,533
458	581002	OYSTERPONDS	28,674	30,893	30,893	32,931
459	650901	PALMYRA-MACEDO	10,011	10,787	10,787	10,506
460	61601	PANAMA	10,287	10,861	10,861	11,826
461	512501	PARISHVILLE	9,498	9,890	9,890	10,609
462	580224	PATCHOGUE-MEDF	11,402	12,251	12,251	12,814
463	181201	PAVILION	9,698	10,273	10,273	10,682
464	131201	PAWLING	13,989	14,556	14,556	15,571
465	500308	PEARL RIVER	13,277	14,413	14,413	14,854
466	661500	PEEKSKILL	15,279	16,068	16,068	16,431
467	661601	PELHAM	14,768	15,317	15,317	16,187
468	181302	PEMBROKE	9,205	9,919	9,919	11,828
469	261201	PENFIELD	11,459	12,155	12,155	12,346
470	680601	PENN YAN	9,317	10,287	10,287	11,554
471	671201	PERRY	9,832	10,672	10,672	11,041
472	91101	PERU	9,860	11,126	11,126	11,849
473	431301	PHELPS-CLIFTON	9,388	10,623	10,623	11,376
474	462001	PHOENIX	10,791	11,107	11,107	12,226
475	440401	PINE BUSH	9,606	10,576	10,576	11,570
476	131301	PINE PLAINS	11,399	12,380	12,380	14,565
477	60601	PINE VALLEY	10,085	11,072	11,072	11,589
478	200101	PISECO	22,241	26,736	26,736	N/A
479	261401	PITTSFORD	11,870	12,644	12,644	12,722
480	280518	PLAINEDGE	12,076	13,977	13,977	15,701
481	280504	PLAINVIEW	15,891	16,964	16,964	17,945
482	91200	PLATTSBURGH	11,637	12,526	12,526	13,607
483	660809	PLEASANTVILLE	14,471	15,490	15,490	16,558
484	660802	POCANTICO HILL	32,101	36,989	36,989	46,333
485	211103	POLAND	10,141	10,558	10,558	11,690
486	51101	PORT BYRON	9,418	10,138	10,138	10,865
487	661904	PORT CHESTER	11,600	12,674	12,674	13,413
488	580206	PORT JEFFERSON	19,872	21,369	21,369	21,199
489	441800	PORT JERVIS	10,910	11,776	11,776	11,904
490	280404	PORT WASHINGTO	18,011	19,475	19,475	20,028
491	42901	PORTVILLE	9,153	9,726	9,726	10,058
492	512902	POTSDAM	9,979	10,840	10,840	11,390
493	131500	POUGHKEEPSIE	11,044	11,195	11,195	12,524
494	572301	PRATTSBURG	9,697	9,983	9,983	10,626
495	461801	PULASKI	8,770	10,270	10,270	11,580
496	641401	PUTNAM	20,620	23,086	23,086	23,966
497	480503	PUTNAM VALLEY	15,825	16,294	16,294	16,888
498	630902	QUEENSBURY	8,374	8,801	8,801	9,538
499	580903	QUOGUE	34,967	38,866	38,866	46,916
500	500401	RAMAPO	15,993	17,571	17,571	16,919

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
501	43001	RANDOLPH	8,957	9,806	9,806	10,720
502	10402	RAVENA COEYMAN	11,446	11,936	11,936	13,365
503	651503	RED CREEK	8,978	9,664	9,664	10,909
504	131701	RED HOOK	10,871	12,091	12,091	13,202
505	411701	REMSSEN	11,110	13,154	13,154	14,790
506	580901	REMSSENBURG	28,044	29,102	29,102	36,414
507	491200	RENSELAER	10,247	10,996	10,996	8,883
508	131801	RHINEBECK	13,604	14,204	14,204	16,681
509	472001	RICHFIELD SPRING	9,317	10,271	10,271	10,916
510	62401	RIPLEY	12,402	13,456	13,456	15,941
511	580602	RIVERHEAD	13,909	15,743	15,743	16,076
512	261600	ROCHESTER	10,070	10,868	10,868	12,426
513	280221	ROCKVILLE CENT	16,663	17,397	17,397	18,767
514	580209	ROCKY POINT	11,446	12,271	12,271	12,823
515	411800	ROME	9,456	10,778	10,778	11,413
516	560603	ROMULUS	11,185	11,830	11,830	14,567
517	620901	RONDOUT VALLEY	14,241	15,569	15,569	17,586
518	280208	ROOSEVELT	16,475	16,845	16,845	16,939
519	591301	ROSCOE	15,149	17,289	17,289	17,826
520	280403	ROSLYN	18,741	20,081	20,081	20,898
521	121502	ROXBURY	14,123	15,068	15,068	16,963
522	401201	ROYALTON HARTLAND	8,755	9,683	9,683	10,207
523	261701	RUSH HENRIETTA	11,226	11,738	11,738	12,330
524	661800	RYE	19,091	18,846	18,846	18,927
525	661901	RYE NECK	16,189	18,168	18,168	18,340
526	521401	S. GLENS FALLS	9,117	9,844	9,844	10,667
527	580413	S. HUNTINGTON	14,159	15,252	15,252	15,758
528	220101	S. JEFFERSON	7,368	8,069	8,069	9,183
529	121702	S. KORTRIGHT	12,416	13,857	13,857	13,381
530	500301	S. ORANGETOWN	14,278	14,729	14,729	15,503
531	580205	SACHEM	12,482	13,313	13,313	13,251
532	221001	SACKETTS HARBOR	10,255	10,726	10,726	10,104
533	580305	SAG HARBOR	20,395	23,814	23,814	24,716
534	580910	SAGAPONACK	13,289	19,419	19,419	N/A
535	43200	SALAMANCA	9,448	11,211	11,211	11,582
536	641501	SALEM	9,675	11,650	11,650	13,082
537	161201	SALMON RIVER	12,370	11,610	11,610	13,576
538	461901	SANDY CREEK	10,230	10,747	10,747	12,911
539	91402	SARANAC	8,832	9,535	9,535	11,333
540	161401	SARANAC LAKE	11,656	13,140	13,140	13,999
541	521800	SARATOGA SPRING	10,177	10,496	10,496	10,532
542	621601	SAUGERTIES	10,068	11,303	11,303	11,825
543	411603	SAUQUOIT VALLEY	9,000	10,057	10,057	10,956
544	580504	SAYVILLE	12,579	15,751	15,751	16,460
545	662001	SCARSDALE	19,135	20,819	20,819	22,148
546	530501	SCHALMONT	11,630	12,830	12,830	13,862
547	530600	SCHENECTADY	9,590	10,272	10,272	12,014
548	470901	SCHENEVUS	10,974	11,100	11,100	12,566
549	491501	SCHODACK	10,509	11,674	11,674	12,169
550	541201	SCHOHARIE	9,913	10,626	10,626	12,138

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
551	151401	SCHROON LAKE	14,073	16,058	16,058	15,368
552	521701	SCHUYLERVILLE	10,735	11,600	11,600	11,472
553	22401	SCIO	10,157	12,133	12,133	11,968
554	530202	SCOTIA GLENVIL	9,606	10,245	10,245	11,013
555	280206	SEAFORD	13,451	14,547	14,547	15,660
556	560701	SENECA FALLS	9,687	10,676	10,676	11,016
557	280252	SEWANHAKA	10,781	12,243	12,243	12,522
558	541401	SHARON SPRINGS	14,169	12,510	12,510	14,154
559	580701	SHELTER ISLAND	25,991	25,456	25,456	27,980
560	520302	SHENENDEHOWA	9,905	10,502	10,502	11,060
561	82001	SHERBURNE EARL	8,687	9,264	9,264	10,707
562	62601	SHERMAN	9,446	10,611	10,611	10,196
563	412000	SHERRILL	9,105	9,667	9,667	9,651
564	580601	SHOREHAM-WADIN	13,116	14,471	14,471	15,726
565	121601	SIDNEY	9,571	11,217	11,217	11,628
566	61501	SILVER CREEK	9,574	10,079	10,079	11,223
567	421601	SKANEATELES	11,552	12,010	12,010	12,337
568	140709	SLOAN	10,003	10,860	10,860	11,946
569	580801	SMITHTOWN	12,667	13,272	13,272	13,969
570	651201	SODUS	11,350	12,258	12,258	12,623
571	420702	SOLVAY	9,801	10,721	10,721	11,760
572	662101	SOMERS	14,552	15,818	15,818	16,825
573	10601	SOUTH COLONIE	10,750	11,422	11,422	12,137
574	580235	SOUTH COUNTRY	14,265	15,404	15,404	15,951
575	231101	SOUTH LEWIS	10,725	11,777	11,777	13,513
576	560501	SOUTH SENECA	11,031	12,642	12,642	13,574
577	580906	SOUTHAMPTON	21,695	24,096	24,096	23,414
578	50701	SOUTHERN CAYUG	11,571	12,338	12,338	13,419
579	581005	SOUTHOLD	14,515	15,431	15,431	17,390
580	60201	SOUTHWESTERN	9,357	9,691	9,691	10,202
581	131602	SPACKENKILL	13,604	14,417	14,417	16,018
582	600801	SPENCER VAN ET	7,417	8,771	8,771	10,808
583	261001	SPENCERPORT	9,781	10,259	10,259	10,533
584	580304	SPRINGS	16,860	19,627	19,627	21,775
585	141101	SPRINGVILLE-GR	9,615	10,053	10,053	11,347
586	271102	ST JOHNSVILLE	9,869	10,561	10,561	11,910
587	161801	ST REGIS FALLS	9,824	11,664	11,664	13,886
588	121701	STAMFORD	9,430	11,560	11,560	13,915
589	401001	STARPOINT	8,219	9,058	9,058	9,789
590	522001	STILLWATER	8,313	8,971	8,971	9,269
591	251501	STOCKBRIDGE VA	8,517	9,838	9,838	10,638
592	591502	SULLIVAN WEST	12,938	14,012	14,012	15,001
593	30601	SUSQUEHANNA VA	10,413	11,919	11,919	12,156
594	140207	SWEET HOME	10,161	10,961	10,961	11,954
595	280502	SYOSSET	17,670	19,526	19,526	20,242
596	421800	SYRACUSE	8,884	10,362	10,362	11,933
597	660401	TARRYTOWN	14,846	16,455	16,455	16,449
598	220701	THOUSAND ISLAND	10,108	11,183	11,183	12,027
599	580201	THREE VILLAGE	13,098	14,277	14,277	15,887
600	151501	TICONDEROGA	11,278	13,258	13,258	13,455

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
601	600903	TIOGA	7,712	8,451	8,451	9,445
602	142500	TONAWANDA	9,165	9,779	9,779	10,051
603	211901	TOWN OF WEBB	16,513	18,823	18,823	20,143
604	591201	TRI VALLEY	15,653	16,260	16,260	18,324
605	491700	TROY	11,481	13,360	13,360	15,986
606	611001	TRUMANSBURG	9,597	10,114	10,114	10,222
607	660302	TUCKAHOE	17,306	18,600	18,600	20,009
608	580913	TUCKAHOE COMMO	24,583	24,715	24,715	28,200
609	421902	TULLY	8,785	9,585	9,585	10,036
610	160101	TUPPER LAKE	8,797	10,281	10,281	11,474
611	441903	TUXEDO	16,710	18,323	18,323	17,470
612	81003	UNADILLA	9,879	10,725	10,725	11,393
613	51901	UNION SPRINGS	9,910	11,969	11,969	12,059
614	280202	UNIONDALE	16,518	18,310	18,310	19,864
615	31501	UNION-ENDICOTT	10,331	10,955	10,955	11,048
616	412300	UTICA	7,860	8,441	8,441	9,280
617	280213	V STR THIRTEEN	14,899	15,193	15,193	15,487
618	280224	V STR TWENTY-F	18,799	18,886	18,886	19,237
619	660805	VALHALLA	18,472	19,877	19,877	20,983
620	280251	VALLEY STR CHS	12,487	13,762	13,762	14,838
621	280230	VALLEY STR UF	16,391	17,598	17,598	19,277
622	441301	VALLEY-MONTGMR	9,209	9,864	9,864	11,222
623	211701	VAN HORNSVILLE	12,184	12,211	12,211	11,991
624	31601	VESTAL	10,513	11,413	11,413	12,166
625	431701	VICTOR	8,790	9,618	9,618	9,518
626	11003	VOORHEESVILLE	11,206	12,377	12,377	12,742
627	260803	W. IRONDEQUOIT	9,590	10,711	10,711	10,413
628	580302	WAINSCOTT	13,289	19,419	19,419	N/A
629	621801	WALLKILL	9,807	10,532	10,532	10,997
630	121901	WALTON	9,575	9,739	9,739	10,718
631	280223	WANTAGH	12,237	13,441	13,441	13,593
632	132101	WAPPINGERS	9,186	10,055	10,055	10,887
633	631201	WARRENSBURG	12,837	14,290	14,290	14,836
634	671501	WARSAW	10,242	12,111	12,111	11,643
635	442101	WARWICK VALLEY	10,863	11,493	11,493	12,198
636	440102	WASHINGTONVILL	10,842	11,687	11,687	11,931
637	522101	WATERFORD	10,199	12,183	12,183	12,844
638	561006	WATERLOO CENT	8,549	9,295	9,295	10,263
639	222000	WATERTOWN	7,344	7,934	7,934	8,985
640	411902	WATERVILLE	9,725	10,734	10,734	10,900
641	11200	WATERVLIET	8,850	9,070	9,070	9,404
642	550301	WATKINS GLEN	9,323	9,562	9,562	10,489
643	600101	WAVERLY	8,126	8,476	8,476	9,059
644	573002	WAYLAND-COHOCT	9,018	9,611	9,611	10,796
645	650801	WAYNE	9,957	10,781	10,781	11,034
646	261901	WEBSTER	10,136	10,427	10,427	10,872
647	50301	WEEDSPORT	9,113	10,421	10,421	11,820
648	200901	WELLS	19,282	18,500	18,500	21,823
649	22601	WELLSVILLE	9,976	11,455	11,455	11,681
650	580102	WEST BABYLON	12,571	13,840	13,840	14,848

Charter Funding By NYS School District

* It is forecasted that 2010-11 will be the same rate as 2008-09 and 2009-10

	District Code	School District Name	Final 2007-08 Basic Tuition	Final 2008-09 Basic Tuition	Final 2009-10 Basic Tuition	Preliminary 2010-11 Basic Tuition
651	210302	WEST CANADA VA	9,181	10,384	10,384	11,723
652	420101	WEST GENESEE	9,079	9,820	9,820	10,199
653	280227	WEST HEMPSTEAD	14,351	14,732	14,732	16,755
654	580509	WEST ISLIP	11,756	12,679	12,679	13,799
655	142801	WEST SENECA	8,555	8,948	8,948	10,179
656	40204	WEST VALLEY	12,044	13,408	13,408	13,623
657	280401	WESTBURY	15,640	17,435	17,435	18,224
658	62901	WESTFIELD	9,929	10,983	10,983	11,891
659	580902	WESTHAMPTON BE	16,314	18,052	18,052	18,354
660	420701	WESTHILL	9,708	10,372	10,372	10,634
661	412801	WESTMORELAND	10,095	11,188	11,188	11,938
662	151601	WESTPORT	12,345	11,244	11,244	13,649
663	262001	WHEATLAND CHIL	12,694	14,442	14,442	15,259
664	170301	WHEELERVILLE	13,709	15,077	15,077	18,435
665	662200	WHITE PLAINS	17,123	18,811	18,811	19,443
666	641701	WHITEHALL	10,230	10,832	10,832	12,236
667	412902	WHITESBORO	9,275	9,505	9,505	9,886
668	22101	WHITESVILLE	9,180	10,241	10,241	10,904
669	31401	WHITNEY POINT	8,922	9,883	9,883	11,324
670	580232	WILLIAM FLOYD	12,659	13,077	13,077	14,168
671	651402	WILLIAMSON	9,984	11,381	11,381	12,113
672	140203	WILLIAMSVILLE	10,131	10,494	10,494	10,904
673	151701	WILLSBORO	12,153	13,461	13,461	15,355
674	401501	WILSON	9,136	10,584	10,584	10,386
675	191401	WINDHAM ASHLAN	15,266	14,868	14,868	18,838
676	31701	WINDSOR	9,118	9,813	9,813	10,115
677	472506	WORCESTER	10,398	10,422	10,422	12,352
678	580109	WYANDANCH	14,812	15,791	15,791	16,666
679	490804	WYNANTSKILL	9,237	10,613	10,613	11,243
680	671002	WYOMING	11,116	14,555	14,555	15,376
681	662300	YONKERS	12,015	12,006	12,006	14,520
682	241701	YORK	8,824	9,863	9,863	10,694
683	43501	YORKSHIRE-PIONE	10,533	10,566	10,566	11,406
684	662402	YORKTOWN	13,595	14,859	14,859	16,743



Charter Schools Institute
The State University of New York

New Application Budget(s) & Cash Flow(s) Template
for SUNY Authorized Charter Schools

Icahn Charter School 6

Contact Name: Richard Santiago

Contact Email:

Contact Phone:

Examples

Pre-Opening Period

January 1, 2012 to June 30, 2012

Operational Year ONE

July 1, 2012 to June 30, 2013

Icahn Charter School 6
PROJECTED BUDGET / OPERATING PLAN FOR PRE-OPENING PERIOD
January 1, 2012 to June 30, 2012

Total Revenue	94,000
Total Expenses	84,000
Net Income	10,000
Actual Student Enrollment	-
Total Paid Student Enrollment	-

DESCRIPTION OF ASSUMPTIONS

	START-UP PERIOD

REVENUE

REVENUES FROM STATE SOURCES

Per Pupil Revenue

CY Per Pupil Rate

School District 1 (NYC)	-	-
School District 2 (Enter Name)	-	-
School District 3 (Enter Name)	-	-
School District 4 (Enter Name)	-	-
School District 5 (Enter Name)	-	-
School District 6 (Enter Name)	-	-
School District 7 (Enter Name)	-	-
School District 8 (Enter Name)	-	-
School District 9 (Enter Name)	-	-
School District 10 (Enter Name)	-	-
School District 11 (Enter Name)	-	-
School District 12 (Enter Name)	-	-
School District 13 (Enter Name)	-	-
School District 14 (Enter Name)	-	-
School District 15 (Enter Name)	-	-
School District - ALL OTHER	-	-

TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding)

Special Education Revenue

Grants

Stimulus

DYCD (Department of Youth and Community Developmt.)

Other

Other

TOTAL REVENUE FROM STATE SOURCES

REVENUE FROM FEDERAL FUNDING

IDEA Special Needs

Title I

Title Funding - Other

School Food Service (Free Lunch)

Grants

Charter School Program (CSP) Planning & Implementation

Other

Other

TOTAL REVENUE FROM FEDERAL SOURCES

LOCAL and OTHER REVENUE

Contributions and Donations

Fundraising

Erate Reimbursement

Earnings on Investments

Interest Income

Food Service (Income from meals)

Text Book

OTHER

TOTAL REVENUE FROM LOCAL and OTHER SOURCES

TOTAL REVENUE	94,000

Foundation for a Greater Opportunity

Icahn Charter School 6
PROJECTED BUDGET / OPERATING PLAN FOR PRE-OPENING PERIOD
January 1, 2012 to June 30, 2012

Total Revenue	94,000	DESCRIPTION OF ASSUMPTIONS
Total Expenses	84,000	
Net Income	10,000	
Actual Student Enrollment	-	
Total Paid Student Enrollment	-	

**START-UP
PERIOD**

EXPENSES

ADMINISTRATIVE STAFF PERSONNEL COSTS

	No. of Positions	
Executive Management	-	-
Instructional Management	1.00	45,000
Deans, Directors & Coordinators	-	-
CFO / Director of Finance	-	-
Operation / Business Manager	1.00	6,000
Administrative Staff	-	-
TOTAL ADMINISTRATIVE STAFF	2.00	51,000

INSTRUCTIONAL PERSONNEL COSTS

Teachers - Regular	-	-
Teachers - SPED	-	-
Substitute Teachers	-	-
Teaching Assistants	-	-
Specialty Teachers	-	-
Aides	-	-
Therapists & Counselors	-	-
Other	-	-
TOTAL INSTRUCTIONAL	-	-

NON-INSTRUCTIONAL PERSONNEL COSTS

Nurse	-	-
Librarian	-	-
Custodian	-	-
Security	-	-
Other	-	-
TOTAL NON-INSTRUCTIONAL	-	-

SUBTOTAL PERSONNEL SERVICE COSTS

2.00	51,000

PAYROLL TAXES AND BENEFITS

Payroll Taxes	10,284
Fringe / Employee Benefits	-
Retirement / Pension	-
TOTAL PAYROLL TAXES AND BENEFITS	10,284

TOTAL PERSONNEL SERVICE COSTS

2.00	61,284

CONTRACTED SERVICES

Accounting / Audit	13,816
Legal	-
Management Company Fee	-
Nurse Services	-
Food Service / School Lunch	-
Payroll Services	-
Special Ed Services	-
Titelment Services (i.e. Title I)	-
Other Purchased / Professional / Consulting	-
TOTAL CONTRACTED SERVICES	13,816

SCHOOL OPERATIONS

Board Expenses	-
Classroom / Teaching Supplies & Materials	400
Special Ed Supplies & Materials	-
Textbooks / Workbooks	-
Supplies & Materials other	-
Equipment / Furniture	-
Telephone	840
Technology	-
Student Testing & Assessment	-
Field Trips	-
Transportation (student)	-
Student Services - other	-
Office Expense	2,160
Staff Development	3,000
Staff Recruitment	1,000
Student Recruitment / Marketing	1,500
School Meals / Lunch	-
Travel (Staff)	-
Fundraising	-
Other	-
TOTAL SCHOOL OPERATIONS	8,900

FACILITY OPERATION & MAINTENANCE

Insurance	-
Janitorial	-
Building and Land Rent / Lease	-
Repairs & Maintenance	-
Equipment / Furniture	-
Security	-
Utilities	-
TOTAL FACILITY OPERATION & MAINTENANCE	-

DEPRECIATION & AMORTIZATION

-

DISSOLUTION ESCROW & RESERVES / CONTINGENCY

-

TOTAL EXPENSES

84,000

NET INCOME

10,000

Icahn Charter School 6
PROJECTED BUDGET / OPERATING PLAN FOR PRE-OPENING PERIOD
January 1, 2012 to June 30, 2012

Total Revenue	94,000	DESCRIPTION OF ASSUMPTIONS
Total Expenses	84,000	
Net Income	10,000	
Actual Student Enrollment	-	
Total Paid Student Enrollment	-	

	START-UP PERIOD

ENROLLMENT - *School Districts Are Linked To Above Entries*

School District 1 (NYC)	-
School District 2 (Enter Name)	-
School District 3 (Enter Name)	-
School District 4 (Enter Name)	-
School District 5 (Enter Name)	-
School District 6 (Enter Name)	-
School District 7 (Enter Name)	-
School District 8 (Enter Name)	-
School District 9 (Enter Name)	-
School District 10 (Enter Name)	-
School District 11 (Enter Name)	-
School District 12 (Enter Name)	-
School District 13 (Enter Name)	-
School District 14 (Enter Name)	-
School District 15 (Enter Name)	-
School District - ALL OTHER	-
TOTAL ENROLLMENT	-

REVENUE PER PUPIL	-

EXPENSES PER PUPIL	-

Icahn Charter School 6 PROJECTED CASH FLOW FOR PRE-OPENING PERIOD January 1, 2012 to June 30, 2012							
Total Revenue	94,000	-	-	-	-	-	94,000
Total Expenses	-	11,915	25,731	12,915	12,616	20,823	84,000
Net Income	94,000	(11,915)	(25,731)	(12,915)	(12,616)	(20,823)	10,000
Cash Flow Adjustments	-	(1,000)	28	28	28	(8,806)	(9,722)
Beginning Cash Balance	-	94,000	81,085	55,382	42,495	29,907	-
Net Income	94,000	81,085	55,382	42,495	29,907	278	278
	January	February	March	April	May	June	TOTAL
REVENUE							
REVENUES FROM STATE SOURCES							
Per Pupil Revenue							
School District 1 (NYC)	-	-	-	-	-	-	-
School District 2 (Enter Name)	-	-	-	-	-	-	-
School District 3 (Enter Name)	-	-	-	-	-	-	-
School District 4 (Enter Name)	-	-	-	-	-	-	-
School District 5 (Enter Name)	-	-	-	-	-	-	-
School District 6 (Enter Name)	-	-	-	-	-	-	-
School District 7 (Enter Name)	-	-	-	-	-	-	-
School District 8 (Enter Name)	-	-	-	-	-	-	-
School District 9 (Enter Name)	-	-	-	-	-	-	-
School District 10 (Enter Name)	-	-	-	-	-	-	-
School District 11 (Enter Name)	-	-	-	-	-	-	-
School District 12 (Enter Name)	-	-	-	-	-	-	-
School District 13 (Enter Name)	-	-	-	-	-	-	-
School District 14 (Enter Name)	-	-	-	-	-	-	-
School District 15 (Enter Name)	-	-	-	-	-	-	-
School District - ALL OTHER	-	-	-	-	-	-	-
TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding)	-	-	-	-	-	-	-
Special Education Revenue	-	-	-	-	-	-	-
Grants							
Stimulus	-	-	-	-	-	-	-
DYCD (Department of Youth and Community Development)	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
TOTAL REVENUE FROM STATE SOURCES	-	-	-	-	-	-	-
REVENUE FROM FEDERAL FUNDING							
IDEA Special Needs	-	-	-	-	-	-	-
Title I	-	-	-	-	-	-	-
Title Funding - Other	-	-	-	-	-	-	-
School Food Service (Free Lunch)	-	-	-	-	-	-	-
Grants							
Charter School Program (CSP) Planning & Implementation	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
TOTAL REVENUE FROM FEDERAL SOURCES	-	-	-	-	-	-	-
LOCAL and OTHER REVENUE							
Contributions and Donations	94,000	-	-	-	-	-	94,000
Fundraising	-	-	-	-	-	-	-
Erate Reimbursement	-	-	-	-	-	-	-
Earnings on Investments	-	-	-	-	-	-	-
Interest Income	-	-	-	-	-	-	-
Food Service (Income from meals)	-	-	-	-	-	-	-
Text Book	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-
TOTAL REVENUE FROM LOCAL and OTHER SOURCES	94,000	-	-	-	-	-	94,000
TOTAL REVENUE	94,000	-	-	-	-	-	94,000

Icahn Charter School 6 PROJECTED CASH FLOW FOR PRE-OPENING PERIOD January 1, 2012 to June 30, 2012							
Total Revenue	94,000	-	-	-	-	-	94,000
Total Expenses	-	11,915	25,731	12,915	12,616	20,823	84,000
Net Income	94,000	(11,915)	(25,731)	(12,915)	(12,616)	(20,823)	10,000
Cash Flow Adjustments	-	(1,000)	28	28	28	(8,806)	(9,722)
Beginning Cash Balance	-	94,000	81,085	55,382	42,495	29,907	-
Net Income	94,000	81,085	55,382	42,495	29,907	278	278
	January	February	March	April	May	June	TOTAL
EXPENSES							
ADMINISTRATIVE STAFF PERSONNEL COSTS							
No. of Positions							
Executive Management	-	-	-	-	-	-	-
Instructional Management	1.00	9 000	9 000	9 000	9 000	9 000	45 000
Deans, Directors & Coordinators	-	-	-	-	-	-	-
CFO / Director of Finance	1.00	-	-	-	1 000	5 000	6 000
Operation / Business Manager	-	-	-	-	-	-	-
Administrative Staff	-	-	-	-	-	-	-
TOTAL ADMINISTRATIVE STAFF	2.00	9,000	9,000	9,000	10,000	1,000	51,000
INSTRUCTIONAL PERSONNEL COSTS							
Teachers - Regular	-	-	-	-	-	-	-
Teachers - SPED	-	-	-	-	-	-	-
Substitute Teachers	-	-	-	-	-	-	-
Teaching Assistants	-	-	-	-	-	-	-
Specialty Teachers	-	-	-	-	-	-	-
Aides	-	-	-	-	-	-	-
Therapists & Counselors	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
TOTAL INSTRUCTIONAL	-	-	-	-	-	-	-
NON INSTRUCTIONAL PERSONNEL COSTS							
Nurse	-	-	-	-	-	-	-
Librarian	-	-	-	-	-	-	-
Custodian	-	-	-	-	-	-	-
Security	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
TOTAL NON-INSTRUCTIONAL	-	-	-	-	-	-	-
SUBTOTAL PERSONNEL SERVICE COSTS	2.00	9 000	9 000	9 000	10 000	14 000	51 000
PAYROLL TAXES AND BENEFITS							
Payroll Taxes	-	1 815	1 815	1 815	2 016	2 823	10 284
Fringe / Employee Benefits	-	-	-	-	-	-	-
Retirement / Pensions	-	-	-	-	-	-	-
TOTAL PAYROLL TAXES AND BENEFITS	-	1 815	1 815	1 815	2 016	2 823	10 284
TOTAL PERSONNEL SERVICE COSTS	2.00	10 815	10 815	10 815	12 016	16 823	61 284
CONTRACTED SERVICES							
Accounting / Audit	-	-	13 816	-	-	-	13 816
Legal	-	-	-	-	-	-	-
Management Company Fee	-	-	-	-	-	-	-
Nurse Services	-	-	-	-	-	-	-
Food Service / School Lunch	-	-	-	-	-	-	-
Payroll Services	-	-	-	-	-	-	-
Special Ed Services	-	-	-	-	-	-	-
Title Services (i.e. Title I)	-	-	-	-	-	-	-
Other Purchased / Professional / Consulting	-	-	-	-	-	-	-
TOTAL CONTRACTED SERVICES	-	-	13 816	-	-	-	13 816
SCHOOL OPERATIONS							
Board Expenses	-	-	-	-	-	-	-
Classroom / Teaching Supplies & Materials	-	-	-	-	-	400	400
Special Ed Supplies & Materials	-	-	-	-	-	-	-
Textbooks / Workbooks	-	-	-	-	-	-	-
Supplies & Materials other	-	-	-	-	-	-	-
Equipment / Furniture	-	-	-	-	-	-	-
Telephone	-	168	168	168	168	168	840
Technology	-	432	432	432	432	432	2 160
Student Testing & Assessment	-	-	-	-	-	-	-
Field Trips	-	-	-	-	-	-	-
Transportation (student)	-	-	-	-	-	-	-
Student Services - other	-	-	-	-	-	-	-
Office Expense	-	-	-	-	-	-	-
Staff Development	-	-	-	-	-	3 000	3 000
Staff Recruitment	-	-	-	1 000	-	-	1 000
Student Recruitment / Marketing	-	500	500	500	-	-	1 500
School Meals / Lunch	-	-	-	-	-	-	-
Travel (Staff)	-	-	-	-	-	-	-
Fundraising	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
TOTAL SCHOOL OPERATIONS	-	1 100	1 100	2 100	600	4 000	8 900
FACILITY OPERATION & MAINTENANCE							
Insurance	-	-	-	-	-	-	-
Janitorial	-	-	-	-	-	-	-
Building and Land Rent / Lease	-	-	-	-	-	-	-
Repairs & Maintenance	-	-	-	-	-	-	-
Equipment / Furniture	-	-	-	-	-	-	-
Security	-	-	-	-	-	-	-
Utilities	-	-	-	-	-	-	-
TOTAL FACILITY OPERATION & MAINTENANCE	-	-	-	-	-	-	-
DEPRECIATION & AMORTIZATION							
DISSOLUTION ESCROW & RESERVES / CONTINGENCY	-	-	-	-	-	-	-
TOTAL EXPENSES	-	11,915	25,731	12,915	12,616	20,823	84,000
NET INCOME	94,000	(11,915)	(25,731)	(12,915)	(12,616)	(20,823)	10,000
CASH FLOW ADJUSTMENTS							
OPERATING ACTIVITIES							
Example - Add Back Depreciation	-	-	28	28	28	194	278
Other	-	-	-	-	-	-	-
Total Operating Activities	-	-	28	28	28	194	278
INVESTMENT ACTIVITIES							
Example - Subtract Property and Equipment Expenditures	-	(1 000)	-	-	-	(9 000)	(10 000)
Other	-	-	-	-	-	-	-
Total Investment Activities	-	(1 000)	-	-	-	(9 000)	(10 000)
FINANCING ACTIVITIES							
Example - Add Expected Proceeds from a Loan or Line of Credit	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-
Total Financing Activities	-	-	-	-	-	-	-
Total Cash Flow Adjustments	-	(1,000)	28	28	28	(8,806)	(9,722)
NET INCOME	94,000	(12,915)	(25,703)	(12,887)	(12,588)	(29,629)	278
Beginning Cash Balance	-	94 000	81 085	55 382	42 495	29 907	-
ENDING CASH BALANCE	94,000	81,085	55,382	42,495	29,907	278	278

Icahn Charter School 6													
PROJECTED CASH FLOW FOR DISCRETIONARY PLANNING YEAR *													
July 1, 20XX to June 30, 20XX													
* This section should be left blank unless and/or until the charter agreement is duly modified to include a planning year													
Total Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Expenses	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income	-	-	-	-	-	-	-	-	-	-	-	-	-
Cash Flow Adjustments	-	-	-	-	-	-	-	-	-	-	-	-	-
Beginning Cash Balance	-	-	-	-	-	-	-	-	-	-	-	-	-
Net Income	-	-	-	-	-	-	-	-	-	-	-	-	-
	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL
REVENUE													
REVENUES FROM STATE SOURCES													
Per Pupil Revenue													
School District 1 (NYC)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 2 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 3 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 4 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 5 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 6 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 7 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 8 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 9 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 10 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 11 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 12 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 13 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 14 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District 15 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School District - ALL OTHER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding)	-	-	-	-	-	-	-	-	-	-	-	-	-
Special Educat on Revenue	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants													
Stimulus	-	-	-	-	-	-	-	-	-	-	-	-	-
DYCD (Department of Youth and Community Developm.)	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM STATE SOURCES	-	-	-	-	-	-	-	-	-	-	-	-	-
REVENUE FROM FEDERAL FUNDING													
IDEA Special Needs	-	-	-	-	-	-	-	-	-	-	-	-	-
Title I	-	-	-	-	-	-	-	-	-	-	-	-	-
Title Funding - Other	-	-	-	-	-	-	-	-	-	-	-	-	-
School Food Service (Free Lunch)	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants													
Charter School Program (CSP) Planning & Implementation	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM FEDERAL SOURCES	-	-	-	-	-	-	-	-	-	-	-	-	-
LOCAL AND OTHER REVENUE													
Contributions and Donations	-	-	-	-	-	-	-	-	-	-	-	-	-
Fundraising	-	-	-	-	-	-	-	-	-	-	-	-	-
Erate Reimbursement	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings on Investments	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Service (Income from meals)	-	-	-	-	-	-	-	-	-	-	-	-	-
Text Book	-	-	-	-	-	-	-	-	-	-	-	-	-
OTHER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM LOCAL AND OTHER SOURCES	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE													
	-	-	-	-	-	-	-	-	-	-	-	-	-

Icahn Charter School 6
PROJECTED BUDGET / OPERATING PLAN FOR YEAR ONE
July 1, 2012 to June 30, 2013

DESCRIPTION OF ASSUMPTIONS

Total Revenue	1,382,982	28,892	-	-134,200	1,536,074
Total Expenses	1,101,301	45,977	-	-264,348	1,411,625
Net Income	281,681	(17,085)	-	(140,148)	124,449
Actual Student Enrollment	108	-			108
Total Paid Student Enrollment	108	-			108

		PROGRAM SERVICES			SUPPORT SERVICES		
		REGULAR EDUCATION	SPECIAL EDUCATION	OTHER	FUNDRAISING	MANAGEMENT & GENERAL	TOTAL
REVENUE							
REVENUES FROM STATE SOURCES							
Per Pupil Revenue	CY Per Pupil Rate						
School District 1 (NYC)	12,443	1,219,644	-	-	-	124,200	1,343,844
School District 2 (Enter Name)	-	-	-	-	-	-	-
School District 3 (Enter Name)	-	-	-	-	-	-	-
School District 4 (Enter Name)	-	-	-	-	-	-	-
School District 5 (Enter Name)	-	-	-	-	-	-	-
School District 6 (Enter Name)	-	-	-	-	-	-	-
School District 7 (Enter Name)	-	-	-	-	-	-	-
School District 8 (Enter Name)	-	-	-	-	-	-	-
School District 9 (Enter Name)	-	-	-	-	-	-	-
School District 10 (Enter Name)	-	-	-	-	-	-	-
School District 11 (Enter Name)	-	-	-	-	-	-	-
School District 12 (Enter Name)	-	-	-	-	-	-	-
School District 13 (Enter Name)	-	-	-	-	-	-	-
School District 14 (Enter Name)	-	-	-	-	-	-	-
School District 15 (Enter Name)	-	-	-	-	-	-	-
School District - ALL OTHER	-	-	-	-	-	-	-
TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding)	12,443	1,219,644	-	-	-	124,200	1,343,844
Special Education Revenue		-	19,000	-	-	-	19,000
Grants		-	-	-	-	-	-
Stimulus		-	-	-	-	-	-
DYCD (Department of Youth and Community Developmt.)		-	-	-	-	-	-
Other		-	-	-	-	-	-
Other		-	-	-	-	-	-
TOTAL REVENUE FROM STATE SOURCES		1,219,644	19,000	-	-	124,200	1,362,844
REVENUE FROM FEDERAL FUNDING							
IDEA Special Needs		-	9,892	-	-	-	9,892
Title I		81,533	-	-	-	-	81,533
Title Funding - Other		10,000	-	-	-	-	10,000
School Food Service (Free Lunch)		-	-	-	-	-	-
Grants		-	-	-	-	-	-
Charter School Program (CSP) Planning & Implementation		-	-	-	-	-	-
Other		-	-	-	-	-	-
Other		-	-	-	-	-	-
TOTAL REVENUE FROM FEDERAL SOURCES		91,533	9,892	-	-	-	101,425
LOCAL and OTHER REVENUE							
Contributions and Donations		62,805	-	-	-	-	62,805
Fundraising		-	-	-	-	-	-
Erate Reimbursement		-	-	-	-	-	-
Earnings on Investments		-	-	-	-	-	-
Interest Income		-	-	-	-	-	-
Food Service (Income from meals)		-	-	-	-	-	-
Text Book		9,000	-	-	-	-	9,000
OTHER		-	-	-	-	-	-
TOTAL REVENUE FROM LOCAL and OTHER SOURCES		71,805	-	-	-	-	71,805
TOTAL REVENUE		1,382,982	28,892	-	-	124,200	1,536,074

1 student requiring 20%-60% of the day

6 students

From Foundation for Greater Opportunity to cover short fall in Yr 1

Icahn Charter School 6
PROJECTED BUDGET / OPERATING PLAN FOR YEAR ONE
July 1, 2012 to June 30, 2013

DESCRIPTION OF ASSUMPTIONS

Total Revenue	1,382,982	28,892	-	-184,200	1,536,074
Total Expenses	1,101,301	45,977	-	-264,348	1,411,625
Net Income	281,681	(17,085)	-	(140,148)	124,449
Actual Student Enrollment	108	-			108
Total Paid Student Enrollment	108	-			108
	PROGRAM SERVICES			SUPPORT SERVICES	
	REGULAR EDUCATION	SPECIAL EDUCATION	OTHER	FUNDRAISING	MANAGEMENT & GENERAL
					TOTAL
EXPENSES					
ADMINISTRATIVE STAFF PERSONNEL COSTS					
	No. of Positions				
Executive Management	0.08	-	-	-	26,018
Instructional Management	1.00	130,000	-	-	130,000
Deans, Directors & Coordinators	0.08	9,330	-	-	9,330
CFO / Director of Finance	0.08	-	-	-	14,768
Operation / Business Manager	0.32	-	-	-	24,324
Administrative Staff	1.08	-	-	-	45,270
TOTAL ADMINISTRATIVE STAFF	2.64	139,330	-	-	249,710
INSTRUCTIONAL PERSONNEL COSTS					
Teachers - Regular	7.00	378,000	-	-	378,000
Teachers - SPED	0.50	-	25,000	-	25,000
Substitute Teachers	-	-	-	-	-
Teaching Assistants	2.00	46,290	-	-	46,290
Specialty Teachers	0.50	25,000	-	-	25,000
Aides	3.00	22,500	-	-	22,500
Therapists & Counselors	-	-	-	-	-
Other	-	-	-	-	-
TOTAL INSTRUCTIONAL	13.00	471,790	25,000	-	496,790
NON INSTRUCTIONAL PERSONNEL COSTS					
Nurse	-	-	-	-	-
Librarian	-	-	-	-	-
Custodian	1.00	-	-	-	32,000
Security	1.00	-	-	-	32,000
Other	-	-	-	-	-
TOTAL NON-INSTRUCTIONAL	2.00	-	-	-	64,000
SUBTOTAL PERSONNEL SERVICE COSTS	17.64	611,120	25,000	-	174,380
PAYROLL TAXES AND BENEFITS					
Payroll Taxes		50,913	4,064	-	12,869
Fringe / Employee Benefits		75,794	6,063	-	19,201
Retirement / Pension		26,475	2,118	-	6,707
TOTAL PAYROLL TAXES AND BENEFITS		153,181	12,245	-	38,777
TOTAL PERSONNEL SERVICE COSTS	17.64	764,301	37,245	-	213,157
CONTRACTED SERVICES					
Accounting / Audit		-	-	-	-
Legal		840	-	-	160
Management Company Fee		-	-	-	-
Nurse Services		-	-	-	-
Food Service / School Lunch		-	-	-	-
Payroll Services		3,552	-	-	677
Special Ed Services		-	-	-	-
Titlement Services (i.e. Title I)		50,000	-	-	50,000
Other Purchased / Professional / Consulting		5,000	-	-	5,000
TOTAL CONTRACTED SERVICES		59,392	-	-	837
SCHOOL OPERATIONS					
Board Expenses		-	-	-	-
Classroom / Teaching Supplies & Materials		40,000	-	-	40,000
Special Ed Supplies & Materials		-	-	-	-
Textbooks / Workbooks		-	-	-	-
Supplies & Materials other		-	-	-	-
Equipment / Furniture		2,000	-	-	2,000
Telephone		3,744	288	-	768
Technology		17,141	1,319	-	3,516
Student Testing & Assessment		10,000	-	-	10,000
Field Trips		2,000	-	-	2,000
Transportation (student)		-	-	-	-
Student Services - other		-	-	-	-
Office Expense		16,548	-	-	3,152
Staff Development		30,000	-	-	30,000
Staff Recruitment		-	-	-	-
Student Recruitment / Marketing		260	-	-	260
School Meals / Lunch		800	-	-	800
Travel (Staff)		50	-	-	25
Fundraising		-	-	-	-
Other		5,880	-	-	1,120
TOTAL SCHOOL OPERATIONS		128,423	1,607	-	8,581
FACILITY OPERATION & MAINTENANCE					
Insurance		31,551	2,427	-	6,472
Janitorial		-	-	-	12,000
Building and Land Rent / Lease		39,000	3,000	-	8,000
Repairs & Maintenance		4,200	-	-	800
Equipment / Furniture		-	-	-	-
Security		840	-	-	160
Utilities		22,074	1,698	-	4,528
TOTAL FACILITY OPERATION & MAINTENANCE		97,665	7,125	-	31,960
DEPRECIATION & AMORTIZATION					
		30,520	-	-	5,813
DISSOLUTION ESCROW & RESERVES / CONTINGENCY					
		21,000	-	-	4,000
TOTAL EXPENSES		1,101,301	45,977	-	264,348
NET INCOME		281,681	(17,085)	-	(140,148)

Shared Salary for Superintendent @ an 8% expense ratio
Shared Salary for Assessment @ an 8% expense ratio
Shared Salary for Dir. of Ops @ an 8% expense ratio
Shared Salary for 4 Managers @ an 8% expense ratio
Includes Shared Admin position

one third of the required reserve

DESCRIPTION OF ASSUMPTIONS

Total Revenue	1,382,982	28,892	-	-134,200	1,536,074
Total Expenses	1,101,301	45,977	-	-264,348	1,411,625
Net Income	281,681	(17,085)	-	(140,148)	124,449
Actual Student Enrollment	108	-	-	-	108
Total Paid Student Enrollment	108	-	-	-	108

	PROGRAM SERVICES			SUPPORT SERVICES		
	REGULAR EDUCATION	SPECIAL EDUCATION	OTHER	FUNDRAISING	MANAGEMENT & GENERAL	TOTAL

ENROLLMENT - *School Districts Are Linked To Above Entries*

School D strict 1 (NYC)	108	-	-	-	-	108
School D strict 2 (Enter Name)	-	-	-	-	-	-
School D strict 3 (Enter Name)	-	-	-	-	-	-
School D strict 4 (Enter Name)	-	-	-	-	-	-
School D strict 5 (Enter Name)	-	-	-	-	-	-
School D strict 6 (Enter Name)	-	-	-	-	-	-
School D strict 7 (Enter Name)	-	-	-	-	-	-
School D strict 8 (Enter Name)	-	-	-	-	-	-
School D strict 9 (Enter Name)	-	-	-	-	-	-
School D strict 10 (Enter Name)	-	-	-	-	-	-
School D strict 11 (Enter Name)	-	-	-	-	-	-
School D strict 12 (Enter Name)	-	-	-	-	-	-
School D strict 13 (Enter Name)	-	-	-	-	-	-
School D strict 14 (Enter Name)	-	-	-	-	-	-
School D strict 15 (Enter Name)	-	-	-	-	-	-
School D strict - ALL OTHER	-	-	-	-	-	-
TOTAL ENROLLMENT	108	-	-	-	-	108

REVENUE PER PUPIL	12,805	-	-	-	14,223
EXPENSES PER PUPIL	10,197	-	-	-	13,071

Total Revenue	174,792	111,987	125,530	125,530	134,530	125,530	123,030	123,030	123,030	123,030	123,030	123,030	1,536,074
Total Expenses	50,952	99,346	135,455	125,455	125,530	125,955	125,455	125,455	125,955	125,455	125,455	123,036	1,411,626
Net Income	123,840	12,641	(9,925)	75	9,000	(425)	(2,425)	(2,425)	(2,925)	(2,425)	(550)	(6)	124,448
Cash Flow Adjustments	100	(42,068)	(63,555)	3,613	3,613	3,613	3,613	3,613	3,613	3,613	3,613	3,613	(73,003)
Beginning Cash Balance	278	124,218	94,791	21,312	25,000	37,613	40,801	41,989	43,177	43,865	45,053	48,117	278
Net Income	124,218	94,791	21,312	25,000	37,613	40,801	41,989	43,177	43,865	45,053	48,117	51,723	51,723

	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL
* Total Column (Column U) for all lines other than Cash Flow Adjustments should equal the Total Column (Column N) on tab '4.' Year Budget & Assumptions'.													
REVENUE													
REVENUES FROM STATE SOURCES													
Per Pupil Revenue	CY Per Pupil Rate												
School Distr ct 1 (NYC)	12,443												
School Distr ct 2 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 3 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 4 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 5 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 6 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 7 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 8 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 9 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 10 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 11 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 12 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 13 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 14 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct 15 (Enter Name)	-	-	-	-	-	-	-	-	-	-	-	-	-
School Distr ct - ALL OTHER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL Per Pupil Revenue (Average Districts Per Pupil Fund ng)	12,443												
Special Education Revenue	-	-	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	1,900	19,000
Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Stimulus	-	-	-	-	-	-	-	-	-	-	-	-	-
DYCD (Department of Youth and Community Developm.t.)	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM STATE SOURCES	111,987	111,987	113,887	113,887	113,887	113,887	113,887	113,887	113,887	113,887	113,887	113,887	1,362,844
REVENUE FROM FEDERAL FUNDING													
IDEA Special Needs	-	-	989	989	989	989	989	989	989	989	989	989	9,892
T tie I	-	-	8,153	8,153	8,153	8,153	8,153	8,153	8,153	8,153	8,153	8,153	81,533
T tie Funding - Other	-	-	2,500	2,500	2,500	2,500	-	-	-	-	-	-	10,000
School Food Serv ce (Free Lunch)	-	-	-	-	-	-	-	-	-	-	-	-	-
Grants	-	-	-	-	-	-	-	-	-	-	-	-	-
Charter School Program (CSP) Planning & Implementation	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM FEDERAL SOURCES	-	-	11,643	11,643	11,643	11,643	9,143	9,143	9,143	9,143	9,143	9,143	101,425
LOCAL AND OTHER REVENUE													
Contr butions and Donations	62,805	-	-	-	-	-	-	-	-	-	-	-	62,805
Fundraising	-	-	-	-	-	-	-	-	-	-	-	-	-
Erate Reimbursement	-	-	-	-	-	-	-	-	-	-	-	-	-
Earnings on Investments	-	-	-	-	-	-	-	-	-	-	-	-	-
Interest Income	-	-	-	-	-	-	-	-	-	-	-	-	-
Food Service (Income from meals)	-	-	-	-	-	-	-	-	-	-	-	-	-
Text Book	-	-	-	-	9,000	-	-	-	-	-	-	-	9,000
OTHER	-	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL REVENUE FROM LOCAL AND OTHER SOURCES	62,805	-	-	-	9,000	-	-	-	-	-	-	-	71,805
TOTAL REVENUE													
	174,792	111,987	125,530	125,530	134,530	125,530	123,030	123,030	123,030	123,030	123,030	123,030	1,536,074

Icahn Charter School 6															
PROJECTED CASH FLOW FOR YEAR ONE OF OPERATIONS															
July 1, 2012 to June 30, 2013															
Total Revenue	174,792	111,987	125,530	125,530	134,530	125,530	123,030	123,030	123,030	123,030	123,030	123,030	123,030	1,536,074	
Total Expenses	50,952	99,346	135,455	125,455	125,530	125,955	125,455	125,455	125,955	125,455	125,455	123,580	123,036	1,411,626	
Net Income	123,840	12,641	(9,925)	75	9,000	(425)	(2,425)	(2,425)	(2,425)	(2,425)	(2,425)	(550)	(6)	124,448	
Cash Flow Adjustments	100	(42,068)	(63,555)	3,613	3,613	3,613	3,613	3,613	3,613	3,613	3,613	3,613	3,613	(73,003)	
Beginning Cash Balance	278	124,218	94,791	21,312	25,000	37,613	40,801	41,989	43,177	43,865	45,053	48,117	51,723	278	
Net Income	124,218	94,791	21,312	25,000	37,613	40,801	41,989	43,177	43,865	45,053	48,117	51,723	51,723		
	July	August	September	October	November	December	January	February	March	April	May	June	TOTAL		
EXPENSES															
ADMINISTRATIVE STAFF PERSONNEL COSTS															
Executive Management	No. of Positions 0.08	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,168	2,170	26,018		
Instructional Management	1.00	10,833	10,833	10,833	10,833	10,833	10,833	10,833	10,833	10,833	10,833	10,833	130,000		
Deans, Directors & Coordinators	0.08	778	778	778	778	778	778	778	778	778	778	778	9,330		
CFO / Director of Finance	0.08	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,231	1,227	14,768		
Operation / Business Manager	0.32	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	2,027	24,320		
Administrative Staff	1.08	3,773	3,773	3,773	3,773	3,773	3,773	3,773	3,773	3,773	3,773	3,773	45,270		
TOTAL ADMINISTRATIVE STAFF	2.64	20,809	20,809	20,809	20,809	20,809	20,809	20,809	20,809	20,809	20,809	20,807	249,710		
INSTRUCTIONAL PERSONNEL COSTS															
Teachers - Regular	7.00	-	14,538	36,346	36,346	36,346	36,346	36,346	36,346	36,346	36,346	36,346	378,000		
Teachers - SPED	0.50	-	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	25,000		
Substitute Teachers	-	-	-	-	-	-	-	-	-	-	-	-	-		
Teaching Assistants	2.00	-	2,315	4,398	4,398	4,398	4,398	4,398	4,398	4,398	4,398	4,398	46,290		
Specialty Teachers	0.50	-	-	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	25,000		
Aides	3.00	-	-	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	2,250	22,500		
Therapists & Counselors	-	-	-	-	-	-	-	-	-	-	-	-	-		
Other	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL INSTRUCTIONAL	13.00	-	18,853	47,994	47,994	47,994	47,994	47,994	47,994	47,994	47,994	47,994	496,790		
NON INSTRUCTIONAL PERSONNEL COSTS															
Nurse	-	-	-	-	-	-	-	-	-	-	-	-	-		
Librarian	-	-	-	-	-	-	-	-	-	-	-	-	-		
Custodian	1.00	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	32,000		
Security	1.00	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	2,667	32,000		
Other	-	-	-	-	-	-	-	-	-	-	-	-	-		
TOTAL NON-INSTRUCTIONAL	2.00	5,333	5,333	5,333	5,333	5,333	5,333	5,333	5,333	5,333	5,333	5,333	64,000		
SUBTOTAL PERSONNEL SERVICE COSTS	17.64	26,143	42												

PROJECTED BUDGET / OPERATING PLAN FOR INITIAL CHARTER PERIOD

DESCRIPTION OF ASSUMPTIONS

This Tab Should Be For The First Five Years Of Actual Operations.					
Total Revenue	1,536,074	1,935,870	2,427,322	2,924,246	3,427,411
Total Expenses	1,411,625	1,911,576	2,251,332	2,647,194	3,020,602
Net Income (Before Cash Flow Adjustments)	124,449	24,294	175,990	277,051	406,809
Actual Student Enrollment	-	-	-	-	-
Total Paid Student Enrollment	108	144	180	216	252
	Year 1	Year 2	Year 3	Year 4	Year 5
	2013	2014	2015	2016	2017
	*Year 1 should tie to Totals for Year 1 on Tabs 4 and 5				
	Per Pupil Revenue Percentage Increase				
	0.0%	0.1%	0.1%	0.1%	0.1%
REVENUE					
REVENUES FROM STATE SOURCES					
Per Pupil Revenue	CY Per Pupil Rate				
School District 1 (NYC)	12,443	1,343,844	1,785,404	2,259,974	2,743,855
School District 2 (Enter Name)	-	-	-	-	-
School District 3 (Enter Name)	-	-	-	-	-
School District 4 (Enter Name)	-	-	-	-	-
School District 5 (Enter Name)	-	-	-	-	-
School District 6 (Enter Name)	-	-	-	-	-
School District 7 (Enter Name)	-	-	-	-	-
School District 8 (Enter Name)	-	-	-	-	-
School District 9 (Enter Name)	-	-	-	-	-
School District 10 (Enter Name)	-	-	-	-	-
School District 11 (Enter Name)	-	-	-	-	-
School District 12 (Enter Name)	-	-	-	-	-
School District 13 (Enter Name)	-	-	-	-	-
School District 14 (Enter Name)	-	-	-	-	-
School District 15 (Enter Name)	-	-	-	-	-
School District - ALL OTHER	-	-	-	-	-
TOTAL Per Pupil Revenue (Average Districts Per Pupil Funding)	12,443	1,343,844	1,785,404	2,259,974	2,743,855
Special Education Revenue		19,000	19,190	19,382	19,576
Grants		-	-	-	-
Stimulus		-	-	-	-
DYCD (Department of Youth and Community Developmt.)		-	-	-	-
Other		-	-	-	-
Other		-	-	-	-
TOTAL REVENUE FROM STATE SOURCES		1,362,844	1,804,594	2,279,355	2,763,431
REVENUE FROM FEDERAL FUNDING					
IDEA Special Needs		9,892	9,991	10,091	10,192
Title I		81,533	97,840	110,070	118,875
Title Funding - Other		10,000	12,000	13,500	14,580
School Food Service (Free Lunch)		-	-	-	-
Grants		-	-	-	-
Charter School Program (CSP) Planning & Implementation		-	-	-	-
Other		-	-	-	-
Other		-	-	-	-
TOTAL REVENUE FROM FEDERAL SOURCES		101,425	119,831	133,660	143,647
LOCAL and OTHER REVENUE					
Contributions and Donations		62,805	-	-	-
Fundraising		-	-	-	-
Erate Reimbursement		-	-	-	-
Earnings on Investments		-	-	-	-
Interest Income		-	-	-	-
Food Service (Income from meals)		-	-	-	-
Text Book		9,000	11,445	14,306	17,168
OTHER		-	-	-	-
TOTAL REVENUE FROM LOCAL and OTHER SOURCES		71,805	11,445	14,306	17,168
TOTAL REVENUE		1,536,074	1,935,870	2,427,322	2,924,246
					3,427,411

Icahn Charter School 6							DESCRIPTION OF ASSUMPTIONS
PROJECTED BUDGET / OPERATING PLAN FOR INITIAL CHARTER PERIOD							
*NOTE: If a Planning Year is Taken in the Beginning of the Charter, the Charter Will Be Extended to Encompass Five Years of Operation. Projected Five Year Budget on this Tab Should Be For the First Five Years of Actual Operations.							
Total Revenue		1,536,074	1,935,870	2,427,322	2,924,246	3,427,411	
Total Expenses		1,411,625	1,911,576	2,251,332	2,647,194	3,020,602	
Net Income (Before Cash Flow Adjustments)		124,449	24,294	175,990	277,051	406,809	
Actual Student Enrollment		-	-	-	-	-	
Total Paid Student Enrollment		108	144	180	216	252	
		Year 1	Year 2	Year 3	Year 4	Year 5	
		2013 2014	2015 2016 2017				
EXPENSES							
ADMINISTRATIVE STAFF PERSONNEL COSTS		No. of Positions					
Executive Management	0.08	26,018	26,929	27,871	28,847	29,856	
Instructional Management	1.00	130,000	149,550	154,784	160,202	165,809	
Deans, Directors & Coordinators	0.08	9,330	81,657	84,515	87,473	90,534	Staff Developer added in second year
CFO / Director of Finance	0.08	14,768	15,285	15,820	16,374	16,947	
Operation / Business Manager	0.32	24,324	25,175	26,056	26,968	27,912	
Administrative Staff	1.08	45,270	68,854	71,264	73,759	76,340	Office aide added in second year
TOTAL ADMINISTRATIVE STAFF	2.64	249,710	367,450	380,311	393,621	407,398	
INSTRUCTIONAL PERSONNEL COSTS							
Teachers - Regular	7.00	378,000	594,000	793,800	1,102,083	1,370,656	Year 2 add 3, year 3 add 3, year 4 add 5, year 5 add 4
Teachers - SPED	0.50	25,000	25,875	26,781	27,718	28,688	
Substitute Teachers	-	-	-	-	-	-	
Teaching Assistants	2.00	46,290	47,910	49,587	51,323	53,119	
Specialty Teachers	0.50	25,000	25,875	26,781	27,718	28,688	
Aides	3.00	22,500	23,288	37,303	38,608	39,959	2 Aides added in year 3
Therapists & Counselors	-	-	60,000	62,100	64,274	66,523	Counselor will be added in second year
Other	-	-	-	-	-	-	
TOTAL INSTRUCTIONAL	13.00	496,790	776,948	996,351	1,311,723	1,587,633	
NON-INSTRUCTIONAL PERSONNEL COSTS							
Nurse	-	-	-	-	-	-	
Librarian	-	-	-	-	-	-	
Custodian	1.00	32,000	33,120	66,240	68,558	70,958	
Security	1.00	32,000	33,120	34,279	35,479	36,721	
Other	-	-	-	-	-	-	
TOTAL NON-INSTRUCTIONAL	2.00	64,000	66,240	100,519	104,037	107,679	
SUBTOTAL PERSONNEL SERVICE COSTS		17.64	810,500	1,210,638	1,477,181	1,809,382	2,102,710
PAYROLL TAXES AND BENEFITS							
Payroll Taxes		67,845	96,730	118,027	144,570	168,007	
Fringe / Employee Benefits		101,058	121,185	147,866	181,119	210,481	
Retirement / Pension		35,300	60,532	73,859	90,469	105,136	
TOTAL PAYROLL TAXES AND BENEFITS		204,203	278,447	339,752	416,158	483,623	
TOTAL PERSONNEL SERVICE COSTS		17.64	1,014,703	1,489,084	1,816,932	2,225,540	2,586,334
CONTRACTED SERVICES							
Accounting / Audit		-	-	-	-	-	
Legal		1,000	1,000	1,000	1,000	1,000	
Management Company Fee		-	-	-	-	-	
Nurse Services		-	-	-	-	-	
Food Service / School Lunch		-	-	-	-	-	
Payroll Services		4,229	4,377	4,530	4,689	4,853	
Special Ed Services		-	-	-	-	-	
Titlement Services (i.e. Title I)		50,000	51,750	53,561	55,436	57,376	
Other Purchased / Professional / Consulting		5,000	5,175	5,356	5,544	5,738	
TOTAL CONTRACTED SERVICES		60,229	62,302	64,448	66,668	68,967	
SCHOOL OPERATIONS							
Board Expenses		-	-	-	-	-	
Classroom / Teaching Supplies & Materials		40,000	41,400	42,849	44,349	45,901	
Special Ed Supplies & Materials		-	-	-	-	-	
Textbooks / Workbooks		-	-	-	-	-	
Supplies & Materials other		-	-	-	-	-	
Equipment / Furniture		2,000	2,070	2,142	2,217	2,295	
Telephone		4,800	6,000	6,210	6,427	6,652	
Technology		21,975	22,744	23,540	24,364	25,217	
Student Testing & Assessment		10,000	15,000	17,000	19,000	21,000	
Field Trips		2,000	2,000	2,000	2,000	2,000	
Transportation (student)		-	-	-	-	-	
Student Services - other		-	-	-	-	-	
Office Expense		19,700	20,390	21,103	21,842	22,606	
Staff Development		30,000	31,050	32,137	33,262	34,426	
Staff Recruitment		-	-	-	-	-	
Student Recruitment / Marketing		260	269	279	288	298	
School Meals / Lunch		800	828	857	887	918	
Travel (Staff)		75	75	75	75	75	
Fundraising		-	-	-	-	-	
Other		7,000	7,245	7,499	7,761	8,033	
TOTAL SCHOOL OPERATIONS		138,610	149,071	155,691	162,472	169,421	
FACILITY OPERATION & MAINTENANCE							
Insurance		40,450	41,866	43,331	44,848	46,417	
Janitorial		12,000	12,420	12,855	13,305	13,770	
Building and Land Rent / Lease		50,000	50,000	50,000	50,000	50,000	
Repairs & Maintenance		5,000	5,175	5,356	5,544	5,738	
Equipment / Furniture		-	-	-	-	-	
Security		1,000	1,035	1,071	1,109	1,148	
Utilities		28,300	29,291	30,316	31,377	32,475	
TOTAL FACILITY OPERATION & MAINTENANCE		136,750	139,786	142,929	146,181	149,548	
DEPRECIATION & AMORTIZATION							
DISSOLUTION ESCROW & RESERVES / CONTINGENCY		36,333	46,333	46,333	46,333	46,333	
		25,000	25,000	25,000	-	-	\$75k reserve
TOTAL EXPENSES		1,411,625	1,911,576	2,251,332	2,647,194	3,020,602	
NET INCOME		124,449	24,294	175,990	277,051	406,809	

Staff Developer added in second year

Office aide added in second year

Year 2 add 3, year 3 add 3, year 4 add 5, year 5 add 4

2 Aides added in year 3
Counselor will be added in second year

\$75k reserve

Icahn Charter School 6						DESCRIPTION OF ASSUMPTIONS
PROJECTED BUDGET / OPERATING PLAN FOR INITIAL CHARTER PERIOD						
*NOTE: If a Planning Year is Taken in the Beginning of the Charter, the Charter Will Be Extended to Encompass Five Years of Operation. Projected Five Year Budget on this Tab Should Be For the First Five Years of Actual Operations.						
Total Revenue	1,536,074	1,935,870	2,427,322	2,924,246	3,427,411	
Total Expenses	1,411,625	1,911,576	2,251,332	2,647,194	3,020,602	
Net Income (Before Cash Flow Adjustments)	124,449	24,294	175,990	277,051	406,809	
Actual Student Enrollment	-	-	-	-	-	
Total Paid Student Enrollment	108	144	180	216	252	
	Year 1	Year 2	Year 3	Year 4	Year 5	
	2013 2014	2015 2016 2017				
ENROLLMENT - *School Districts Are Linked To Above Entries*						
School District 1 (NYC)	-	-	-	-	-	
School District 2 (Enter Name)	-	-	-	-	-	
School District 3 (Enter Name)	-	-	-	-	-	
School District 4 (Enter Name)	-	-	-	-	-	
School District 5 (Enter Name)	-	-	-	-	-	
School District 6 (Enter Name)	-	-	-	-	-	
School District 7 (Enter Name)	-	-	-	-	-	
School District 8 (Enter Name)	-	-	-	-	-	
School District 9 (Enter Name)	-	-	-	-	-	
School District 10 (Enter Name)	-	-	-	-	-	
School District 11 (Enter Name)	-	-	-	-	-	
School District 12 (Enter Name)	-	-	-	-	-	
School District 13 (Enter Name)	-	-	-	-	-	
School District 14 (Enter Name)	-	-	-	-	-	
School District 15 (Enter Name)	-	-	-	-	-	
School District - ALL OTHER	-	-	-	-	-	
TOTAL ENROLLMENT	-	-	-	-	-	
REVENUE PER PUPIL	-	-	-	-	-	
EXPENSES PER PUPIL	-	-	-	-	-	
CASH FLOW ADJUSTMENTS						
OPERATING ACTIVITIES						
Example - Add Back Depreciation	36,333	46,333	46,333	46,333	46,333	
Other	-	-	-	-	-	
Total Operating Activities	36,333	46,333	46,333	46,333	46,333	
INVESTMENT ACTIVITIES						
Example - Subtract Property and Equipment Expenditures	(109,336)	(30,000)	(30,000)	(40,000)	(40,000)	
Other	-	-	-	-	-	
Total Investment Activities	(109,336)	(30,000)	(30,000)	(40,000)	(40,000)	
FINANCING ACTIVITIES						
Example - Add Expected Proceeds from a Loan or Line of Credit	-	-	(52,268)	(52,268)	(52,268)	Repay foundation for start up and first year infusion of cash
Other	-	-	-	-	-	
Total Financing Activities	-	-	(52,268)	(52,268)	(52,268)	
Total Cash Flow Adjustments	(73,003)	16,333	(35,935)	(45,935)	(45,935)	
NET INCOME	51,446	40,627	140,055	231,116	360,874	
Beginning Cash Balance	278	51,724	92,351	232,406	463,522	
ENDING CASH BALANCE	51,724	92,351	232,406	463,522	824,395	

FISCAL SOUNDNESS

31. Budget

31(a) Budget Template

Use the Institute's mandatory budget template file, completing all six (6) tabs, to provide start-up, first year and five year budget projections. The file contains mandatory budget and cash flow templates. Assumption columns are available within the file for comments. The mandatory budget template file is available on the Institute's website at:

<http://www.newyorkcharters.org/openAppKit.htm>. For any private contributions, grant funds or other philanthropic funds in the school budget, please provide letters of commitment from the funding sources detailing the amounts and uses for the funding.

Please see attachments

31(b) Budget Narrative

Provide supporting evidence in the form of a narrative that the start-up budget plan, the first-year operational budget and cash flow, and the five-year budget plans are fiscally sound and that the proposed school would have sufficient start-up funds available to it. Provide the rationale for or source of the assumptions upon which your budget rests and explain how your budget supports the implementation of the academic program described in this proposal.

START UP BUDGET

The start up budget is aligned with previous budgets used during the start up of other Icahn schools. The assumption used to formulate the budget is derived from past experiences and audited financials. The school will be supported by seasoned individuals with experience in opening new schools. The majority of the work in the early months will take place in one of our current schools while the construction of the facility is completed.

We have found that it takes a principal roughly 5 months to prepare a school for September. The start up budget includes a salary of \$45,000 for the first five months. In addition, we have set aside funds for a business manager. The business operation set up, which includes fiscal, HR, technology, etc, will be completed by the accounting team that is shared among the Icahn Network. We have set aside \$6,000 for this task. The operation will be a replication of the other Icahn schools.

Payroll expenses are also added to the budget. The total personnel service cost is 73% percent of the overall start-up budget of \$84,000.

Other expenses include accounting, supplies, marketing and recruitment. These categories account for 11% of the budget. In addition, we have set aside \$10,000 for technology.

The Foundation for a Greater Opportunity will provide a loan of \$94,000 to meet expenses during the start up period. The repayment of the loan will be paid in equal installments in years 3-5 of the charter. The loan will be issued in full before any pre-opening service begins. The budget does not include revenues that are not guaranteed. As illustrated on the budget, each month has a positive cash flow to meet all expenditures.

FIRST YEAR OF OPERATION

Revenue

The AOE per pupil allocation used for the first year is \$12,443. Due to the current fiscal climate in New York State, a conservative approach was taken in selecting the AOE. We feel that the \$12,443 is realistic. In the event the AOE is lower, we estimate that it will not have a significant impact on the budget. The sentiment is that it will not vary far from \$12,443. If the AOE is higher than we expected, it will help build a positive reserve for the school as we do not expect to add significant increases in expenses.

As with the startup budget, the first year is not dependent on federal or state grants unless it is guaranteed. We feel that the location in which Icahn 6 will be located will be in a high risk area prompting the availability of Title I funds. Icahn 1-4 are currently receiving Title I and we feel it will not be different for Icahn 6.

The Foundation for a Greater Opportunity will provide a second loan, if needed, to meet expenditures during the first year. In order to maintain a positive cash flow from month to month an infusion of \$62,805 is provided in July of year 1 to be paid back in later years.

Overall the budget has \$1,536,074 in revenue.

- 87% is AOE revenue
- 2% in special education revenue, estimated special education student is 6 which is 6 % of total student enrollment
- 6% in Title funds
- 5 % in other funds

We emphasize the revenue assumptions are reasonable and are modeled against previous Icahn Schools. The conservative approach and non reliance on grants ensures that the school will record at a minimum the revenues on the budget.

Expenses

- Staffing

In the budget, we replicated the staffing as with other Icahn schools. The school will have an administrative staff that will be shared among other Icahn Schools. The positions are as follows:

1. Superintendent
2. Director of Operations
3. Director of Assessment
4. Executive Secretary to the Superintendent
5. Business Managers

Since there are other Icahn Schools absorbing some of the cost for the positions listed above, the school will only pay 8% of the overall cost.

There will be a full time Principal, 7 full time teachers, 1 part-time special education teacher, 1 part-time ESL teacher, 2 teaching aides, 1 custodian, 1 security and 3 individuals for afterschool. Salaries for all positions are modeled from our current Icahn Network.

- The school operation expense is in line with other Icahn schools during their first year of operation. We feel that the expenses are realistic. Again, we used our experience to record all necessary expenses to fulfill the educational goals as well as fiscal obligations.

Overall Year 1

As illustrated in the cash flow projections, the school is able to meet its entire fiscal obligation and maintain a positive cash flow for each month. At year end, unrestricted net assets are similar to Icahn 4 in its first year of operation, excluding federal grants from the comparison. The school ends the year with a positive cash flow projection.

FIVE YEAR BUDGET

Revenue

The AOE over the 5 years of the charter is calculated on a relatively flat increase of .1% year after year. It is expected that the financial strain will continue the next couple of years with minimal increases over the charter period. We have added modest increase in title I, special education and text book revenues. No other revenue was added to the 5 year plan.

Expenses

The shared position expense continues during the 5 years of the charter with a 3.5% increase in expense year after year. The percentage increase is due to the historical change in other Icahn Schools for shared expenses.

- Staffing

The same positions as in the first year continue adding teachers each year to accommodate the increase in students as well as providing additional TA teachers for small group instruction. Year two a Staff Developer will be on staff and an assessment position will be added in year 5 to assist the Director of Assessment.

	Number in Position				
	Year 1	Year 2	Year 3	Year 4	Year 5
Grades Served:	KG-2	KG-3	KG-4	KG-5	KG-6
Enrollment:	108	144	180	216	252
Position					
Superintendent	.08	.08	.08	.08	.08
CFO/Director of Operations	.08	.08	.08	.08	.08
Principal	1.00	1.00	1.00	1.00	1.00
Director of Assessment	.08	.08	.08	.08	.08
Operation support staff (4)	.32	.32	.32	.32	.32
Executive Assistant to Superintendent	.08	.08	.08	.08	.08
School Secretary	1.00	1.00	1.00	1.00	1.00
Staff Developer		1.00	1.00	1.00	1.00
Teachers	7.00	10.00	13.00	17.00	21.00
Assessment Teacher				1.00	1.00
Special Ed. Teacher	.50	.50	.50	.50	.50
Teaching Aides	2.00	2.00	2.00	2.00	2.00
ESL Teacher	.50	.50	.50	.50	.50
Office Aide		1.00	1.00	1.00	1.00
Afterschool personnel	3.00	3.00	3.00	3.00	3.00
Security	1.00	1.00	1.00	1.00	1.00
Custodial	1.00	1.00	2.00	2.00	2.00
Total	17.64	22.64	26.64	31.64	35.64

The same model is utilized in other Icahn schools and we expect the cost of these positions to be relatively close to our existing schools.

- The operation of the school will continue to increase in a modest fashion. Revenue, which is conservative, is increasing at a rate of 22% year after year versus expenses of 21%. This illustrates that the school continues to have revenues above expenses during the full term of the charter. The budget also shows positive cash year after year.

31(c) Financial Planning

Explain the process your school will use to develop its budget. Your response should address:

- **Who will be involved;**
- **How needs will be identified and weighed;**
- **The timeline for creating and approving budgets; and**
- **Procedures for monitoring and modifying budgets.**

Financial Planning

- Who will be involved:

As with the other Icahn schools, the Superintendent, Director of Operations, Principal, Business Manager and accounting team are involved in the initial planning. Once the budget is near final, it is presented to the Treasurer then presented to the full Board for final approval.

- How needs will be identified and weighed:

The educational needs will be reviewed by the Superintendent and Principal using past experiences in other Icahn Schools. We take full advantage of the replication model and we use it as guide to weigh the need of the school. Although we use the model to replicate the budget for each of the Icahn schools, we understand that each school may have different needs to meet their educational goals and we modify the budget to fulfill those needs.

- The timeline for creating and approving budgets; and

Generally, the development of the budget begins in April to discuss specific needs for each of the schools. The first draft is ready soon after the final AOE is provided. In the event that the AOE has not been determined, the AOE from the previous year is used. The budgets are approved by the board in the May/June board meetings.

- Procedures for monitoring and modifying budgets:

Budgets are monitored on a monthly basis and budget to actual are compared. Any significant variances are reviewed. Any significant variance is discussed with the Superintendent and Principal. Modification of the budget requires authorization from the Superintendent.

31(d) Fiscal Impact

Complete the following table and discuss the fiscal impact of the school on other public and non-public schools in the area, including:

- Enrollment expectations (should tie to Attachment 3 and the 5-year budget projection);
- Per Pupil Allocation assumptions;
- Dollar amount the proposed charter school anticipates receiving from each district in Per Pupil Funding;
- Other projected revenue the proposed charter school anticipates receiving from the district (special education, grant, etc.);
- Projected Budget for the District; and
- Projected impact as a percentage of dollars of each district's budget (with more than 10 students projected to attend the charter school) for each year.

Operational Year (A)	Enrollment (# of Students) (B)	Per Pupil Allocation (C)	*Projected Per Pupil Charter Cost (B x C = D)	Other Projected District Revenue (SPED Funding, Food, Service, Grants, etc.) (E)	Total Projected Funding to Charter School from District (D + E = F)	Total Budget for District (G)	Projected Impact (i.e. % of District's Overall Funding) (F / G = H)
2012 – 2013	108	\$12,443	\$1,343,844	\$129,425	\$1,473,269	\$21 Billion	0.0001 %
2013 – 2014	144	\$12,567	\$1,809,648	\$150,466	\$1,935,870	\$21 Billion	0.0001 %
2014 – 2015	180	\$12,693	\$2,284,740	\$167,348	\$2,427,322	\$21 Billion	0.0001 %
2015 – 2016	216	\$12,820	\$2,769,120	\$180,391	\$2,924,246	\$21 Billion	0.0001 %
2016 – 2017	352	\$12,948	\$4,557,696	\$190,288	\$3,427,411	\$21 billion	0.0002 %

- *due to an extended year, the projected above does not reconcile with actual budget because of deferred revenue
- The variance in no way changes the projected impact percentage

32. Insurance

Describe the insurance coverage to be carried by the charter school including the name of the insured and amounts of insurance for liability, property loss, and student personal injury.

Fiduciary Liability \$1M (St. Paul Travelers Ins.,Co.)

Workers Comp : \$1M (The Hartford).

School Leaders & Omission: \$5M (National Union Fire Ins. Co) 4.Commercial Package: (The Hartford)

Property Liability: (determined by value of property)

General Liability: \$2M

Umbrella package(Excess Liability) (The Hartford)

* General, Auto, Employer Liability \$10M

33. **Fiscal Audits**

Describe the school's plans for at least annual fiscal audits.

A certified Public Accountant licensed in New York State will conduct annual fiscal audits. During the engagement process, it will be noted, at a minimum, the scope meet same audit requirements of other public schools. In addition, the financial statement will follow the template format suggested by CSI on its website.

Audits will be conducted in accordance with auditing standards generally accepted in the United States of America and Government Auditing Standards issued by the Comptroller General of the United States.

The auditing firm will present the report to the board.

SCHOOL POLICIES AND PROCEDURES

34. Board By-Laws

Please provide a set of by-laws for the proposed school, which includes the charter school's method for appointment/election of trustees and the length of the terms established for each trustee position. Note that recent amendments to the Act require that the by-laws be in compliance with provisions of the New York General Municipal Law regarding conflicts of interest, which generally does not allow teachers, administrators, or other school employees to serve on charter school boards.

BY-LAWS of ICAHN CHARTER SCHOOL 6

ARTICLE I

NAME

The name of the Corporation is the Icahn Charter School 7 (hereinafter the "Corporation").

ARTICLE II

MEMBERSHIP

The Corporation has no members. The rights which would otherwise vest in the members vest in the Directors of the Corporation (each a "Trustee" and collectively, the "Board" or the "Trustees").

ARTICLE III

BOARD OF TRUSTEES

A. Powers: The Board shall manage and control the affairs and property of the Corporation. All corporate powers, except such as are otherwise provided for in the Certificate of Incorporation, these By-laws, or Article 56 of New York State Education Law, New York State Not-for-Profit Corporation Law, New York State Freedom of Information Law and New York State Open Meetings Law (collectively, "New York Law"), shall be and hereby are vested in and shall be exercised by the Board. The Board shall have full power to adopt rules and regulations governing all actions which it takes, except as otherwise provided by New York Law.

Without limiting the generality of the powers hereby granted to the Board, but subject to the same limitations, the Board shall have all the powers enumerated in these By-laws, and the following specific powers:

1. To elect and remove Trustees;
2. To select and remove Officers, agents and employees of the Corporation; to prescribe powers and duties for them; and to fix their compensation;
3. To conduct, manage and control the affairs and activities of the Corporation, and to make rules and regulations;
4. To enter into contracts, leases and other agreements which are, in the Board's judgment, necessary or desirable in obtaining the purposes of promoting the interests of the Corporation;

6. To act as trustee under any trust incidental to the Corporation's purposes, and to receive, hold, administer, exchange and expend funds and property subject to such a trust;

7. To acquire real or personal property, by purchase, exchange, lease, gift, devise, bequest, or otherwise, and to hold, improve, lease, sublease, mortgage, transfer in trust, encumber, convey or otherwise dispose of such property;

8. To borrow money, incur debt, or to execute and deliver promissory notes, bonds, debentures, deeds of trust, mortgages, pledges, hypothecations or other evidences of debt and securities;

9. To indemnify and maintain insurance on behalf of any of its Trustees, Officers, employees or agents for liability asserted against or incurred by such person in such capacity or arising out of such person's status as such, subject to the provisions of the New York New York Not-for-Profit Corporation Law and the limitations noted in these By-laws; provided that any action contemplated in Sections 1, 7 and 8 shall require the approval of a majority of the entire membership of the Board.

B. Number of Trustees: The number of Trustees of the Corporation shall be not less than 5 nor more than 25. The Board shall fix the exact number of Trustees, within these limits, by Board resolution or amendment of the By-laws. No decrease in the number of Trustees shall serve to diminish the term of any Trustee then in office. As of the date on which these By-laws are adopted, the exact number of Trustees is fixed at 7.

C. Election of Trustees

1. Election: The Board shall elect the Trustees by the vote of a majority of the Trustees then in office, whether or not the number of Trustees in office is sufficient to constitute a quorum, or by the sole remaining Trustee.

2. Eligibility: The Board may elect any person who in its discretion it believes will serve the interests of the Corporation faithfully and effectively; except, however as limited by Article III.C.3. herein and no more than two (2) Trustees may be employees, officers, directors, agents or partners of Carl C. Icahn or of any entity over which Mr. Icahn has substantial control, or who are related to Mr. Icahn by blood or marriage. In addition to other candidates, the Board will include a parent of an active Icahn Charter School student; provided, however, the parent is an officer of ICS 5 Parents' Association and is designated by the Association to represent it on the Board (the "Parent Representative").

3. Interested Persons: Not more than 50% of the persons serving on the Board may be interested persons. An "interested person" is Carl C. Icahn and any person who has, or is an owner of more than 5% of any business that has, in the past twelve (12) months, received compensation from Carl C. Icahn or any entity over which Mr. Icahn has substantial control in consideration of goods or services.

4. Term of Office: The terms of office of all Trustees shall expire at the next annual meeting following their election, and, in any event, each Trustee shall continue in office until his or her successor shall have been elected and qualified, or until his or her earlier death, resignation or removal. All Trustees are eligible for unlimited reelection.

D. Removal of Trustees: The Board may remove or suspend from office any Trustee, in compliance with the not-for-profit law and education law, by a vote of a majority of the entire Board, on examination and due proof of the truth of a written complaint by any trustee, of misconduct, incapacity or neglect of duty; provided, that at least one week's previous notice of the proposed action shall have been given to the accused and to each trustee.

E. Resignation by Trustee. A Trustee may resign by giving written notice to the Board Chair or Secretary. The resignation is effective upon receipt of such notice, or at any later date specified in the notice. The acceptance of a resignation by the Board Chair or Secretary shall not be necessary to make it effective, but no resignation shall discharge any accrued obligation or duty of a Trustee.

F. Vacancies. A vacancy is deemed to occur on the effective date of the resignation of a Trustee, upon the removal of a Trustee, upon declaration of vacancy pursuant to these By-laws, or upon a Trustee's death. A vacancy is also deemed to exist upon the increase by the Board of the authorized number of Trustees.

G. Compensation of Trustees. Trustees shall serve without compensation. However, the Board may approve reimbursement of a Trustee's actual and necessary expenses while conducting Corporation business.

ARTICLE IV

PRINCIPAL OFFICE

The Corporation may have offices in such places as the Board may from time to time determine or the purposes of the Corporation may require.

ARTICLE V

MEETINGS OF THE BOARD

A. Place of Meetings Board Meetings shall be held at the Corporation's principal office or at any other place as the Board may designate.

B. Annual Meetings An Annual Meeting shall be held at a date, time and place fixed by the Board. Notice of the date, time and place of such Annual Meeting shall be given in such form as the Board may determine.

C. Regular Meetings. Regular Meetings shall be held at various times within the year at such time and place as determined by the Board; provided, however, that no fewer than nine (9) meetings shall be called per year.

D. Special Meetings. A Special Meeting shall be held at any time called by the Chair or by any Trustee upon written demand of not less than one-fifth of the entire Board. Notice of the date, time and place of such Special Meeting shall be given to all Trustees in such form as the Board may determine. Except as otherwise provided in these By-laws, any business may be transacted at any duly called board meetings.

E. Adjournment. A majority of the Trustees present at a meeting, whether or not a quorum, may adjourn the meeting to another time and place.

F. Public Notice. Notice to the public of Board Meetings shall be given in compliance with New York State Open Meetings Law.

G. Waiver of Notice. Notice of a meeting need not be given to a Trustee who signs a waiver of notice or written consent to holding the meeting or an approval of the minutes of the meeting, whether before or after the meeting, or attends the meeting without protest prior to the meeting or at its commencement, of the lack of notice. The Secretary shall incorporate all such waivers, consents and approvals into the minutes of the meeting.

ARTICLE VI

ACTION BY THE BOARD

A. Quorum Unless a greater proportion is required by law, a majority of the entire Board of Trustees shall constitute a quorum for the transaction of any business or of any specified item of business.

B. Action by the Board.

1. Actions Taken at Board Meetings. Except as otherwise provided by statute or by these By-laws, the vote of a majority of the Board present at the time of the vote, if a quorum is present at such time, shall be the act of the Board. If at any meeting of the Board there shall be less than a quorum present, the Trustees present may adjourn the meeting until a quorum is obtained. Any Board action may be taken without a meeting if the entire Board of Trustees consents in writing.

2. Board Meeting by Conferencing Technology. Trustees may participate in a Board meeting through use of videoconferencing or similar communication equipment by which all persons can see and hear all other persons participating in the meeting at the same time. Participation in a meeting pursuant to the foregoing constitutes presence in person at such meeting. If videoconferencing is used, the Board shall provide an opportunity for the public to attend, listen and observe at any site at which a Trustee participates. The public notice for the meeting shall inform the public that videoconferencing will be used, identify the locations for the meeting, and state that the public has the right to attend the meeting at any of the locations. In addition, Trustees may participate in a Board meeting through use of teleconference or similar communication equipment by which all persons can hear all other persons participating in the meeting at the same time, but such participation shall not constitute presence in person at such meeting.

C. Committees.

1. Appointment of an Executive Committee. The Board may appoint an Executive Committee by vote of the majority of Trustees. An Executive Committee will consist of not less than five (5) Trustees, who shall serve at the pleasure of the Board; provided, however, (i) not more than 50% of the persons serving on the Executive Committee may be an “interested person” (as defined in Article III.C.3.), and (ii) the Parent Representative (as defined in Article III.C.2.) shall be a member of the Executive Committee.

2. Authority of Executive Committee. The Board may delegate to an Executive Committee any of the authority of the Board, except with respect to:

- a. The election of Trustees;
- b. Filling vacancies on the Board or any committee which has the authority of the Board;
- c. The fixing of Trustee compensation for serving on the Board or on any Committee;
- d. The amendment or repeal of By-laws or the adoption of new By-laws;
- e. The appointment of other Committees of the Board, or the members of the Committees.
- f. The granting of degrees; and Removing Officers.

3. Other Committees of the Board of Directors. The Board may, from time to time and by a majority vote of the Trustees then in office, appoint one or more advisory committees for any purpose. In appointing a committee, the Board shall appoint the chair of the committee, shall specify the term of the committee’s existence, and shall define the committee’s powers and duties (which shall not be inconsistent with New York Education Law). Each committee shall consist of at least three directors. Notwithstanding the foregoing, the Corporation shall not enter into any contract or other transaction with the Foundation for a Greater Opportunity unless the same has been approved by a majority vote of a committee of the Board consisting of at

least three (3) members, none of whom has an “interest” (as defined in Article XI.D.) in the contract or transaction. The Board shall have the power to establish such a committee from time to time and such committee shall have the authority of the Board to approve any such contract or other transaction. A majority of Trustees serving on such committee shall constitute a quorum. If quorum is present, a vote of the majority of Trustees serving on such committee, shall be the act of the Committee.

4. Procedures of Committees. The Board may prescribe the manner in which the proceedings of a Committee are to be conducted. In the absence of such prescription, a Committee may prescribe the manner of conducting its proceedings, except that the regular and special meetings of the Committee are governed by the provisions of these By-laws with respect to the calling of meetings.

D. Standard of Care.

1. Performance of Duties. Each Trustee shall perform all duties of a Trustee, including duties on a Committee, in good faith and with that degree of diligence, care and skill, including reasonable inquiry, as an ordinary prudent person in a like position would use under similar circumstances.

2. Reliance on Others. In performing the duties of a Trustee, a Trustee shall be entitled to rely on information, opinions, reports or statements, including financial statements and other financial data, presented or prepared by:

a. One or more Officers or employees of the Corporation whom the Trustee believes to be knowledgeable in the matters presented;

b. Legal counsel, public accountants or other persons as to matters that the Trustee believes are within that person's professional or expert competence; or

c. A Board Committee on which the Trustee does not serve, duly designated in accordance with a provision of the Corporation's Charter or By-laws, as to matters within its designated authority.

3. Investments. In investing and dealing with all assets held by the Corporation for investment, the Board shall exercise the standard of care described above in Paragraph D.1. and shall consider among other relevant considerations the long and short term needs of the Corporation in carrying out its purposes, including its present and anticipated financial requirements. The Board may delegate its investment powers to others, provided that those powers are exercised within the ultimate direction of the Board.

E. Rights of Inspection. Every Trustee has the right to inspect and copy all books, records and documents of every kind and to inspect the physical properties of the Corporation, provided that such inspection is conducted at a reasonable time after reasonable notice, and provided that such right of inspection and copying is subject to the obligation to maintain the confidentiality of the reviewed information, in addition to any obligations imposed by any applicable federal, state or local law.

ARTICLE VII
OFFICERS

A. Officers The Officers of the Corporation consist of a President (hereinafter "Chair"), Vice President (hereinafter "Vice Chair"), a Secretary and a Chief Financial Officer (hereinafter "Treasurer"). The Corporation also may have such other Officers as the Board deems advisable.

1. Chair. Subject to Board control, the Chair has general supervision, direction and control of the affairs of the Corporation, and such other powers and duties as the Board may prescribe. If present, the Chair shall preside at Board meetings.

2. Vice Chair. If the Chair is absent or disabled, the Vice Chair shall perform all the Chair's duties and, when so acting, shall have all the Chair's powers and be subject to the same restrictions. The Vice Chair shall have other such powers and perform such other duties as the Board may prescribe.

3. Secretary. The Secretary shall: (a) keep or cause to be kept, at the Corporation's principal office, or such other place as the Board may direct, a book of minutes of all meetings of the Board and Board Committees, noting the time and place of the meeting, whether it was regular or special (and if special, how authorized), the notice given, the names of those present, and the proceedings; (b) keep or cause to be kept a copy of the Corporation's Charter and By-laws, with amendments; (c) give or cause to be given notice of the Board and Committee meetings as required by the By-laws; and (d) have such other powers and perform such other duties as the Board may prescribe.

4. Treasurer. The Treasurer shall: (a) keep or cause to be kept adequate and correct accounts of the Corporation's properties, receipts and disbursements; (b) make the books of account available at all times for inspection by any Trustee; (c) deposit or cause to be deposited the Corporation's monies and other valuables in the Corporation's name and to its credit, with the depositories the Board designates; (d) disburse or cause to be disbursed the Corporation's funds as the Board directs; (e) render to the Chair and the Board, as requested but no less frequently than once every fiscal year, an account of the Corporation's financial transactions and financial condition; (f) prepare any reports on financial issues required by an agreement on loans; and (g) have such other powers and perform such other duties as the Board may prescribe.

B. Election, Eligibility and Term of Office.

1. Election. The Board shall elect the Officers annually at the Annual Meeting or a Regular Meeting designated for that purpose or at a Special Meeting called for that purpose, except that Officers appointed to fill vacancies shall be elected as vacancies occur.

2. Eligibility. A Trustee may hold any number of offices, except that neither the Secretary nor Treasurer may serve concurrently as the Chair.

3. Term of Office. Each Officer serves at the pleasure of the Board, holding office until resignation, removal or disqualification from service, or until his or her successor is elected.

C. Removal and Resignation. The Board may remove any Officer, either with or without cause, at any time. Such removal shall not prejudice the Officer's rights, if any, under an employment contract. Any Officer may resign at any time by giving written notice to the Corporation, the resignation taking effect upon receipt of the notice or at a later date specified in the notice.

ARTICLE VIII

NON-LIABILITY OF TRUSTEES

The Trustees shall not be personally liable for the Corporation's debts, liabilities or other obligations.

ARTICLE IX
INDEMNIFICATION OF CORPORATE AGENTS

The Corporation shall, to the fullest extent now or hereafter permitted by and in accordance with standards and procedures provided by Sections 721 through 726 of the New York Not-for-Profit Corporation Law and any amendments thereto, indemnify any person made, or threatened to be made, a party to any action or proceeding by reason of the fact that he, his testate or intestate was a Trustee or Officer, and may by agreement or decree by the Board expend such indemnification to any employee or agent of the Corporation against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees.

ARTICLE X
SELF-DEALING TRANSACTIONS

The Corporation shall not engage in any self-dealing transactions, except as approved by the Board. "Self-dealing transaction" means a transaction to which the Corporation is a party and in which one or more of the Trustees has a material personal financial interest ("interested Trustee(s)"). Notwithstanding this definition, the following transaction is not a self-dealing transaction, and is subject to the Board's general standard of care:

A transaction which is part of a public or charitable program of the Corporation, if the transaction (a) is approved or authorized by the Board in good faith and without unjustified favoritism, and (b) results in a benefit to one or more Trustees or their families because they are in a class of persons intended to be benefited by the program.

ARTICLE XI
OTHER PROVISIONS

A. Fiscal Year. The fiscal year of the Corporation begins on July 1 of each year and ends on June 30.

B. Execution of Instruments. Except as otherwise provided in these By-laws, the Board may adopt a resolution authorizing any Officer or agent of the Corporation to enter into any contract or execute and deliver any instrument in the name of or on behalf of the Corporation. Such authority may be general or confined to specific instances. Unless so authorized, no Officer, agent or employee shall have any power to bind the Corporation by any contract or engagement, to pledge the Corporation's credit, or to render it liable monetarily for any purpose or any amount.

C. Construction and Definitions. Unless the context otherwise requires, the general provisions, rules of construction, and definitions contained in the New York Law shall govern the construction of these By-laws. Without limiting the generality of the foregoing, words in these By-laws shall be read as the masculine or feminine gender, and as the singular or plural, as the context requires, and the word "person" includes both a corporation and a natural person. The captions and headings in these By-laws are for convenience of reference only are not intended to limit or define the scope or effect of any provisions.

D. Conflict of Interest. Any Trustee, Officer or key employee having a personal interest in a contract, other transaction or program presented to or discussed by the Board or Board Committee for authorization, approval, or ratification shall make a prompt, full and frank disclosure of his or her interest to the Board or Committee prior to its acting on such contract or transaction. Such disclosure shall include all relevant and material facts known to such person about the contract or transaction which might reasonably be construed to be adverse to the Corporation's interest. The body to which such disclosure is made shall thereupon determine, by majority vote, whether the disclosure shows that a conflict of interest exists or can reasonably be construed to exist. If a conflict is deemed to exist, such person shall not vote on, nor be present during the discussion or deliberations with respect to, such contract or transaction (other than to

present factual information or to respond to questions prior to the discussion). The minutes of the meeting shall reflect the disclosure made, the vote thereon and, where applicable, the abstention from voting and participation. The Board may adopt conflict of interest policies requiring:

1. Regular annual statements from Trustees, Officers and key employees to disclose existing and potential conflicts of interest; and,
2. Corrective and disciplinary actions with respect to transgressions of such policies.

For the purpose of this section, a person shall be deemed to have an "interest" in a contract or other transaction if he or she is the party (or one of the parties) contracting or dealing with the Corporation, or is a trustee or officer of, or has a significant financial interest in the entity contracting or dealing with the Corporation or a personal interest in a matter before the Board. A Trustee shall be deemed to have a personal interest if he or she has a familial or other personal relationship with an employee or student who is the subject of a pending Board action.

E. Interpretation of Charter. Whenever any provision of the By-laws are in conflict with the provisions of the Charter, the provisions of the Charter shall control.

ARTICLE XII AMENDMENT

The Board shall have the exclusive power to make, alter, amend and repeal the By-laws and Certificate of Incorporation of the Corporation (with the exception of Article III.C.3.) by the affirmative vote of a majority of the entire membership of the Board, subject to obtaining necessary governmental approval for any such action; provided, however, that notice of the proposed amendment or amendments shall have been included in the meeting notice which is given to the Trustees and, provided further, that no such action shall be taken that would adversely affect the qualification of the Corporation as an organization (i) exempt from Federal income taxation under Section 501(a) of the Internal Revenue Code of 1986, as amended (hereinafter "I.R.C."), as an organization described in I.R.C. § 501(c)(3), and (ii) contributions to which are deductible under I.R.C. § 170(c)(2).

ARTICLE XIII

LIMITATIONS

A. Exempt Activities. Notwithstanding any other provision of these By-laws, no Trustee, Officer, employee or representative of the Corporation shall take any action or carry on any activity by or on behalf of the Corporation not permitted to be taken or carried on by an organization (i) exempt from Federal income tax under I.R.C. § 501(a), as an organization described in I.R.C. § 501(c)(3), and (ii) contributions to which are deductible under I.R.C. § 170(c)(2).

B. Prohibition Against Sharing in Corporate Earnings. No Trustee, Officer or employee of, or other person connected with, the Corporation, or any other private individual, shall receive at any time any of the net earnings or pecuniary profit from the operations of the Corporation, provided that this shall not prevent either the payment to any such person of reasonable compensation for services rendered to or for the benefit of the Corporation or the reimbursement of expenses incurred by any such person on behalf of the Corporation, in connection with effecting any of the purposes of the Corporation; and no such person or persons shall be entitled to share in the distribution of any of the corporate assets upon the dissolution of the Corporation. All such persons shall be deemed to have expressly consented and agreed that

upon such dissolution or winding up of the affairs of the Corporation, whether voluntary or involuntary, the assets of the Corporation then remaining in the hands of the Board, after all debts have been satisfied, shall be transferred either to another charter school located within the Community School District.

35. Code of Ethics

Attach the code of ethics of the charter school. The code of ethics must include a comprehensive and formal conflict of interest policy with specific procedures for implementing the policy and assuring compliance therewith. The code of ethics and conflict of interest policy must be written to apply not only to trustees, but to officers and employees of the school as well.

Code of Ethics

The Trustees and employees of ICS 7 will be held to the highest standards of professional conduct and ethics. The code of conduct in this attachment pertains particularly to Trustees of the school; expectations for staff conduct and ethics are described at length in the personnel policies.

A Trustee may not participate in Board deliberations regarding matters in which he or she has a direct or indirect financial interest, including but not limited to deliberations reviewing a proposed contract or project. It is considered to be a financial interest of a Trustee if he or she or a member of his or her family is an owner, partner, stockholder, director, trustee or employee of any company with business before the Board.

A Trustee or an employee may not use his or her position to acquire any gift or privilege worth \$50 or more that is not available to a similarly situated person. Trustees and employees will avoid engaging in activities that would appear to be unduly influenced by other persons who have a special interest in matters under consideration by the Board. If an occasion arises in which a Trustee or employee is approached by a person or organization having a special interest in a matter under consideration by the Board or school, the Trustee or employee must write a letter disclosing all known facts prior to participating in a Board discussion of the matter or school proceeding. The Trustee or employee must file the disclosure in such a way as to have his or her interest formally noted in the school's Board minutes or his/her personnel file.

Certain back office services--such as insurance medical insurance, and pension--and legal services will be provided by Icahn Associates, a company affiliated with Carl C. Icahn, at no cost to the Charter School. Not only are the services provided at cost, but one of the Icahn Associates entities is Icahn Sourcing, which seeks out lowest cost vendors and can ensure low costs because of the large volume that the entire Icahn Associates world provides. Through large volume discounts and the saving of research time, this arrangement saves the charter school in many different ways. This is also the case for the current Icahn Charter Schools. These related party transactions for the ICS 7 will be disclosed in the audited financial statements.

As reflected in the application budget, it is anticipated that Foundation for a Greater Opportunity will advance start-up costs and shortfalls in the first years of the charter. These advances will be repaid to the Foundation in the last years of the charter. All such advances and payments will be made to the Foundation at below market rates.

Related party relationships and transactions and related amounts receivable or payable, including sales, purchases, loans, transfers, leasing arrangements, and guarantees will be properly recorded or disclosed in the financial statements.

Trustees are prohibited from disclosing confidential information that they may acquire through participation on the school's Board of Trustees. They are also prohibited from using such confidential information to further their own personal interests.

36. Admissions Policy

Attach the proposed student admission policy and procedures for the charter school. This policy should include, at a minimum, the following information:

- **The required anti-discrimination criteria and allowable admissions preferences, including in New York City, the Community School District (CSD) preference;**
- **Any “at-risk” admission factors, such as students with disabilities (requiring special education programs/services), students who are English language learners or students who are eligible to participate in the federal free or reduced-price lunch program, etc.;**
- **The scheduled application and enrollment periods for the first and subsequent years, including the approximate date each year on which you intend to hold the lottery, if necessary, which must be after April 1st of each year;**
- **An outreach plan including strategies for: (1) recruiting prospective students and (2) attracting English language learners, students with disabilities and students who qualify for free and reduced-price lunch in sufficient numbers as to meet targets that are comparable to the school district of location;**
- **The specific targeted student population (if any);**
- **The step-by-step procedures to be implemented in the event timely applications for admission exceed the available seats, including who will conduct the lottery, the precise manner in which the lottery will be conducted, and measures that will be taken to ensure that the process adheres to Education Law subdivision 2854(2);**
- **The procedures for student registration after being admitted through the lottery or otherwise, to include whether the school will backfill grades and if so how and when;**
- **The manner in which the waitlist will be maintained;**
- **The procedures for an enrolled student’s withdrawal from the school; and**
- **The procedures for currently enrolled students to notify the school of their intent to enroll the following year.**

Admission of students shall not be limited on the basis of intellectual ability, measures of achievement or aptitude, athletic ability, disability, ethnicity, race, creed, gender, national origin, religion or ancestry. It is anticipated that the demand for admission will exceed available seats and a lottery system meeting the requirements for New York State charter school lotteries will be developed to address this situation, with a preference for siblings of students already enrolled in

the school and a preference for students living in the School's Community School District. Parents/Guardians will document residence at the time of registration following our lottery. Acceptable documentation will include a lease and/or utility bill. In the event that a lottery system is required, the actual process will be open to the public. After the first year of the lottery, students returning to the school will be given preference.

We anticipate a two month-long application period. We expect to hold the lottery in April.

Our marketing plan includes notifying the local elementary school, community board, community based organizations, houses of worship and community centers. We will be in touch with the Borough President and other community leaders and Community Education Councils.

We will print and distribute fliers to distribute at subway stations, supermarkets and communities of faith. We will be in touch with community based organizations. We will hold a voluntary Open House when key people from the trustees and a school official will be present who will demonstrate the Core Knowledge Program to parents. We will be available to answer organizational and educational questions at hours convenient to parents in the community. This is another advantage of a replication school—that members of our already opened schools can be available to new families. It is reassuring to new families to know that the Icahn curriculum has already been proven and to meet people who have successfully put it in place.

The application and admission process will be made clear at these meetings and as part of the application material. The application will be translated into other languages if necessary. The application will include: "The Icahn Charter School 7 does not discriminate on the basis of sex in admission or the educational program it operates, and is required by federal Title IX of the Education Amendments of 1972 not to discriminate in such a manner." The application will provide that "Information in the students' records will not be released without the written consent of the parent or as noted under FERPA requirements." The school secretary will be prepared to answer questions and help families complete the application. To apply, it is only necessary that the school receive a completed application for the child.

The targeted population will be children in the local Community School District--neighborhoods where the schools' testing results are below average. Since our location will intentionally be in an area where the local schooling is not meeting the students' capacity to learn, we will be serving under-served children, where there is a risk of academic failure, including students with disabilities and students who may not be English language proficient. It is the School's goal to prove that all children can learn, and to ensure an education that best meets the child's needs.

The lottery will be conducted by the principal and a board member and another person. Children will be admitted to kindergarten who have reached the age of five by December 31 of the year in which they apply, in accordance with the New York City public schools. After checking the birth dates to make sure that the application is the appropriate age for the entering grade, the child's name will be put on a piece of paper. The place of residence will also be noted so that preference can be given to those living in the community district of the school. The children from the Community School District will be chosen first. If there are siblings applying, each child's piece of paper will indicate that there is a sibling also applying. All the names will be put

in a box. One person will pick out a piece of paper. Another person will write the child's name on a sheet of paper with numbers relative to the number of applicants. A third person will check the results. After the available spaces are filled, the remaining applicants will be put on a waiting list in the order in which the name was selected.

When a sibling's piece of paper is chosen, the other sibling will be listed immediately after the first sibling. Siblings of enrolled students will, upon completion of an application, be placed in a separate lottery, which will be drawn first.

Students will be considered to be enrolled in each successive year through the completion of grade eight.

After all the names have been chosen, the parents will be notified by letter. For those students who are accepted, the letter will include a list of forms that need to be provided, specifically an original birth certificate, social security card, immunization records and proof of address, and an appointment time to meet with school administrator to turn over the forms. For children not selected, the letter will indicate their number on the Wait List, and will describe the steps that will take place if a space becomes available. That wait list will be maintained for the entire year. If a student withdraws, the next applicant on the wait list in that grade will be called and offered the space.

Student withdrawal will be permitted upon the written request of the parent or legal guardian and proof of enrollment in another school. Following the written request of the admitting school, student records will be transferred. If a student does not return in September, the school will telephone and send the family a certified letter to determine the child's status. When a space opens, the waiting list will then be activated to admit the next child on the same grade level.

37. Discipline Policy

(a) General Education

Attach the charter school's student discipline rules and procedures for general education students. If your school is to have a provision for suspension or expulsion, include as well the long term and short term due-process protections for students and parents, and procedures and policies for implementing mandatory alternative instruction.

ICAHN CHARTER SCHOOL 7 STUDENT CODE OF CONDUCT AND DISCIPLINARY POLICY

INTRODUCTION

It is the school's philosophy that in most cases, proper student discipline will be maintained through the use of a challenging and exciting learning environment; a clear understanding by children and parents/ guardians of the expectations for behavior.

When students behave in ways that are not acceptable under this Code of Conduct, there will be a variety of responses, depending on the level of the problem. Generally it is hoped that in-school suspension will be the most severe punishment necessary, but there may be situations in which more severe responses may be necessary. The Code of Conduct has two components: (a) a list of expected behaviors; (b) a list of inappropriate and prohibited conduct with possible consequences. Neither of these lists is exhaustive. The discipline imposed for violations of the Code of Conduct will depend on the individual circumstances of the incident and the student's disciplinary record. Additionally, the Principal or his/her designee may determine that an alternative response from those on the chart below is appropriate.

CODE OF CONDUCT

Students are expected to demonstrate the following behaviors while traveling to/from school, during the school day and at all Icahn Charter School functions whether on or off school grounds:

- Respect for learning;
- Respect for the feelings of others;
- The use of appropriate language at all times;
- Trip and neighborhood walk safety;
- Respect for the property of others;
- Respect for school property;
- Getting along with other children;
- Following directions from school staff;
- Arriving to school on time; and
- Appropriate ways to solve problems with peers.

These topics will be included in regular classroom lessons in a uniform manner to ensure continuity in all classes:

- Respect for learning includes:
 - We always come to school on time
 - We complete our homework every night
 - We do our work neatly and carefully
 - We listen when the teacher or classmate is speaking
 - We raise our hand when we wish to ask or answer a question
- Respecting the feelings of others includes:
 - Be polite and friendly to others
 - Never tease or bully anyone
 - Never call anyone by a name that is hurtful
 - Try to help someone when they make a mistake
- The use of appropriate language at all times
 - We never use curse words
 - We talk to each other with respect at all times
 - We do not call people names that hurt their feelings
- Trip and neighborhood walk safety
 - We always wear our name tag on trips and walks
 - We stay on line with our partner
 - We do not run
 - We sit still on busses or trains
 - We walk quietly so that we do not disturb others
 - We always take a partner when using a bathroom
- Respect for the property of others
 - We do not take anything from someone without asking
 - We treat other people's property with respect
 - We always return things we borrow
- Respect for school property
 - We never write in library books
 - We do not tear pages from any book
 - We do not write on walls or desks
 - We do not throw books or school property
 - We behave properly in the bathroom
 - We keep our school neat and clean
 - We pick up something that we dropped
 - We do not touch student displays

- Getting along with other children
 - We do not yell at other children
 - We never hit other children
 - We talk to someone about our feelings
 - We ask a teacher to help us if we have a problem
- Following directions from school staff
 - We never leave the classroom without permission
 - We stay with our class at all times
 - We always talk to teachers with respect
- Arriving to school on time
 - We always come to school on time
 - We come to school straight from home
 - We come to school ready to learn
 - If we are late or absent, we bring a note from our parent
- Proper ways to solve problems with peers:
 - We explain to others how we feel
 - We ask a teacher to help us solve a problem

Inappropriate and Prohibited Conduct

Students are prohibited from engaging in the following conduct while traveling to/from school, during the school day and at all Icahn Charter School functions whether on or off school grounds. Students may be subjected to discipline for engaging in prohibited conduct even if it takes place off school grounds if it may endanger the health or safety of pupils within the school or adversely affect the educational process:

- Willfully cause physical injury to any other person, or threaten to use force that could result in or risks injury, assault another person, fighting or engaging in physically aggressive or threatening behavior, or engaging in inappropriate or unwanted physical contact of any kind
- Conspiring to or participating in an incident of group violence or gang-related activity or violence
- Willfully damage, deface or destroy school property, including graffiti, or remove or use such property without express authorization, including, but not limited to, computers, phones, copy machines and elevators
- Stealing, or taking the property of another without permission
- Sexually harass another or commit sexual acts on school property or at school sponsored events
- Bully, intimidate, coerce or haze another person or otherwise discriminate against another person based on his/her actual or perceived race, color, weight, national origin, ethnic group, religion, religious practice, disability, sexual orientation, gender, gender identification, sex, or economic circumstances

- Enter into any private office or classroom of an administrative officer, teacher, or staff member without permission express authorization
- Enter or remain on school property without express authorization
- Remain in any building or facility after it is normally closed, or enter any building or facility prior to its normal opening, without express authorization
- Refuse to leave any building or facility after being requested to do so by school administration or staff
- Willfully obstruct or interfere with the free movement of persons and vehicles
- Deliberately disrupt or prevent the peaceful and orderly conduct of classes, lectures, after-school activities, or deliberately interfere with the freedom of meetings or deliberately any prevent any person to express his or her views, unless such disruption is necessary to maintain order of the educational process
- Possess on school property any rifle, shotgun, pistol, revolver, knife, chain, club or other weapon of any type, whether or not the person has a license to possess such weapon
- Commit acts that threaten the safety and welfare of any person
- Violate any federal or State statute or regulation, local ordinance or school policy
- Possess, use, be under the influence of or distribute alcohol, drugs or drug paraphernalia, or tobacco products
- Refuse or fail to comply with a lawful order or direction of a school official in the performance of his or her duty
- Distribute or post on school property any written material, pamphlets or posters without the prior express approval of the Principal or his/her designee
- Unexcused absences
- Lateness to school or class
- Fail to return school property
- Unapproved use of computers, fax, cell phones, beepers, computer games, personal devices for music, communication or games
- Rude or disrespectful behavior towards another person, including, but not limited to, swearing or inappropriate language
- Lying or dishonesty
- Scholastic dishonesty including, but not limited to, cheating and plagiarizing
- Falsifying records or signatures including, but not limited to, parents notes and report cards
- Insubordination, defying or disobeying school employees, kitchen staff, custodial staff, medical staff, safety agents or other persons involved in the school's educational program

This list of prohibited conduct, while detailed, is not to be considered exclusive.

Penalties

Depending on the severity of the infraction, disciplinary responses include, but are not limited to:

- Verbal and written warnings to the student and notice to parents/guardians
- Removal from class or reassignment to another class
- Before or after-school detention
- Reprimand

- Peer mediation
- Learning and behavioral contracts between or among the school, parent/guardian and student
- Exclusion or suspension from athletic, social, extra-curricular activities or other privileges
- In-school suspension
- Out-of-school suspension
- Expulsion

For minor infractions, we aim to determine an appropriate in-school course of action in consultation with the teacher, parent/guardian and administration. Children displaying inappropriate or disruptive behavior may be asked to participate in a conference with the teacher, parent/guardian and principal. The intent and purpose of such conference will be to modify the behavior, avoid further infractions, and imposition of more severe discipline.

The list of potential penalties, while detailed, is not exhaustive, nor does it preclude in any way the referral to law enforcement personnel of any matter believed to violate federal, state or local law or where the conduct is required by applicable law or regulation to be reported to law enforcement agencies, including, but not limited to the Gun Free Schools Act or applicable State law.

DISCIPLINARY PROCEDURES AND DUE PROCESS

Short-Term Suspensions (5 Days or Less)

A short-term suspension is defined as an in-school or out-of-school suspension of 5 days or less. When the school proposes suspending a student, the parent/guardian will be notified immediately or as soon as practicable by telephone. If the school has the parent/guardian's email address, notification will be provided by email. The parent/guardian will also be notified by overnight mail service or other method to his/her last known address within 24 hours of the school's decision to propose a short-term suspension. The written notice will include the reason(s) for the proposed suspension, the proposed duration of the suspension and whether the proposed suspension will be in-school or out-of-school. The written notice will also advise the parent/guardian that he/she will have the opportunity to request an informal conference with the Principal of the school or his/her designee. At an informal conference, the student and parent/guardian will be given an opportunity to deny or explain the charges, to present his/her own evidence and question the complaining witness(es). A written decision will be issued after the informal conference. The written notice and informal conference shall be in the parent/guardian's dominant language or translation will be made.

Alternative instruction will be provided during the period of suspension. The school may choose to deliver alternative instruction at the school, in the student's home, or at another location, within its sole discretion. The specifics of alternative instruction, including the amount of time of the instruction to be provided, are within the school's sole discretion. Students on suspension are required and expected to complete all school work. In addition, when appropriate, the student may be assigned a project designed to address the conduct that gave rise to the suspension.

Long-Term Suspensions (More than 5 Days)

A long-term suspension is defined as an in-school or out-of-school suspension of more than 5 days. When the school proposes suspending a student, the parent/guardian will be notified immediately or as soon as practicable by telephone. If the school has the parent/guardian's email address, notification will be provided by email. The parent/guardian will also be notified by overnight mail service or other method to his/her last known address within 24 hours of the school's decision to propose a long-term suspension. The written notice will include the reason(s) for the proposed suspension, the proposed duration of the suspension and whether the proposed suspension will be in-school or out-of-school. The written notice will also advise the parent/guardian and the student of the student's right to a formal hearing at which he/she may be represented by counsel, cross-examine the witness(es) against him/her, and present witnesses and evidence of his/her own. The written notice and hearing shall be in the parent/guardian's dominant language or a translation will be made.

The formal hearing will be conducted by the Principal or his/her designee ("Hearing Officer"). The hearing will be recorded. If the student or his/her parent/guardian will be represented by counsel at the hearing, notice must be provided to the Hearing Officer no less than 2 days before the hearing is scheduled. A written decision will be issued after the formal hearing.

Alternative instruction will be provided during the period of suspension. The school may choose to deliver alternative instruction at the school, in the student's home, or at another location, within its sole discretion. The specifics of alternative instruction, including the amount of time of the instruction to be provided, are within the school's sole discretion. Students on suspension are required and expected to complete all school work. In addition, when appropriate, the student may be assigned a project designed to address the conduct that gave rise to the suspension.

For suspensions of 10 days or longer, the school will provide alternative instruction, with a greater emphasis on tutoring as necessary. The services provided will be designed in order to ensure that the student is given the opportunity to master the school curriculum and take such assessment tests as the school would otherwise provide. The school may also seek to place the student during the term of the suspension in any alternate education program that is operated by the student's school district of residence.

Expulsion from Icahn Charter School

An expulsion is the permanent removal of a student from the school. In the case of conduct which in the school's judgment warrants expulsion, the student may be subjected to a short or long-term suspension first. The procedures to be followed where expulsion is proposed are the same as for a Long-Term Suspension above.

If, after a formal hearing, the school expels a student, the school will cooperate with any school to which the student seeks to enroll, including providing the receiving school with all relevant information regarding the student's academic performance and student records, upon

request of the school or parent/guardian. An expelled student will be provided with alternative instruction. The means and manner of alternative instruction will be the same as for a student who has been suspended. Alternative instruction will be provided until the student is enrolled at another accredited school, or otherwise participating in an accredited program, including any alternative education program operated by the student's school district of residence, to the extent the provision of such services is required by law. As above, the school may seek, where appropriate, to place the student in an alternative education program operated by the student's school district of residence either through agreement with the school district or by operation of law.

APPEALS

An appeal from written decision imposing a short-term suspension, long-term suspension or expulsion may be made, in writing, to the Board of Trustees of the Icahn Charter School 7, no later than 10 calendar days from the date of the written decision. The Board of Trustees may adopt in whole, or in part, the original decision imposing the discipline. Final decisions of the Board of Trustees may be appealed to the Commissioner of Education within 30 days of the decision on appeal.

(b) Special Education

Please provide the discipline policy that the school will enact for students with disabilities.

DISCIPLINARY PROCEDURES FOR STUDENTS WITH DISABILITIES

The school's disciplinary policy, as regards any student with a disability, will be consistent with the Individuals with Disabilities Act ("IDEA"), and its implementing regulations including (34 CFR, Part 300 *et seq.*) as well as applicable New York State law respecting students with disabilities. The school will cooperate with the Committee on Special Education ("CSE") of the student's school district of residence as necessary to ensure compliance with applicable law and regulation.

Generally, a student with, or suspected of having a disability may be disciplined in the same manner as his/her non-disabled peers as set forth above. However, when a student is suspended for more than 10 days, or on multiple occasions that, in the aggregate, amount to more than 10 days in a school year, additional safeguards are in place to ensure that the student's behavior was not tied to, or was a "manifestation" of his/her disability. An exclusion from school for a period greater than 10 days, as described in this paragraph, is considered a change in placement.

Specifically, when a change of placement of greater than 10 days is proposed, a manifestation team consisting of: (a) someone from the CSE who is knowledgeable about the student and can interpret information about the student's behavior generally; (b) the parent/guardian; and (c) relevant members of the student's CSE IEP team (as determined by the parent and CSE) shall convene immediately if possible, but in no event later than 10 days after

the decision to change placement, to determine whether the conduct was a manifestation of the student's disability.

A student whose IEP includes specific disciplinary guidelines will be disciplined in accordance with those guidelines. If the disciplinary guidelines appear not to be effective or if there is concern for the health and safety of the student or others if those guidelines are followed with respect to a specific infraction, the CSE may consider a change in the guidelines.

In the event of a proposed short-term or long-term suspension, or expulsion of a student with disabilities, the school will follow the notice procedures described above for students without disabilities. The notice to the parent/guardian will advise that the CSE has been notified. The notice will state the purpose of the CSE meeting and the names of the expected attendees, and indicate the parent/guardian's right to have relevant CSE members attend.

The manifestation team must review the student's IEP together with all relevant information within the student's file and any information provided by the parent/guardian.

Manifestation Hearing

If the manifestation team concludes that the child's behavior resulted from his disability, the manifestation team must conduct a functional behavioral assessment ("FBA") and implement a behavioral intervention plan ("BIP") to address the behaviors giving rise to the conduct, unless an FBA or BIP was made prior to the student's violation of school rules giving rise to the suspension, in which case each should be reviewed and revised, if necessary, to address the behavior.

Moreover, the student must also be returned to his or her original placement (i.e., the placement from which he/she was removed), unless: (a) the parent and district agree to another placement as part of the newly created or revised BIP, or (b) in cases where the child:

- (i) carries or possesses a weapon to or at school, on school premises, or to or at a function under the jurisdiction of the State or local educational agency;
- (ii) knowingly possesses or uses illegal drugs, or sells or solicits the sale of a controlled substance, while at school, on school premises, or at a school function under the jurisdiction of the State or local educational agency; or
- (iii) has inflicted serious bodily injury upon another person while at school, on school premises, or at a school function under the jurisdiction of the State or local educational agency;

the Committee on Special Education shall determine an appropriate Interim Alternative Educational Setting ("IAES"), which shall not exceed 45 days.

Suspensions of More Than 5 Days

Hearings regarding suspensions of more than 5 days must be bifurcated into a guilt phase and a penalty phase. If the student is found to be guilty, the hearing officer shall make a threshold determination whether a suspension or removal of greater than 10 days is warranted. If the answer is “no”, the hearing may proceed to the guilt phase; provided, however, that the student will be entitled to special education services necessary to ensure a free and appropriate public education (“FAPE”) during the removal period. If, however, the hearing officer intends to remove the student for more than 10 days, a manifestation meeting must be commenced before the student is removed, except when the student is guilty of behavior relating to serious bodily injury, drugs and alcohol, or weapons as set forth above under the section entitled “Manifestation Hearings”. If the behavior is determined to be a manifestation of the student’s disability, the hearing shall be dismissed, unless the behavior involved serious bodily injury, drugs and alcohol, or weapons. If the behavior is determined not to be tied to the student’s disability, the hearing may proceed to the penalty phase.

If a student is found guilty of conduct involving serious bodily injury, drugs and alcohol, or weapons, he/she may be removed to an IAES for up to 45 days, regardless of whether the behavior was a manifestation of his/her disability. Those circumstances are the only circumstances when a student with a disability may be disciplined regardless of whether the conduct is related to the student’s disability.

Alternative Instruction

If the suspension is upheld, the student, at the school’s sole discretion, he/she may be placed in alternative instruction, or be required to remain at home during the pendency of the suspension, but not for a period of time greater than the amount of time a non-disabled student would be subject to suspension for the same behavior.

A suspended elementary school student will be assigned to alternative instruction for direct instruction for a minimum of one hour per day and a secondary school student will be assigned for a minimum of two hours of direct instruction per day. The school will assign staff to develop alternative instruction that will enable the student to complete required coursework and make sure that the student progresses toward his/her IEP goals. If the school believes it is unable to accommodate the provisions of the student’s IEP, it will immediately contact the CSE to convene a meeting to remedy the situation. The school will coordinate with the student’s general education teachers to ensure that the coursework and homework is gathered and provided to the student. During alternative instruction, the school will insure all assignments are taught, reviewed, and submitted to the general education teacher in a timely fashion. In addition, when appropriate, the student may be assigned a project designed to address the behavior that gave rise to the suspension.

Appeal

The appeal process for students with disabilities is the same as for students in general education. Please see the section on appeals above.

38. Dress Code Policy

If the charter school would implement a dress code policy, provide such policy including a description of how the cost of any uniform would be subsidized for parents unable to afford them.

The charter school will have a dress code, but not a uniform. Students will be required to wear a white shirt and dark pants or skirts,

39. Complaint Policy

Attach the policies of the charter school's board of trustees for handling complaints from individuals or groups.

ICAHN CHARTER SCHOOL 7

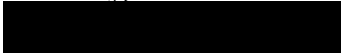
COMPLAINT POLICY

Icahn Charter School 7 is committed to addressing complaints by its constituents in a timely and appropriate manner. This policy provides a procedure for two types of complaints: (a) complaints alleging a violation of the New York Charter Schools Act (Education Law § 2850, *et seq.*) or the school's charter, or any other provision of law relating to the management or operation of the charter school; and (b) complaints about matters other than those specified in (a) above. The procedures for filing a complaint differ depending on whether the complaint is of the first or second type described above.

Complaints Alleging A Violation Of The Charter Schools Act, The School's Charter Or Provision Of Law Relating To The Management Or Operation Of The Charter School

Complaints in this category are designated "Formal Complaints". The following procedures apply to Formal Complaints. Any person may file a Formal Complaint, in writing, to the Secretary of the school's Board of Trustees, within 14 calendar days that the alleged violation took place. The Secretary will forward the Formal Complaint to the Vice Chair of the Board of Trustees who has been delegated by the Board of Trustees to address Formal Complaints.

The address for sending Formal Complaints is:

Secretary, Icahn Charter School 7


A Formal Complaint form is available in the school Principal's office and also in the office of the Superintendent of Schools. While it is not required that this form be used, it is recommended. In any event, in order for the Vice Chair to properly consider the written Formal Complaint, a detailed statement must be provided regarding the facts and circumstances giving rise to the Formal Complaint, the identity of any individuals involved in the Formal Complaint, and the date of any events or facts concerning the matter. Submit with your Formal Complaint any relevant documentation, reports, etc. in support of the Formal Complaint.

A Formal Complaint will be considered and responded to in writing within 14 calendar days of its receipt by the Secretary. Full attention will be given to the Formal Complaint including consideration of any statements submitted by the complainant with the Formal Complaint, any relevant documents, input of school personnel and any other persons whose contributions may be relevant.

The written response will include a copy of “Guidelines of the Charter School Institute for Handling Complaints Received Pursuant to Education Law §2855(4)” which is also available at <http://www.newyorkcharters.org/forms/guidelinesGrievances.pdf>. This document describes the process for filing a complaint with the New York State Charter School Institute (“CSI”), as the representative of the Trustees of the State University of New York, in the event the complainant, after presenting the Formal Complaint to the school’s Board of Trustees, is unsatisfied with the Board’s response.

If the complainant files a complaint with CSI and the complainant believes CSI has not adequately addressed the Formal Complaint, the complainant may bring the complaint to the State Education Department, which handles complaints for the Board of Regents. The Trustees of the State University of New York and the Board of Regents have the authority, under the Charter Schools Act, to take appropriate action. Upon a determination being made by either body or their representatives, a copy of the determination will be transmitted to the complainant by the school.

Other Complaints Regarding the Operation or Management of the Charter School

For complaints other than those specified above, the following procedures apply. The Board of Trustees has delegated to the Principal the authority and responsibility to receive, consider and respond to all regular complaints relating to the management or operation of the school (“Informal Complaint”). Informal Complaints must be made in writing to the Principal within 14 calendar days of the decision or action that gave rise to the complaint. If the complaint concerns a decision or action of the Principal, then the Informal Complaint must be made, in writing, to the Superintendent.

In order for the Principal or Superintendent to properly consider a written Informal Complaint, a detailed statement must be provided regarding the facts and circumstances giving rise to the Informal Complaint, the identity of any individuals involved in the Informal Complaint, and the date of any events or facts concerning the matter. Any relevant documentation, reports, etc. in support of the Informal Complaint should be submitted with the Informal Complaint.

Informal Complaints, whether made in writing to the Principal or Superintendent, will be addressed to the Complainant within 14 calendar days of its receipt by the Principal or Superintendent, unless there are extenuating circumstances. Informal Complaints will be responded to in writing.

40. Dissolution Procedures

Attach the procedures that the school would follow in the event of the closure and dissolution of the charter school, including for the transfer of students and student records, execution of a closure plan, and for the disposition of school assets. Please indicate the applicant's preference for distributing the assets to either the school district of location or another charter school within that district.

In the event of dissolution of ICS 7, all students will be referred to their appropriate home district at the Department of Education for transfer recommendations and enrollment in available programs. The administration of the Charter School would provide families with information about other public and private schools through meetings and mailings. The administration of the Charter School would be available to discuss options with the families. All referral and counseling activities will be completed in a timely manner.

In the event of dissolution of the Charter School, the School will follow the Institute's Closure Plan. All student records will be transferred, and all students will be referred, to the school district in which the Charter School will be located, for transfer recommendations and enrollment in available programs. The Principal and the guidance counselor will help families make arrangements for transfer of their children, including holding a public meeting at the school. The Board will designate one trustee and one school employee to oversee the closing of the school from an operational and financial perspective.

The Charter School will maintain a reserve fund of \$25,000 each year for three years of the charter to cover debts in the case of the school's dissolution. It is in the budget as an administrative expense in the reserve fund. In the event of dissolution of assets in excess of those necessary to meet liabilities, the remaining assets would be transferred to another Icahn Charter School.

41. Personnel Policies

Attach a copy of the proposed school's personnel policies, including at least the following information:

- **The procedures for hiring and dismissing school personnel;**
- **The school's required qualifications for hiring teachers, school administrators and other employees;**
- **A description of responsibilities for staff members;**
- **A description of the school's processes and criteria for evaluating teacher performance; and**
- **A description of how teachers will be held accountable for student achievement.**

Qualifications for Teachers

- A clear understanding of the needs of "at risk" children
- Experience teaching in similar communities
- Superior academic achievement in undergraduate and graduate school, as applicable
- Successful experience in the classroom
- Completion of New York State exams for Teacher Certification
- The hiring goal of ICS 7 is to hire only certified personnel. In any event, no more than 30% of the teachers or five positions (whichever is fewer) will be filled by uncertified personnel, who will, at a minimum, be NCLB qualified.

Classroom teachers will have the responsibility for providing instruction in all curriculum areas. All teachers will have the responsibility for closely monitoring student progress and providing remediation where necessary to prevent the child from falling behind.

Two paras will provide coverage during the optional early morning session. In the budget, we have allowed for paras to provide supervision for the late sessions, depending on the enrollment for those sessions. Supervision will be provided to ensure completion of homework assignments, special projects and related instructional activities.

Through ongoing dialogue with staff, the principal will encourage the use of a variety of instructional materials and learning strategies. The staff development sessions will afford our teachers the opportunity to refine their skills through a collaborative planning session, the development of appropriate assessment tools, the sharing of successful strategies, participation in workshops, the appropriate use of technology in the classroom and effective guidance techniques and self assessment. Teachers will have the opportunity to videotape their lessons for their private review. The Staff Developer will provide demonstration lessons as needed. There will be an emphasis on the analysis of student data to address specific instructional needs. Teachers

will be trained in ongoing assessment techniques to ensure successful results on New York State exams.

Expectations for teacher performance and student achievement are determined through the careful monitoring of lessons, student work, achievement results and the previously determined areas in need of strengthening. These expectations are articulated and instilled in the staff through workshops, grade conferences, feedback from Staff Developers and intervisitations among our sister schools. The Principal will also conduct frequent conferences with the teachers and the Staff Developers to determine future goals and objectives.

If after working with a less than effective teacher, there is no improvement, the Principal will have to terminate the teacher. A Principal will maintain all communication with each teacher in the teacher's professional file. The School will follow a progressive discipline policy to address ineffective teaching. This will include a conference with the teacher, with a follow-up letter to the file indicating the matters covered in the conference and detailing future expectations. If after working with a less than effective teacher, there is no improvement, the Principal will have to terminate the teacher.

The partnership with CEI-PEA, staffed by nationally recognized school administrators, will serve as an additional resource and bridge to teaching universities. Staff development activities will include dialogues with these experienced and knowledgeable educators.

In keeping with our goal of providing educational excellence in a nurturing and supportive environment, ICS 7 hiring policy will be to seek the most qualified staff without regard to race, creed, national origin, religion, citizenship, age, sex, marital status or disability. This policy will ensure equal opportunity for promotions, staff development, layoffs and termination (if necessary).

Hiring and Dismissal Policies

Hiring

Qualifications and duties:

The Principal has the duty to make sure that the school is successful. The Principal will be the person ultimately in charge of all aspects of the school—including academic, financial, all the constituents, including reporting to the board and to the various stakeholders. We intend to hire an experienced principal.

Assistant Teacher

Qualification: State certified teaching assistant

Duties: To assist in the remediation of “at risk” students, To work with small groups of students at the classroom learning centers for Mathematics and Language Arts, Monitor the completion of homework assignments, Assist in the implementation of individualized instruction

Staff Developer

Qualifications: Successful documented experience working with inner city children. Ability to interpret data for assessment driven instruction, familiarity and working knowledge of NYS standards. Minimum 5 years teaching experience.

Duties: Must be able to evaluate and remediate the effectiveness of writing, mathematics, science and social studies lessons, Empower teachers with skills and strategies for students' academic success, develop and follow through on new initiatives as indicated by teacher/student

performance, Conduct teacher workshops, Facilitate and coordinate additional professional development activities, Monitor ongoing instruction to ensure adherence to the New York State Standards, Monitor assessment driven instruction, Review lesson plans

Business Manager:

Qualification: Bachelors degree in Accounting/Finance, Minimum of three years experience in not for profit accounting

Duties: Develop school budgets. Provide financial reporting to internal and external agencies. Work closely with authorizers and auditing institutions. Supervise the purchase of goods and services of the school, which will be determined by price, quality and dependability. Particular vendors may be chosen for any one or any combination of these factors; however, ensuring at all times the selection of a particular good, service, or vendor shall be with the intention of maintaining a top-quality school. Execution of contracts and grants within the scope of the charter school's charter and financial plans. etc. Prepare quarterly and year end financial reports. Responsible for all aspect of human recourses, facility issues and transportation.

Teacher:

Qualifications:

- Education: Master's Degree or NCLB qualified
- Passing all NY State exams or NCLB qualified
- Preferred: Master's degree in field
- Criminal background checks and finger printing
- Child Abuse Registry Check

Duties: Teachers will be assigned to classrooms based on grade level. There will also be floating teachers who will cover specific subjects or help the classroom teachers.

Upon receiving the candidate's files, ICS 7 will check each of the recommended nominee's references. This is usually done by telephone. The number of references to be checked will depend on the kinds of responses obtained from the references. The level of competence, promise of career growth, ability to work with colleagues and students, outstanding achievement, other strengths, and such weaknesses as missing classes, not completing work on time, and student complaints will be some of the areas of inquiry.

When an open position is offered to a candidate, the Principal will send the candidate two copies of an employment letter stating the specific position, the starting date, beginning pay or salary, and the offer of employment. The candidate will be asked to sign and return one copy to accept or decline the offer, and to keep the other copy for his or her files.

Upon employment by ICS 7, all employees are required to complete any and all necessary financial forms and benefit applications as deemed necessary by the Principal or by his or her designee.

Employment qualifications as stated by an employee or prospective employee on an employment application or related information may be verified, and falsification of such information may jeopardize an employee's standing with this organization or a prospective employee's likelihood of being hired.

Communication of Terms of Employment

Employees shall receive annual letters of employment that state the terms of their employment.

Regular Full- Time and Part-Time Employment

Employees may be hired as regular full-time employees, and as such will be eligible for all benefits as described in this document.

The organization also may hire part-time staff. Part-time staff is those who are employed for less than 40 hours per work week. Part-time employees are not eligible for benefits as stated in this document. Time off work without pay for part-time employees may be granted by the Principal or his or her designee.

Performance Evaluation and Discipline Policy

The Principal is responsible for employees' performance evaluations. Each year each staff member will undergo a thorough performance review with the Principal. At this time the employee will receive formal feedback on their performance. The Principal will survey the staff to obtain feedback on the staff's evaluation of the management's employee expectations. At any time during the school year as it is merited, the school will issue formal commendations to teachers and staff members whose performance has been exemplary. The school will use the following kinds of mechanisms to advise teachers and other staff if their performance is below expectations: oral and written warnings, disciplinary probation and suspension. Employees may also be terminated for misconduct and/or poor job performance (see termination section below). All teachers will receive on-going required staff development through workshops, case conferencing, intervisitations and mentoring. Teachers who demonstrate a deficiency in any aspect of their responsibilities will receive additional assistance. If the deficiency continues, the teacher will be dismissed. The Principal is directly responsible to the Board of Directors. In the event of failure in the performance of his/her duties, he/she will be dismissed.

Termination

Each employee will be employed on an "at will" basis. The Board of Trustees has the authority to terminate an employee with or without cause, unless such termination would violate applicable law. Offenses which can result in immediate dismissal include, but are not limited to:

1. Possession, use, sale, purchase, or distribution on ICS 7's property, or reporting to work under the influence, of a drug and/or alcohol.
2. Falsifying or altering records.
3. Theft of ICS 7 property.
4. Sabotaging or willfully damaging ICS 7's equipment or the property of other employees.
5. Insubordination involving, but not limited to, defaming, assaulting, or threatening to assault a supervisor, and refusing to carry out the order of a supervisor.
6. Fighting or provoking a fight on school premises.
7. Absence for three days without notice, in which event the employee will be deemed to have quit voluntarily.
8. Working for another employer while on leave without consent of ICS 7.
9. Carrying concealed weapons on ICS 7's property or during any school-sponsored event.
10. Treating a student in a cruel or inappropriate way.
11. Failure to perform professional duties.

12. Poor job performance.
13. Undermining the code of ethics at ICS 7.

Final Pay

Employees who leave the service of ICS 7 for any reason shall be entitled to all pay that may be due them, with the following qualifications:

1. Employees will be advised of their rights under the Consolidated Omnibus Budget Reconciliation Act of 1986 (COBRA) to continue health care coverage for themselves and their dependents at group rates at their own expense for up to 18 months.
2. An employee who is terminated or who resigns must return all office keys, identification, security cards and codes, any borrowed school property including personal laptop and office materials and supplies in such employee's possession to the Principal. Failure to return ICS 7's items will result in delay in payment of final pay until all of ICS 7's property is returned.
3. No information or copies of information, including but in no way limited to files, memos, computer-stored items, lists, or other similar information, may be taken by such employee without the express permission of the Principal.
4. The final date of employment is the final date on which the employee serves his or her duties at ICS 7. It shall never be construed as the date upon which the employee receives his or her final pay.

Severance Pay

Employees shall not be entitled to severance pay.

Exit Interview

All employees are strongly encouraged to participate in an exit interview before leaving ICS 7.

Equal Opportunity Employer

It is the policy of ICS 7 to seek and employ the best-qualified personnel without regard to race, religion, color, creed, national origin, citizenship, age, sex, marital status, or disability. It is further this organization's policy to ensure equal opportunity for the advancement of staff members and equal treatment in the areas of upgrading, training, promotion, transfer, layoff, and termination.

ADA Compliance

ICS 7 will comply with the American with Disabilities Act (ADA) of 1990, and welcomes applications from people with disabilities.

Immigration Reform and Control Act of 1986

ICS 7 will verify that all of our employees are authorized for employment in the United States. All employees will complete an I-9 form.

Drug-Free Workplace

All employees are required to notify the Principal within five days of any criminal conviction if it occurred either in or out of the workplace. Employees will be notified that the unlawful manufacture, distribution, possession or uses of controlled substances are prohibited in the workplace.

Smoking

All facilities of ICS 7 will be smoke-free.

42. Action Plan

Provide an action plan that outlines the steps that the founding group will undertake to ensure a successful start-up. In a well-organized chart, your action plan should include:

- **A list of the tasks to be completed between the time the charter is approved and the opening of the school.**
- **The start date and projected completion date of each task; and**
- **The person(s) responsible for each task.**

Part of our comfort with opening more charter schools in New York City stems from our experience having opened other replication schools and from know that we have the personnel to train the new school staff. The Superintendent will mentor the new principal. The Superintendent is the primary resource for training the principal, however he will also tap into others in the Icahn Charter network to provide a complete and textured training. The Director of Operations will mentor the new Business Manager.

MONTH	JOB	START/ENDS	PERSON IN CHARGE
January/February Principal	Hire Principal		Superintendent makes recommendation to Board. Board hires.
February-March Principal	Lottery	Lottery after April 1	Principal
April Principal	Principal preparation work	Principal starts full-time in April. Will shadow existing principals. Full-time training period ends September when school starts.	Jeffrey Litt works with Principal
April Principal	Train Principal in charter school orientation: • Accountability Plan overview, • testing, ITBS • Core Knowledge • Targeted Assistance	April-July	Jeffrey Litt works with Principal on academic aspects and school organization. Richard Santiago works with Principal on

	• attendance procedures • progress reports • observes classes • attends board meetings as observer • meets with Director of Assessment for complete orientation • meets with AP Operations to learn budget process and protocols • assists with school budget process.		financial matters
April Business Manager	• under direction of AP Operations and principal, begins budget process for the school, assists with lottery. • begins fiscal orientation • assists principal with lottery advertising • learns ATS • attendance procedures • record keeping • staff attendance • filing of all required operations reports • assists with plans for bussing, lunch, school nurse	Hired part-time in April. Continues through July. Begins full-time in position in September, or before if necessary.	Richard Santiago trains business staff for new school
May Principal	continues orientation with AP Operations, Director of Assessment • observations • shadowing principal(s)		Jeffrey Litt works with Principal on academic aspects and school organization. Richard Santiago

	• begins to prepare orders for texts, supplies, educational materials, computers, software		works with Principal on financial matters
May Business Manager	• assists with finalizing school budget under direction from AP Operations and principal. • assists with ordering supplies • assists with ordering ITBS tests for June testing • finalizes all vendors (insurance, health, 403B, etc) • prepares budget under direction of AP Operations and principal for presentation to the board.		Richard Santiago trains new Business Manager
June Principal	• participates in ITBS testing including scheduling, individual testing for IEP students • observes the promotion process with teacher and principal(s), assists in graduation exercises • placement of students in new classes • Finalizes building issues.		Jeffrey Litt works with Principal on academic aspects and school organization. Richard Santiago works with Principal on financial matters
June Business Manager	• final arrangements for lunch, medical, busses. • enters student rosters in ATS		Richard Santiago trains new Business Manager

	• assists principal with outstanding issues.		
	•		
July Principal	• assists in analysis of post ITBS scores • final promotion decisions • prepares agenda for professional development to be held 3rd and 4th weeks of July. • observes end of year report preparations to CSI, SED • receives all materials, supplies, furniture, finalizes staff assignments		Principal works with ICS1 Director of Assessment, with Jeffrey Litt, with Staff Developer
July Business Manager	• sets up payroll rosters • monitors student registration • observes end of year required reports to CSI, SED		Richard Santiago trains new Business Manager

SUPPLEMENTAL INFORMATION

43. Supplemental Information

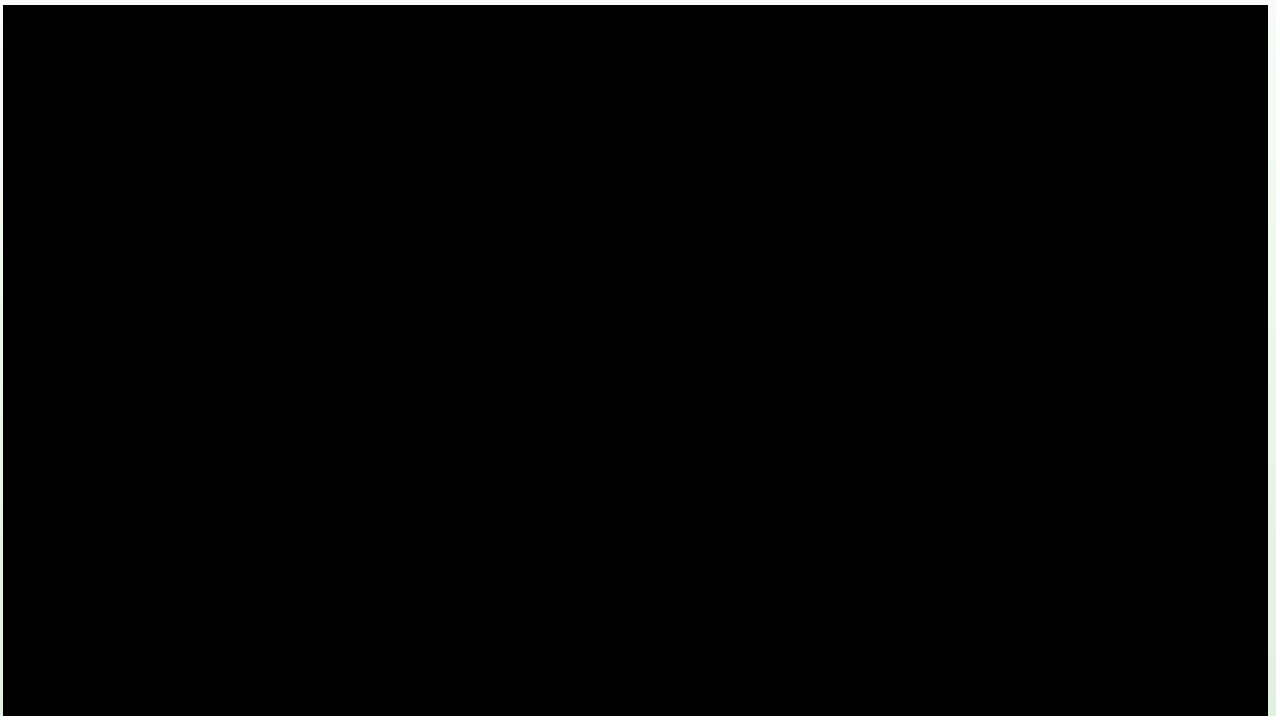
If you have any additional information that you think would be helpful to the Institute and the SUNY Trustees in their evaluation of your proposal, you may provide it here.

We are applying for two Icahn Charter Schools to open in 2012. As has been described throughout this application, we believe in the small school model, and in our model in particular. In the past, the Institute has asked why we don't apply for one charter and have more children in the one school, rather than apply for separate charters. To address this possible question, throughout this application are explanations of why the small school model that we have developed works and why it is important to us. While other charter operators may be comfortable with larger schools, that is not a model we have embraced. Our small school model is one that we believe in and the one that we are comfortable committing to again.

Icahn Charter School 1, the school that will be replicated, was part of Dr. Caroline Hoxby's New York City Charter Schools Evaluation Project. The Hoxby report's evaluation of our program is informative and positive and addresses many of the goals of New York charter schools and questions in this RFP. It is attached here as it adds external, objective evidence of our program's effectiveness.

The New York City Charter Schools Evaluation Project

Icahn Charter School



December 2010

reporting on results through
the 2007-08 school year

Principal Investigators:

Caroline M. Hoxby, Sonali Murarka, Jenny Kang

ICAHN CHARTER SCHOOL REPORT

Caroline M. Hoxby, Sonali Murarka, and Jenny Kang

Suggested Citation:

Hoxby, Caroline M., Sonali Murarka, and Jenny Kang. "Icahn Charter School Report." Second report in series. Cambridge MA: New York City Charter Schools Evaluation Project, December 2010.

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Jenny Kang, National Bureau of Economic Research

This research was funded by the Institute for Education Sciences under Contract R 305A040043, a subcontract of the National Center on School Choice at Vanderbilt University. We are thankful to the New York City Department of Education, especially Jennifer Bell-Ellwanger and Janet Brand, for their assistance in producing us with administrative data. The New York City Charter School Center and the individual charter schools participating in the study have been indispensable for their cooperation in compiling data. We gratefully acknowledge grant and administrative help from staff of the National Bureau of Economic Research and from the National Center on School Choice, Vanderbilt University. We also gratefully acknowledge excellent research assistance from Natalie Cox, Estevan Flores, Maxine Holland, Roselyn Hallett, Ryan Imamura, Christina Luu, Conrad Miller, Brendon Pezzack, and Ardalan Tajalli. The authors are responsible for the content of this report.

The aggregate report can be downloaded from <http://www.nber.org/~schools/charterschoolseval>

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INTERPRETING YOUR SCHOOL'S REPORT

Dear **Icahn Charter School**,

Thank you for participating in the New York City Charter Schools Evaluation. We hope that you find this report valuable. Keep in mind that this report is for *you*. It is not a public report unless you choose to make it public, and it is up to you to decide whether and how you wish to release part or all of it.

This 2010 report includes achievement results up through the 2007-08 school year for students who applied to your school up through the 2005-06 year. The previous report your school received from this study was released in July 2007 and included achievement results through the 2005-06 school year. We expect to produce another report within the year that will include achievement data up through the 2009-10 school year. There should also be additional reports in future years.

The report has an Executive Summary followed by four sections.

- The first section of the report is a description of your school.
- The second section of the report describes the students who applied to your school through the 2005-06 school year and also those students who were offered spots and chose to attend. This section also compares the students you enrolled to the students who applied but did not attend, either because they declined your offer of admission or because they were not offered a place through your lottery (they were “lotteried-out”). This section is a summary of the second section in the previously-released report.
- The third section of the report describes the method we used for assessing your school’s impact on student achievement, lottery-based analysis.
- The fourth section of the report contains our main results on how your school affects students’ achievement on standardized examinations.

We are eager to help you interpret the results. We suggest that you read the report first, keeping a note of any questions that you may have as you go along. A Frequently Asked Questions section is included at the end of this report. Should you have remaining unanswered questions, please contact us directly at the New York City Charter Schools Evaluation Project (650.724.7415 or charterevaluation@gmail.com).

EXECUTIVE SUMMARY

What is our school's effect on student achievement?

Your school's primary effects on achievement are **+0.40** standard deviations in math and **+0.25** standard deviations in reading per year (Table IVb). In other words, Icahn raises its students' math scores by 0.40 standard deviations for every year the students spend in the school and raises reading scores by 0.25 standard deviations for every year the students spend in the school. These results are in addition to whatever gains the students would have been expected to make in the traditional public schools, had they been lotteried out.

Keep in mind that a standard deviation or "effect size" is a conventional way of expressing test scores that works for all tests. If students' scores rise by one standard deviation, it is a large change in achievement and typically corresponds to more than a grade's worth of learning and more than a performance level. We have also translated your schools' effects into scale score points per the New York City standardized tests. For each year that students spend at Icahn, they can expect to improve by about 16.53 scale score points in math and by about 10.29 scale score points in reading.

These results are statistically significant with a high level of confidence. This means that we are very confident that the effects of your school are not zero or negative.

How has our school's effect on student achievement changed over time -- in other words, compared to the previous report?

In the last report, which covered achievement on state standardized exams through 2005-06, your school's effect on math achievement was +0.36 and your school's effect on reading achievement was +0.16. The results for effect on math achievement were statistically significant, whereas the results for reading achievement were not. Note that the results from this most recent report are more accurate than previous results because we are now evaluating more data.

Did the student lotteries at our school through 2005-06 appear to be fair and balanced?

Through 2005-06, the student lotteries at your school appear to be fair and balanced when comparing characteristics such as ethnicity and eligibility for school services of lotteried-in students to lotteried-out students (Tables IIa-IIc).

Did our school enroll or not enroll students with certain characteristics?

Through 2005-06, it seems that students choosing to enroll in your school were very reflective of all the applicants to your school (Tables IIa-IIc).

I. DESCRIPTION OF ICAHN CHARTER SCHOOL

SCHOOL'S MISSION STATEMENT

The mission of Icahn Charter School is to use the Core Knowledge curriculum, developed by E.D. Hirsch, to provide students with a rigorous academic program offered in an extended day/year setting. Students will graduate armed with the skills and knowledge to participate successfully in the most rigorous academic environments, and will have a sense of personal and community responsibility.

INSTITUTIONAL CHARACTERISTICS

Year opened	2001
Grades served (2008-2009)	K-8
Enrollment (2008-2009)	324
Chartering agency	SUNY Trustees
Institutional partners	Foundation for a Greater Opportunity
Borough	Bronx

LOCATION

Address: 1525 Brook Avenue, Bronx, New York 10457

Icahn Charter School is located in the South Bronx and operates in a facility specifically built to house the school. Figure 1a shows the school's location relative to the traditional public schools in the surrounding area.

NEIGHBORHOOD

Comparing the charter school's census tract to New York City as a whole (see Table Ia), we see that it is located in a neighborhood that has a higher proportion of black and Hispanic residents and a lower proportion of white and Asian residents. For instance, Icahn Charter School's neighborhood is 64.8 percent black, whereas New York City as a whole is 28.7 percent black.

Figure 1a
Traditional Public Elementary Schools in the Surrounding Area

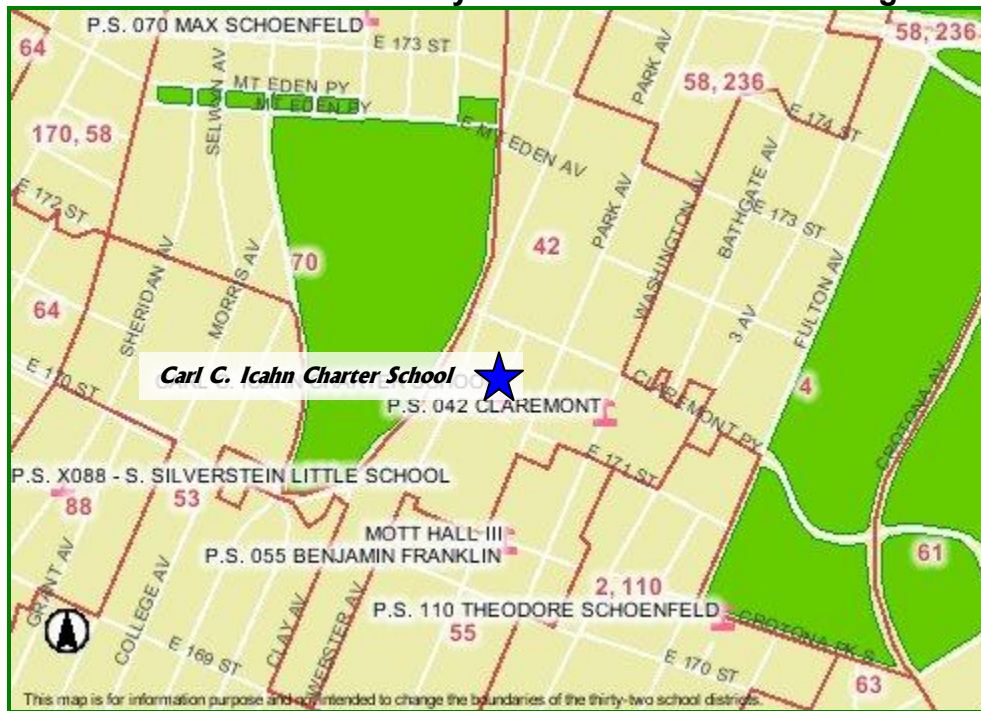


Figure 1a
Traditional Public Middle Schools in the Surrounding Area

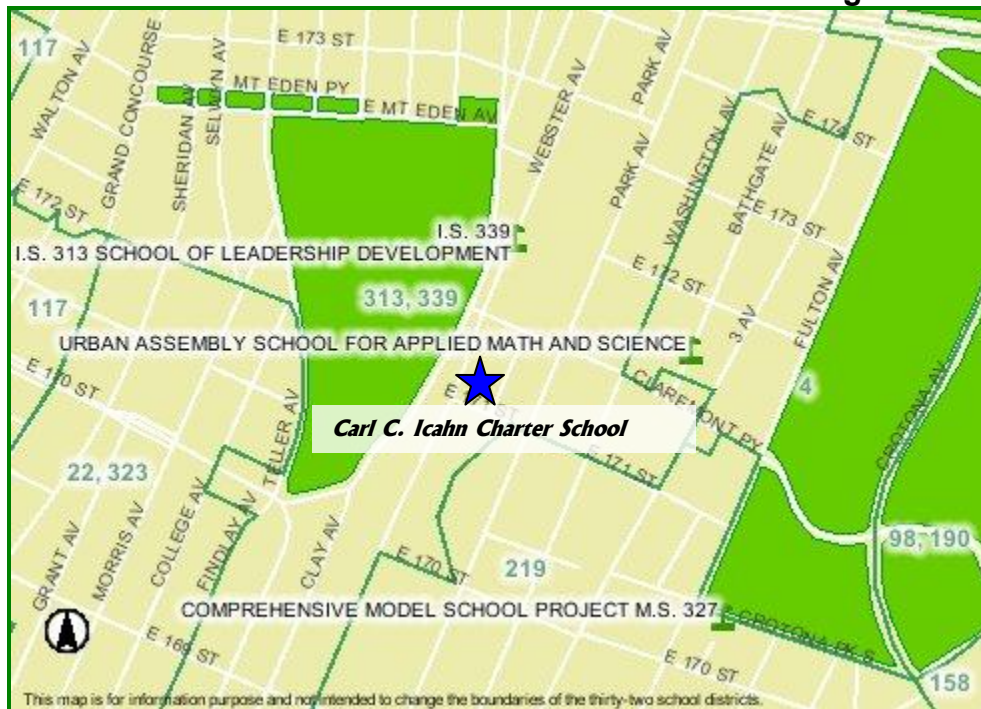


Table 1a
Icahn Charter School's Neighborhood
Compared to New York City as a Whole

<i>Neighborhood Characteristic</i>	<i>Neighborhood of Icahn Charter School</i>	<i>New York City as a whole</i>
% White (non-Hispanic)	0.8%	33.2%
% Black	64.8%	28.7%
% Hispanic	43.7%	27.9%
% Asian	0.4%	12.5%
Median family income	\$15,732	\$43,018
% households with income less than \$20,000	56.6%	28.4%
% of adults who have no high school diploma or GED	53.8%	28.0%
% of adults with bachelor's degree or higher	7.3%	27.9%
% of families with children that are headed by a single parent	57.1%	39.2%

Source: Authors' calculations based on Geolytics 2008 estimates of U.S. Census of Population and Housing data.

Icahn Charter School's neighborhood is economically disadvantaged. The median income of families in the school's census tract is \$15,732 while the median income of families in New York City overall is \$43,018. 53.8 percent of households in the school's neighborhood have incomes less than \$20,000, but only 28.4 percent of New York City households have such low incomes.

Finally, Icahn Charter School's neighborhood is educationally and socially disadvantaged. 53.8 percent of their adults have no high school diploma or general equivalency degree (GED). In contrast, only 28 percent of New York City adults have such a low level of education. In addition, 57.1 percent of families in the school's neighborhood are headed by single parents, whereas 39.2 percent of families are headed by single parents in New York City as a whole.

SCHOOL DESCRIPTION

Icahn Charter School serves grades K-8. The school was founded in 2001 by Foundation for a Greater Opportunity, a foundation funded by Carl. C. Icahn to open charter schools in the South Bronx. The mission of Icahn Charter emphasizes preparation for further learning in an rigorous extended day/year setting.

Icahn Charter uses the Core Knowledge Sequence, developed by E.D. Hirsch, as its primary method of instruction. This program is based on the idea that students should be equipped with a core set of knowledge in order to be competitive in any setting. The program is taught sequentially and thematically with an emphasis on literature, history, math and science. Expectations for students and for parents are clearly outlined by the school. Classes are capped at 18 students, and faculty mentors are assigned to meet with targeted students on a daily basis. Instruction takes place during extended school hours, over the length of a 200-day extended school year.

Mathematics instruction strives to reach beyond the conventional curriculum and makes use of a subject specialist to support instruction. Evaluation in mathematics is ongoing through a combination of teacher judgment and testing. The school uses the McGraw-Hill curriculum for both Math and Language Arts and uses their “Fox in a Box” program to assess students (in grades K-2) and determine their academic weaknesses. The science program emphasizes the importance of science in daily life and covers geology, physics, biology and chemistry. With a strong emphasis on increasing student competence, students are continually assessed in an attempt to ensure effective instruction. Students who demonstrate weakness receive “targeted assistance,” a program that includes intensive small group instruction for 45 minutes a day, 5 days a week, as well as fourteen weeks of Saturday Academy from 9:00 am -12:00 pm.

The school values parent involvement and holds parents accountable for their student’s homework and attendance in addition to student accountability. Parents are presented with a monthly syllabus and are expected to follow their students’ progress. Evaluation reports are sent home 6 times during the school year and parents are welcome in the school to observe their children. Parents see their son or daughter’s teacher every day and can make an appointment as needed; parents do not need an appointment to see the school’s principal. The school also takes discipline very seriously and, according to the school, “disruptive behavior is dealt with firmly, swiftly and fairly.” The school makes attempts to partner with parents on discipline in order to convey a uniform message to each child. Through this combination of curriculum, discipline, and accountability, Icahn Charter School hopes to adequately prepare all students for further learning.

Table 1b
Policies and Characteristics of Icahn Charter School

Founding Agency Name	Founding Agency Type	Founding Agency Experience	Length of School Day	Length of School Year	Summer or Saturday School	After or Before School Programming
Foundation for a Greater Opportunity	Nonprofit Community Grown Organization (CGO)	Foundation for a Greater Opportunity operates 4 charter schools in the Bronx	7.5 hours 8:30 am – 4:00 pm	192 days	Required Saturday School for students in need of remedial assistance: 14 weeks (9 am-12 pm)	Tutoring and other extracurricular activities offered after school, required for targeted assistance students (4:00-6:00)
Math Curriculum	Language Arts Curriculum	Other Curricula	Average Class Size	Evaluations Administered	Uniform Policy	Discipline Policy
McGraw-Hill Mathematics; Glenco 90 minutes daily	McGraw-Hill Reading program; Waterford Early Learning Program (grades K-2) 90 minutes daily	Core Knowledge Social Studies and Science	No more than 18	Iowa Test of Basic Skills (twice per year) Fox in a Box test	Uniforms required and given to students	Disruptive behavior is dealt with firmly, swiftly, and fairly; Guidance-oriented school
Advisory Program	Parent Participation	Teachers Unionized	Teacher Payment Structure	Organization of Leadership	Other Staff Positions	Emphasized Values/Goals
Faculty mentors assigned to students based on academic and/or social needs. Students meet with mentors as needed	Parent-teacher conferences (2 per year).	No	Traditional, with annual bonuses (for the past two years) determined by the board	Principal; Director of Operations; Board of Trustees	Director of Assessment; Staff developer; Mathematics Specialist (part-time)	Academic preparation, personal responsibility, community responsibility

II. THE STUDENTS OF ICAHN CHARTER SCHOOL

Demographics of Icahn Charter School's Applicants

In this section, we look at who applies to Icahn Charter School. How do the lotteried-in students (those who were offered a spot) compare to the lotteried-out students (those who were not)? And how do the students who enrolled compare to the non-enrolled students (those who either were lotteried out or declined a spot)?

This report analyzes achievement results up through 2007-08 and demographics of applicants up through 2005-06. This report does not include students who applied to your charter school in 2006 or 2007. Students who applied in these years will be included in future reports.

Table IIa shows that Icahn Charter School applicants were mostly black (54.1 percent) and Hispanic (42.1 percent). Only a few percent were white (0.6 percent), Asian (0.3 percent), or another race (1.8 percent). (Because percentages are rounded to the nearest whole number, the race and ethnicity percentages may not add up to 100.)

The lotteried-in applicants look very similar to the applicants as a whole. Formally, there are no statistically significant differences between the lotteried-in applicants and lotteried-out applicants. This confirms that the lotteries were indeed random.

The students who enrolled in Icahn Charter School also look very similar to the applicants. They were nearly all black or Hispanic (51.7 percent and 48.3 percent, respectively). Again, there are no statistically significant differences between the students who enrolled and those who did not enroll.

Table IIa also shows that applicants to your charter school, lotteried-in applicants, and enrollees are all about equally likely to be male and female.

Table IIa
Demographics of Icahn Charter School's Applicants
2001-02 to 2005-06

	<i>All applicants</i>	<i>Applicants who were lotteried-in</i>	<i>Statistically significant difference? (from lotteried-out)</i>	<i>Applicants who enrolled</i>	<i>Statistically significant difference? (from non-enrolled)</i>
% black Non-Hispanic	54.1	55.2	No	51.7	No
% white Non-Hispanic	0.6	0.0	No	0.0	No
% Hispanic	42.1	42.4	No	48.3	No
% Asian	0.3	0.8	No	0.0	No
% other race	1.8	0.0	No	0.0	No
% female	51.1	45.6	No	48.8	No

Table IIb
Prior Test Scores of Icahn Charter School's Applicants
2001-02 to 2005-06

	<i>All applicants</i>	<i>Applicants who were lotteried-in</i>	<i>Statistically significant difference? (from lotteried-out)</i>	<i>Applicants who enrolled</i>	<i>Statistically significant difference? (from non-enrolled)</i>
Previous math score among those who attended grade 3 or higher in another school prior to applying	630.4	635.9	No	651.3	No
Previous reading score among those who attended grade 3 or higher in another school prior to applying	634.3	634.9	No	646.5	No

Prior Test Scores of Icahn Charter School's Applicants

People are often interested in the prior test scores of students who apply to charter schools because they would like to know whether a district's high-achievers or low-achievers are disproportionately applying to charter schools. Because students do not take tests until grade three, we only have prior test scores for students who apply to grades four or higher from another New York City public school. For Icahn Charter School, students with prior test scores are atypical because they are not applying for an intake grade.

Table IIb shows the prior test scores of applicants, lotteried-in students, and students who enroll in Icahn Charter School. The lotteried-in applicants are not statistically significantly different in terms of previous math or reading scores. Similarly, there are no statistically significant differences between students who enrolled and those who did not enroll with respect to previous test scores.

Table IIc
Prior Program Participation of Icahn Charter School's Applicants
2001-02 to 2005-06

	<i>All applicants</i>	<i>Applicants who were lotteried-in</i>	<i>Statistically significant difference? (from lotteried-out)</i>	<i>Applicants who enrolled</i>	<i>Statistically significant difference? (from non-enrolled)</i>
% who participated in the Free or Reduced-Price lunch program	95.5	98.0	No	100.0	No
% who participated in special education	6.0	3.2	No	4.1	No
% who used services for English Language Learners	2.2	3.2	No	3.5	No

Note: Participation information is recorded at the time the applicant applied to the charter school.

Free or Reduced-Price Lunch, Special Education, and English Language Learner Service Participation of Icahn Charter School's Applicants

Table IIc shows the program participation at the time of application of applicants, lotteried-in students, and students who enroll in Icahn Charter School. The table shows that 95.5 percent of applicants participated in the free or reduced-price lunch program, 6 percent of applicants participated in special education, and 2.2 percent of applicants used services for English Language Learners.

The lotteried-in applicants are not statistically significantly different from the lotteried-out applicants in terms of these programs. Students who actually enrolled are also not statistically different from the non-enrolled students in regards to these programs. The lack of statistically significant differences indicates that the school's enrolled students are reflective of the entire body of applicants.

How do Icahn Charter School's Applicants Compare to Students at the Schools from which they are Drawn?

Tables IId and IIe show Icahn Charter School's applicants compared to the "composite comparison school" and to several individual traditional public schools. The composite comparison school is a weighted average of the characteristics of *all* of the traditional public schools from which this charter school draws applicants. For instance, if a charter school draws 1 percent of its applicants from a certain school, that school will get a 1 percent weight.

Tables IId and IIe also show the characteristics of the individual traditional public schools from which Icahn Charter School draws at least 7 percent of its applicants: PS 42 Claremont School and PS 55 Benjamin Franklin. It is generally not possible to add up the individual schools shown to get the constructed comparison "school" because the table does not show individual schools

that account for less than 7 percent of applicants. And your charter school, like all New York City charter schools, draws small numbers of applicants from many schools.

Overall, applicants to Icahn Charter School are not entirely reflective of the traditional public schools from which the charter school draws. Your school seems to have attracted a greater proportion of black applicants than the composite comparison school and a smaller proportion of Hispanic applicants. The school's applicants have higher previous test scores, and smaller proportions of English Language Learners and special education participants. The school has a similar proportion of students eligible for free or reduced-price lunch.

Table IId
Icahn Charter School versus the Traditional Public Schools from which it Draws Applicants
Demographics
2004-05 to 2005-06

Icahn Charter School 2004-05 through 2005-06	Applicants to Icahn Charter School	Composite Comparison "School" (a weighted average of the traditional public schools from which applicants were drawn)	PS 42 Claremont School 20.0% of applicants drawn from this school	PS 55 Benjamin Franklin 15.5% of applicants drawn from this school
% Female	51.1	50.2	38.6	40.2
% Black Non-Hispanic	54.1	39.1	44.6	45.6
% White Non-Hispanic	0.6	1.6	0.6	0.3
% Hispanic	42.1	57.6	54.1	53.6
% Asian	0.3	1.5	0.2	0.2
% Other	1.8	0.4	0.5	0.3

Notes: The table shows the demographics of students who apply to the charter school. It shows the same information for the schools from which this charter school draws its applicants. The composite comparison school is a weighted average of the characteristics of *all* of the traditional public schools from which this charter school draws applicants. For instance, if a charter school draws 1% of its applicants from a certain school, that school will get a 1% weight. The table also shows the characteristics of all of the individual traditional public schools from which this charter school draws at least 7% of its applicants. It is generally not possible to add up the individual schools shown to get the constructed comparison "school" because the table does not show individual schools that account for less than 7% of applicants. And most charter schools draw small numbers of applicants from many schools. Sources: Information for traditional public schools taken from the Common Core of Data (CCD). Information for the charter school taken from the New York City Department of Education Basic Educational Data System (BEDS).

Table IIe
Icahn Charter School versus the Traditional Public Schools from which it Draws Applicants
Prior Test Scores and Program Participation
2004-05 to 2005-06

Icahn Charter School 2004-05 through 2005-06	Applicants to Icahn Charter School	Composite Comparison "School" (a weighted average of the traditional public schools from which applicants were drawn)	PS 42 Claremont School 20.0% of applicants drawn from this school	PS 55 Benjamin Franklin 15.5% of applicants drawn from this school
Previous math score among those who attended grade 3 or higher in another school prior to applying	630.4	621.5	612.5	599.6
Previous reading score among those who attended grade 3 or higher in another school prior to applying	634.3	625.2	617.8	613.5
% Eligible for Free or Reduced-Price Lunch at the time of application	95.5	93.5	63.9	71.6
% Participated in Special Education at the time of application	6.0	14.6	21.2	17.2
% Classified as English Language Learner at the time of application	2.2	17.3	18.3	20.6

Notes: The table shows the characteristics of students who apply to the charter school at the time of application. It shows the same information for the schools from which this school draws its applicants. Statistics from "the time of application" available for students who were previously enrolled in a traditional public school in New York City. Source: Information for the charter school taken from the New York City Department of Education Basic Educational Data System (BEDS)

III. THE SUPERIORITY OF LOTTERY-BASED ANALYSIS

Why is lottery-based evaluation the gold standard?

Lottery analysis is, by far, the best way to determine the effect of a charter school on the test scores of the sort of students who tend to apply to the school. In fact, lottery analysis produces results that are so much more reliable than the results of any other method that no other results should be given any credence when lottery-based results are available. Only when lottery-based results are unavailable should one attend to results based on other methods, and even then it should be with extreme caution. If a charter school runs a lottery, its effects on achievement should be evaluated via the lottery method, even if this involves gathering some data.

Guaranteeing an “apples to apples” comparison

While students at traditional public schools normally attend the school closest to where they live, students attending charter schools have specifically chosen to apply to them. Thus, if we simply compare students who attend a charter school to students who attend traditional public schools, we may be comparing “apples to oranges.” We will almost certainly confuse evidence on the *effects* of the charter school with evidence on who *selects into* the charter school. This is known as selection bias.

Lottery-based analysis completely eliminates this bias so long as a charter school holds a random lottery among applicants and has a sufficient number of lotteried-in and lotteried-out students to generate balance. (The lotteried-in and lotteried-out are “balanced” if they are not distinguishable on a statistical basis.) Intuitively, the reason why lottery-based analysis can produce bias-free results is that *both* the lotteried-in and lotteried-out students have applied to the same charter school, so there is no difference in selection between the two groups.

What about students who are offered a place in a charter school’s lottery but who decide not to attend anyway?

We conduct a lottery-based analysis that even eliminates biases caused by students who are lotteried in but who decide not to attend the charter school after all. The basic intuition is this: we adjust the achievement differences between lotteried-in and lotteried-out students to take account for the fact that only some percentage of lotteried-in students enroll in charter schools. For instance, if 90 percent of lotteried-in students actually enroll in charter schools, the adjustment factor would be 90 percent. This adjustment is the standard procedure in lottery-based studies, including medical trials. In technical terms, we estimate “treatment-on-the-treated” effects by using lotteried-in status as an instrument for enrollment.

What about other methods, for occasions when lottery-based analysis is not available?

When lottery-based analysis is not available, researchers usually compare charter school students to students in traditional public schools, most of whom did not apply to charter schools. These comparisons are usually biased. Researchers can remedy some of this bias by using statistical methods to account for differences that we can readily observe between students who do and do not apply to the charter school. Unfortunately, a researcher does not really know when the statistical adjustments are making the bias better and when they are making the bias worse! The only way to know for sure is to compare the statistically adjusted results to results from a lottery-based study of the same data. However, if we have lottery-based results, there is really no point in computing statistically adjusted results.

What about analyzing gains in achievement?

Lottery-based analysis automatically analyzes gains since we start with two groups who are identical (lotteried-in and lotteried-out) and follow their progress.

However, when people say they are doing “gains analysis” they usually are not referring to lottery analysis. As a rule, they are talking about comparing the *gains* made by charter school students to the *gains* made by traditional public school students who did not apply to charter schools. Comparing gains can be, but is not necessarily, helpful. Comparing gains can even make bias worse.

What about matching based on students’ prior history in traditional public schools?

To use matching based on students’ prior history (“TPS-history-matching”), a researcher finds students who are currently in charter schools but who were previously enrolled in traditional public schools long enough to establish a program participation history (free lunch participation, special education, English Learner services). Then, the researcher matches the charter school student to one or more students in his or her previous traditional public school based on factors such as race, ethnicity, program participation, and prior test scores. The researcher then compares each student to his or her matched counterparts. The entire matching process is based on those students, and only those students, who switch out of traditional public schools and apply to charter schools in late grades. These “switchers” are non-representative students and are precisely the students for whom selection bias is most serious.

What about value-added analysis?

When lottery-based analysis is not available, some people mistakenly turn to pure value-added analysis. However, pure value-added analysis should *not* be used in the case of charter schools because it is the one method that systematically makes bias worse. Pure value-added analysis can

only be used on charter school students who switch from a traditional public school to a charter school (or *vice versa*) after being tested for at least two years in their initial school.

Unfortunately, selection bias is at its worst among precisely these students. Intuitively, when a family observes the gain that their child is making and then decides to switch to a wholly different school despite the loss of friends and familiarity, the family is making a strong selection decision. It is exactly such strong decisions that generate bias in a statistical analysis. The bottom line is that pure value-added analysis produces systematically biased results.

What is the difference between gains analysis and value-added analysis?

People often get pure value-added analysis mixed up with comparison of gains, but they are different methods:

- Comparison of Gains compares the gains of students in charter schools to the gains of *other* students in traditional public schools.
- Pure Value-Added Analysis compares the gains of a student from periods when he/she is in charter school to his/her *own* gains from periods when he/she is in traditional public school.

In other words, if the only students being analyzed are those who attend charter schools at some point, it is pure value-added analysis.

How do we know which evaluation methods work well?

Lottery-based results serve as a gold standard as long as they are available. We can use data like New York City's to test the different methods because each method can be used: lottery-based, statistical adjustment, comparison of gains, pure value-added and matching-on-previous-history. When we conduct such tests, we find that statistical adjustment and comparison of gains sometimes work but not reliably. Value-added analysis and matching-on-previous history produce systematically biased results, as we would logically expect them to.

The bottom line

Methods do matter, and some methods consistently produce misleading results. By sticking with lottery-based analysis whenever possible, you are most likely to end up with accurate results. An advantage of lottery-based analysis is that it is also easy to understand. You do not need to be an expert in statistics to see why comparing lotteried-in and lotteried-out students generates accurate estimates of the effects of charter schools.

How exactly do we use lottery-based data to estimate charter schools' effects?

Using lottery data to estimate effects is logically simple. We compute average achievement for lotteried-in students, compute average achievement for lotteried-out students, and compare them.

IV. THE EFFECT OF ICAHN CHARTER SCHOOL ON TEST SCORES

ARE THE ESTIMATES REPRESENTATIVE OF ICAHN CHARTER SCHOOL APPLICANTS?

Who has taken the statewide achievement tests at Icahn Charter School?

Icahn Charter School opened in 2001-02 with grades kindergarten through two and has added a grade each year until reaching its full complement of grades in 2007-08. Thus, in 2007-08, the school tested students in grades three through eight.

What years of achievement test results are covered by this study?

This report evaluates achievement test results from the school years starting in 2000-01 and ending in 2007-08. These are the years that are currently available in the New York City database. The next report will evaluate test results up through 2009-10.

Can lottery-based evaluation be used for Icahn Charter School?

Yes. From 2003-04 to 2007-08, Icahn Charter School had test takers in the third through eighth grades who had been admitted in an admissions lottery that was statistically balanced. See Table IVa for details.

Prior to 2004-05, Icahn Charter School also held lotteries, but the school did not keep full application information on lotteried-out students. (This is quite normal. Many schools did not archive full application information on lotteried-out students simply because they were unaware that such information might later be needed.) This accounts for the unavailable lotteries shown in Table IVa.

Icahn Charter School also has numerous students currently enrolled in kindergarten through second grades who have not yet taken tests but who may have been admitted in balanced admissions lotteries. The school also has students in higher grades who have already taken tests but who were admitted in lotteries after 2005-06. Data for these students will be available for evaluation in future years.

Table IVa
Availability of Lottery-Based Results for
Icahn Charter School I

Are Balanced Lotteries Available?	Year of Test-Taking				
	2007-08	2006-07	2005-06	2004-05	2003-04
Grade 3 tests	Yes	Yes	Yes	Yes	No
Grade 4 tests	Yes	Yes	Yes	Yes	No
Grade 5 tests	Yes	Yes	Yes	No	c/n/a
Grade 6 tests	Yes	Yes	Yes	c/n/a	c/n/a
Grade 7 tests	Yes	Yes	c/n/a	c/n/a	c/n/a
Grade 8 tests	Yes	c/n/a	c/n/a	c/n/a	c/n/a
Math A Regents	n/a	n/a	n/a	n/a	n/a
Comprehensive English Regents	n/a	n/a	n/a	n/a	n/a
Living Environment Regents	n/a	n/a	n/a	n/a	n/a
Global History Regents	n/a	n/a	n/a	n/a	n/a
U.S. History Regents	n/a	n/a	n/a	n/a	n/a

Notes: "c/n/a" means that the school does not currently have students in the relevant grade-of-testing but that the school does plan to have students in the relevant grade-of-testing. "n/a" means that the school does not plan to have students in the relevant grade-of-testing. "Yes" means that, for the grade of testing and school year in question, there are students available who took the test and who were originally admitted to the school in a balanced lottery. "No" means that, for the grade of testing and school year in question, there are no students available who took the test and who were originally admitted to the school in a balanced lottery. A school will have no balanced lottery available if it held no lottery, if it failed to keep full application information on lotteried-out students, or if the number of participants in the lottery was so small that the lotteried-in and lotteried-out groups were statistically significantly different at the 90 percent level. In the years before this study commenced, many schools failed to keep full application information on lotteried-out students simply because they were unaware that such information might later be needed.

LOTTERY-BASED RESULTS: THE EFFECTS OF ICAHN CHARTER SCHOOL ON MATH AND ENGLISH TEST SCORES IN GRADES 3 THROUGH 8

The Bottom Line

Compared to his lotteried-out counterparts, a student who attends Icahn Charter School has test scores that are +0.40 standard deviations higher for math and +0.25 standard deviations higher for English for each year he spends in the school before taking the test. These results are statistically significant with a high level of confidence. That means that we are very confident that the effects of Icahn Charter School on math and reading achievement are not zero or negative. These gains are *in addition* to whatever gains the students would have been expected to make in the traditional public schools, had they been lotteried-out.

What is a standard score and how big is a change of 1 unit?

Table IVb presents your school's results for math and English language arts in standard score units. A standard score or "effect size" is a conventional way of expressing test scores that allows us to compare tests from all years and grades on the same basis. A change of 1 unit in a standard score is a large change in achievement because it means that the student's performance has risen by a whole standard deviation. Suppose that a student started out at performance level 1 ("not meeting learning standards") on the New York State tests. If his standard score rose by 1 unit, he would leap up to performance level 3 ("meeting learning standards") in English. In math, he would leap even higher: well into performance level 3.

How do I translate the results into scale scores?

The bottom panel of Table IVb shows the results translated into 2007-08 scale score points. For each year that students spend in the school, Icahn Charter School raises their math scale scores by about 16.53 points and raises their reading scores by about 10.29 points.

Table IVb
Lottery-Based Estimates of the Effect of Attending Icahn Charter School,
Per Year of Attendance, on Test Scores for Grades 3 through 8
(shown in standard score units)

	Estimated Effect of Attending Icahn Charter School, Per Year of Attendance	
	effect on Math	effect on English
Effect in terms of Standard Score or Effect Size [statistically significant effect?]	0.40 [Yes]	0.25 [Yes]
Translation of Effect into 2007-08 Scale Score Points	16.53	10.29

Notes: This table shows the effect of attending Icahn charter school. An effect is judged to be statistically significant if it is statistically significantly different from zero with 90% confidence.

Estimation Details: the results are based on all balanced lotteries. The results are treatment on the treated results – that is, the estimation takes account of which lotteried-in students do and do not actually attend charter schools. The results also account for students who attend school only part of the year, students' grade at the time they take the test, and differences associated with the school year of the test. The estimation includes a full set of lottery fixed effects, and the standard errors are robust and clustered at the student level. Similar results are obtained if the estimation accounts for students' characteristics: race, gender, pre-lottery eligibility for school meals program, pre-lottery participation in special education, pre-lottery limited English proficiency status. Similar results are also obtained if all lotteries, not just balanced lotteries, are include in the estimation.

To estimate "treatment on the treated" estimates, an indicator for being lotteried-in is used as an instrument for attending the charter school.

Sources: Student test scores and characteristics are from the New York City Basic Educational Data System (BEDS). Student applicant and lottery lists are from the charter school.

FREQUENTLY ASKED QUESTIONS

Who conducted this report and how is it funded?

This is the second report from an independent study of New York City's traditional public schools and charter schools. It is funded by the Institute for Education Sciences, which is the research arm of the United States Department of Education.

The principal investigator for the study is Dr. Caroline M. Hoxby. She is a professor of economics at Stanford University and the Director of the Education Program at the National Bureau of Economic Research (NBER). The principal authors of this year's report are Dr. Hoxby and two former Project Managers: Jenny Kang and Sonali Murarka. The investigators are grateful for the cooperation and help they have received in the data gathering process from the New York City Department of Education, the New York City Charter School Center, and the charter schools located in New York City. All of these organizations have also helped the investigators by answering questions and clarifying details about the data. However, the investigators are solely responsible for the content of the report.

How can I request another electronic or paper version of my school's report?

Please contact us at charterevaluation@gmail.com if you would like an electronic version of your school's report emailed to you or a paper version mailed to you.

How does my school compare to other charter schools?

Please see the full report that includes aggregate results for all NYC charter schools, which will allow you to compare yourself to the overall average effect of charter schools in NYC. The aggregate report also contains some achievement analyses broken down by school characteristic so you can compare yourself to schools with similar characteristics, such as a longer school year, unionized teachers, etc. You will not be able to compare yourself to an individual charter school, however, unless that school chooses to make its report public.

How can we get a copy of the full report that includes aggregate results for all the NYC charter schools?

You can download a copy of the full report from <http://www.nber.org/~schools/charterschoolseval>

How does this December 2010 report relate to the overall study?

The first report in this study was released in July 2007. It included achievement results through the 2005-06 school year. This December 2010 report includes achievement results up through the 2007-08 school year for students who applied to your school up through the 2005-06 year. We expect to produce another report that will include all the charter schools currently operating in New York City. It will include achievement data up through the 2009-10 school year. There may also be additional reports in future years.

If we give you permission, can you put our school-level report on the NYC Charter Schools Evaluation public website to be downloaded?

Our NYC Charter Schools Evaluation Project website is reserved for city-wide aggregate reports. You are, of course, welcome to post parts or all of the report on your own school's website or brochure.

If I have suggestions for other information I would be interested in for next year's report, who should I contact?

Please contact us at charterevaluation@gmail.com or 650.724.7415. We would be happy to hear your feedback and suggestions about how the report could be more useful to you. There are certainly some questions about NYC charter school achievement we are interested in but cannot yet investigate because we don't have the proper data. For example, we have been asked about breaking down performance by teacher certification but we have not been able to collect good data on this yet.

Can I see any of these results broken down by grade within my school?

Yes. Please let us know if you would like any of these tables broken down by grade or by year (for now, we've only separated out the most recent year's results from all the other years).

Can I have access to the data you used to create our school report?

We can provide you with an electronic version of the information we retrieved from student applications to your school if you gave us paper applications. As a school leader, you should be able to collect information from ATS on the achievement and demographics of students enrolled in your school. We unfortunately cannot provide you with data on students who applied but did not attend your school for reasons of confidentiality.

Questions regarding Section II

What does statistical significance mean?

Statistical significance is a sign to you about whether we are confident about a particular result. If a result is statistically significant at the 90% level, this roughly means that we are 90% confident that the result you see is not the same as a difference of zero between the two populations. For example, let's say the percent female of lotteried-in students is 65% and the percent female of lotteried-out students is 60%, and this is statistically significant at the 90% level. Then, we could say that we are 90% confident that the 5 percentage point difference of 65% vs. 60% is correct and should be believed over a zero percentage point difference between the lotteried-in and lotteried-out groups.

Why did you choose the race categories you use in the tables?

The race categories we use are Black Non-Hispanic, White Non-Hispanic, Hispanic, Asian, and Other. These are the breakdowns given to us by the NYC Department of Education. We are therefore unfortunately unable to break down the data into more specific racial groups, such as Asian subgroups or mixed race.

Why are some comparisons of special education, English Language Learner status, and free and reduced-price lunch statistics unreliable?

It turns out that when schools are recording a student's program participation (participation in the National School Lunch program, special education, and English learner services), charter schools and traditional public schools do not have the same recording procedures. This makes some statistics unreliable for the purpose of comparing charter school applicants to traditional public

school students. We show only reliable statistics based on pre-application indicators in this report. Unfortunately, pre-application data are not available for most charter school applicants. There is no perfect fix for this problem. Fortunately, the recording problems do not affect the lottery-based analysis of achievement. This is because that analysis depends on comparing lotteried-in and lotteried-out *among* applicants. It does not depend on comparing applicants to non-applicants.

Why are some statistics shown for students at the time they applied?

Participation in the National School Lunch program, special education participation, and English Learner services are all shown for students at the time they applied. This is because the time-of-application statistics all come from the same recording system: the New York City Department of Education data system. By using the same recording system, we get comparable statistics.

What is the difference between lotteried-in and enrolled students?

Lotteried-in students include everyone who was offered a spot in your school if you held a lottery. Enrolled students include everyone who enrolled in your school at some point. The main difference between lotteried-in and enrolled students is the group of students who decline their spots: these decliners will be included as lotteried-in but not as enrolled.

Similarly, lotteried-out students include all the students who were never offered spots in your school (many schools refer to these students as waitlisted because a charter school will frequently automatically place lotteried-out students on a waiting list for admission to the school). Non-enrolled students include all the lotteried-out students as well as the students who were lotteried-in but declined the spots offered to them.

What is the “composite comparison school”?

The composite comparison school is a weighted average of all of the traditional public schools from which your charter school draws applicants. Suppose your school draws 50% of its applicants from School A, 25% of its applicants from School B, 10% of its applicants from School C, and 5% each from Schools D, E, and F. The composite comparison school will weight each traditional public school’s characteristics (percent female, percent black, etc) appropriately, with a 50% weight given to School A, 25% weight given to School B, and so on. The table also shows characteristics of the individual schools from which your school draws at least 7% of its applicants. Thus, in the above example, in addition to the composite comparison school we would see individual statistics for Schools A, B, and C. The table would *not* show individual statistics for Schools D, E, and F. Please note, therefore, that it is generally not possible to average the individual school shown to get the constructed comparison “school” as the table does not show individual schools that account for less than 7% of your applicants.

Questions regarding Section III

All our lotteries are held using random numbers – why does my school have unbalanced lotteries?

Your school’s lotteries probably are not balanced statistically because you have a small number of students falling into either the lotteried-in or the lotteried-out category (or both). For example,

if you have 50 applicants for only three spots available in fifth grade in a given year, you will have three lotteried-in students (and 47 lotteried-out). With such a small number of lotteried-in students it is quite possible that all three happen to be of the same race or same gender even though the students were chosen randomly. This outcome would cause your lottery to be unbalanced even though it was a truly random lottery.

Why doesn't my school's report contain any lottery-based achievement results?

Your school's report may not contain lottery-based achievement results for three possible reasons: your school does not have students in test-taking grades yet (3 and above); your school has not held any (statistically) balanced lotteries; or your school was unable to provide us with appropriate data on student applicants to your lotteries. If your school falls into the final category and you would like to discuss the types of information we need to conduct our lottery-based analyses, please feel free to email us (charterevaluation@gmail.com).

Are there any disadvantages of the lottery-based method?

Not really. So long as charter schools are running lotteries, the lottery-based method is best. Most urban charter schools in the U.S. run lotteries, so the lottery-based method can be used to evaluate them. Charter schools located in rural areas and "virtual" charter schools tend not to use lotteries. It is difficult to evaluate them with *any* method.

What do the indicators of statistical significance mean?

The indicators of statistical significance are signals of whether we are confident about a particular result. If a result is statistically significant at the 90% level ("yes"), this roughly means that we are 90% confident that the result you see should be believed over a difference of zero between the two populations. For example, in the tables of lottery-based estimates, let's consider an "Effect on Math" of 0.3 that is indeed statistically significant at the 90% level. Then, we could say that we are 90% confident that the estimated difference of 0.3 should be believed over a difference of 0.0 between the two populations, the lotteried-in and the lotteried-out.

What are "lottery fixed effects"?

Lottery fixed effects are a statistical technique we use to account for differences in the composition of a lottery from one grade and one year to the next. For example, one year your school may draw an unusually large number of female applicants, and this technique helps attribute that factor to the specific lottery rather than letting it affect your school's overall results.

What are "robust standard errors clustered at the student level"?

Robust standard errors clustered at the student level are used so that a given student who applies to your school multiple times is not treated as separate individuals. For example, if a certain student applies to your school three years in a row, this technique helps account for him as one individual rather than three separate individuals.

The report frequently refers to the expected gains of lotteried-out students. Do we know what these expected gains are?

Calculating the average expected gains of most schools' lotteried-out students is somewhat complicated given the change in tests in New York City. We realize, however, you may be interested in this statistic, since your school's estimated results are *in addition* to this expected

gain. If you are interested in finding out the expected gains of lotteried-out students for your school, please email us (charterevaluation@gmail.com) and we will be happy to discuss our calculations with you.

If a result is insignificant, does this mean my school is having no effect?

No. A math and/or reading result that is insignificant (not bolded and has the word “No” under it) simply means that we did not have enough data to be very confident in the effect your school is having. It could be that your school is having a fairly large effect, negative or positive, but we are unable to measure it precisely with our data thus far. Many schools with insignificant effects thus far may indeed see significant results next year. Please note that if your school were truly having no effect on achievement, you would see the effect on achievement estimated as 0.0 with the word “Yes” under it. In other words, we would have estimated a zero effect with high confidence.

I find my school’s lottery results to be surprising. Why might that happen?

There are two primary reasons why your school’s lottery-based achievement results may not match your expectations. First, you may be used to comparing yourself to a group of schools from which you do not draw a large number of students. For example, you might usually compare yourself to the three schools that are closest geographically to your school and it turns out that your school does not actually pull many students from these schools. The composite comparison school tables in Section II should help you determine if this is the case. Second, it may be true that student applicants to your school who continue to attend their traditional public schools are performing differently than you expected (either better or worse). Please feel free to email or call us if you would like to discuss your school’s results further.

Are there outcomes besides scores on New York City and state tests that you can look at?

In the future we would like to look at attendance, entry into college, and perhaps Advanced Placement test scores. We have been unable to look at these outcomes yet, however, because of limited data availability.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Listening and Speaking		
A. Classroom Discussion		
Participate in age appropriate activities involving listening and speaking.	SLK.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.	Participate in think, par, share activities in small and large groups.
Speak clearly with volume appropriate to the setting.	SLK.6 Speak audibly and express thoughts, feelings, and ideas clearly.	Speak and make inferences about information and ideas clearly with proper grammar usage.
Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc.	SLK.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	Engage in oral discussions using appropriate and effective use of strategies to convey their thoughts with peers following established rules of discussion.
Ask questions to clarify conversations, directions, exercises, and/or classroom routines.	SLK.3 Ask and answer questions in order to seek help, get information, or clarify something that is not understood.	Ask specific questions to clarify and extend meaning. Use language cues to indicate different levels of certainty.
Carry on and participate in a conversation over four to five turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age.	WK.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed. SLK.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. b. Continue a conversation through multiple exchanges	Revise by adding details to their illustrations or writings. Respond to questions in a written form using strategies taught for note taking, organizing and categorizing.
Identify and express physical sensations, mental states, and emotions of self and others.	SLK.6 Speak audibly and express thoughts, feelings, and ideas clearly.	Present information clearly in an oral manner.
Understand and use language to express spatial and temporal relationships (up, down, first, last, before, after, etc.).	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).	Be able to elect, focus, organize, and point of view for oral and or written presentations. Be able to observe basic writing conventions such as correct spelling, punctuation and capitalization.
Understand and use narrative language to describe people, places, things, locations, events, actions.	SLK.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.	Use dtails, examples, anecdotes, or personal experiences to explain or clarify information.
Understand and use common sayings and phrases such as “Better safe than sorry” and “Look before you leap” (see page 11).	LK.6 Use words and phrases acquired through conversations, reading and being read to, and res ponding to texts.	Present personal responses to text that make reference to plot characters, ideas, vocabulary and text structures.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
B. Presentation of Ideas and Information		
Follow multi-step, oral directions.	SLK.1 Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).	Participate in think, pair, share activities in small and large groups with peers and adults. Engage in oral discussions using appropriate and effective use of strategies to convey their thoughts with peers following established rules of discussion.
Give simple directions.	WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. SLK.6 Speak audibly and express thoughts, feelings, and ideas clearly.	Able to select focus, organization, and point of view for oral and written presentations. Exhibit understanding of the elements in creating a report whether illustratively or written form.
Provide simple explanations. WK.2	Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.	Able to make appropriate and effective use of strategies to construct meaning from print, such as prior knowledge about a subject, structural and context clues.
Recite a nursery rhyme, poem or song independently.		Able to use stress, pitch and juncture when sharing nursery rhymes or song independently.
C. Comprehension and Discussion of Read-Alouds—All Texts		
Listen to and understand a variety of texts read aloud, including fictional stories, fairy tales, fables, historical narratives, drama, informational text, and poems.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Able to read and form opinions about a variety of literary and informational text. Listen attentively and contribute to class discussions.
Grasping Specific Details and Key Ideas		
Describe illustrations. RLK.7	With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts). RIK.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	Identify relationships between the illustrations and the story.
Sequence four to six pictures illustrating events in a read-aloud.	RLK.2 With prompting and support, retell familiar stories, including key details. RIK.2 With prompting and support, identify the main topic and retell key details of a text.	Retell stories and provide supporting details sequentially.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
Answer questions requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc.	RLK.1 With prompting and support, ask and answer questions about key details in a text. SLK.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	Use appropriate facts and details to ask questions from the text.
Retell key details.	RKL.1 With prompting and support, ask and answer questions about key details in a text. RLK.2 With prompting and support, retell familiar stories, including key details. RIK.1 With prompting and support, ask and answer questions about key details in a text. RIK.2 With prompting and support, identify the main topic and retell key details of a text. RIK.8 With prompting and support, identify the reasons an author gives to support points in a text. WK.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	Make appropriate and effective use of reading strategies to construct meaning from print.
Ask questions to clarify information in a read-aloud.	RIK.1 With prompting and support, ask and answer questions about key details in a text. SLK.2 Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.	Ask questions to clarify and extend meaning.
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts in a read-aloud.	RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story. WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. SLK.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail. LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Use appropriate descriptive language to describe story elements.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	b. Use frequently occurring nouns and verbs.	
Observing Craft and Structure		
Understand and use words and phrases heard in read-alouds.	RLK.4 Ask and answer questions about unknown words in a text. RIK.4 With prompting and support, ask and answer questions about unknown words in a text. LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Use frequently occurring nouns and verbs. LK.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck). b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word. LK.5 With guidance and support from adults, explore word relationships and nuances in word meanings. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.	Demonstrate a basic understand of language in written and oral forms.
Compare and contrast similarities and differences within a single read-aloud or between two or more read-alouds.	RLK.9 With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories. RIK.9 With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	Use traditional structures for conveying similarities and differences in oral and written forms.
Make personal connections to events or experiences in a read-aloud and/or make connections among several read-alouds.	RIK.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. RIK.10 Actively engage in group reading activities with purpose and understanding.	Make connections between text to text and text to self.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	LK.5 With guidance and support from adults, explore word relationships and nuances in word meanings. c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).	
Integrating Information and Evaluating Evidence		
Prior to listening to a read-aloud, identify what they know and have learned that may be related to the specific story or topic to be read aloud.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Produce a response to literature using whatever means to communicate and make meaning; e.g. drawing, letter, strings, scribbles, letter approximations, and other graphic representations as well as gestures, intonations and role played voices.
Use pictures accompanying the read-aloud to check and support understanding of the read-aloud.	RLK.1 With prompting and support, ask and answer questions about key details in a text. RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story. RLK.7 With prompting and support, describe the relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts). RIK.1 With prompting and support, ask and answer questions about key details in a text. RIK.2 With prompting and support, identify the main topic and retell key details of a text. RIK.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. RIK.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	Use illustrations to show sequence and literary elements.
Make predictions prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far and then compare the actual outcomes to predictions.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Make predictions based on pictures, titles, and text they have heard.
Answer questions that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require	RIK.1 With prompting and support, ask and answer questions about key details in a text. WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a story	Support judgments through references to text, other works, authors or nonprint media or references to personal knowledge.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
recognizing cause/effect relationships.	reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...).	
Identify who is telling a story or providing information in a text.		
D. Comprehension and Discussion of Read-Alouds- Fiction, Drama, and Poetry		
Retell or dramatize a story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story.	Role play in order to better understand details and sequence of events.
Change some story events and provide a different story ending.	WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	Use a few traditional structures for conveying information such as chronological order, cause and effect and similarity and differences.
Create and tell an original story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	Use details, illustrations, examples, anecdotes, or personal experiences to explain or clarify information.
**Draw pictures and/or dictate ideas to represent details or information from a read-aloud (L.K.21)	WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...). WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. SLK.5 Add drawings or other visual displays to descriptions as desired to provide additional detail.	Select a focus, organization, and point of view for oral and written presentations.
Distinguish fantasy from realistic text in a story	RLK.5 Recognize common types of text (e.g., storybooks, poems).	Identify common types of genre: e.g poetry, nursery rhymes, fairy tales, and informational text.
**Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading (L.K.23)	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with	Read, re-read independently with peers or adults with purpose and understanding.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	purpose and understanding.	
Demonstrate understanding of literary language (e.g., author, illustrator, characters, setting, plot, dialogue, personification, simile, and metaphor) and use some of these terms in retelling stories or creating their own stories.	RLK.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story. RIK.6 Name the author and illustrator of a text and define the role of each in presenting the ideas or information in a text.	Demonstrate knowledge of the author and illustrator of a given text.
E. Comprehension and discussion of Read-Alouds – Non-fiction and Informational Text		
Retell important facts and information from a nonfiction read-aloud.	RLK.1 With prompting and support, ask and answer questions about key details in a text. RLK.2 With prompting and support, retell familiar stories, including key details. RIK.2 With prompting and support, identify the main topic and retell key details of a text. RIK.8 With prompting and support, identify the reasons an author gives to support points in a text. WK.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	Work independently or in a group to formulate questions, recall information, or gather information to provide answers to questions.
With assistance, categorize and organize facts and information within a given topic.	RIK.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...). WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. WK.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. LK.5 With guidance and support from adults, explore word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.	Use a combination of drawing, dictations, and writing to to compose informative text and supply some information about a topic. Read a variety of literature to different genres: picture books poems, articles and stories from children's magazines; fables myths and legends; songs, plays and media productions; and works of fiction and nonfiction intended for young readers.

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With assistance, create and interpret timelines and lifelines related to read-alouds.	RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story. RIK.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	Identify literary elements in a story and compare literary elements between two texts. Describe events that happened long ago and those from present time.
Distinguish read-alouds that describe events that happened long ago from those that describe contemporary or current events.	RIK.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	Describe events present and past using story structure e.g. Title, characters, setting, main idea.
II. Reading		
A. Print Awareness		
Demonstrate understanding that what is said can be written and that the writing system is a way of writing down sounds.	RFK.1 Demonstrate understanding of the organization and basic features of print.	Understands, verbalizes, and writes relationship between spoken and written language.
Demonstrate understanding of directionality (left to right, return sweep, top to bottom, front to back).	RFK.1 Demonstrate understanding of the organization and basic features of print. a. Follow words from left to right, top to bottom, and page by page.	Demonstrate an understanding of the organization and basic features of print, left to right, top to bottom and page by page.
Identify the parts of books and function of each part (front cover, back cover, title page, table of contents).	RIK.5 Identify the front cover, back cover, and title page of a book. RFK.1 Demonstrate understanding of the organization and basic features of print.	
Demonstrate correct book orientation by holding book correctly and turning pages. Recognize that sentences in print are made up of separate words.	RFK.1 Demonstrate understanding of the organization and basic features of print.	
Understand that words are separated by spaces.	RFK.1 Demonstrate understanding of the organization and basic features of print. c. Understand that words are separated by spaces in print.	
Distinguish letters, words, sentences, and stories. Demonstrate understanding of basic print conventions by tracking and following print word for word when listening to text read aloud.	RFK.1 Demonstrate understanding of the organization and basic features of print.	

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
Demonstrate understanding that the sequence of letters in a written word represents the sequence of sounds in the spoken word.	RFK.1 Demonstrate understanding of the organization and basic features of print. b. Recognize that spoken words are represented in written language by specific sequences of letters.	
Recognize and name the 26 letters of the alphabet in both their upper-case and lower-case forms.	RFK.1 Demonstrate understanding of the organization and basic features of print. d. Recognize and name all upper- and lowercase letters of the alphabet.	Recognizes spoken words are represented in written language. Recognizes all upper and lower case letters in any given order.
Say the letters of the alphabet in order, either in song or recitation.		
B. Phonological and Phonemic Awareness		
Identify environmental sounds, e.g., keys jingling, scissors cutting, clapping.		Demonstrate an understanding of spoken words, syllables and sounds. Count pronounce, blend and segment syllables in spoken words
Identify whether pairs of environmental sounds are the same or different		Demonstrate an understanding of spoken words, syllables and sounds. Count pronounce, blend and segment syllables in spoken words
Count the number of environmental sounds heard, e.g., clapping, rhythm band instruments.		Demonstrate an understanding of spoken words, syllables and sounds. Count, pronounce, blend and segment syllables in spoken words
Orally segment sentences into discrete words. Demonstrate understanding that words are made up of sequences of sounds. Demonstrate understanding that vowel sounds are produced with the mouth open and airflow unobstructed, whereas consonant sounds involve closing parts of the mouth and blocking the air flow. Given a pair of spoken words, select the one that is longer (i.e., contains more phonemes). In riddle games, supply words that begin with a target phoneme.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	Demonstrate an understanding of spoken words, syllables and sounds. Count, pronounce, blend, and segment syllables in spoken words.
Indicate whether a target phoneme is or is not present in the initial/medial/final position of a spoken word, e.g., hear /m/ at the beginning of mat and /g/ at the end of bag. Listen to one-syllable words and tell the beginning or ending sounds, e.g., given dog, identify initial /d/ or final /g/.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/.)	

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicaor
Recognize the same phoneme in different spoken words, e.g., /b/ in ball, bug, and big.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.	
Identify whether pairs of phonemes are the same or different, including pairs that differ only in voicing, e.g., /b/ and /p/.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	
Orally blend two to three sounds to form a word, e.g., given the sounds /k/.../a/... /t/, blend to make cat.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). c. Blend and segment onsets and rimes of single-syllable spoken words.	
Segment a spoken word into phonemes, e.g., given bat, produce the segments/b//a//t/.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). c. Blend and segment onsets and rimes of single-syllable spoken words.	Demonstrate an understanding of spoken words, syllables Counts, pronounce, blend and segment syllables in spoken words.
Given a spoken word, produce another word that rhymes, e.g., given hit, supply bit or mitt.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Recognize and produce rhyming words.	
Identify the number of syllables in a spoken word.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). b. Count, pronounce, blend, and segment syllables in spoken words.	
C. Phonics: Decoding and Encoding		
Demonstrate understanding that a systematic, predictable relationship exists between written letters (graphemes) and spoken sounds (phonemes).	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.	Apply grade level phonicis, words analysis skills in decoding words.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
Blend individual phonemes to pronounce printed words. Understand that sometimes two or more printed letters stand for a single sound. Read and write any CVC word, e.g., sit or cat. Read and write one-syllable words containing common initial consonant clusters such as tr-, fl-, dr- and sp- and consonant digraphs such as ch-, sh-, th-, etc.	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
Read and write words containing separated vowel graphemes, such as, late, bite, note, cute.	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.	Apply grade level phonics, word analysis skills in decoding words.
Read tricky spellings that can be sounded two ways, e.g., the letter ‘s’ sounded /s/ as in cats and /z/ as in dogs.	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
Read and write chains of one-syllable words in which one sound is added, substituted, or omitted, e.g., read at > cat > bat > bad > bid.	RFK.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words. RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.	
Read at least 15 words generally identified as very high frequency words.	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does).	
Consonant Sounds and Spellings Taught in Kindergarten		

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
/b/ spelled 'b' as in boy, 'bb' as in tubby /d/ spelled 'd' as in dog, 'dd' as in madder /f/ spelled 'f' as in fun, 'ff' as in stuff /g/ spelled 'g' as in get, 'gg' as in egg /h/ spelled 'h' as in him /j/ spelled 'j' as in jump /k/ spelled 'c' as in cat, 'k' as in kitten, 'ck' as in sick, 'cc' as in moccasin /l/ spelled 'l' as in lip, 'll' as in sell /m/ spelled 'm' as in mad, 'mm' as in hammer /n/ spelled 'n' as in net, 'nn' as in funny /p/ spelled 'p' as in pet, 'pp' as in happy /r/ spelled 'r' as in red, 'rr' as in earring /s/ spelled 's' as in sit, 'ss' as in dress /t/ spelled 't' as in top, 'tt' as in butter /v/ spelled 'v' as in vet /w/ spelled 'w' as in wet /x/ spelled 'x' as in tax /y/ spelled 'y' as in yes /z/ spelled 'z' as in zip, 'zz' as in buzz, 's' as in dogs /ch/ spelled 'ch' as in chop /sh/ spelled 'sh' as in ship /th/ spelled 'th' as in thin /th/ spelled 'th' as in then /qu/ spelled 'qu' as in quick /ng/ spelled 'ng' as in sing, 'n' as in pink	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sound for each consonant.	
Vowel Sounds and Spellings Taught in Kindergarten		

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
/a/ spelled 'a' as in cat /e/ spelled 'e' as in get /i/ spelled 'i' as in hit /o/ spelled 'o' as in hot /u/ spelled 'u' as in but /ae/ spelled 'a_e' as in cake /ee/ spelled 'ee' as in bee /ie/ spelled 'i_e' as in bike /oe/ spelled 'o_e' as in note /ue/ spelled 'u_e' as in cute /er/ spelled 'er' as in her. /ar/ spelled 'ar' as is car /or/ spelled 'or' as in for	RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.	
D. Oral Reading and Fluency		
Read decodable stories that incorporate the specific code knowledge that has been taught.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding. RFK.3 Know and apply grade-level phonics and word analysis skills in decoding words. c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does). RFK.4 Read emergent-reader texts with purpose and understanding.	Read accurately with intonation and affect
Use phonics skills in conjunction with context to confirm or self-correct word recognition and understanding, rereading as necessary.	RLK.4 Ask and answer questions about unknown words in a text. RIK.4 With prompting and support, ask and answer questions about unknown words in a text. RFK.4 Read emergent-reader texts with purpose and understanding. LK.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck). LK.4 Determine or clarify the meaning of unknown and	

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	multiple-meaning words and phrases based on kindergarten reading and content. b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.	Read accurately with intonation and affect.
Demonstrate understanding of and use commas and end punctuation while reading orally.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	
Read aloud, alone, or with a partner at least 15 minutes each day.	RFK.4 Read emergent-reader texts with purpose and understanding.	
E. Reading Comprehension – All Texts		
Demonstrate understanding of simple decodable text after reading independently.	RFK.4 Read emergent-reader texts with purpose and understanding.	Uses details, examples, anecdotes or personal experiences to explain or clarify information.
Grasping Specific Details and Key Ideas		
Answer questions requiring literal recall and understanding of the details and/or facts (i.e., who, what, where, when, etc.) about a text that has been read independently.	RLK.1 With prompting and support, ask and answer questions about key details in a text. RIK.1 With prompting and support, ask and answer questions about key details in a text.	
Retell or dramatize a story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story.	Use key details in a text to support responses, inferences information and ideas with reference to characters, setting and major events in a story in a sequential order.
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts from a text that has been read independently.	RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story. WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. SLK.4 Describe familiar people, places, things, and events and, with prompting and support, provide additional detail. LK.1. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Use frequently occurring nouns and verbs.	Demonstrate knowledge of syntactically correct oral and written language.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
Observing Craft and Structure		
Understand and use words and phrases from a text that has been read independently.	RLK.4 Ask and answer questions about unknown words in a text. RIK.4 With prompting and support, ask and answer questions about unknown words in a text. LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Use frequently occurring nouns and verbs. LK.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content. a. Identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck). b. Use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word. LK.5 With guidance and support from adults, explore word relationships and nuances in word meanings. b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms). d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.	Select and understand the features and structures of language appropriate to the purpose and context of the words.
Integrating Information and Evaluating Evidence		
Prior to reading, identify what they know and have learned that may be related to the specific story or topic to be read.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Support judgements through reference to text and other work. Identify who is narrating the story or providing information in the text.
Use pictures accompanying the written text to check and support understanding.	RLK.1 With prompting and support, ask and answer questions about key details in a text. RLK.2 With prompting and support, retell familiar stories, including key details. RLK.3 With prompting and support, identify characters, settings, and major events in a story. RLK.7 With prompting and support, describe the	Support judgements through reference to text and illustrations and other works. Identify the story or providing information in the text.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	relationship between illustrations and the story in which they appear (e.g., what moment in a story an illustration depicts). RIK.1 With prompting and support, ask and answer questions about key details in a text. RIK.2 With prompting and support, identify the main topic and retell key details of a text. RIK.3 With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text. RIK.7 With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).	
Make predictions prior to and while reading, based on the title, pictures, and/or text read thus far and then compare the actual outcomes to predictions.	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Make appropriate and effective use of reading strategies to construct meaning from print and illustrations.
Identify who is telling a story or providing information in a text.	RLK.6 With prompting and support, name the author and illustrator of a story and define the role of each in telling the story.	
III. Writing		
Draw pictures to represent a preference or opinion.	WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...).	Use the process of pre-writing to produce well constructed text whether narrative or informational using text and/or pictures.
Write narratives, informative and explanatory texts, and offer an opinion through shared writing exercises.	WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...). WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.	Use the process of pre-writing to produce well constructed topic using text and/or pictures.

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	WK.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including collaboration with peers. WK.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them.)	
With assistance, add details to writing.	WK.1 Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g. My favorite book is...). WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. WK.3 Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened. WK.5 With guidance and support from adults, respond to questions and suggestions from peers and add details to strengthen writing as needed.	Use basic writing conventions such as spelling, punctuation and capitalization, as well as sentence and paragraph structures appropriate to written forms.
Create a title or caption to accompany a picture and/or shared writing.	WK.2 Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic. LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Produce and expand complete sentences in shared language activities.	
IV. Language Conventions		
Form letters, words, phrases and sentences to communicate thoughts and ideas.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters LK.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. c. Write a letter or letters for most consonant and	Write letters, invitations, to communicate with other, while demonstrating control of grammar, punctuation, sentence structure.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	short-vowel sounds (phonemes).	
Apply basic spelling conventions. Use basic capitalization and punctuation in sentences to convey meaning.	LK.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
A. Handwriting and Spelling		
Hold a pencil with a pincer grasp and make marks on paper.		
Trace, copy, and print from memory the 26 letters of the alphabet accurately in both their upper-case and lower-case forms.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters	
Write own name.		
Write from left to right, leaving spaces between words, and top to bottom using return sweep.		
Begin to write phonemically plausible spellings for words that cannot be spelled correctly with current code knowledge, e.g., write bote for boat, sum for some, hunee for honey.	LK.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	
Write words, phrases, and sentences from dictation, applying phonics knowledge.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Produce and expand complete sentences in shared language activities. LK.2 Produce and expand complete sentences in shared language activities. d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	
B. Parts of Speech and Sentence Structure		
Use and understand question words, i.e., what, where, when, who, how.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. d. Understand and use question words (interrogatives) (e.g., who, what, where, when,	

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
	why, how).	
Form regular plural nouns by adding 's' or 'es', i.e., dog, dogs, wish, wishes.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).	
Demonstrate understanding of frequently occurring prepositions, i.e., to/from, in/out, on/off.	LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).	
Produce and expand complete sentences orally and in shared writing exercises.	WK.7 Participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them.) LK.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Produce and expand complete sentences in shared language activities.	
C. Capitalization and Punctuation		
Capitalize the first word in a sentence, the pronoun I.	LK.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun I.	Produce written product demonstrating control of sentence structure using proper capitalization and punctuation.
Identify and use end punctuation, including periods, question marks, and exclamation points.	LK.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. b. Recognize and name end punctuation.	Produce written product demonstrating control of sentence structure using proper punctuation such as periods (.), questions marks (?), and exclamations points (!)
V. Poetry		
A. Mother Goose and other Traditional Poems*		

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A Diller, A Dollar Baa, Baa, Black Sheep Diddle, Diddle, Dumpling Early to Bed Georgie Porgie Hey Diddle Diddle Hickory, Dickory, Dock Hot Cross Buns Humpty Dumpty It's Raining, It's Pouring Jack and Jill Jack Be Nimble Jack Sprat Ladybug, Ladybug Little Bo Peep Little Boy Blue Little Jack Horner Little Miss Muffet London Bridge Is Falling Down Mary, Mary, Quite Contrary Old King Cole Old Mother Hubbard One, Two, Buckle My Shoe Pat-a-Cake Rain, Rain, Go Away Ride a Cock-Horse Ring Around the Rosey Rock-a-bye, Baby Roses Are Red See-Saw, Margery Daw Simple Simon Sing a Song of Sixpence Star Light, Star Bright There Was a Little Girl There Was an Old Woman Who Lived in a Shoe This Little Pig Went to Market	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Ask specific questions to clarify and extend meaning. -Present information clearly in a variety of oral and written forms such as summaries, paraphrases, brief reports, stories, posters, and charts. -Use details, examples, anecdotes, or personal experiences to explain or clarify information. -Present personal responses to literature that make reference to the plot, characters, ideas vocabulary, and text structure. -Read and form opinions about a variety of literary texts. -Understand the literary elements of setting, character, plot, theme, and point of view, and compare those features to other works of their own lives. -Listen attentively and recognize when it is appropriate for them to speak. -Take turns speaking and responding to others' ideas in conversations on familiar topics. -Explain the meaning of literary works with some attention to meaning beyond the literal level. -Read aloud accurately and fluently using phonics and context clues to determine pronunciation and meaning.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
B. Other Poems, Old and New*		
April Rain Song (Langston Hughes) Happy Thought (Robert Louis Stevenson) I Do Not Mind You, Winter Wind (Jack Prelutsky) Mary Had a Little Lamb (Sara Josepha Hale) The More It Snows (A. A. Milne) My Nose (Dorothy Aldis) Rain (Robert Louis Stevenson) Three Little Kittens (Eliza Lee Follen) Time to Rise (Robert Louis Stevenson) Tommy (Gwendolyn Brooks) Twinkle Twinkle Little Star (Jane Taylor)	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	(See page 20)
VI. Fiction		
A. Stories*		

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
The Bremen Town Musicians (Brothers Grimm) Chicken Little (also known as “Henny-Penny”) Cinderella (Charles Perrault) Goldilocks and the Three Bears How Many Spots Does a Leopard Have? (African folktale) King Midas and the Golden Touch The Legend of Jumping Mouse (Native American: Northern Plains legend) The Little Red Hen Little Red Riding Hood Momotaro: Peach Boy (Japanese folktale) Snow White and the Seven Dwarfs The Three Billy Goats Gruff The Three Little Pigs A Tug of War (African folktale) The Ugly Duckling (Hans Christian Andersen) The Velveteen Rabbit (Margery Williams) selections from Winnie-the-Pooh (A. A. Milne) The Wolf and the Kids (Brothers Grimm)	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	(See page 20)
B. Aesop’s Fables*		
The Lion and the Mouse The Grasshopper and the Ants The Dog and His Shadow The Hare and the Tortoise	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	(See page 20)
C. American Folk Heroes and Tall Tales*		
Johnny Appleseed Casey Jones	RLK.10 Actively engage in group reading activities with purpose and understanding. RIK.10 Actively engage in group reading activities with purpose and understanding.	Engage in tal tales and folk hero reading activities with the purpose to identify and compare physical, human and cultural difference.
D. Literary Terms		
author illustrator		Identify the author and illustrator of any given story.

Core Knowledge Sequence Kindergarten	Common Core State Standards covered at CK Grade Level	Performance Indicator
VII. Sayings and Phrases		
A dog is man's best friend. April showers bring May flowers. Better safe than sorry. Do unto others as you would have them do unto you. The early bird gets the worm. Great oaks from little acorns grow. Look before you leap. A place for everything and everything in its place. Practice makes perfect. [It's] raining cats and dogs. Where there's a will there's a way.	LK.5 With guidance and support from adults, explore word relationships and nuances in word meanings. LK.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts.	Ask specific questions to clarify and extend meaning. Use details, examples, anecdotes, or personal experiences to explain or clarify information.
*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade "staircase" of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ARTS & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		
**The Core Knowledge Language Arts Program: Grade K Language Art Objectives for Listening and Learning		

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A. Classroom Discussion		
Participate in age appropriate activities involving listening and speaking.	SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.	Produce evidence that demonstrates an understanding of by participating in book talks, responding to literature.
Speak clearly with volume appropriate to the setting. Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say “excuse me” or “please,” etc.	SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).	Listen attentively and recognize when it is appropriate for them to speak. Take turns speaking and responding to others' ideas in conversations on familiar topics. Recognize appropriate interactions for different circumstances
Ask questions to clarify conversations, directions, exercises, and/or classroom routines.	SL1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media. SL1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	Ask specific questions to clarify and extend meaning.
Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner’s comments, with either an adult or another child of the same age.	W1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed. SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. b. Build on others’ talk in conversations by responding to the comments of others through multiple exchanges.	Express opinions about events, books, issues and experiences supporting their opinions with some evidence Take turns speaking and respond to others' ideas in conversations on familiar topics. Recognize the kind of interaction appropriate for different circumstances: group discussions, one to one conversations.
Identify and express physical sensations, mental states, and emotions of self and others.	SL1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	Discuss, identify and compare the physical human, and cultural characteristics of different regions and people.
Understand and use language to express spatial and temporal relationships (up, down, first, last, before, after, etc.).	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. i. Use frequently occurring prepositions (e.g., during, beyond, toward).	
Understand and use narrative language to describe people, places, things, locations, events, actions.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL1.3 Describe characters, settings, and major events in	Discuss, identify and compare the physical human, and cultural characteristics of different regions and people. Engage in tall tales and folk hero group reading activities.

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	a story, using key details. SL1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	
Understand and use common sayings and phrases such as “Hit the nail on the head” and “Let the cat out of the bag” (see page 34).	L1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibblet because she nibbles too much because she likes that).	-Use details, examples, anecdotes, or personal experiences to explain or clarify information. -Use inference and deduction to understand text. -Explain the meaning of literary works with some attention meaning beyond the literal level.
B. Presentation of Ideas and Information		
Follow multi-step, oral directions.	SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).	
Give simple directions. W1.2	Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. SL1.6 Produce complete sentences when appropriate to task and situation.	
Provide simple explanations. RL1	.1 Ask and answer questions about key details in a text. RL1.3 Describe characters, settings, and major events in a story, using key details. RI1.1 Ask and answer questions about key details in a text. RI1.2 Identify the main topic and retell key details of a text. RI1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI1.7 Use illustrations and details in a text to describe its key ideas. RI1.8 Identify the reasons an author gives to support points in a text. W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	Make connections between literary works according to common theme. Compare literacy classics to media versions of same work. Determine why characters behave the way they do. Produce a retelling of a story to peers and adults. Create picture books.

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	W1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. W1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. SL1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly. SL1.6 Produce complete sentences when appropriate to task and situation.	Make connections between literary works according to a common theme.
Recite a nursery rhyme, poem or song independently, using appropriate eye contact, volume and clear enunciation.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL1.3 Describe characters, settings, and major events in a story, using key details.	
**Share writing with others (L.1.29).	W1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed. W1.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers. SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups.	
Give oral presentations about personal experiences, topics of interest, and/or stories, using appropriate eye contact, volume and clear enunciation.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL1.3 Describe characters, settings, and major events in a story, using key details. RI1.7 Use illustrations and details in a text to describe its key ideas. RI1.8 Identify the reasons an author gives to support points in a text. SL1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	Elaborate on literacy elements and use prior knowledge to execute oral and written presentations.
C. Comprehension and Discussion of Read-Alouds – All Texts		

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Listen to and understand a variety of texts read aloud, including fictional stories, fairy tales, fables, historical narratives, drama, informational text, and poems.	RI.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types. RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	Make connections between literary works, genres, and and informational text with prompting and support.
Distinguish the following genres of literature: fiction, nonfiction and drama.	RI.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types. RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	Read a variety of literature of different genres. Recognize features that distinguish the genres and use those features to aid comprehension.
Grasping Specific Details and Key Ideas		
Describe illustrations.	RI.1.7 Use illustrations and details in a story to describe its characters, setting, or events. RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI.1.7 Use illustrations and details in a text to describe its key ideas.	Differentiate between illustrations and text context utilizing different genres.
Sequence four to six pictures illustrating events in a read-aloud.	RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI.1.2 Identify the main topic and retell key details of a text. RI.1.7 Use illustrations and details in a text to describe its key ideas.	Select and use strategies learned for note taking, organizing categorizing informaion. Use a few traditional structures for conveying information such as chronological order, cause and effect, and similarity and differences.
Answer questions requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc.	RI.1.1 Ask and answer questions about key details in a text. RI.1.1 Ask and answer questions about key details in a text.	Ask specific questions to clarify and extend meaning.
Retell key details.	RI.1.1 Ask and answer questions about key details in a text. RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.	Respond to literature by retlling stories to peers and adults.

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	RI.1.2 Identify the main topic and retell key details of a text. RI.1.8 Identify the reasons an author gives to support points in a text.	
Ask questions to clarify information in a read-aloud.	RI.1.1 Ask and answer questions about key details in a text. RI.1.1 Ask and answer questions about key details in a text. W1.5 With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed. W1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. SL1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. c. Ask questions to clear up any confusion about the topics and texts under discussion.	Ask specific questions to clarify and extend meaning.
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts in a read-aloud.	RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI.1.3 Describe characters, settings, and major events in a story, using key details. W1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	Read, listen to historical narratives and describe people, places, things, events, actions, and facts and discuss how their locations are related to the location of other people and places.
Observing Craft and Structure		
Understand and use words and phrases heard in read-alouds.	RI.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. L1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase.	Make connections using poetry, short plays, picture books and stories in narrative and informational text demonstrating an understanding of word relationships

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	b. Use frequently occurring affixes as a clue to the meaning of a word. L1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes). d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	
Compare and contrast similarities and differences within a single read-aloud or between two or more read-alouds.	RI.1.9 Compare and contrast the adventures and experiences of characters in stories. RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures).	
Make personal connections to events or experiences in a read-aloud and/or make connections among several read-alouds.	RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1. L1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. c. Identify real-life connections between words and their use (e.g., note places at school that are cozy).	Make connections using poetry, short plays, picture books and stories in narrative and informational text demonstrating an understanding of word relationships.
Integrating Information and Evaluating Evidence		
Prior to listening to a read-aloud, identify what they know and have learned that may be related to the specific story or topic to be read aloud.	RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	Use inference and deduction to understand text.
Use pictures accompanying the read-aloud to check and support understanding of the read-aloud.	RI.1.1 Ask and answer questions about key details in a text. RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.	Recognize some features that distinguish the genres and use those features to aid comprehension.

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	RL1.3 Describe characters, settings, and major events in a story, using key details. RL1.7 Use illustrations and details in a story to describe its characters, setting, or events. RI1.1 Ask and answer questions about key details in a text. RI1.2 Identify the main topic and retell key details of a text. RI1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI1.7 Use illustrations and details in a text to describe its key ideas.	
Make predictions prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far and then compare the actual outcomes to predictions.	RL1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI1.10 With prompting and support, read informational texts appropriately complex for grade 1.	
Answer questions that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships.	W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. g. Use frequently occurring conjunctions (e.g., and, but, or, so, because).	Demonstrate their ability to express an opinion in written format about a topic, idea, or text. Demonstrate use of conventions of writing. Read and form opinions about a variety of literary and informational texts and presentations as well as persuasive texts such as advertisements, commercials, and letters to editors.
Interpret information that is presented orally and then ask additional questions to clarify information or the topic in the read-aloud.	SL1.3 Ask and answer questions about what a speaker says in order to gather additional information or clarify something that is not understood.	Ask specific questions to clarify and extend meaning
Identify who is telling a story or providing information in a text.	RL1.6 Identify who is telling the story at various points in a text.	
D. Comprehension and Discussion of Read-Alouds – Fiction, Drama, and Poetry		
Retell or dramatize a story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI1.2 Identify the main topic and retell key details of a	Present personal responses to literature that make reference to the plot, characters, ideas, vocabulary, and text structure.

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	text.	
Compare and contrast characters from different stories.	RL1.9 Compare and contrast the adventures and experiences of characters in stories.	Make connections by comparing and contrasting different pieces of literature.
Change some story events and provide a different story ending.	W1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	Produce a narrative account using their own imaginative ending as an alternative to the ending provided.
Create and tell an original story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	W1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	Produce a narrative account using their own imaginative story structure.
Distinguish fantasy from realistic text in a story.	RL1.5 explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	
**Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading (L.1.27).	RL1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI1.10 With prompting and support, read informational texts appropriately complex for grade 1.	Select, read, and recount a variety of genres and texts with grade appropriate complexity.
Identify the moral or lesson of a fable, folktale, or myth.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.	Read, compare and distinguish theme between fairytales, folktales, and myths.
Demonstrate understanding of literary language (e.g., author, illustrator, characters, setting, plot, dialogue, personification, simile, and metaphor) and use some of these terms in retelling stories or creating their own stories.	RL1.6 Identify who is telling the story at various points in a text.	Identify figurative language and story elements to help understand text.
Identify sensory language and how it is used to describe people, objects, places and events.	RL1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. SL1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	Identify figurative language and story elements to help understand text. Identify words and phrases in stories and poems that express ideas and feelings clearly.
E. Comprehension and Discussion of Read-Alouds: Non-Fiction and Informational Texts		
Generate questions and seek information from multiple sources to answer questions.	RI1.5 Know and use various text features (e.g., heading, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text. RI1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI1.7 Use illustrations and details in a text to describe its	Use a variety of resources to gather information and provide answers to questions both orally and in written form.

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	key ideas. W1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books and use them to write a sequence of instructions) W1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. SL1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	
Answer questions about the details of a nonfiction text, indicating which part of the text provided the information needed to answer specific questions.	SL1.2 Ask and answer questions about key details in a text read aloud or information presented orally or through other media.	Ask and answer specific questions to clarify and extend meaning.
With assistance, categorize and organize facts and information within a given topic.	RI1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. W1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. W1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question. L1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. a. Sort common objects into categories (e.g., colors, clothing) to gain a sense of the concepts the categories represent.	Make connections between literary works according to common theme. Compare literary classic to televised version of same work.
With assistance, create and interpret timelines and lifelines related to read-alouds.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL1.3 Describe characters, settings, and major events in a story, using key details.	Gather and present information about text in chronological order using graphic organizers e.g timelines.

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	RI.1.2 Identify the main topic and retell key details of a text. RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.	
**Draw pictures, dictate, or write simple sentences to represent details or information from a read-aloud (L.1.24)	Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. SL.1.5 Add drawings or other visual displays to descriptions when appropriate to task and situation.	Support judgements and opinions through references to text and other works.
Distinguish read-alouds that describe events that happened long ago from those that describe contemporary or current events.	RI.1.7 Use illustrations and details in a text to describe its key ideas.	
II. Reading		
A. Print Awareness		
Demonstrate understanding that what is said can be written and that the writing system is a way of writing down sounds. Demonstrate understanding of directionality (left to right, return sweep, top to bottom, front to back). Identify the parts of books and function of each part (front cover, back cover, title page, table of contents). Demonstrate correct book orientation by holding book correctly and turning pages.	RF1.1 Demonstrate understanding of the organization and basic features of print.	Follow text using one to one correspondance with an understanding of what they are reading.
Recognize that sentences in print are made up of separate words.	RF1.1 Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation).	Recognizes and produces sentence structure including writing punctuation.
Understand that words are separated by spaces. RF1	.1 Demonstrate understanding of the organization and basic features of print.	Produces sentence with appropriate spacing between words
Distinguish letters, words, sentences, and stories. RF1	.1 Demonstrate understanding of the organization and basic features of print a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending	Demonstrates an understanding of spoken works, syllables, and sounds. Can count, pronounce and segment syllables. and words in sentence verbally and in written form.

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	punctuation).	
Demonstrate understanding of basic print conventions by tracking and following print word for word when listening to text read aloud. Demonstrate understanding that the sequence of letters in a written word represents the sequence of sounds in the spoken word.	RF1.1 Demonstrate understanding of the organization and basic features of print.	Understand one to one correspondance and identifies features of text.
Recognize and name the 26 letters of the alphabet in both their upper-case and lower-case forms.		Identifies upper and lower case letters in any given order.
Say the letters of the alphabet in order, either in song or recitation.		Recites letters of the alphabet starting at any given point.
B. Phonemic Awareness		
Demonstrate understanding that words are made up of sequences of sounds. Demonstrate understanding that vowel sounds are produced with the mouth open and airflow unobstructed, whereas consonant sounds involve closing parts of the mouth and blocking the air flow. Given a pair of spoken words, select the one that is longer (i.e., contains more phonemes).	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	Identifies letter sound correspondence and uses them to recognize or figure out regularly spelled one and two syllable words.
In riddle games, supply words that begin with a target phoneme. Indicate whether a target phoneme is or is not present in the initial/medial/final position of a spoken word, e.g., hear /m/ at the beginning of mat and /g/ at the end of bag. Listen to one-syllable words and tell the beginning or ending sounds, e.g., given dog, identify initial /d/ or final /g/. Recognize the same phoneme in different spoken words, e.g., /b/ in ball, bug, and big.	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). c. Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words.	Uses onsets and rhymes to create new words that include blends and diagraphs. Able to separate sounds by saying each sound aloud (replacing the beginning and ending sounds to form new words).
Identify whether pairs of phonemes are the same or different, including pairs that differ only in voicing, e.g., /b/ and /p/.	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	
Orally blend two to three sounds to form a word, e.g., given the sounds /k/... /a/.../t/, blend to	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	

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make cat.	b. Orally produce single-syllable words by blending sounds (phonemes), including consonant blends.	
Segment a spoken word into phonemes, e.g., given bat, produce the segments/b//a//t/.	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). d. Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes).	Separate sounds by saying each sound aloud (replacing beginning and ending sounds to form new words)
Given a spoken word, produce another word that rhymes, e.g., given hit, supply bit or mitt.	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes).	Produce words by replacing beginning or ending sounds to form new rhyming words.
Identify the number of syllables in a spoken word.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. d. Use knowledge that every syllable must have a vowel sound to determine the number of syllables in a printed word.	Know regular letter sound correspondance and use them to recognize or figure out regularly spelled one and two syllable words.
C. Phonics: Decoding and Encoding		
Demonstrate understanding that a systematic, predictable relationship exists between written letters (graphemes) and spoken sounds (phonemes).	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
Blend individual phonemes to pronounce printed words. Understand that sometimes two or more printed letters stand for a single sound.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. b. Decode regularly spelled one-syllable words.	
Read one to two syllable words containing any of the grapheme-phoneme correspondences listed below.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. b. Decode regularly spelled one-syllable words. RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. e. Decode two-syllable words following basic patterns by breaking the words into syllables.	Know regular letter sound correspondance and use them to recognize or figure out regularly spelled one and two syllable words.
Read and write words with inflectional endings, i.e., -s, -ed, -ing, -er, -est.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. f. Read words with inflectional endings. L1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies.	Use inflectional endings to conform to the conventions of language and syntax.

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	c. Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).	
Read, understand, and write contractions, i.e., isn't, I'm, can't, etc.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. g. Recognize and read grade-appropriate irregularly spelled words.	Able to demonstrate understanding of English in written and oral work and select structures of language appropriate to the purpose and context of the work.
Sort and classify words according to the spelling used to represent a specific phoneme.		
Read tricky spellings that can be sounded two ways, e.g., the letter 's' sounded /s/ as in cats and /z/ as in dogs. Read and spell chains of one-syllable words in which one sound is added, substituted, or omitted, i.e., read at > cat > bat > bad > bid.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words.	Recognize regular and irregular letter sound correspondance.
Read at least 30 words generally identified as high frequency words.	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. g. Recognize and read grade-appropriate irregularly spelled words.	
Consonant Sounds and Spellings Taught in 1st Grade		

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/b/ spelled 'b' as in boy, 'bb'; as in tubby /d/ spelled 'd' as in dog, 'dd' as in madder, 'ed' as in filled /f/ spelled 'f' as in fun, 'ff' as in stuff /g/ spelled 'g' as in get, 'gg' as in egg /h/ spelled 'h' as in him /j/ spelled 'j' as in jump, 'g' as in gem, 'ge' as in fringe /k/ spelled 'c' as in cat, 'k' as in kitten, 'ck' as in sick, 'cc' as in moccasin /l/ spelled 'l' as in lip, 'll' as in sell /m/ spelled 'm' as in mad, 'mm' as in hammer /n/ spelled 'n' as in net, 'nn' as in funny, 'kn' as in knock /p/ spelled 'p' as in pet, 'pp' as in happy /r/ spelled 'r' as in red, 'rr' as in earring, 'wr' as in wrist /s/ spelled 's' as in sit, 'ss' as in dress, 'c' as in cent, 'ce' as in prince, 'se' as in rinse /t/ spelled 't' as in top, 'tt' as in butter, 'ed' as in asked /v/ spelled 'v' as in vet, 've' as in twelve /w/ spelled 'w' as in wet, 'wh' as in when /x/ spelled 'x' as in tax /y/ spelled 'y' as in yes /z/ spelled 'z' as in zip, 'zz' as in buzz, 's' as in dogs	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
/ch/ spelled 'ch' as in chop, 'tch' as in itch /sh/ spelled 'sh' as in ship /th/ spelled 'th' as in thin /th/ spelled 'th' as in then /qu/ spelled 'qu' as in quick /ng/ spelled 'ng' as in sing, 'n' as in pink	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Know the sound-spelling correspondences for common consonant digraphs.	
Vowel Sounds and Spellings Taught in 1st Grade		

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicaor
/a/ spelled 'a' as in cat /e/ spelled 'e' as in get /i/ spelled 'i' as in hit /o/ spelled 'o' as in hot /u/ spelled 'u' as in but	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words. RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words.	Demonstrate skills and knowledge necessary to segment and blend grade level words
/ae/ spelled 'a_e' as in cake, 'ai' as in wait, 'ay' as in day, 'a' as in paper /ee/ spelled 'ee' as in bee, 'e' as in me, 'y' as in funny, 'ea' as in beach, 'e_e' as in Pete, ie' as in cookie /ie/ spelled 'i_e' as in bike, 'i' as in biting, 'y' as in try, 'ie' as in tie, igh' as in night /oe/ spelled 'o_e' as in note, 'oa' as in boat, 'oe' as in toe, 'o' as in open, 'ow' as in snow /ue/ spelled 'u_e' as in cute	RF1.2 Demonstrate understanding of spoken words, syllables, and sounds (phonemes). a. Distinguish long from short vowel sounds in spoken single-syllable words. RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words. c. Know final –e and common vowel team conventions for representing long vowel sounds.	Demonstrate skills and knowledge necessary to segment and blend grade level words.
/aw/ spelled 'aw' as in paw /oo/ spelled 'oo' as in look, /oo/ spelled 'oo' as in soon /ou/ spelled 'ou' as in shout /oi/ spelled 'oi' as in oil /er/ spelled 'er' as in her /ar/ spelled 'ar' as is car /or/ spelled 'or' as in for	RF1.3 Know and apply grade-level phonics and word analysis skills in decoding words.	Demonstrate skills and knowledge necessary to segment and blend grade level words.
D. Oral Reading and Fluency		
Read decodable stories that incorporate the specific code knowledge that has been taught.	RI1.10 With prompting and support, read informational texts appropriately complex for grade 1. RF1.4 Read with sufficient accuracy and fluency to support comprehension.	Demonstrate fluency by reading books that they have not seen before by reading with a 90% or better accuracy rate.
Demonstrate increased accuracy, fluency, and expression on successive reading of a decodable text (50 wpm by the end of the year).	RF1.4 Read with sufficient accuracy and fluency to support comprehension. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	Demonstrate fluency by reading books not seen before with 90% or better accuracy rate.
Use phonics skills in conjunction with context to confirm or self-correct word recognition and	RF1.4 Read with sufficient accuracy and fluency to support comprehension.	

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
understanding, rereading as necessary.	c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	
Demonstrate understanding of and use commas and end punctuation while reading orally.	RF1.4 Read with sufficient accuracy and fluency to support comprehension. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	Uses punctuation cues to guide them in getting meaning and fluenc reading aloud.
Read aloud, alone, or with a partner at least 15 minutes each day.	RF1.4 Read with sufficient accuracy and fluency to support comprehension.	
E. Reading Comprehension – All Texts		
Demonstrate understanding of completely decodable text after reading independently	RF1.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	Uses self monitoring and self controlling strategies to support comprehension.
Grasping Specific Details and Key Ideas		
Sequence four to six pictures illustrating events from a text that has been read independently.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI1.2 Identify the main topic and retell key details of a text. RI1.7 Use illustrations and details in a text to describe its key ideas.	Uses traditional sturctures for conveying information about the sequential order of a text.
Answer questions requiring literal recall and understanding of the details and/or facts (i.e., who, what, where, when, etc.) about a text that has been read independently.	RL1.1 Ask and answer questions about key details in a text. RI1.1 Ask and answer questions about key details in a text.	Ask and answer questions to clarify and extend meaning.
Retell key details from a text that has been read independently.	RL1.1 Ask and answer questions about key details in a text. RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI1.2 Identify the main topic and retell key details of a text. RI1.8 Identify the reasons an author gives to support points in a text.	Refers to details in text to retell a story.
Ask questions to clarify information about a text	RL1.1 Ask and answer questions about key details in a	

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
that has been read independently.	text. RI.1.1 Ask and answer questions about key details in a text.	
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts from a text that has been read independently.	RL.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI.1.3 Describe characters, settings, and major events in a story, using key details.	Retell stories using details from text.
Observing Craft and Structure		
Identify basic text features and what they mean, including title, table of contents, and chapters.	RI.1.5 Know and use various text features (e.g., heading, tables of contents, glossaries, electronic menus, icons) to locate key facts or information in a text.	
Understand and use words and phrases from a text that has been read independently.	RI.1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text. L.1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Use frequently occurring affixes as a clue to the meaning of a word. L.1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. b. Define words by category and by one or more key attributes (e.g., a duck is a bird that swims; a tiger is a large cat with stripes). d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	Use strategies to construct meaning from text.
Compare and contrast similarities and differences within a single text or between multiple texts read independently.	RI.1.9 Compare and contrast the adventures and experiences of characters in stories. RI.1.9 Identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations,	Make connections between literary works according to theme.

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	descriptions, or procedures).	
Make personal connections to events or experiences in a text that has been read independently and/or make connections among several texts that have been read independently.	RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1. L.1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. c. Identify real-life connections between words and their use (e.g., note places at school that are cozy).	Make text to text, text to self, and text to world connections in order to show comprehension of the text.
Integrating Information and Evaluating Evidence		
Prior to reading, identify what they know and have learned that may be related to the specific story or topic to be read.	RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	
Use pictures accompanying the written text to check and support understanding.	RI.1.1 Ask and answer questions about key details in a text. RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RI.1.3 Describe characters, settings, and major events in a story, using key details. RI.1.7 Use illustrations and details in a story to describe its characters, setting, or events. RI.1.1 Ask and answer questions about key details in a text. RI.1.2 Identify the main topic and retell key details of a text. RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text. RI.1.6 Distinguish between information provided by pictures or other illustrations and information provided by the words in a text. RI.1.7 Use illustrations and details in a text to describe its key ideas.	Ask and answer questions in a text and pictures by relating new information to prior knowledge and experience.
Make predictions prior to and while reading,	RI.1.10 With prompting and support, read prose and	Use inference and deduction to understand text.

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based on the title, pictures, and/or text read thus far and then compare the actual outcomes to predictions.	poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	
Answer questions that require making interpretations, judgments, or giving opinions about what is read independently, including answering “why” questions that require recognizing cause/effect relationships.	W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. L.1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. g. Use frequently occurring conjunctions (e.g., and, but, or, so, because).	Support judgements and opinions by referring to the text or other works to provide a sense of closure.
Identify who is telling a story or providing information in a text.	RI.1.6 Identify who is telling the story at various points in a text.	
Identify temporal words that link and sequence events, i.e., first, next, then, etc.		
Identify words that link ideas, i.e., for example, also, in addition.	RI.1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.	
F. Reading Comprehension- Fiction, Drama, and Poetry		
Retell or dramatize a story, using narrative language to describe characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson.	Retell a story using story elements and sequence of events.
Compare and contrast characters from different stories.	RI.1.9 Compare and contrast the adventures and experiences of characters in stories.	
Change some story events and provide a different story ending.		
Distinguish fantasy from realistic text in a story.	RI.1.5 Explain major differences between books that tell stories and books that give information, drawing on a wide reading of a range of text types.	
**Evaluate and select read-alouds, books, or poems on the basis of personal choice for rereading (L.1.27).	RI.1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1. RI.1.10 With prompting and support, read informational texts appropriately complex for grade 1.	Respond to non-fiction, poetry, and drama using interpretive, critical and evaluative processes.
Identify the moral or lesson of a fable, folktale, or myth.	RI.1.2 Retell stories, including key details, and demonstrate understanding of their central message or	

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicaor
	lesson.	
Demonstrate understanding of literary language (e.g., author, illustrator, characters, setting, plot, dialogue, personification, simile, and metaphor) and use some of these terms in retelling stories or creating their own stories.	RL1.6 Identify who is telling the story at various points in a text.	
Identify sensory language and how it is used to describe people, objects, places and events.	RL1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses.	
G. Reading Comprehension – Non-Fiction and Informational Texts		
With assistance, create and interpret timelines and lifelines related to text read independently.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. RL1.3 Describe characters, settings, and major events in a story, using key details. RI1.2 Identify the main topic and retell key details of a text. RI1.3 Describe the connection between two individuals, events, ideas, or pieces of information in a text.	Gather information about story elements from text features.
Distinguish text that describes events that happened long ago from text that describes contemporary or current events.	RI.1.7 Use illustrations and details in a text to describe its key ideas.	
III. Writing		
Writing to Reflect Audience, Purpose, and Task		
Add details to writing. W1.5	With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.	
Begin to use tools, including technology, to plan, draft, and edit writing.	W1.6 With guidance and support from adults, explore a variety of digital tools to produce and publish writing, including in collaboration with peers.	
Conducting Research		
Gather information from experiences or provided text sources.	W1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books and use them to write a sequence of instructions) W1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	Gather information from researn and produce a variety of informational writing projects.

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A. Narrative Writing		
Write or retell a story that includes characters, setting(s), and a beginning, a middle and an end to events of the story in proper sequence.	RL1.2 Retell stories, including key details, and demonstrate understanding of their central message or lesson. W1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	
Write a descriptive paragraph using sensory language.		
Create a title and an ending that are relevant to the narrative.	W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure. W1.3 Write narratives in which they recount two or more appropriately sequenced events, include some details regarding what happened, use temporal words to signal event order, and provide some sense of closure.	Extend a story by stating and supporting an opinion.
B. Informative/Explanatory Writing		
Write about a topic, including a beginning and ending sentence, facts and examples relevant to the topic, and specific steps (if writing explanatory text).	W1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure.	
C. Persuasive Writing (Opinion)		
Express an opinion or point of view in writing, providing reasons and supporting details for preference or opinion using the linking word because.	W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	State and support an opinion using appropriate language.
Create a title that is relevant to the topic or subject of the text.	W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	
If writing about a specific book or read-aloud, refer to the content of the text.	W1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	
IV. Language Conventions		

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
Form letters, words, phrases and sentences to communicate thoughts and ideas.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters.	Demonstrates understanding of the conventions of spelling, punctuation and capitalization.
Apply basic spelling conventions. L1.2	Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. d. Use conventional spelling for words with common spelling patterns and for frequently occurring irregular words.	Observe basic writing conventions, such as correct spelling punctuation, and capitalization.
Use basic capitalization and punctuation in sentences to convey meaning.		
A. Handwriting and Spelling		
Print from memory the 26 letters of the alphabet accurately in both their upper-case and lower-case forms.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Print many upper- and lowercase letters.	Write letters of the alphabet in lower and upper case from any given starting point.
Write on primary lined paper from left to right, staying within the lines and leaving spaces between words, and from top to bottom, using return sweep.		
Write phonemically plausible spellings for words that cannot be spelled correctly with current code knowledge, e.g., write ate for eight, boi for boy, fone for phone.	L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	
Write words, phrases, and sentences from dictation, applying phonics knowledge.	L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. e. Spell untaught words phonetically, drawing on phonemic awareness and spelling conventions.	
Identify and use synonyms and antonyms.	L1.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 1 reading and content, choosing flexibly from an array of strategies. L1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings.	Demonstrate understanding of vocabulary words by using additional synonyms, antonyms, examples or definitions.

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
	d. Distinguish shades of meaning among verbs differing in manner (e.g., look, peek, glance, stare, glare, scowl) and adjectives differing in intensity (e.g., large, gigantic) by defining or choosing them or by acting out the meanings.	Demonstrates an understanding of the conventions of spelling, punctuation and capitalization
B. Parts of speech and Sentence Structure		
Recognize, identify and use subject, object, and possessive pronouns, i.e., I, me, my, they, them, orally, in written text and in own writing.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Use common, proper, and possessive nouns. d. Use personal, possessive, and indefinite pronouns (e.g., I, me, my; they, them, their; anyone, everything). h. Use determiners (e.g. articles, demonstratives)	Demonstrates and understanding of the conventions of spelling, grammar, punctuation and capitalization.
Recognize, identify and use common and proper nouns, orally, in written text, and in own writing.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. c. Use singular and plural nouns with matching verbs in basic sentences (e.g., He hops; We hop).	Demonstrates an understanding of the conventions of grammar in their own writing.
Recognize, identify and use regular verbs to convey a sense of past, present, and future tense orally, in written text, and in own writing.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. e. Use verbs to convey a sense of past, present, and future (e.g., Yesterday I walked home; Today I walk home; Tomorrow I will walk home).	Demonstrates use of conventions grammar when using past present, and future tenses in narrative writing.
Recognize, identify, and use adjectives orally, in written text, and in own writing.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Use frequently occurring adjectives.	Demonstrate use of conventions of of grammar in written and oral tasks.
Recognize, identify and use subjects and predicates, orally, in written text, and in own writing.	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	Identify and use subjects and predicates when speaking and producing a write task.
Recognize, identify, and use statements, questions, and exclamations orally, in written	L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or	

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
text, and in own writing.	speaking. j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	Write sentences using basic writing conventions, such as correct spelling, punctuation, as well as sentence and paragraph structures appropriate to written forms.
Produce and expand complete sentences orally and in shared writing exercises.	W1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books and use them to write a sequence of instructions) SL1.6 Produce complete sentences when appropriate to task and situation. L1.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. j. Produce and expand complete simple and compound declarative, interrogative, imperative, and exclamatory sentences in response to prompts.	Present information clearly in a variety of oral and written forms such as summaries, paraphrases, brief reports, stories, posters, and charts.
C. Capitalization and Punctuation		
Capitalize the first word in a sentence, the pronoun I, and proper nouns (names and places,) months, days of the week.	RF1.1 Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation). L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize dates and names of people.	- Present information clearly in a variety of written forms such as summaries, paraphrases, brief reports, stories, posters and charts using effective vocabulary and following the rules of grammar usage, spelling and punctuation in a variety of writing forms.
Identify and use end punctuation, including periods, question marks, and exclamation points.	RF1.1 Demonstrate understanding of the organization and basic features of print. a. Recognize the distinguishing features of a sentence (e.g., first word, capitalization, ending punctuation). L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. b. Use end punctuation for sentences.	- Present information clearly in a variety of written forms such as summaries, paraphrases, brief reports, stories, posters and charts, using effective vocabulary and following the rules of grammar usage, spelling and punctuation in a variety of forms.
Use commas appropriately in greetings and closings of letters, dates, and items in a series.	L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	

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	c. Use commas in dates and to separate single words in a series.	
Write a simple friendly letter.		
Use apostrophes to create contractions and indicate possession, i.e., cat's meow.	L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Observes writing conventions such as correct spelling, punctuation, grammar, as well as sentence structure in a variety of writing forms.
Use quotation marks appropriately to designate direct speech.	L1.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
V. Poetry*		
Hope (Langston Hughes) I Know All the Sounds the Animals Make (Jack Prelutsky) My Shadow (Robert Louis Stevenson) The Owl and the Pussycat (Edward Lear) The Pasture (Robert Frost) The Purple Cow (Gelett Burgess) Rope Rhyme (Eloise Greenfield) Sing a Song of People (Lois Lenski) Solomon Grundy (traditional) The Swing (Robert Louis Stevenson) Table Manners [also known as "The Goops"] (Gelett Burgess) Thanksgiving Day ["Over the river and through the wood"] (Lydia Maria Child) Washington (Nancy Byrd Turner) Wynken, Blynken, and Nod (Eugene Field)	RL1.10 With prompting and support, read prose and poetry of appropriate complexity for grade 1.	Produces evidence that demonstrates understanding of concepts by: - participating in book talks -responding to literature -comparing a written piece to its media counterpart - producing a poem
VI. Fiction		
A. Stories*		

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
The Boy at the Dike (folktale from Holland) The Frog Prince Hansel and Gretel selections from The House at Pooh Corner (A. A.Milne) How Anansi Got Stories from the Sky God (folktale from West Africa) It Could Always Be Worse (Yiddish folktale) Jack and the Beanstalk The Knee-High Man (African-American folktale) Medio Pollito (Hispanic folktale) The Pied Piper of Hamelin Pinocchio The Princess and the Pea Puss-in-Boots Rapunzel Rumpelstiltskin Sleeping Beauty The Tale of Peter Rabbit (Beatrix Potter) Tales of Br'er Rabbit (recommended tales: Br'er Rabbit Gets Br'er Fox's Dinner; Br'er Rabbit Tricks Br'er Bear; Br'er Rabbit and the Tar Baby) Why the Owl Has Big Eyes (Native American legend)		(Continuation of previous page)
B. Aesop's Fables*		
The Boy Who Cried Wolf The Dog in the Manger The Wolf in Sheep's Clothing The Maid and the Milk Pail The Fox and the Grapes The Goose and the Golden Eggs		Make connections between literary works according to a theme . Respond to literature by determining why characters behave the way they do. Produce a retelling of story to parents. Create picture books.
C. Different Lands, Similar Stories*		

Core Knowledge Sequence Grade 1	Common Core State Standards covered at CK Grade Level	Performance Indicator
Lon Po Po (China) and Little Red Riding Hood Issun Boshi, or One-Inch Boy (Japan); Tom Thumb (England); Thumbelina (by the Danish writer Hans Christian Andersen); Little Finger of the Watermelon Patch (Vietnam) Some of the many variations on the Cinderella story (from Europe, Africa, China, Vietnam, Egypt, Korea, etc.		Make connections between literary works according to a common theme. Listen and understand a variety of literary genres: fables, myth, legends, fairy tales, and media productions; and works of fiction and nonfiction intended for young readers.
D. Literary Terms		
Characters, heroes, and heroines		Understand literary terms through genre reading
Drama actors and actresses costumes, scenery and props theater, stage, audience		Recognize some features that distinguish the genres and and use those features to aid comprehension.
VII. Sayings and Phrases		
A.M. and P.M. An apple a day keeps the doctor away. Do unto others as you would have them do unto you. [also in Kindergarten] Fish out of water Hit the nail on the head. If at first you don't succeed, try, try again. Land of Nod Let the cat out of the bag. The more the merrier. Never leave till tomorrow what you can do today. Practice makes perfect. [also in Kindergarten] Sour grapes There's no place like home.. Wolf in sheep's clothing	RL1.4 Identify words and phrases in stories or poems that suggest feelings or appeal to the senses. L1.5 With guidance and support from adults, demonstrate understanding of word relationships and nuances in word meanings. L1.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., I named my hamster Nibblet because she nibbles too much because she likes that).	Demonstrate an understanding of figurative language.

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*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ART S & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		
**The Core Knowledge Language Arts Program: Grade 1 Language Art Objectives for Listening and Learning		

Core Knowledge Sequence GRADE 2	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Listening and Speaking		
A. Classroom Discussion		
Maintain attention and actively participate in discussions about a variety of topics, ideas, and texts in both small and large group settings.	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). b. Build on others' talk in conversations by linking their comments to the remarks of others. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.	Illustrate, comment, or participate in conversation with peers and adults to clarify, answer questions or expand ideas.
Speak clearly with volume appropriate to the setting.	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).	Listen attentively and recognize when it is appropriate to speak. Take turns speaking and respond to others' ideas in conversations on familiar topics. Recognize the kind of interaction appropriate for different circumstances, such as book talk, group discussions, and one to one conversations.
Use agreed-upon rules for group discussions, i.e., look at and listen to the speaker, raise hand to speak, take turns, say "excuse me" or "please," etc.	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion)	Listen attentively and recognize when it is appropriate to speak. Take turns speaking and respond to other's ideas in conversations on familiar topics. Recognize the kind of interaction appropriate for different circumstances, such as book talk, group discussions, and one to one conversations.
Ask questions to clarify conversations, directions, exercises, and/or classroom routines.	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. c. Ask for clarification and further explanation as needed about the topics and texts under discussion.	Ask specific questions to clarify and extend meaning. Take turns speaking and respond to other's ideas in conversations on familiar topics. Recognize the kind of interaction appropriate for different circumstances such as talk talk, group discussions, and one to one conversations
Carry on and participate in a conversation over at least six turns, staying on topic, initiating comments or responding to a partner's	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups.	Identify the reasons and evidence a speaker provides to support particular points. Summarize the points a speaker makes and explain

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comments, with either an adult or another child of the same age.	b. Build on others' talk in conversations by linking their comments to the remarks of others. SL2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language standards 1 and 3 on pages 26 and 27 for specific expectations.)	how each claim is supported by reasons and evidence.
Participate in a conversation or group discussion by making reference to, or building upon, a comment made by another person.	SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. b. Build on others' talk in conversations by linking their comments to the remarks of others.	Identify the reasons and evidence a speaker provides to support particular points. Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence.
Identify and express physical sensations, mental states, and emotions of self and others.		
Understand and use language to express spatial and temporal relationships (up, down, first, last, before, after, etc.).		
Understand and use narrative language to describe people, places, things, locations, events, actions.	SL2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	
Understand and use common sayings and phrases such as "Don't judge a book by its cover" and "Better late than never" (see page 60).	L2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).	Make appropriate use of words and details to construct meaning.
B. Presentation of Ideas and Information		
Follow multi-step, oral directions. SL2.1	Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. a. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).	Demonstrate appropriate listening behaviors and recognize when is appropriate for them to speak.
Give simple directions. W2.2	Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. SL2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language standards 1 and 3 on pages 26 and 27 for specific expectations.)	Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification.

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Provide simple explanations. RL2.1	Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.3 Describe how characters in a story respond to major events and challenges. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text. RI2.8 Describe how reasons support specific points the author makes in a text. W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. W2.8 Recall information from experiences or gather information from provided sources to answer a question. SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. SL2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. SL2.6 Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 2 Language standards 1 and 3 on pages 26 and 27 for specific expectations.)	Use the process of prewriting, drafting, revising and proof reading to produce well-constructed informational text. Take turns in collaborative conversation with peers and adults in grade appropriate topics. Express opinions about events, books, experiences, supporting their opinions with some evidence.
Recite a nursery rhyme, poem or song independently, using appropriate eye contact, volume and clear enunciation.	RI2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	Take turns speaking and respond to other's ideas. Read aloud accurately and fluently making proper eye contact.

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	RL2.3 Describe how characters in a story respond to major events and challenges.	
Give oral presentations about personal experiences, topics of interest, stories, and summaries of factual information that have been presented orally, visually or through multimedia, using appropriate eye contact, volume and clear enunciation.	SL2.4 Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
C. Comprehension and Discussion of Read-Alouds – All Texts		
Listen to and understand a variety of texts read aloud, including fictional stories, fairy tales, fables, historical narratives, drama, informational text, and poems.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RL2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. Compare and contrast the overall structure (e.g., chronology, comparison cause/effect, problem/solution) of events, ideas, concepts or information in two or more texts.
Distinguish the following genres of literature: fiction, nonfiction and drama.	RL2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Gather and interpret information from a variety of genres.
Grasping Specific Details and Key Ideas		
Describe illustrations.	RI2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate	Explain how specific aspects of a text’s illustrations contribute to what is conveyed by the words in a story (e.g., create mood, emphasize aspects of a

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	understanding of its characters, setting, or plot. RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	character or setting). Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
Sequence four to six pictures illustrating events in a read aloud.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.	
Answer questions requiring literal recall and understanding of the details and/or facts of a read-aloud, i.e., who, what, where, when, etc.	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	
Retell key details	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.8 Describe how reasons support specific points the author makes in a text. SL2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	Select and use key strategies to recount details and main ideas from variety of genres.
Summarize in one's own words selected parts of a read-aloud.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	
Ask questions to clarify information in a read-aloud.	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. W2.8 Recall information from experiences or gather	Use the 5 questions forms to demonstrate understanding of text.

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	information from provided sources to answer a question. SL2.1 Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. c. Ask for clarification and further explanation as needed about the topics and texts under discussion. SL2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.	
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts in a read-aloud.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RL2.3 Describe how characters in a story respond to major events and challenges. W2.3 Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	Use details, examples, anecdotes and personal experiences for oral and written presentations.
Observing Craft and Structure		
Understand and use words and phrases heard in read-alouds.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. RI2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area. L2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. L2.5 Demonstrate understanding of word relationships and nuances in word meanings.	Identify words and phrases in stories and poems that express ideas and feelings clearly.
Compare and contrast similarities and differences within a single read-aloud or between two or more read-alouds.	RI2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures. RI2.9 Compare and contrast the most important points presented by two texts on the same topic.	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series). Compare and contrast the most important points and key details presented in two texts on the same topic. Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific

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		descriptions and directions in the text.
Make personal connections to events or experiences in a read-aloud and/or make connections among several read-alouds.	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. L2.5 Demonstrate understanding of word relationships and nuances in word meanings. SL2.5 Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings.	Make text to text, text to self and world connections in order to show understanding of text.
Integrating Information and Evaluating Evidence		
Prior to listening to a read-aloud, identify what they know and have learned that may be related to the specific story or topic to be read aloud.	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Apply prior knowledge to enhance understanding of text.
Use pictures accompanying the read-aloud to check and support understanding of the read-aloud.	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RL2.3 Describe how characters in a story respond to major events and challenges. RL2.7 Use information gained from the illustrations and words in a print or digital text to demonstrate understanding of its characters, setting, or plot.	Use pictures and text to inference and use deduction to understand text.

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	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	
Make predictions prior to and during a read-aloud, based on the title, pictures, and/or text heard thus far and then compare the actual outcomes to predictions.	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Make predictions based on prior knowledge and interactions with the the text read.
Answer questions that require making interpretations, judgments, or giving opinions about what is heard in a read-aloud, including answering “why” questions that require recognizing cause/effect relationships.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe. W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect. Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).
Interpret information that is presented orally and then ask additional questions to clarify information or the topic in the read-aloud.	SL2.3 Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.	Ask specific questions to clarify and extend meaning.
Identify who is telling a story or providing information in a text.	RL2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	Understand story structure, theme, point of view and compare to other works.
D. Comprehension and Discussion of Read-Alouds – Fiction, Drama, and Poetry		

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Retell a story, using narrative language to describe characters, setting(s), and the plot of the story in proper sequence.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RL2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.	Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
Compare and contrast characters from different stories.	RL2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
Describe characters in increasing depth by referring to dialogue and/or their actions in the story.	RL2.3 Describe how characters in a story respond to major events and challenges. RL2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
Change some story events and provide a different story ending. Create and tell an original story, using narrative language to describe characters, setting(s), and the plot of the story in proper sequence.	W2.3 Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	Create personal narratives using the elements of the literature they have read using appropriate vocabulary.
Distinguish fantasy from realistic text in a story.	RL2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	
Identify the moral or lesson of a fable, folktale, or myth.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	
Demonstrate understanding of literary language (e.g., author, illustrator, characters, setting, plot, dialogue, personification, simile, and metaphor) and use some of these terms in retelling stories or creating their own stories.	RL2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	
Identify repetitions in phrases, refrains, or sounds in poems or songs.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	
Identify sensory language and how it is used to describe people, objects, places and events.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. SL2.4 Tell a story or recount an experience with	

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	appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences.	
Describe the use of rhyme, rhythm and sensory images used in poetry.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	
E. Comprehension and Discussion of Read-Alouds – Non-Fiction and Informational Text		
Generate questions and seek information from multiple sources to answer questions.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. RI2.6 Identify the main purpose of a text, including what the author wants to answer, explain, or describe. RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text. W2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). W2.8 Recall information from experiences or gather information from provided sources to answer a question.	Use a variety of resources to gather information and provide answers to questions both orally and in written form.
Answer questions about the details of a nonfiction text, indicating which part of the text provided the information needed to answer specific questions.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. SL2.2 Recount or describe key ideas or details from a text read aloud or information presented orally or through other media.	
With assistance, categorize and organize facts and information within a given topic.	RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop	Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in text. RI5.3 Explain the relationship or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information.

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	points, and provide a concluding statement or section. W2.8 Recall information from experiences or gather information from provided sources to answer a question. L2.5 Demonstrate understanding of word relationships and nuances in word meanings.	
With assistance, create and interpret timelines and lifelines related to read-alouds.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.3 Describe how characters in a story respond to major events and challenges RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	Use traditional structures to convey information in sequential order.
Interpret information presented in diagrams, charts, graphs, etc.	RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, timelines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
Distinguish read-alouds that describe events that happened long ago from those that describe contemporary or current events.	RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	
II. Reading		
A. Phonics: Decoding and Encoding		
Demonstrate understanding that a systematic, predictable relationship exists between written letters (graphemes) and spoken sounds (phonemes).	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
Blend individual phonemes to pronounce printed words.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes.	Demonstrate skills and knowledge necessary to segment and blend grade level words.
Understand that sometimes two or more printed letters stand for a single sound.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading	Demonstrate an understanding of the conventions of spelling in multisyllable words.

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	regularly spelled one-syllable words. b. Know spelling-sound correspondences for additional common vowel teams. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes.	
Read multi-syllable words containing any of the grapheme-phoneme correspondences listed below.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. c. Decode regularly spelled two-syllable words with long vowels. d. Decode words with common prefixes and suffixes.	
Read and write words with inflectional endings, i.e., -s, -ed, -ing, -er, -est.	L2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional).	Demonstrate an understanding of how inflectional endings change the meaning of a root word.
Read, understand, and write contractions, i.e., isn't, I'm, can't, etc.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. f. Recognize and read grade-appropriate irregularly spelled words.	
Sort and classify words according to the spelling used to represent a specific phoneme.		
Read tricky spellings that can be sounded two ways, e.g., the letter 's' sounded /s/ as in cats and /z/ as in dogs.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. e. Identify words with inconsistent but common spelling-sound correspondences.	
Read and spell chains of one-syllable words in which one sound is added, substituted, or omitted, i.e., read at > cat > bat > bad > bid.	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words.	
Consonant Sounds and Spellings Taught in Second Grade		

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/b/ spelled 'b' as in boy, 'bb' as in tubby /d/ spelled 'd' as in dog, 'dd' as in madder, 'ed' as in filled /f/ spelled 'f' as in fun, 'ff' as in stuff /g/ spelled 'g' as in get, 'gg' as in egg /h/ spelled 'h' as in him /j/ spelled 'j' as in jump, 'g' as in gem, 'ge' as in fringe /k/ spelled 'c' as in cat, 'k' as in kitten, 'ck' as in sick, 'cc' as in moccasin /l/ spelled 'l' as in lip, 'll' as in sell /m/ spelled 'm' as in mad, 'mm' as in hammer /n/ spelled 'n' as in net, 'nn' as in funny, 'kn' as in knock /p/ spelled 'p' as in pet, 'pp' as in happy /r/ spelled 'r' as in red, 'rr' as in earring, 'wr' as in wrist /s/ spelled 's' as in sit, 'ss' as in dress, 'c' as in cent, 'ce' as in prince, 'se' as in rinse /t/ spelled 't' as in top, 'tt' as in butter, 'ed' as in asked /v/ spelled 'v' as in vet, 've' as in twelve /w/ spelled 'w' as in wet, 'wh' as in when /x/ spelled 'x' as in tax /y/ spelled 'y' as in yes /z/ spelled 'z' as in zip, 'zz' as in buzz, 's' as in dogs /ch/ spelled 'ch' as in chop, 'tch' as in itch /sh/ spelled 'sh' as in ship /th/ spelled 'th' as in thin /th/ spelled 'th' as in then /qu/ spelled 'qu' as in quick /ng/ spelled 'ng' as in sing, 'n' as in pink	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words	Demonstrate understanding of regular and irregular letter sound correspondences in decoding multi-syllabic words.
Vowel Sounds and Spellings Taught in Second Grade		

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/a/ spelled 'a' as in cat /e/ spelled 'e' as in get, 'ea' as in head /i/ spelled 'i' as in hit, 'y' as in myth /o/ spelled 'o' as in hot, 'a' as in wall /u/ spelled 'u' as in but, 'o' as in son	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading regularly spelled one-syllable words.	Demonstrate understanding of regular and irregular letter sound correspondence in decoding multi-syllable words.
/ae/ spelled 'a_e' as in cake, 'ai' as in wait, 'ay' as in day, 'a' as in paper, 'ey' as in hey, 'ei' as in weight, 'ea' as in great /ee/ spelled 'ee' as in bee, 'e' as in me, 'y' as in funny, 'ea' as in beach, 'e_e' as in Pete, 'ie' as in cookie, 'i' as in ski, 'ey' as in key /ie/ spelled 'i_e' as in bike, 'i' as in biting, 'y' as in try, 'ie' as in tie, 'igh' as in night /oe/ spelled 'o_e' as in note, 'oa' as in boat, 'oe' as in toe, 'o' as in open, 'ow' as in snow /ue/ spelled 'u_e' as in cute, 'u' as in unit, 'ue' as in cue	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Distinguish long and short vowels when reading regularly spelled one-syllable words. b. Know spelling-sound correspondences for additional common vowel teams. c. Decode regularly spelled two-syllable words with long vowels.	Demonstrate understanding of regular and irregular letter sound correspondence in decoding multi-syllable words.
/aw/ spelled 'aw' as in paw, 'au' as in Paul, 'augh' as in caught, 'ough' as in bought /oo/ spelled 'oo' as in look, 'u' as in student, 'ue' as in blue, 'ui' as in fruit, 'ew' as in new, 'u_e' as in tune /oo/ spelled 'oo' as in soon /ou/ spelled 'ou' as in shout, 'ow' as in now /oi/ spelled 'oi' as in oil, 'oy' as in toy /er/ spelled 'er' as in her, 'ur' as in hurt, 'ir' as in bird, 'ar' as in dollar /ar/ spelled 'ar' as in car /or/ spelled 'or' as in for, 'ore' as in more, 'our' as in four, 'oor' as in door Schwa spelled 'a' as in about /shun/ spelled 'tion' as in mention	RF2.3 Know and apply grade-level phonics and word analysis skills in decoding words.	Demonstrate understanding of regular and irregular letter sound correspondence in decoding multi-syllable words.
B. Oral Reading and Fluency		
Read decodable stories that incorporate the specific code knowledge that has been taught.	RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed	Read accurately and fluently, using phonics and context clues to determine pronunciation and meaning using grade level resources.

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	at the high end of the range. RF2.4 Read with sufficient accuracy and fluency to support comprehension.	
Demonstrate increased accuracy, fluency, and expression on successive reading of a decodable text (90 wpm by the end of the year).	RF2.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.	Read with sufficient accuracy and fluency to support comprehension. . Read on-level text with purpose and understanding. . Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings . Use context to confirm or self-correct word recognition and understanding, rereading as necessary. Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
Use phonics skills in conjunction with context to confirm or self-correct word recognition and understanding, rereading as necessary.	RF2.4 Read with sufficient accuracy and fluency to support comprehension. c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary. L2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g., happy/unhappy, tell/retell). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional). d. Use knowledge of the meaning of individual words to predict the meaning of compound words (e.g., birdhouse, lighthouse, housefly; bookshelf, notebook, bookmark). e. Use glossaries and beginning dictionaries, both	Read with sufficient accuracy and fluency to support comprehension. . Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

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	print and digital, to determine or clarify the meaning of words and phrases. RI2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area.	
Demonstrate understanding of and use commas and end punctuation while reading orally.	RF2.4 Read with sufficient accuracy and fluency to support comprehension. b. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.	Demonstrate an understanding of writing conventions such as spelling, punctuation, grammar as well as sentence structure while reading orally
Read aloud, alone, or with a partner at least 20 minutes each day.	RF2.4 Read with sufficient accuracy and fluency to support comprehension.	
C. Reading Comprehension – All Texts		
Demonstrate understanding of text—the majority of which is decodable—after independent reading.	RF2.4 Read with sufficient accuracy and fluency to support comprehension. a. Read on-level text with purpose and understanding.	Read with sufficient accuracy and fluency to support comprehension Read on-level text with purpose and understanding
Grasping Specific Details and Key Ideas		
Sequence four to six pictures illustrating events from a text that has been read independently.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text.	
Answer questions requiring literal recall and understanding of the details and/or facts (i.e., who, what, where, when, etc.) about a text that has been read independently.	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	
Retell key details from a text that has been read independently.	RL2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.8 Describe how reasons support specific points the	Ask and answer questions in a text by relating new information to prior knowledge and experience.

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	author makes in a text.	
Summarize in one's own words selected parts of a text.	RI.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	
Ask questions to clarify information about a text that has been read independently.	RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	Ask specific questions to clarify and extend meaning.
Use narrative language to describe people, places, things, locations, events, actions, a scene or facts from a text that has been read independently.	RI.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI.2.3 Describe how characters in a story respond to major events and challenges	
Observing Craft and Structure		
Identify basic text features and what they mean, including title, table of contents, chapter headings and captions.	RI.2.5 Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently. RI.2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.
Understand and use words and phrases from a text that has been read independently.	RI.2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. RI.2.4 Determine the meaning of words and phrases in a text relevant to a grade 2 topic or subject area. L.2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., addition, additional). L.2.5 Demonstrate understanding of word relationships	Use context clues and word attack skills to determine meaning of words in a variety of texts.

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	and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy). b. Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny). L2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).	
Compare and contrast similarities and differences within a single text or between multiple texts read independently.	RI2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures. RI2.9 Compare and contrast the most important points presented by two texts on the same topic.	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series). With prompting and support, identify basic similarities in and differences between two texts on the same topic (e.g., in illustrations, descriptions, or procedures). Compare and contrast stories in the same genre (e.g., mysteries and adventure stories) on their approaches to similar themes and topics.
Make personal connections to events or experiences in a text that has been read independently and/or make connections among several texts that have been read independently	RI2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. L2.5 Demonstrate understanding of word relationships and nuances in word meanings. a. Identify real-life connections between words and their use (e.g., describe foods that are spicy or juicy).	Make text to text, text to self and text to world connections in order to show understanding of the text.

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Integrating Information and Evaluating Evidence		
Prior to reading, identify what they know and have learned that may be related to the specific story or topic to be read.	RI2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Respond to poetry, non-fiction and drama using interpretive critical and evaluating processes.
Use pictures accompanying the written text to check and support understanding.	RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	
Make predictions prior to and while reading, based on the title, pictures, and/or text read thus far and then compare the actual outcomes to predictions.	RI2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Respond to poetry, non fiction and drama using interpretive critical and evaluative processes.
Answer questions that require making interpretations, judgments, or giving opinions about what is read independently, including answering “why” questions that require recognizing cause/effect relationships.	RI2.8 Describe how reasons support specific points the author makes in a text. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Extend a story by stating and supporting an opinion.
Interpret information that is read independently and then ask questions to clarify this information.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate	

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	understanding of key details in a text. RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	
Identify who is telling a story or providing information in a text.	RI.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	
Identify temporal words that link and sequence events, i.e., first, next, then, etc.		Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).
Identify words that link ideas, i.e., for example, also, in addition.	RI.2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	
D. Reading Comprehension – Fiction, Drama, and Poetry		
Retell a story, using narrative language to describe characters, setting(s), and the plot of the story in proper sequence.	RI.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	
Compare and contrast characters from different stories.	RI.2.9 Compare and contrast two or more versions of the same story (e.g., Cinderella stories) by different authors or from different cultures.	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
Describe characters in increasing depth by referring to dialogue and/or their actions in the story.	RI.2.3 Describe how characters in a story respond to major events and challenges. RI.2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	
Change some story events and provide a different story ending.		
Distinguish fantasy from realistic text in a story.	RI.2.5 Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action.	
Identify the moral or lesson of a fable, folktale, or myth.	RI.2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral.	

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Demonstrate understanding of literary language (e.g., author, illustrator, characters, setting, plot, dialogue, personification, simile, and metaphor) and use some of these terms in retelling stories or creating their own stories.	RL2.6 Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue aloud.	
Identify sensory language and how it is used to describe people, objects, places, and events.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	
Identify repetitions in phrases, refrains, or sounds in poems or songs.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	
Describe the use of rhyme, rhythm and sensory images used in poetry.	RL2.4 Describe how words and phrases (e.g., regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song.	
E. Reading Comprehension – Non-Fiction and Informational Text		
Generate questions and seek information from multiple sources to answer questions.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text.	
Answer questions about the details of a nonfiction text, indicating which part of the text provided the information needed to answer specific questions.	RI2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. RI2.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Use the questioning forms of the 5 W's to demonstrate understanding of the text.
Interpret information presented in diagrams, charts, graphs, etc.	RI2.7 Explain how specific images (e.g., a diagram showing how a machine works) contribute to and clarify a text.	
With assistance, categorize and organize facts and information for a given topic.	RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text. W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop	Gather, categorize and organize information from research.

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	points, and provide a concluding statement or section. W2.8 Recall information from experiences or gather information from provided sources to answer a question. L2.5 Demonstrate understanding of word relationships and nuances in word meanings.	
With assistance, create and interpret timelines and lifelines related to text read independently.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. RI2.3 Describe how characters in a story respond to major events and challenges. RI2.2 Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	Use traditional structures to convey information in sequential order.
Distinguish text that describes events that happened long ago from text that describes contemporary or current events.	RI2.3 Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text.	
III. Writing		
Writing to Reflect Audience, Purpose, and Task		
Add details to writing. W2.5	With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.	
Begin to use tools, including technology, to plan, draft, and edit writing.	W2.5 With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing. W2.6 With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.	.With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others . With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting. .With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others;
Conducting Research		

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Gather information from experiences or provided text sources.	W2.7 Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). W2.8 Recall information from experiences or gather information from provided sources to answer a question.	Recall information from experiences or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
A. Narrative Writing		
Write a familiar story that includes setting(s), character(s), dialogue, and if appropriate, several events, using temporal words and phrases to indicate the chronology of events.	RL2.2 Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. W2.3 Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	Write a narrative that includes sensory details and concrete language to develop plot and character.
Write a personal narrative.	W2.3 Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	Write a narrative that includes sensory details and concrete language to develop plot and character.
Create a title and an ending that are relevant to the narrative.	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W2.3 Write narratives in which they recount a well elaborated event or short sequence of events, include details to describe actions, thoughts, and feelings, use temporal words to signal event order, and provide a sense of closure.	Write an informational text to support judgements and opinions through references to text, other works or personal knowledge .
B. Informative/Explanatory Writing		
Write about a topic, including a beginning and ending sentence, facts and examples relevant to the topic, and specific steps (if writing explanatory text).	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. W2.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	Write an informational text to support judgements and opinions through references to text, other works or personal knowledge.
Group similar information into paragraphs.	W2.2 Write informative/explanatory texts in which they	

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	introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section.	
Use linking words such as also, another, and, etc. to connect ideas within a paragraph.	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	
C. Persuasive Writing (Opinion)		
Express an opinion or point of view in writing, providing reasons and supporting details for preference or opinion. Use words to link opinions with reasons or supporting details, such as because, also, another.	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	Distinguish their own point of view from that of the narrator or those of the characters. Distinguish their own point of view from that of the author of a text.
Create a title that is relevant to the topic or subject of the text.	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	
If writing about a specific book or read-aloud, refer to the content of the text.	W2.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section.	
IV. Language Conventions		
Form sentences and paragraphs to communicate thoughts and ideas.	L2.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Compare formal and informal uses of English.	
Apply basic spelling conventions.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. d. Generalize learned spelling patterns when writing words (e.g., cage → badge; boy → boil).	Demonstrate command of the writing conventions to show an understanding of spelling.
Use basic capitalization and punctuation in sentences to convey meaning.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic	

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A. Spelling		
Write phonemically plausible spellings for words using current code knowledge, e.g., write doller for dollar, wate for wait or weight.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
Write words, phrases, and sentences from dictation, applying phonics knowledge.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
Alphabetize words to the second letter.		
Use a children's dictionary, with assistance, to check spelling and verify the meaning of words.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings. L2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. e. Use glossaries and beginning dictionaries, both print and digital, to determine or clarify the meaning of words and phrases.	Demonstrate command of the conventions of standard English as related to capitalization, punctuation and spelling.
Identify and use synonyms, antonyms, homophones, and compound words.	L2.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. L2.5 Demonstrate understanding of word relationships and nuances in word meanings. b. Distinguish shades of meaning among closely related verbs (e.g., toss, throw, hurl) and closely related adjectives (e.g., thin, slender, skinny, scrawny).	Observe the conventions of grammar usage, in a variety of writing genres.
B. Parts of Speech and Sentence Structure		
Recognize, identify and use subject, object, and possessive pronouns, i.e., I, me, my, they, them, orally, in written text and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Observe the conventions of grammar usage in a variety of writing genres.
Recognize, identify and use correct noun-pronoun agreement orally, in written text and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Observe the conventions of grammar usage in a variety of writing genres.

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	a. Use collective nouns (e.g., group). b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish). c. Use reflexive pronouns (e.g., myself, ourselves).	
Recognize, identify and use common and proper nouns, orally, in written text, and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use collective nouns (e.g., group).	Demonstrate command of the conventions of English grammar when using common and proper nouns in an oral or written presentation.
Recognize, identify, and use the articles a and an appropriately orally, in written text and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Demonstrate command of the conventions of English grammar in an oral or written presentation.
Recognize, identify and use selected regular and irregular plural nouns orally, in written text and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. b. Form and use frequently occurring irregular plural nouns (e.g., feet, children, teeth, mice, fish).	
Recognize, identify and use selected regular and irregular past, present, and future tense verbs orally, in written text, and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. d. Form and use the past tense of frequently occurring irregular verbs (e.g., sat, hid, told).	
Recognize, identify, and use adjectives orally, in written text, and in own writing. Recognize, identify, and use adverbs orally, in written text, and in own writing.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. e. Use adjectives and adverbs, and choose between them depending on what is to be modified.	
Recognize, identify and use subjects and predicates, orally, in written text, and in own writing.		
Recognize, identify, and use statements, questions, and exclamations orally, in written text, and in own writing.		
Recognize, identify, and use complete simple and compound sentences.	L2.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. f. Produce, expand, and rearrange complete simple and compound sentences (e.g., The boy watched the movie; The little boy watched the movie; The	Demonstrate command of the conventions of English grammar in an oral or written presentation.

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	action movie was watched by the little boy).	
C. Capitalization and Punctuation		
Capitalize the first word in a sentence, the pronoun I, and proper nouns (names and places,) months, days of the week, titles of people, and addresses.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize holidays, product names, and geographic	Demonstrates a command of the conventions of English language such as grammar, spelling, capitalization when writing.
Recognize, identify and use abbreviations with correct punctuation for the months, days of the week, titles of people, and addresses.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
Identify and use end punctuation, including periods, question marks, and exclamation points.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
Use commas appropriately in greetings and closings of letters, dates, items in a series, and addresses.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. b. Use commas in greetings and closings of letters.	
Write a simple friendly letter.	Demonstrates command of conventions of English in writing a friendly letter	
Use apostrophes to create contractions and indicate possession, i.e., cat's meow.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. c. Use an apostrophe to form contractions and frequently occurring possessives.	
Use quotation marks appropriately to designate direct speech.	L2.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	
V. Poetry*		
Bed in Summer (Robert Louis Stevenson) Bee! I'm expecting you (Emily Dickinson) Buffalo Dusk (Carl Sandburg) Caterpillars (Aileen Fisher) Discovery (Harry Behn) Harriet Tubman (Eloise Greenfield) Hurt No Living Thing (Christina Rossetti) Lincoln (Nancy Byrd Turner)	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Read a variety of literature genres: poems, myths, legends, plays, media productions, works of fiction and non-fiction intended for your readers - recognize features that distinguish the genres and use those features to aid comprehension.

Core Knowledge Sequence GRADE 2	Common Core State Standards covered at CK Grade Level	Performance Indicator
The Night Before Christmas (Clement Clarke Moore) Rudolph Is Tired of the City (Gwendolyn Brooks) Seashell (Federico Garcia Lorca) Smart (Shel Silverstein) Something Told the Wild Geese (Rachel Field) There Was an Old Man with a Beard (Edward Lear) Who Has Seen the Wind? (Christina Rossetti) Windy Nights (Robert Louis Stevenson)		
VI. Fiction		
A. Stories*		
Beauty and the Beast The Blind Men and the Elephant (a fable from India) A Christmas Carol (Charles Dickens) Charlotte's Web (E. B. White) The Emperor's New Clothes (Hans Christian Andersen) The Fisherman and His Wife (Brothers Grimm) How the Camel Got His Hump (a "Just-So" story by Rudyard Kipling) Iktomi stories (legends of the Plains Indian trickster figure, such as Iktomi Lost His Eyes; Iktomi and the Berries; Iktomi and the Boulder) The Magic Paintbrush (a Chinese folktale) El Pajaro Cu (a Hispanic folktale) selections from Peter Pan (James M. Barrie) Talk (a West African folktale) The Tiger, the Brahman, and the Jackal (a folktale from India) The Tongue-Cut Sparrow (a folktale from Japan)	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	*Specifically listed in CCSS (Grade 3)
B. Mythology of Ancient Greece*		
Gods of Ancient Greece and Rome Zeus (Jupiter)	Read a variety of literature of different genres; fables myths , lengends	

Core Knowledge Sequence GRADE 2	Common Core State Standards covered at CK Grade Level	Performance Indicator
Hera (Juno) Apollo (Apollo) Artemis (Diana) Poseidon (Neptune) Aphrodite (Venus) Demeter (Ceres) Ares (Mars) Hermes (Mercury) Athena (Minerva) Hephaestus (Vulcan) Dionysus (Bacchus) Eros (Cupid) Hades (Pluto)		Students select and use key strategies to recount details and main idea from a variety of genres.
Mount Olympus: home of the gods		
Mythological creatures and characters Atlas (holding the world on his shoulders) centaurs Cerberus Pegasus Pan		
Greek Myths Prometheus (how he brought fire from the gods to men) Pandora's Box Oedipus and the Sphinx Theseus and the Minotaur Daedalus and Icarus Arachne the Weaver Swift-footed Atalanta Demeter and Persephone Hercules (Heracles) and the Labors of Hercules	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Respond to a variety of genres using interpretive, critical and evaluative process.
C. American Folk Heroes and Tall Tales*		

Core Knowledge Sequence GRADE 2	Common Core State Standards covered at CK Grade Level	Performance Indicator
Paul Bunyan Johnny Appleseed John Henry Pecos Bill Casey Jones	RL2.10 By the end of the year, read and comprehend literature, including stories and poetry, in the grades 2–3 text complexity band proficiently, with scaffolding as needed at the high end of the range.	
D. Literary Terms		
myth		
tall tale		
limerick		
VII. Sayings and Phrases		
Back to the drawing board Better late than never Cold feet Don't cry over spilled milk. Don't judge a book by its cover. Easier said than done Eaten out of house and home Get a taste of your own medicine Get up on the wrong side of the bed In hot water Keep your fingers crossed. Practice what you preach. The real McCoy Two heads are better than one. Turn over a new leaf Where there's a will there's a way. You can't teach an old dog new tricks.	L2.5 Demonstrate understanding of word relationships and nuances in word meanings. L2.6 Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g., When other kids are happy that makes me happy).	Demonstrates an understanding of figurative language.
*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ARTS & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Reading and Writing		
A. Reading Comprehension and Response		
Independently read and comprehend longer works of fiction (“chapter books”) and nonfiction appropriately written for third grade or beyond.	RL3.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 2–3 text complexity band independently and proficiently. RI3.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 2–3 text complexity band independently and proficiently.	Use inferences and deduct meaning from text.
Point to specific words or passages that are causing difficulties in comprehension.		
Orally summarize main points from fiction and nonfiction readings.	RL3.2 Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text. RI3.2 Determine the main idea of a text; recount the key details and explain how they support the main idea. SL3.2 Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.	.Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, qualitatively, and orally. . Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas and themes. .Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text. .Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. . Summarize a written text read aloud or information presented in diverse media and formats, including visually, qualitatively, and orally. .Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
Ask and pose plausible answers to how, why, and what-if questions in interpreting texts, both fiction and nonfiction.	RL3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers. RI3.1 Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as .	Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. . Refer to details and examples in a text when explaining what the text says explicitly and when drawing

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	the basis for the answers. SL3.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 3 topics and texts, building on others' ideas and expressing their own clearly. a. Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion). c. Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others. d. Explain their own ideas and understanding in light of the discussion. SL3.3 Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.	inferences from the text. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. Use details, examples, anecdotes, or personal experiences to explain or clarify information. Include relevant information and exclude extraneous material.
Use a dictionary to answer questions regarding meaning and usage of words with which he or she is unfamiliar.	RI3.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area. L3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.	Use a few traditional structures to convey information such as chronological order, cause and effect and similarities and differences.
Know how to use a table of contents and index to	RI3.5 Use text features and search tools (e.g., key words,	

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
locate information.	sidebars, hyperlinks) to locate information relevant to a given topic efficiently.	
B. Writing		
Produce a variety of types of writing—such as stories, reports, poems, letters, descriptions—and make reasonable judgments about what to include in his or her own written works based on the purpose and type of composition.	W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section. W3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section. W3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure. W3.4 With guidance and support from adults, produce writing in which the development and organization are	Use details, examples, anecdotes, or personal experiences to explain or clarify information. Include relevant information and exclude extraneous material. Use dialog and descriptive language to write real or imaginative narratives, to be shared with peers and adults.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. L3.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases for effect. b. Recognize and observe differences between the conventions of spoken and written standard English.	
Know how to gather information from basic print sources (such as a children’s encyclopedia), and write a short report presenting the information in his or her own words.	W3.7 Conduct short research projects that build knowledge about a topic. W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	
Know how to use established conventions when writing a friendly letter: heading, salutation (greeting), closing, signature.	W3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Explain the meaning of literary works beyond the literary level of comprehension.
Produce written work with a beginning, middle, and end.	W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section. W3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	Demonstrate point of view in a written form making use of organizational structures and providing closure to their writing.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section. W3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure. W3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Recognize features that distinguish various genres and use them to aid their comprehension of the text.
Organize material in paragraphs and understand how to use a topic sentence How to develop a paragraph with examples and details that each new paragraph is indented	W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons.	Use transitional words in writing in order to convey their point of view.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	d. Provide a concluding statement or section. W3.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section. W3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure. W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Use different writing genres and create poems, articles, stores, fables, myths , and legends.
In some writings, proceed with guidance through a process of gathering information, organizing thoughts, composing a draft, revising to clarify and refine his or her meaning, and proofreading with attention to spelling, mechanics, and presentation of a final draft.	W3.1 Write opinion pieces on topics or texts, supporting a point of view with reasons. a. Introduce the topic or text they are writing about, state an opinion, and create an organizational structure that lists reasons. b. Provide reasons that support the opinion. c. Use linking words and phrases (e.g., because, therefore, since, for example) to connect opinion and reasons. d. Provide a concluding statement or section. W3.2 Write informative/explanatory texts to examine a	Express opinions in written form using the process of pre-writing, drafting, revising, and proof reading to produce wee structured informational text.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Common Core State Standards covered above or below CK Grade Level
	topic and convey ideas and information clearly. a. Introduce a topic and group related information together; include illustrations when useful to aiding comprehension. b. Develop the topic with facts, definitions, and details. c. Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information. d. Provide a concluding statement or section. W3.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations. c. Use temporal words and phrases to signal event order. d. Provide a sense of closure. W3.4 With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W3.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 3 on pages 28 and 29.) W3.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.	Apply prior knowledge using traditional structures to convey information such as chronological order, cause and effect and similarities and differences.
C. Spelling Grammar and Usage		

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
Spell most words correctly or with a highly probable spelling, and use a dictionary to check and correct spellings about which he or she is uncertain. Use capital letters correctly.	L3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize the first word in a sentence and the pronoun I. b. Recognize and name end punctuation. c. Write a letter or letters for most consonant and short-vowel sounds (phonemes). d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.	Observe the conventions of grammar, word usage, spelling, and punctuation.
Understand what a complete sentence is, and identify subject and predicate in single-clause sentences distinguish complete sentences from fragments	L3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., childhood). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	Exchange friendly notes, cards, and letters with friends, relatives, and pen pals in order to observe the conventions of grammar, word usage, spelling and punctuation.
Identify and use different sentence types: declarative (makes a statement) interrogative (asks a question) imperative (gives a command) exclamatory (for example, "What a hit!")	L3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., childhood). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., I walked; I walk; I	Use nouns, pronouns, verbs and adjectives within traditional structures to convey information such as chronological order, cause and effect, similarities and differences.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	will walk) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	
Know the following parts of speech and how they are used: nouns (for concrete nouns) pronouns (singular and plural) verbs: action verbs and auxiliary (helping) verbs adjectives (including articles: a before a consonant, an before a vowel, and the) adverbs	L3.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences. b. Form and use regular and irregular plural nouns. c. Use abstract nouns (e.g., childhood). d. Form and use regular and irregular verbs. e. Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses. f. Ensure subject-verb and pronoun-antecedent agreement.* g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified. h. Use coordinating and subordinating conjunctions. i. Produce simple, compound, and complex sentences.	Make oral presentations and demonstrate command of the English language using correct forms of nouns, pronouns, regular and irregular verbs.
Know how to use the following punctuation: end punctuation: period, question mark, or exclamation point comma: between day and year when writing a date; between city and state in an address; in a series; after yes and no apostrophe: in contractions; in singular and plural possessive nouns	L3.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Capitalize appropriate words in titles. b. Use commas in addresses. c. Use commas and quotation marks in dialogue. d. Form and use possessives. e. Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness). f. Use spelling patterns and generalizations (e.g.,	Use proper writing mechanics, quotations, possessive forms, capitalization in a variety of writing genres.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words. g. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.	
Recognize and avoid the double negative.		
D. Vocabulary		
Know what prefixes and suffixes are and how the following affect word meaning: Prefixes: re meaning “again” (as in reuse, refill) un meaning “not” (as in unfriendly, unpleasant) dis meaning “not” (as in dishonest, disobey) un meaning “opposite of” or “reversing an action” (as in untie, unlock) dis meaning “opposite of” or “reversing an action” (as in disappear, dismount) Suffixes: er and or (as in singer, painter, actor) less (as in careless, hopeless) ly (as in quickly, calmly)	RF3.3 Know and apply grade-level phonics and word analysis skills in decoding words. a. Identify and know the meaning of the most common prefixes and derivational suffixes. b. Decode words with common Latin suffixes. c. Decode multisyllable words. d. Read grade-appropriate irregularly spelled words. L3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases. L3.5 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps). b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).	Use effective vocabulary and follow grammar, usage spelling, and punctuation in a variety of writing genres.

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
	c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).	
Know what homophones are (for example, by, buy; hole, whole) and correct usage of homophones that commonly cause problems: their, there, they're your, you're its, it's here, hear to, too, two	L3.4 Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 3 reading and content, choosing flexibly from a range of strategies. a. Use sentence-level context as a clue to the meaning of a word or phrase. b. Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat). c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion). d. Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases. L3.5 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps). b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).	Use traditional structures to convey information such as chronological order, cause and effect, similarities and differences. Read a variety of literature in different genres; picture books, articles, poems and stories from magazines, fables and myths.
Recognize common abbreviations (for example, St., Rd., Mr., Mrs., Ms., Dr., U.S.A., ft., in., lb.).		

II. Poetry*

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
Adventures of Isabel (Ogden Nash) The Bee (Isaac Watts; see also below, “The Crocodile”) By Myself (Eloise Greenfield) Catch a Little Rhyme (Eve Merriam) The Crocodile (Lewis Carroll) Dream Variations (Langston Hughes) Eletelephony (Laura Richards) Father William (Lewis Carroll) First Thanksgiving of All (Nancy Byrd Turner) For want of a nail, the shoe was lost . . . (traditional) Jimmy Jet and His TV Set (Shel Silverstein) Knoxville, Tennessee (Nikki Giovanni) Trees (Sergeant Joyce Kilmer)		
III. Fiction		
A. Stories*		
Alice in Wonderland (Lewis Carroll) from The Arabian Nights: Aladdin and the Wonderful Lamp Ali Baba and the Forty Thieves The Hunting of the Great Bear (an Iroquois legend about the origin of the Big Dipper) The Husband Who Was to Mind the House (a Norse/English folktale, also known as “Gone is Gone”) The Little Match Girl (Hans Christian Andersen) The People Who Could Fly (an African American folktale) Three Words of Wisdom (a folktale from Mexico) William Tell selections from The Wind in the Willows: “The River Bank” and “The Open Road” (Kenneth Grahame)		
Norse Mythology		

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Performance Indicator
Asgard (home of the gods) Valhalla Hel (underworld) Odin Thor trolls Norse gods and English names for days of the week: Tyr, Odin [Wodin], Thor, Frigg [Freya]		
More Myths and Legends of Ancient Greece and Rome Jason and the Golden Fleece Perseus and Medusa Cupid and Psyche The Sword of Damocles Damon and Pythias Androcles and the Lion Horatius at the Bridge		
C. Literary terms		
biography and autobiography		
Fiction and nonfiction		
IV. Sayings and Phrases		

Core Knowledge Sequence GRADE 3	Common Core State Standards covered at CK Grade Level	Common Core State Standards covered above or below CK Grade Level
Actions speak louder than words. His bark is worse than his bite. Beat around the bush Beggars can't be choosers. Clean bill of health Cold shoulder A feather in your cap Last straw Let bygones be bygones. One rotten apple spoils the whole barrel. On its last legs Rule the roost The show must go on. Touch and go When in Rome do as the Romans do. Rome wasn't built in a day.	RL3.4 Determine the meaning of words and phrases as they are used in a text, distinguishing literal from nonliteral language. L3.5 Demonstrate understanding of word relationships and nuances in word meanings. a. Distinguish the literal and nonliteral meanings of words and phrases in context (e.g., take steps). b. Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful). c. Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered). L3.6 Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific words and phrases, including those that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).	
*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ART S & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Writing, Grammar, and Usage		
A. Writing and Research		
Produce a variety of types of writing—including stories, reports, summaries, descriptions, poems, letters—with a coherent structure or story line.	W4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events. W4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 4 on pages 28 and 29.) W4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”). b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”). W4.10 Write routinely over extended time frames (time	Demonstrate in a piece of writing the ability to manage the conventions of grammar and usage of English so that they aid rather than interfere with reading.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. RL4.2 Determine a theme of a story, drama, or poem from details in the text; summarize the text. RL4.3 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions). RL4.5 Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g. verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text. RI4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text. RI4.8 Explain how an author uses reasons and evidence to support particular points in a text. L4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely.* b. Choose punctuation for effect.* c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).	Make connections to literary works according to a common theme. Make appropriate and effective use of strategies to construct meaning from print, such as prior knowledge about a subject, structural and context clues, and an understanding of letter sound relationships to decode difficult words.
Know how to gather information from different sources (such as an encyclopedia, magazines, interviews, observations, atlas, on-line), and write short reports presenting the information in his or her own words, with attention to the following: - understanding the purpose and audience of the writing - defining a main idea and sticking to it - providing an introduction and conclusion - organizing material in coherent paragraphs - documenting sources in a rudimentary bibliography	W4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related	Use effective vocabulary and follow the rules of grammar usage, spelling and punctuation in persuasive writing. Express opinions in such forms as oral and written reviews letters to the editor, essays, or persuasive speeches, about events, books, issues, and experiences, supported with some evidence.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	to the information or explanation presented. W4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic. W4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. W4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 4 Reading standards to literature (e.g., “Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character’s thoughts, words, or actions].”). b. Apply grade 4 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text”). W4.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. RI4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.	Conduct research utilizing a variety of available media such as magazines, articles, and on-line resources to complete a written project report integrating information from different sources and be able to support their point of view.
Organize material in paragraphs and understand how to use a topic sentence How to develop a paragraph with examples and details that each new paragraph is indented	W4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer’s purpose. b. Provide reasons that are supported by facts and details. c. Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition). d. Provide a concluding statement or section related to the opinion presented. W4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related	Use the writing process to produce well structured text in a variety of writing genres.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within categories of information using words and phrases (e.g., another, for example, also, because). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented. W4.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events.	Develop in written form topics or opinions using the elements of literature they have read and use of appropriate vocabulary using correct grammatical content.
B. Grammar and Usage		
Understand what a complete sentence is, and identify subject and predicate in single-clause sentences Distinguish complete sentences from fragments Identify and correct run-on sentences	L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather	

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., to, too, two; there, their).*	
Identify subject and verb in a sentence and understand that they must agree.	L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., to, too, two; there, their).*	Demonstrate in a piece of writing the ability to manage the conventions, grammar and usage of English so that they aid rather than interfere with reading.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify and use different sentence types: declarative, interrogative, imperative, exclamatory. Know the following parts of speech and how they are used: nouns, pronouns, verbs (action verbs and auxiliary verbs), adjectives (including articles), adverbs, conjunctions (and, but, or), interjections.	L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., to, too, two; there, their).*	
Know how to use the following punctuation: end punctuation: period, question mark, or exclamation point comma: between day and year when writing a date, between city and state in an address, in a series, after yes and no, before conjunctions that combine sentences, inside quotation marks in dialogue apostrophe: in contractions, in singular and plural possessive nouns quotation marks: in dialogue, for titles of poems, songs, short stories, magazine articles	L4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed.	
Understand what synonyms and antonyms are, and provide synonyms or antonyms for given words.	L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to	

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	conventional patterns (e.g., a small red bag rather than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., to, too, two; there, their).* L4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).	Understand, explain the meaning of figurative language, word relationships, similes, metaphors, common idioms and proverbs and use them appropriately in their writing and speaking.
Use underlining or italics for titles of books.	L4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed.	
Know how the following prefixes and suffixes affect word meaning: Prefixes: im, in (as in impossible, incorrect) non (as in nonfiction, nonviolent) mis (as in misbehave, misspell) en (as in enable, endanger) pre (as in prehistoric, pregame) Suffixes: ily, y (as in easily, speedily, tricky) ful (as in thoughtful, wonderful)	RF4.3 Know and apply grade-level phonics and word analysis skills in decoding words a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking;	Decode difficult words and make appropriate and effective use of strategies to construct meaning from print such as prior knowledge about a subject, structure and clues.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
able, ible (as in washable, flexible) ment (as in agreement, amazement)	I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.* g. Correctly use frequently confused words (e.g., to, too, two; there, their).* L4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	
Review correct usage of problematic homophones: their, there, they're your, you're its, it's here, hear to, too, two	L4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why). b. Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses. c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions. d. Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). e. Form and use prepositional phrases. f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*	

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
	g. Correctly use frequently confused words (e.g., to, too, two; there, their).*	
II. Poetry		
A. Poems*		
Afternoon on a Hill (Edna St. Vincent Millay) Clarence (Shel Silverstein) Clouds (Christina Rossetti) Concord Hymn (Ralph Waldo Emerson) Dreams (Langston Hughes) the drum (Nikki Giovanni) Fog (Carl Sandburg) George Washington (Rosemary and Stephen Vincent Benet) Humanity (Elma Stuckey) Life Doesn't Frighten Me (Maya Angelou) Monday's Child Is Fair of Face (traditional) Paul Revere's Ride (Henry Wadsworth Longfellow) The Pobble Who Has No Toes (Edward Lear) The Rhinoceros (Ogden Nash) Things (Eloise Greenfield) A Tragic Story (William Makepeace Thackeray)	RL4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. RF4.4 Read with sufficient accuracy and fluency to support comprehension b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.	Recognize features that distinguish the genres and use those to aid comprehension.
B. Terms		
stanza and line RI4	.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	
III. Fiction		
A. Stories*		

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
The Fire on the Mountain (an Ethiopian folktale) from Gulliver's Travels: Gulliver in Lilliput and Brobdingnag (Jonathan Swift) The Legend of Sleepy Hollow and Rip Van Winkle (Washington Irving) The Magic Brocade (a Chinese folktale) Pollyanna (Eleanor Porter) Robinson Crusoe (Daniel Defoe) Robin Hood St. George and the Dragon Treasure Island (Robert Louis Stevenson)	RL4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. RF4.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	
B. Myths and Mythical Creatures*		
Legends of King Arthur and the Knights of the Round Table How Arthur Became King The Sword in the Stone The Sword Excalibur Guinevere Merlin and the Lady of the Lake Sir Lancelot	RL4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). RL4.9 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures. RL4.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. RF4.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	Read a variety of literature of different genres, articles magazines, myths and legends in order to be able to compare and contrast what they have read.
C. Literary Terms		
novel plot setting	RI4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	Recognize features that distinguish the genres and use those features to aid in comprehension.
IV. Speeches*		

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
Patrick Henry: “Give me liberty or give me death” Sojourner Truth: “Ain’t I a woman?”	RI4.10 By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4–5 text complexity band proficiently, with scaffolding as needed at the high end of the range. RF4.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	
V. Sayings and Phrases		
An ounce of prevention is worth a pound of cure. As the crow flies Beauty is only skin deep. The bigger they are, the harder they fall. Birds of a feather flock together. Blow hot and cold Break the ice Bull in a china shop Bury the hatchet Can’t hold a candle to Don’t count your chickens before they hatch. Don’t put all your eggs in one basket. Etc. Go to pot Half a loaf is better than none. Haste makes waste. Laugh and the world laughs with you. Lightning never strikes twice in the same place. Live and let live. Make ends meet. Make hay while the sun shines. Money burning a hole in your pocket Once in a blue moon One picture is worth a thousand words. On the warpath	RL4.4 Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). RI4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area. L4.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms). L4.6 Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g. quizzed, whined, stammered) and that are basic to a particular topic (e.g. wildlife, conservation, and endangered when discussing animal preservation).	Use inference and deduction to understand text Explain the meaning of literary works with some attention to meanings beyond the literal level.

Core Knowledge Sequence GRADE 4	Common Core State Standards covered at CK Grade Level	Performance Indicator
RSVP Run-of-the-mill Seeing is believing. Shipsshape Through thick and thin Timbuktu Two wrongs don't make a right. When it rains, it pours. You can lead a horse to water, but you can't make it drink.		
*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ARTS & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Writing, Grammar, and Usage		
A. Writing and Research		
Produce a variety of types of writing—including reports, summaries, letters, descriptions, research essays, essays that explain a process, stories, poems—with a coherent structure or story line.	W5.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. b. Provide logically ordered reasons that are supported by facts and details. c. Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). d. Provide a concluding statement or section related to the opinion presented. W5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented. W5.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use narrative techniques, such as dialogue,	Present (in essays, position papers, speeches and debates) clear analysis of issues, ideas, texts, and experiences, supporting their position with well - developed arguments. Develop arguments with effective use of details and evidence that reflect a coherent set of criteria (e.g. reporting results of lab experience) to support a hypothesis. Monitor and adjust their own oral and written presentations according to the standards for a particular genre (e.g. defining key terms used in a formal debate.)

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
	description, and pacing, to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words, phrases, and clauses to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events. W5.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1–3 above.) W5.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach. (Editing for conventions should demonstrate command of Language standards 1–3 up to and including grade 5 on pages 28 and 29.) W5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”). b. Apply grade 5 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point[s]”). W5.10 Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. RL5.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact). RI5.8 Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s). L5.3 Use knowledge of language and its conventions	Organize information according to an identifiable structure, such as compare/contrast or general to specific. Develop information with appropriate supporting materials, such as facts, details, illustrative examples or anecdotes, and exclude extraneous material. Use the process of pre-writing, drafting, revising, and proofreading (the "writing process") to produce well-constructed informational texts.

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
	when writing, speaking, reading, or listening. a. Expand, combine, and reduce sentences for meaning, reader/listener interest, and style. b. Compare and contrast the varieties of English (e.g., dialects, registers) used in stories, dramas, or poems.	
Know how to gather information from different sources (such as an encyclopedia, magazines, interviews, observations, atlas, on-line), and write short reports synthesizing information from at least three different sources, presenting the information in his or her own words, with attention to the following: understanding the purpose and audience of the writing defining a main idea and sticking to it providing an introduction and conclusion organizing material in coherent paragraphs illustrating points with relevant examples documenting sources in a rudimentary bibliography	W5.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. c. Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a concluding statement or section related to the information or explanation presented. W5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. W5.8 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. W5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. a. Apply grade 5 Reading standards to literature (e.g., “Compare and contrast two or more characters, settings, or events in a story or a drama, drawing on specific details in the text [e.g., how characters interact]”). b. Apply grade 5 Reading standards to informational texts (e.g., “Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support	Write social letters, cards, reports, essays, using a variety of resources and electronic sources.

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
	which point[s]”). RI5.7 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. RI5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	
B. Grammar and Usage		
Understand what a complete sentence is, and identify subject and predicate correct fragments and run-ons		
Identify subject and verb in a sentence and understand that they must agree.		
Know the following parts of speech and how they are used: nouns, verbs (action verbs and auxiliary verbs), adjectives (including articles), adverbs, conjunctions, interjections.	L5.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. a. Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. b. Form and use the perfect (e.g., I had walked; I have walked; I will have walked) verb tenses. c. Use verb tense to convey various times, sequences, states, and conditions. d. Recognize and correct inappropriate shifts in verb tense.* e. Use correlative conjunctions (e.g., either/or, neither/nor).	Produce oral and written reports on topics related to all school subjects with appropriate grammar and language usage. Use a wide variety of strategies for selecting, organizing and categorizing information to be presented with appropriate grammar and language usage.
Understand that pronouns must agree with their antecedents in case (nominative, objective, possessive), number, and gender.		
Correctly use punctuation studied in earlier grades, as well as the colon before a list, commas with an appositive	L5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation to separate items in a series.* b. Use a comma to separate an introductory	

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
	element from the rest of the sentence. c. Use a comma to set off the words yes and no (e.g., Yes, thank you), to set off a tag question from the rest of the sentence (e.g., It's true, isn't it?), and to indicate direct address (e.g., Is that you, Steve?). d. Use underlining, quotation marks, or italics to indicate titles of works. e. Spell grade-appropriate words correctly, consulting references as needed.	
Use underlining or italics for titles of books.	L5.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use punctuation to separate items in a series.* b. Use a comma to separate an introductory element from the rest of the sentence. c. Use a comma to set off the words yes and no (e.g., Yes, thank you), to set off a tag question from the rest of the sentence (e.g., It's true, isn't it?), and to indicate direct address (e.g., Is that you, Steve?). d. Use underlining, quotation marks, or italics to indicate titles of works. e. Spell grade-appropriate words correctly, consulting references as needed.	Use standard English, precise vocabulary, and presentational strategies effectively to influence an audience.
C. Vocabulary		
Know how the following prefixes and suffixes affect word meaning: Prefixes: anti (as in antisocial, antibacterial) inter (as in interstate) co (as in coeducation, co-captain) mid (as in midnight, Midwest) fore (as in forefather, foresee) post (as in postseason, postwar) il, ir (as in illegal, irregular) semi (as in semicircle, semiprecious) Suffixes:	RF5.3 Know and apply grade-level phonics and word analysis skills in decoding words a. Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. L5.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 5 reading and content, choosing flexibly from a range of strategies. a. Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase.	Analyze, interpret, and evaluate information ideas, organization and language from academic and non academic texts, such as textbooks, public documents, book and movie reviews and editorials

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
ist (as in artist, pianist) ish (as in stylish, foolish) ness (as in forgiveness, happiness) tion, sion (as in relation, extension)	b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis). c. Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.	
II. Poetry		
A. Poems*		
The Arrow And The Song (Henry Wadsworth Longfellow) Barbara Frietchie (John Greenleaf Whittier) Battle Hymn of the Republic (Julia Ward Howe) A bird came down the walk (Emily Dickinson) Casey at the Bat (Ernest Lawrence Thayer) The Eagle (Alfred Lord Tennyson) I Hear America Singing (Walt Whitman) I like to see it lap the miles (Emily Dickinson) I, too, sing America (Langston Hughes) Jabberwocky (Lewis Carroll) Narcissa (Gwendolyn Brooks) O Captain! My Captain! (Walt Whitman) A Poison Tree (William Blake) The Road Not Taken (Robert Frost) The Snowstorm (Ralph Waldo Emerson) Some Opposites (Richard Wilbur) The Tiger (William Blake) A Wise Old Owl (Edward Hersey Richards)	RL5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. RF5.4 Read with sufficient accuracy and fluency to support comprehension b. Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings. *Specifically listed in CCSS	Compare and synthesize information from different sources.
B. Terms		

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
onomatopoeia alliteration	RI5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.	
III. Fiction and Drama		
A. Stories*		
The Adventures of Tom Sawyer (Mark Twain) episodes from Don Quixote (Miguel de Cervantes) Little Women (Part First) (Louisa May Alcott) Narrative of the Life of Frederick Douglass (Frederick Douglass) The Secret Garden (Frances Hodgson Burnett) Tales of Sherlock Holmes, including “The Red-Headed League” (Arthur Conan Doyle)	RI5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. RF5.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	Interpret and analyze information from textbooks and non-fiction books for young adults, as well as reference materials audio and media presentations, oral interviews, graphs, charts, diagrams, and electronic data bases intended for a general audience.
B. Drama*		
A Midsummer Night’s Dream (William Shakespeare)	RI5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. RF5.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	Present responses to and interpretations of literature, making reference to the literary elements found in the text and connections with their personal knowledge and experience. Produce interpretations of literary works that identify different levels of meaning and comment on their significance and effect.
Terms: tragedy and comedy act, scene Globe Theater	RI5.5 Explain how a series of chapters, scenes, or stanzas fit together to provide the overall structure of a particular story, drama, or poem. RI5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area.	Understand and identify the distinguishing features of major genres and use them to aid their interpretation and discussion of literature.
C. Myths and Legends*		

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
A Tale of the Oki Islands (a legend from Japan, also known as “The Samurai’s Daughter”) Morning Star and Scarface: the Sun Dance (a Plains Native American legend, also known as “The Legend of Scarface”) Native American trickster stories (for example, tales of Coyote, Raven, or Grandmother Spider)	RI.5.10 By the end of the year, read and comprehend literature, including stories, dramas, and poetry, at the high end of the grades 4–5 text complexity band independently and proficiently. RF.5.4 Read with sufficient accuracy and fluency to support comprehension a. Read on-level text with purpose and understanding	
D. Literary Terms		
Pen name (pseudonym)		
Literal and figurative language imagery metaphor and simile symbol personification	RI.5.4 Determine the meaning of words and phrases as they are used in a text, including figurative language such as metaphors and similes. RI.5.7 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel, multimedia presentation of fiction, folktale, myth, poem).	Use appropriate language and style for the situation and the audience and to understand the ideas and interests expressed by the person receiving the message. Read and discuss social communications and electronic communications of other writers and use some of the techniques of those writers in their own writing.
IV. Speeches*		
Abraham Lincoln: The Gettysburg Address Chief Joseph (Highh’moot Tooyalakekt): “I will fight no more forever”	RI.5.10 By the end of the year, read and comprehend informational texts, including history/social studies, science, and technical texts, at the high end of the grades 4–5 text complexity band independently and proficiently.	
V. Sayings and Phrases		
Birthday suit Bite the hand that feeds you. Chip on your shoulder Count your blessings. Eat crow Eleventh hour Eureka! Every cloud has a silver lining. Few and far between Forty winks The grass is always greener on the other	RI.5.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 5 topic or subject area. L.5.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. a. Interpret figurative language, including similes and metaphors, in context. b. Recognize and explain the meaning of common idioms, adages, and proverbs. c. Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words. L.5.6 Acquire and use accurately grade-appropriate	Express opinions in such forms as oral and written reviews, letters to the editor, essays, or persuasive speeches, about events, books issues, and experiences, supporting their experiences with some evidence.

Core Knowledge Sequence GRADE 5	Common Core State Standards covered at CK Grade Level	Performance Indicator
side (of the hill). To kill two birds with one stone Lock, stock and barrel Make a mountain out of a molehill A miss is as good as a mile. It's never too late to mend. Out of the frying pan and into the fire. A penny saved is a penny earned. Read between the lines. Sit on the fence Steal his/her thunder Take the bull by the horns. Till the cows come home Time heals all wounds. Tom, Dick and Harry Vice versa A watched pot never boils. Well begun is half done. What will be will be	general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover, in addition).	
*Reading: Text complexity and the growth of comprehension The Reading standards place equal emphasis on the sophistication of what students read and the skill with which they read. Standard 10 defines a grade-by grade “staircase” of increasing text complexity that rises from beginning reading to the college and career readiness level. Whatever they are reading, students must also show a steadily growing ability to discern more from and make fuller use of text, including making an increasing number of connections among ideas and between texts, considering a wider range of textual evidence, and becoming more sensitive to inconsistencies, ambiguities, and poor reasoning in texts. (Common Core State Standards for ENGLISH LANGUAGE ARTS & Literacy in History/Social Studies, Science, and Technical Subjects, p. 8)		

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Writing Grammar and Usage		
A. Writing and Research		
Learn strategies and conventions for writing a persuasive essay, with attention to defining a thesis (that is, a central proposition, a main idea) supporting the thesis with evidence, examples, and reasoning distinguishing evidence from opinion anticipating and answering counter-arguments maintaining a reasonable tone		Compare and synthesize information from different sources. Use a wide variety of strategies for selecting, organizing and categorizing information.
Write a research essay, with attention to asking open-ended questions gathering relevant data through library and field research summarizing, paraphrasing, and quoting accurately when taking notes defining a thesis organizing with an outline integrating quotations from sources acknowledging sources and avoiding plagiarism preparing a bibliography		Present (in essays, position papers, speeches and debates) clear analyses of issues, ideas, texts, and experiences, supporting their position with well-developed arguments.
Write a standard business letter.		
B. Speaking and Listening		
Participate civilly and productively in group discussions.		Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on <i>grade 4 topics and texts</i> , building on others' ideas and expressing their own clearly. . Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. . Follow agreed-upon rules for discussions and carry out assigned roles. . Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
		link to the remarks of others. - Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. - Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. - Follow agreed-upon rules for discussions and carry out assigned roles. - Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. - Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions.
Give a short speech to the class that is well-organized and well-supported.		Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.. Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
Demonstrate an ability to use standard pronunciation when speaking to large groups and in formal circumstances, such as a job interview.		- Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. (See grade 4 Language standards 1 on pages 28 and 29 for specific expectations.) - Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation. (See grade 5 Language standards 1 and 3 on pages 28 and 29 for specific expectations.)

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
C. Grammar and Usage		
Understand what a complete sentence is, and identify subject and predicate, identify independent and dependent clauses, correct fragments and run-ons		Use standard English for formal presentation of information selecting appropriate grammatical constructions and vocabulary, using a variety of sentence structures, and observing the rules of punctuation capitalization and spelling.
Identify different sentence types, and write for variety by using simple sentences compound sentences complex sentences compound-complex sentences		Write stories, poems, and literary essays and plays that observe the conventions of the genre and contain interesting and effective language and voice using standard English effectively.
Correctly use punctuation introduced in earlier grades, and learn how to use a semicolon or comma with <i>and</i> , <i>but</i> , or <i>or</i> to separate the sentences that form a compound sentence.		
Correctly use punctuation introduced in earlier grades, and learn how to use a semicolon or comma with <i>and</i> , <i>but</i> , or <i>or</i> to separate the sentences that form a compound sentence.		
Recognize the following troublesome verbs and how to use them correctly: sit, set rise, raise lie, lay		Monitor and adjust their own oral and written presentations according to the standards for a particular genre (e.g. defining key terms used in a formal debate)
Correctly use the following: good / well between / among bring / take accept / except fewer / less like / as affect / effect who / whom imply / infer principle / principal		Use standard English, precise vocabulary, and presentational strategies effectively to influence an audience.

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
their / there / they're		
D. Spelling		
Review spelling rules for use of <i>ie</i> and <i>ei</i> ; for adding prefixes and suffixes		
Continue work with spelling, with special attention to commonly misspelled words, including: acquaintance amateur analyze answer athlete Britain characteristic committee conscious cooperate criticize dependent develop embarrassed exaggerate exercise fulfill gymnasium hypocrite innocence interrupt license marriage minimum naturally occurrence parallel		Use standard English for formal presentations of information selecting appropriate grammatical constructions and vocabulary, using a variety of sentence structures, and observing the rules of punctuation, capitalization and spelling.

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
peasant philosopher possess privilege receipt recommendation repetition restaurant rhythm separate similar sophomore substitute success suspicion tragedy woman writing		
E. Vocabulary		
<i>Latin/Greek Word Meaning Examples</i> annus [L] year annual, anniversary ante [L] before antebellum, antecedent aqua [L] water aquarium astron [G] star astronaut, astronomy bi [L] two bisect, bipartisan bios [G] life biology, biography centum [L] hundred cent, percent decem [L] ten decade, decimal dico, dictum [L] say, thing said dictation, dictionary duo [G, L] two duplicate ge [G] earth geology, geography		Use standard English for formal presentation of information selecting appropriate grammatical constructions and vocabulary, using a variety of sentence structures, and observing the rules of punctuation, capitalization and spelling.

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
hydor [G] water hydrant, hydroelectric magnus [L] large, great magnificent, magnify mega [G] large, great megaphone, megalomania mikros [G] small microscope, microfilm minus [L] smaller diminish, minor monos [G] single monologue, monarch, monopoly omnis [L] all omnipotent, omniscient phileo [G] to love philosophy, philanthropist phone [G] sound, voice phonograph, telephone photo [from G <i>phos</i>] light photograph, photocopy poly [G] many polygon post [L] after posthumous, posterity pre [L] before predict, prepare primus [L] first primary, primitive protos [G] first prototype, protozoa psyche[G] soul, mind psychology quartus [L] fourth quadrant, quarter tele [G] at a distance telephone, television, telepathy thermos [G] heat thermometer, thermostat tri [G, L] three trilogy, triangle unus [L] one unanimous, unilateral video, visum [L] see, seen evident, visual vita [L] life vitality, vitamin		
II. Poetry		
A. Poems		

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
All the world's a stage [from <i>As You Like It</i>] (William Shakespeare) Apostrophe to the Ocean [from <i>Childe Harold's Pilgrimage</i> , Canto 4, Nos. 178-184] (George Gordon Byron) I Wandered Lonely as a Cloud (William Wordsworth) If (Rudyard Kipling) Mother to Son (Langston Hughes) Lift Ev'ry Voice and Sing (James Weldon Johnson) A narrow fellow in the grass (Emily Dickinson) A Psalm of Life (Henry Wadsworth Longfellow) The Raven (Edgar Allan Poe) A Song of Greatness (a Chippewa song, trans. Mary Austin) Stopping by Woods on a Snowy Evening (Robert Frost) Sympathy (Paul Laurence Dunbar) There is no frigate like a book (Emily Dickinson) The Walloping Window-blind (Charles E. Carryl) Woman Work (Maya Angelou)		
B. Terms		
meter	Understand and identify the distinguishing features of the major genres	
iamb	and use them to aid their interpretation and discussion of literature	
couplet	Recognize different levels of meaning.	
rhyme scheme	Write stories, poems, literary essays and plays that observe the conventions of the	
free verse	genre and contain interesting and effective language and voice.	
III. Fiction and Drama		
A. Stories		
<i>The Iliad</i> and <i>The Odyssey</i> (Homer) <i>The Prince and the Pauper</i> (Mark Twain)		
B. Drama		

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
<i>Julius Caesar</i> (William Shakespeare)		
C. Classical Mythology		
Apollo and Daphne Orpheus and Eurydice Narcissus and Echo Pygmalion and Galatea		Understand and identify the distinguishing features of the major genres and use them to aid their interpretations and discussion of literature.
D. Literary Terms		
Epic		
Literal and figurative language (review from grade 5) imagery metaphor and simile symbol personification	Evaluate literary merit based on an understanding of the genre and the literary elements Produce interpretations of literary works that identify different levels of meaning and comment on their significance and effect. Identify significant literary elements(including methaphor, symbolism, forshadowing, dialect, rhyme, meter, irony, and use those elements to interpret the work	
IV. Sayings and Phrases		

Core Knowledge Sequence GRADE 6	Common Core State Standards covered at CK Grade Level	Performance Indicator
All for one and one for all. All's well that ends well. Bee in your bonnet The best-laid plans of mice and men oft go awry. A bird in the hand is worth two in the bush. Bite the dust Catch-as-catch-can Don't cut off your nose to spite your face. Don't lock the stable door after the horse is stolen. Don't look a gift horse in the mouth. Eat humble pie A fool and his money are soon parted. A friend in need is a friend indeed. Give the devil his due. Good fences make good neighbors. He who hesitates is lost. He who laughs last laughs best. Hitch your wagon to a star. If wishes were horses, beggars would ride. The leopard doesn't change his spots. Little strokes fell great oaks. Money is the root of all evil. Necessity is the mother of invention. It's never over till it's over. Nose out of joint Nothing will come of nothing. Once bitten, twice shy. On tenterhooks Pot calling the kettle black Procrastination is the thief of time. The proof of the pudding is in the eating. RIP The road to hell is paved with good intentions. The road to hell is paved with good intentions. Rome wasn't built in a day. Rule of thumb A stitch in time saves nine. Strike while the iron is hot. Tempest in a teapot Tenderfoot		

Core Knowledge Sequence Kindergarten	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Patterns and Classification			
Establish concepts of likeness and difference by sorting and classifying objects according to various attributes: size, shape, color, amount, function, etc.	4 K	.MD 3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Use a variety of manipulatives to create patterns to create patterns using attributes of color, size, or shape
Define a set by the common property of its elements.	7 K.G.	4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).	Describe characteristics and relationships of geometric objects. Sort groups of objects by size and size order (increasing decreasing)
In a collection of objects that includes a given set and an item that does not belong, indicate which item does not belong.	2 K.MD	3. Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	Use a variety of manipulatives to create patterns to create patterns using attributes of color, size, shape
Moving from concrete objects to pictorial representations, recognize patterns and predict the extension of a pattern.	7		Recognize, describe, extend, and create patterns that repeat (e.g. ABABAB or AABAABAAB)
Extend a sequence of ordered concrete objects.	1, 7		Recognize, describe, extend, and create patterns that repeat (e.g. ABABAB or AABAABAAB)
II. Numbers and Number Sense			
Using concrete objects and pictorial representations, compare sets: same as (equal to) more than less than most least	4 K	.CC 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies. K.OA 3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$).	Count the items in a collection and know the last counting work tells how many items are in the collection. Verbally determine how many more to less, and then using the verbal counting sequence match and count. Identify more, less, and same amounts from pictographs or concrete models.
Count			

Core Knowledge Sequence Kindergarten	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
forward from 1 to 31, first beginning with 1, and later from any given number	2 K	.CC 1. Count to 100 by ones and by tens. K.CC 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).	Count out (produce) a collection up to 100 by ones and tens given a random beginning number.
backward from 10	2		verbally/write count backwards from 10
from 1 to 10 by twos	2		Count out(produce) a collection up to 10 by twos
by fives and tens to 50	2 K	.CC 1. Count to 100 by ones and by tens.	Count out (produce) a collection up to 100 by ones and tens
Write numbers 1 to 31 (with special attention to the difference between certain written symbols, such as 6 and 9; 2 and 5; 1 and 7; 12 and 21, etc.).	2 K	.CC 3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects).	Write/draw pictures to other informal symbols to represent a number of objects from 0 to 31
Count and write the number of objects in a set.	2 K	.CC 3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (with 0 representing a count of no objects). K.CC 4. Understand the relationship between numbers and quantities; connect counting to cardinality. a. When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object. b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted. c. Understand that each successive number name refers to a quantity that is one larger. K.CC 5. Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1–20, count out that many objects.	Count the items in a collection and know the last counting work tells how many items are in the collection of 0-20. Visually determine how many more to less, and then using the verbal counting sequence, match and count. Identify more, less and same amounts from concrete models Formulate mathematically relevant questions with teacher guidance.
Given a number, identify one more, one less.	2 K.OA	1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	Determine how many more to less, and then using the verbal counting sequence, match and count. Use a variety of ways and manipulatives to represent addition and subtraction.
Identify ordinal position, first (1st) through sixth (6th).	2		Use and understand and identify verbal terms first(1st) through sixth (6th)

Core Knowledge Sequence Kindergarten	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify pairs.	2		
Interpret simple pictorial graphs.	4		Draw a picture graph and a bar graph with teacher guidance
Identify $\frac{1}{2}$ as one of two equal parts of a region or object; find $\frac{1}{2}$ of a set of concrete objects.	2, 7		Identify and share mathematical ideas through the manipulation of objects, drawing, pictures and . social phenomena(e.g. sharing between friends)
III. Money			
Identify pennies, nickels, dimes, and quarters.	2		Identify pennies, nickels, dimes and quarters
Identify the one-dollar bill.	2		Identify the one-dollar bill
Identify the dollar sign (\$) and cents sign (¢)	2		Identify and write the dollar (\$) and cents sign
Write money amounts using the cents sign (¢).	2		Write money amounts using the cents sign .
IV. Computation			
Add and subtract to ten, using concrete objects; Recognize the meaning of the plus sign (+).	6 K.OA 1.	Use objects to show and understand mathematical phenomena(e.g. draw pictures to show a story problem show number value using fingers). Formulate problems solutions from everyday situations. K.OA 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem K.OA 4. For any number 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.	Use objects to show and understand mathematical phenomena(e.g. draw pictures to show a story problem show number value using fingers). Formulate problems solutions from everyday situations. Use informal counting strategies to find solutions. Compare and discuss ideas for solving a with teacher and peers to justify their thinking. Use drawings/pictures to model the action in problems. Recognize and verbalize the meaning of the plus sign (+)
Subtraction: the concept of “taking away”; recognize the meaning of the minus sign (-).	6 K.OA	1. Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations. K.OA 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem	Use objects to show and understand mathematical phenomena(e.g. draw pictures to show a story problem show number value using fingers). Formulate problems solutions from everyday situations. Use drawings/pictures to model the action in problems. Recognize and verbalize the meaning of the minus sign (-)

Core Knowledge Sequence Kindergarten	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
V. Measurement			
Identify familiar instruments of measurement, such as ruler, scale, thermometer.	5,6		Identify and explore guesses, using a variety of objects as measurement tool. Use nonstandard and standard tools to measure length, weight and temperature
Compare objects according to: Linear measure long and short; longer than, shorter than measure length using non-standard units begin to measure length in inches height: taller than, shorter than Weight heavy, light heavier than, lighter than Capacity (volume) full and empty less full than, as full as, fuller than Temperature: hotter and colder	4,5,6	K. MD 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object. K. MD 2. Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.	Name, discuss, and compare attributes of length (longer than, shorter than) Investigate the use of knowledgeable guessing as a mathematical tool. Explores guesses, using a variety of objects and manipulatives. Use standard and non standard representations.
Time Sequence events: before and after; first, next, last. Compare duration of events: which takes more or less time. <i>Read a clock face and tell time to the hour.</i> Know the days of the week and the months of the year. Orientation in time: today, yesterday, tomorrow; morning, afternoon; this morning vs. yesterday morning, etc.	4,5,6		Tell and write time in hours and half-hours using analog and digital clocks. Relate specific times such as morning, noon, afternoon and evening to activities and absence/presence of daylight
VI. Geometry			
Identify left and right hand.	2		Use appropriate mathematical language
Identify top, bottom, middle.	2	Understand/use positions such as over, under, above, below, on, beside, in between	

Core Knowledge Sequence Kindergarten	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standards
Know and use terms of orientation and relative position, such as: closed, open on, under, over in front, in back (behind) between, in the middle of next to, beside inside, outside around far from, near above, below to the right of, to the left of here, there	4 K	.G 1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to.	Use appropriate mathematical terms, vocabulary and language. Understand and use ideas such as over, under, above, next to, and between.
Identify basic shapes in a variety of common objects and artifacts (windows, pictures, books, buildings, cars, etc.).	4 K	.G 2. Correctly name shapes regardless of their orientations or overall size.	Use a variety of manipulative and other objects to construct replicas of common objects.
Identify and sort basic plane figures: square, rectangle, triangle, circle.	4 K	.G 2. Correctly name shapes regardless of their orientations or overall size. K. G 3. Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).	
Recognize shapes as the same or different.	4 K	.G 4. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).	
Make congruent shapes and designs.	4	K. G 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes. K.G 6. Compose simple shapes to form larger shapes. For example, “Can you join these two triangles with full sides touching to make a rectangle?”	

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicators
I. Patterns and Classification			
Establish concepts of likeness and difference by sorting and classifying objects according to various attributes: size, shape, color, amount, function, etc.	4		Classify objects into given categories; count the numbers of objects in each category and sort the categories by count. Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/“corners”) and other attributes (e.g., having sides of equal length).
Define a set by the common property of its elements.	2		Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
In a collection of objects that includes a given set and an item that does not belong, indicate which item does not belong.	2		Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.
Recognize patterns and predict the extension of a pattern.	7		Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</i>
II. Numbers and Number Sense			
Write numbers 0-100	2	1.NBT 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Count the items in a collection and know the last counting word tells how many items are in a collection of 1-120 Count our (produce) a collection of a specified size (1-120)
Count from 0 - 100 by ones; twos; fives; tens.	2	1.NBT 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Count the items in a collection and know the last counting word tells how many items are in a collection of 1-120 Count our (produce) a collection of a specified size (1-120) ccounting by ones, twos, fives, and tens.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Count forward and backwards.	2	1.NBT 1. Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	Name the number before and after a given number and the numbers between two given numbers up to 120(with and without the number line or number charts.
Use tallies.	4	Display data in bar graphs using concrete objects at intervals of one	
Identify ordinal position, 1st to 10th.	2	Use and understand verbal ordinal terms first to twelfth using concrete models and labels.	
Identify dozen; half-dozen; pair.	2		
Recognize place value: ones, tens, hundreds.	6 1.NBT	2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones — called a “ten.” b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones).	Compose and decompose numbers from 1 to 120 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).
Identify more and less; counting how many more or less.	6		Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference.
Given a number, identify one more and one less; ten more and ten less.	6, 8	1.NBT 5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used.	Use mental math to add or subtract 10 using teacher coaching, and explain methods used.
Compare quantities using the signs <, >, and = .	2 1.NBT	3. Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	Compare two numbers between 1 and 120 presented as written numerals based on meaning of tens, ones, using ><, = symbols.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Recognize fractions as part of a whole: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$	2 1.G.3.	Partition circles and rectangles into two and four equal shares, describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares.	Understand a fraction $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$ as the quantity formed by 1 part when a whole is partitioned into x equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.
Create and interpret simple pictorial graphs and bar graphs.	4 1.M	D 4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems using information presented in a bar graph.
III. Money			
Identify and recognize relative value of penny, nickel, dime, quarter.	2		Use vocabulary and recognize coins and relative value.
Recognize and use dollar (\$) and cents (¢) signs.	2		Recognize and use cent, and dollar \$ notations
Show how different combinations of coins equal the same amounts of money.	7,8		Use different combinations of coins to make like and different money amounts up to 25 cents
IV. Computation			
Addition(using concrete objects, and paper and pencil)		Make stories that go with number sentences. Interpret information correctly, identify problem and generate solutions	
Know the meaning of the plus (+) sign.	2		Creates and uses + sign to problem solve.
Know what a “sum” is.	2		
Know addition facts to $10 + 10$ (untimed mastery).	6,7,8 1.OA	6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	For any number from 1 to 20, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation. Fluently add and subtract within 20.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Add in any order.	6,7,8 1.OA	6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	Solve additions problems using strategies of plus 1, double digits.
Know what happens when you add zero.	6,7,8		Add numbers with 0.
Know how to write addition problems horizontally and vertically.	6,7,8		Write and solve addition problems horizontally and vertically
Know that when you add 3 numbers, you get the same sum regardless of grouping of addends.	6,7,8	1.OA 2. Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Writes and explains problems using commutative properties
Solve two-digit addition problems with and without regrouping.	6,7,8 1.NBT	4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Writes and solves additions problems with or without regrouping. Uses manipulatives to demonstrate place value and regrouping operations. Writes and explains methods used to problem solve.
Subtraction (using concrete objects, and paper and pencil)	s	Uses	manipulatives, creates and solve subtraction problems.
Understand subtraction as “taking away.”	6,7,8	1. OA 5. 5. Relate counting to addition and subtraction (e.g., by counting on 2 to add 2).	Uses and explains subtraction using appropriate mathematical language.
Know the meaning of the minus sign (-).	2		Uses and creates problems using appropriate language symbols. Articulates connection between symbols and words.
Know what a “difference” is.	2	Creates, solves,	and explains problems using vocabulary and symbols.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Know subtraction facts corresponding to addition facts (untimed mastery).	6,7,8	1.OA 4. Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8. 1.OA 6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).	Fluently add and subtract within 20
Know how to write subtraction problems horizontally and vertically.	6,7,8		Writes and solves subtraction problems horizontally and vertically.
Solve two-digit subtraction problems with and without regrouping.	6,7,8 1.NBT	4. Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	Writes and creates subtraction problems with or without regrouping. Uses manipulatives to demonstrate place value and regrouping operations. Writes and explains methods used to problem solve.
Mentally subtract 10 from a two-digit number.	6,7,8 1.NBT	5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT 6. Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Given a number subtract 10 from a two digit number in a range of 10-90 Uses manipulatives to demonstrate place value and regrouping operations Writes and explains methods used to problem solve.
Solving Problems and Equations			Interpret, identify and generate possible problem solutions.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Write an addition or subtraction equation to solve basic one-step story and picture problems.	4,6,7,8	1.OA 1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	Create and write addition and subtraction stories up to 20. Use manipulatives, drawings to represent problem solutions.
Solve simple equations in the form of ____ - 2 = 7; 5 + ____ = 7.	6,7,8	1.OA 3. Apply properties of operations as strategies to add and subtract.3 Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.) 1.OA 7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. For example, which of the following equations are true and which are false? $6 = 6$, $7 = 8 - 1$, $5 + 2 = 2 + 5$, $4 + 1 = 5 + 2$. 1.OA 8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = \quad - 3$, $6 + 6 = \quad$.	Use algebraic expressions and symbols to problem solve. Create and solve problems using commutative property of addition. Understand and write simple equations +, -, and = symbols. Use algebraic expressions and symbols to problem solve.
V. Measurement			
Identify familiar instruments of measurement, such as ruler, scale, thermometer.	5,6		Select and use standard and non standard units to measure length, weight, and temperature.

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Compare objects according to: Linear measure Measure length using non-standard units. Measure length in inches and feet, and in centimeters. Measure and draw line segments in inches and centimeters. Weight Compare weights of objects using a balance scale. Measure weight in non-standard units and in pounds. Capacity (volume) Estimate and measure capacity in cups. Identify quart, gallon. Temperature: associate temperature in degrees Fahrenheit with weather.	4,5,6 1.M	D 1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD 2. Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps.	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.in cups, quarts, gallons Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
Time Sequence events: before and after; first, next, last. Compare duration of events: which takes more or less time. Read a clock face and tell time to the half-hour. Know the days of the week and the months of the year, both in order and out of sequence. Orientation in time: today, yesterday, tomorrow; morning, afternoon, evening, night; this morning vs. yesterday morning, etc.	4,5,6 1.M	D 3. Tell and write time in hours and half-hours using analog and digital clocks.	Recognize and writes specific times (morning, noon, afternoon evening) Tell Time to the half hour using both digital and analog clocks Write the days of the week and the months of the year, both in order and out of sequence Given a set day tell the day before, after, and current day of the week.
VI. Geometry			
Identify left and right hand.	2		

Core Knowledge Sequence Grade 1	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify top, bottom, middle.	2		
Know and use terms of orientation and relative position, such as: closed, open on, under, over in front, in back (behind) between, in the middle of next to, beside inside, outside around far from, near above, below to the right of, to the left of here, there	2 1.G1.	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	
Identify and draw basic plane figures: square, rectangle, triangle, circle.	5		Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
Describe square, rectangle, triangle according to number of sides.	1,2 1.G1.	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	
Identify basic solid figures: sphere, cube, cone.	1		Identify and draw shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).
Identify basic shapes in a variety of common objects and artifacts (balls, cans, windows, pictures, books, buildings, cars, etc.).	1		Create a variety of models using common objects relevant to common everyday structures.
Make congruent shapes and designs.	1,4 1.G2.	Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.	

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Numbers and Number Sense			
Write numbers to 1,000.	2	2.NBT 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Given a number read write numbers, number names, and in expanded form through the use of manipulatives, pencil, paper up to 1,000
Read and write words for numbers from one to one-hundred.	2	2.NBT 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Given a number read, write numbers, number names and in expanded form through use of manipulatives, pencil, paper up to 1,000
Order and compare numbers to 1,000, using the signs <, >, and = .	2	2.NBT 4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons.	Formulate problems and solutions from everyday situations using >, =, < symbols and record and explain the results of the comparison.
Count by twos, threes, fives, and tens by tens from any given number by hundreds to 1,000; by fifties to 1,000 forward and backward	2	2.NBT 2. Count within 1000; skip-count by 5s, 10s, and 100s.	Given a number count and write within 1000, skip counting by 2, 3, 5, 10, 50, 100 forwards and backwards.
Use a number line.	2	2. MD 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	Given a number count and write numbers within a 100 using number line. Given a number use a number line to solve sums and differences using skip counting.
Use tallies.	2		Collect and record data (using tallies) related to the question.
Identify ordinal position, 1st to 20th, and write words for ordinal numbers, first to twentieth.	2		Read written ordinal numbers 1st-20th and use them to represent ordinal relations.
Identify even and odd numbers.	2	2.OA 3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	Given a set group determine whether it has an even or odd number of items.
Identify dozen; half-dozen; pair.	2		Identify, write, solve problems equal to dozen, 1/2 doz and pairs

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Recognize place value: ones, tens, hundreds, thousands.	2	2.NBT 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	Use manipulatives, games, drawings to explain and model actions in a problem given a set number up to four digits. Given a number explain and model the value of a given digit.
Write numbers up to hundreds in expanded form (for example $64 = 60 + 4$; $367 = 300 + 60 + 7$).	2	2.NBT 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). 2.NBT 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Writes and explains the value of a a digit in a given number in expanded form. Writes a number from expanded form to numerical form.
Given a number, identify one more and one less; ten more and ten less.	8	2.NBT 8. Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	
Round to the nearest ten.	4		Use place value understanding to round whole numbers to the nearest 10 or 100.
Create and interpret simple bar graphs.	4 2.M	D 10. Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put together, take-apart, and compare problems ⁴ using information presented in a bar graph.	Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify and extend numerical and symbolic patterns.	7		Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. Identify apparent features of the pattern that were not explicit in the rule itself. <i>For example, given the rule “Add 3” and the starting number. Explain informally why the numbers will continue to alternate in this way.</i>
Record numeric data systematically and find the lowest and highest values in a data set.	6, 7		Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.
II. Fractions			
Recognize these fractions as part of a whole set or region and write the corresponding numerical symbols: $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{6}$, $\frac{1}{8}$, $\frac{1}{10}$.	2	2.G 3. Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	Create. draw and use objects to show and understand social phenomena (sharing pizza, count and represent sharing cookies between friends.) Explain equivalence of fractions and compare by reasoning about their size.
Recognize fractions that are equal to 1.	7		Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = \frac{3}{1}$; recognize that $\frac{6}{1} = 6$; locate $\frac{4}{4}$ and 1 at the same point of a number line diagram.
III. Money			
Recognize relative values of a penny, nickel, dime, quarter, and dollar.	2		Show and explain to peers different coin combinations to make up to a dollar.
Write amounts of money using \$ and ¢ signs, and the decimal point.	2		Write and recognize money amounts using \$ and cent, and decimal point.
Show how different combinations of coins equal the same amounts of money.	2		Identify and write equivalent combinations equal to same amounts of money.

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Add and subtract amounts of money.	2, 6	2.MD 8. Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have	Intrepret information correctly, identify the problem and generate possible solutions using dollar bills, combination of coins, and correctly use cent, \$ symbols.
IV. Computation			
A. Addition			
Achieve timed mastery of addition facts (2 seconds).	8	2.OA 2. Fluently add and subtract within 20 using mental strategies. ² By end of Grade 2, know from memory all sums of two one-digit numbers.	
Recognize what an addend is.	2		Understand subtraction as an unknown-addend problem. For example, subtract $10 - 8$ by finding the number that makes 10 when added to 8.
Know how to write addition problems horizontally and vertically.	2		Determine sums by means. Understand and use commutative property of addition; write and solve problems vertically and horizontally.
Know how to add in any order and check a sum by changing the order of the addends.	1		Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$).
Estimate the sum		Estimate the	number in a collection to 100 then compare by actual counting.
Solve two-digit and three-digit addition problems with and without regrouping.	4, 6	2.NBT 7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three- digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	Determine sums by various means(famliy facts, inverse operations adding doubles, plus one. Add two three digit using place value strategies, with and without regrouping.
Find the sum (up to 999) of any two whole numbers.	4, 6	2.NBT 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Determine sums by various means(famliy facts, inverse operations adding doubles, plus one. Add two three digit using place value strategies, with and without regrouping.

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Add three two-digit numbers.	4, 6	2.NBT 6. Add up to four two-digit numbers using strategies based on place value and properties of operations.	Use a variety of strategies to add using up to four two digit number with and with regrouping.
Practice doubling (adding a number to itself).	4, 6	2.NBT 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Fluently add within 1000 using strategies and algorithms based on place value, properties of operations.
B. Subtraction			
Understand the inverse relation between addition and subtraction; use addition to check subtraction.	1	2.NBT 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	
Know addition and subtraction “fact families.”	7 2.NBT	5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	_____
Achieve mastery of subtraction facts.	8	2.OA 2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.	_____
Estimate the difference.	4		
Know how to write subtraction problems horizontally and vertically.	2		Write and solve subtraction problems horizontally and vertically.
Solve two-digit and three-digit subtraction problems with and without regrouping.	4	2.NBT 7. Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three- digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	
Given two whole numbers of 999 or less, find the difference.	4	2.NBT 5. Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	Find the difference given two numbers between 1 and 1000,
C. Introduction to Multiplication			
Recognize the “times” sign (x).	2	Understand meaning of symbols and how they relate to others.	

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Know what “factor” and “product” mean.	2		Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. <i>For example, describe a context in which a total number of objects can be expressed as 5×7.</i>
Understand that you can multiply numbers in any order.	7		Fluently multiply using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. Know from memory all products of two one-digit numbers.
Multiplication facts: know the product of any single-digit number $\times$ 1, 2, 3, 4, 5.	7	2.OA.4. Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. Know from memory all products of two one-digit numbers.
Know what happens when you multiply by 1, by 0, and by 10.	7		Fluently multiply using strategies such as the relationship between numbers
Practice simple word problems involving multiplication.	4, 6		Use multiplication to solve word problems in situations involving equal groups, arrays, and measurement quantities by using drawings and equations with a symbol.
D. Solving Problems and Equations			
Solve basic word problems.	2, 4, 6	2.OA.1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹ 2.MD.5. Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	Interpret information correctly, identify the problem and generate possible solutions. Explain to others how problem was solved, giving strategies and justifications. Verbally support reasoning with an answer. Formulate mathematically relevant questions.

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Write and solve simple equations in the form of $\_\_\_ - 9 = 7$; $7 + \_\_\_ = 16$; $4 \times \_\_\_ = 8$.	4, 6		Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 + ? = 11$, $5 = ? - 3$, $6 + 6 = ?$.
V. Measurement			
A. Linear Measure			
Make linear measurements in feet and inches, and in centimeters.	2, 4, 5	2.MD 1. Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. 2.MD 4. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	
Know that one foot = 12 inches.	7		Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...</i>
Know abbreviations: ft., in.	2		Identify and write measures using ft., in. abbreviations
Measure and draw line segments in inches to 1/2 inch, and in centimeters.	5	2.MD 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. 2.MD 9. Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standard
Estimate linear measurements, then measure to check estimates.	1, 4	2.MD 3. Estimate lengths using units of inches, feet, centimeters, and meters.	Estimate lengths of different objects in the classroom using non standard and standards tools of measurement.
B. Weight			
Compare weights of objects using a balance scale.	5		Use a balance scale to weigh class objects
Estimate and measure weight in pounds, and know abbreviation: lb.	4		Use mathematical phenomena to make guesses and use standard measures to prove/disapprove an answer.
C. Capacity (volume)			
Estimate and measure capacity in cups.	4		Measure and estimate liquid volumes and masses of objects using standard units solve one-step word problems involving masses or volumes that are given in the same units by using drawings (such as a beaker with a measurement scale) to represent the problem.
Measure liquid volumes: cups, pints, quarts, gallons.	5		Measure and estimate liquid volumes and masses of objects using standard units of grams cups,pints, quarts, gallons solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.
Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart).	5		Use a variety of everyday containers to compare differences liquid volumes.
D. Temperature			
Measure and record temperature in degrees Fahrenheit to the nearest 2 degrees.	5		Monitor and record daily temperatures in degrees Fahrenheit to the nearest 2 degrees.
Know the degree sign: °	2		Identify and write degree sign.
E. Time			
Read a clock face and tell time to five-minute intervals.	2, 5	2.MD 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	Read and maintain a log of you go to sleep, or do scheduled activities.
Know how to distinguish time as a.m. or p.m.	2	2.MD 7. Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	Keep a log of events in the day using analog and digital clocks.
Understand noon and midnight.	2		

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve problems on elapsed time (how much time has passed?).	2, 4		Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.
Using a calendar, identify the date, day of the week, month, and year.	5		Write the days of the week and months of the year Identify on a calendar a given day, date, month of the year.
Write the date using words and numbers.	5		Given a specific date, write the dates in words and numbers.
VI. Geometry			
Identify and draw basic plane figures: square, rectangle, triangle, circle.	2, 7	2.G 1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	Apply mathematics to objects, pictures and symbols. Understand and apply attributes belonging to a category of two dimensional figures. e.g all rectangles have four right angles and squares are rectangles and have same number of faces.
Describe square, rectangle, triangle according to number of sides; distinguish between square and rectangle as regards length of sides (a square has sides of equal length).	7	2.G 1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	_____
Measure perimeter in inches of squares and rectangles.	5	2.G 2. Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	_____
Identify solid figures—sphere, cube, pyramid, cone, cylinder—and associate solid figures with planar shapes: sphere (circle), cube (square), pyramid (triangle).	7	2.G 1. Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).
Make congruent shapes and designs.	7		Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape.

Core Knowledge Sequence Grade 2	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify lines as horizontal; vertical; perpendicular; parallel.	7		Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. • Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.
Name lines and line segments (for example, line AB; segment CD).	7		Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
Identify a line of symmetry, and create simple symmetric figures.	7		Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicaor
I. Numbers and Number Sense			
6 Read and write numbers (in digits and words) up to six digits. Recognize place value up to hundred	2	2.NBT 1. Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases: a. 100 can be thought of as a bundle of ten tens — called a “hundred.” b. The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones). 2.NBT 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	Read and write numbers to 999,99
1 Compare numbers to		2.NBT 4. Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.	
2		2.NBT 2. Count within 1000; skip-count by 5s, 10s, and 100s	
2		2.NBT 3. Read and write numbers to 1000 using base-ten numerals, number names, and expanded form	
5		2. MD 6. Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	
2			
2		2.OA 3. Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	
6 3.NBT 1. Use place value understanding to round whole numbers to the nearest 10 or 100.			

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify perfect squares (and square roots) to 100, and recognize the square root sign: $\sqrt{\quad}$	2		Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational.
Identify Roman numerals from 1 to 20 (I - XX).	2		
Understand what negative numbers are in relation to familiar uses (such as temperatures below zero).	7		Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
Locate positive and negative whole numbers on a number line.	5, 7		Understand and verbalize that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.
Create and interpret bar graphs and line graphs.	4	3.MD 3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.
Record outcomes for a simple event (for example, tossing a die) and display the results graphically.	4, 6	3.MD 3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	
II. Fractions and Decimals			
Recognize fractions to $\frac{1}{10}$ and fractions whose denominator is 100.	2, 7	3.NF 1. Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.	

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify numerator and denominator.	2	3.NF 1. Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.	Understands and recognizes the meaning of numerator in symbolic form of a fraction.
Write mixed numbers.	2		Writes mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
Recognize equivalent fractions (for example, $\frac{1}{2} = \frac{3}{6}$).	1, 8	3.NF 3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $\frac{1}{2} = \frac{2}{4}$, $\frac{4}{6} = \frac{2}{3}$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Uses manipulatives, visual models and illustrations to name and explain fractions as part of a whole or as part of a set.
Compare fractions with like denominators, using the signs $<$, $>$, and $=$.	8	3.NF 3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	Uses the symbols $<$, $>$, and $=$ (with and without the use of a number line) to compare whole numbers and unit fractions.
Know and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$.	8		Read, write, and compare decimals to the hundredth
Read and write decimals to the hundredths.	6, 8		Read, write, and compare decimals to the hundredth a. Read and write decimals to hundredths using base-ten numerals, number names
III. Money			

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standards
Write amounts of money using \$ and ¢ signs, and the decimal point.			Count and represent combined coins and dollars, using using currency symbols.
Make change, using as few coins as possible.	2		Given a set amount, count and make change using the least number of coins possible.
Add and subtract amounts of money.	2		Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?
Multiply and divide amounts of money by small whole numbers.	2		Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?
IV. Computation			
A. Addition			
Mentally estimate a sum.	4, 8		Use real world situations in which an estimate is more appropriate
Use mental computation strategies.	8 3	.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Use a variety of strategies such as fact families, doubles, estimation to find a sum.
Addition with and without regrouping; find the sum (up to 10,000) of any two whole numbers.	4, 6	3.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Solve addition of multi-digit whole numbers up to 10,000 with and without regrouping.
B. Subtraction			
Understand addition and subtraction as inverse operations; use addition to check subtraction.	1 3	.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Add and subtract within 10,000 using strategies and algorithms based on place value, properties of operation, and the relationship between addition and subtraction.
Review and practice basic subtraction facts.	1, 4	3.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Add and subtract within 10,000 using strategies and algorithms based on place value, properties of operation, and the relationship between addition and subtraction.
Mentally estimate the difference.	4		Use a variety of strategies such as fact families, relationship of operations to find a difference
Use mental computation strategies.	8 3	.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Add and subtract within 10,000 using strategies and algorithms based on place value, properties of operation, and the relationship between addition and subtraction.

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	
Subtraction with and without regrouping: given two whole numbers of 10,000 or less, find the difference.	1, 4	3.NBT 2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	Solve subtraction problems within 10,000 with and without regrouping, and using strategies and algorithms based on place value, properties of operations.
C. Multiplication			
Master basic multiplication facts to 10×10 .	1, 4	3.OA 7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Recite by memory multiplication facts up to 10.
Mentally multiply, by 10, 100, and 1,000.	8	3.NBT 3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	Solve multiplication problems using the place value structure of a base ten, 100, and 1,000 structure.
Multiply two whole numbers, with and without regrouping, in which one factor is 9 or less and the other is a multi-digit number up to three digits.	6, 7, 8	3.OA 5. Apply properties of operations as strategies to multiply and divide.2 Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)	Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Write numbers in expanded form using multiplication, for example: $9,278 = (9 \times 1,000) + (2 \times 100) + (7 \times 10) + 8$.	8		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
Estimate a product.	4	Use concrete	materials to compare round and order whole numbers
Solve word problems involving multiplication.	2, 4	3.OA 3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Represent problems situation in oral, writte, concrete,pictorial , and graphic forms. Interpret information correctly, indentify the problem, and generate possible solution. Use trial and error to solve problems
D. Division			

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Understand multiplication and division as inverse operations.	1, 8	3.OA 6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. 3.OA 7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Solve problems using relationship between multiplication and division to verify solutions.
Know the meaning of dividend, divisor, and quotient.	2		.Write, read, and evaluate expressions in which letters stand for numbers Identify parts of an expression using mathematical terms (dividend, divisor, quotient, ; view one or more parts of an expression as a single entity.
Know basic division facts to $100 \div 10$.	1	3.OA 7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Multiply and divide using strategies such as the relationship between operations to prove answer.
Know that you cannot divide by 0.	7		Understand and use the zero property in the divisor
Know that any number divided by 1 = that number.	7		Use 1 as the identity element for multiplication and division
Divide two- and three-digit dividends by one-digit divisors.	1, 4		Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Solve division problems with remainders.	1, 4	3.OA 3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Check division by multiplying (and adding remainder).	1		Develop and use strategies for selecting the appropriate computational and operational method in problem solving.
E. Solving Problems and Equations			
Solve two-step word problems.	2	3.OA 8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Use tables, patterns, halving and manipulatives to provide meaning for division. Solve two-step word problems using the four operations. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
Solve equations in the form of ____ $\times$ 9 = 63; $81 \div$ ____ = 9.	4	3.OA 4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \div 3$, $6 \times 6 = ?$. 3.OA 6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.	
Solve problems with more than one operation, as in $(43 - 32) \times (5 + 3) =$ ____.	4	3.OA 8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Solve two-step problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation.
Read and write expressions that use parentheses to indicate order of multiple operations.	6, 7, 8	3.OA 5. Apply properties of operations as strategies to multiply and divide. ² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)	Write and use a variety of strategies to solve multiplication and division. Use the associative property of multiplication.

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standards
V. Measurement			
A. Linear Measure			
Make linear measurements in yards, feet, and inches; and, in centimeters and meters.	5		Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.
Know that one foot = 12 inches; one yard = 36 inches; 3 feet = 1 yard; 1 meter = 100 centimeters; 1 meter is a little more than one yard.	5, 7		Measure using relative sizes of measurement units within one system of units including inches, foot, yard; meter, centimeter. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table. <i>For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs</i>
Measure and draw line segments in inches (to 1/4 inch), and in centimeters.	5	3.MD.4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	
Estimate linear measurements, then measure to check estimates.	1, 4		Estimate lengths using units of inches, feet, centimeters, and meters.
B. Weight			
Compare weights of objects using a balance scale.	5		Use a balance scale to weigh class items in lbs., oz., g., kg.
Estimate and measure weight in pounds and ounces; grams and kilograms.	4		Use trial and error to verify guesses. Measure objects using ounces, pounds, grams and kilograms
Know abbreviations: lb., oz., g, kg	2		Weigh and record results using abbreviations lbs, oz., g kg.
C. Capacity (volume)			

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Estimate and measure liquid capacity in cups, pints, quarts, gallons, and liters.	4	3.MD 2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g) , kilograms (kg), and liters (l).6 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.	Measure and estimate liquid volumes and masses of objects using standrd units of liquid capacity such as cups, pints, quarts, and liters.
Know that 1 quart = 2 pints; 1 gallon = 4 quarts.	7		Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table.
Compare U.S. and metric liquid volumes: quart and liter (one liter is a little more than one quart).	7		Use relative sizes of measurement units within one system of units including quart, liter Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two column table.
D. Temperature			
Measure and record temperature in degrees Fahrenheit and Celsius.	2, 5		Measure and record temperature for a given period of time in Fahrenheit and Celsius
Know the degree sign: ° 2			Record measure temperatures using degree symbol
Identify freezing point of water as 32° F = 0° C.	7		
E. Time			
Read a clock face and tell time to the minute as either a.m. or p.m.; tell time in terms of both “minutes before” and “minutes after” the hour.	2, 5	3.MD 1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Given an activity tell and record time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time.

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve problems on elapsed time (how much time has passed?).	2, 4	3.MD 1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	
Using a calendar, identify the date, day of the week, month, and year.	2, 5		Identify and write days of week, months year. Identify on a calendar any given day, date, month of the year.
Write the date using words (for name of month) and numbers, and only numbers.	2		Given a date, write it words and numbers.
VI. Geometry			
Identify lines as horizontal, vertical, perpendicular, or parallel.	7		Draw points, lines, line segments, rays, and perpendicular and parallel lines. Identify these in two-dimensional figures.
Name lines and line segments (for example, line AB; segment CD).	7		Draw points, lines, line segments, rays, and perpendicular and parallel lines. Identify these in two-dimensional figures.
Polygons: recognize vertex (plural: vertices); identify sides as line segments (for example, side CD); identify pentagon, hexagon, and octagon (regular).	7		Draw points, lines, line segments, rays, and perpendicular and parallel lines. Identify these in two-dimensional figures.
Identify angles by letter names (for example, /_____ABC); identify a right angle; know that there are four right angles in a square or rectangle.	7		Recognize angles as geometric shapes that are formed whenever two rays share a common endpoint, and understand concepts of angle measurement:

Core Knowledge Sequence Grade 3	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standard
Compute area in square inches (in ²) and square centimeters (cm ²).	6, 7, 8	3.MD 5. Recognize area as an attribute of plane figures and understand concepts of area measurement. a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. 3.MD 6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). 3.MD 7. Relate area to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole- number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	
Recognize and draw congruent figures; identify a line of symmetry, and create symmetric figures.	7		Recognize and draw a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
Identify solid figures: sphere, cube, rectangular solid, pyramid, cone, cylinder.	7		Identify shapes as two-dimensional (lying in a plane, “flat”) or three dimensional (“solid”).

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Numbers and Number Sense			
Read and write numbers (in digits and words) up to nine digits.	2	4.NBT 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Use concrete materials and a place value chart to compare round and order whole numbers. Understand the place value structure of the base ten number system.
Recognize place value up to hundred millions.	6	4. NBT. 1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.	Understand the place value structure of the base ten number structure up to hundred millions.
Order and compare numbers to 999,999,999 using the signs $<$, $>$, and $=$.	8	4.NBT 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Understand the place values structure; order and compare numbers up to 999,999,999 using the signs $<$, $>$ Use concrete materials and a place value chart to compare, round and order whole numbers.
Write numbers in expanded form.	8 4.NB	T 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Read and write whole numbers using word name, expanded and standard form.
Use a number line; locate positive and negative whole numbers on a number line.	5		Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.
Round to the nearest ten; to the nearest hundred; to the nearest thousand.	6	4.NBT 3. Use place value understanding to round multi-digit whole numbers to any place.	Understand the place value structure of the base ten number structure to compare, round and order whole numbers.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify perfect squares (and square roots) to 144; recognize the square root sign: $\sqrt{\quad}$	2		
Identify Roman numerals from 1 to 1,000 (I - M), and identify years as written in Roman numbers			Write and identify Roman numerals from 1 - 1,000 Compare Roman numeral with standard numerals. e.g. I=1, C=100, M=1000
Create and interpret bar graphs and line graphs.	2, 4		Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. <i>For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</i>
Plot points on a coordinate plane (grid), using ordered pairs of positive whole numbers.	2, 4		Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. a. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. b. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Standard
Know the meanings of multiple, factor, prime number, and composite number.	2	4.OA 4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.	Use a number chart to identify multiple primes and composite numbers.
II. Fractions and Decimals			
A. Fractions			
Recognize fractions to one-twelfth.	2		Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.
Identify numerator and denominator.	2		Uses tables, patterns, halving and manipulatives to provide meaning for division
Write mixed numbers; change improper fractions to mixed numbers and vice versa.	8	4.NF 3. Use place value understanding to round multi-digit whole numbers to any place. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.	
Recognize equivalent fractions (for example, $1/2 = 3/6$).	8	4.NF 1. Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	
Put fractions in lowest terms.	8		Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Rename fractions with unlike denominators to fractions with common denominators.	8	4.NF 2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	
Compare fractions with like and unlike denominators, using the signs $<$, $>$, and $=$.	8	4.NF 2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. 4.NF 5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.4 For example, express $\frac{3}{10}$ as $\frac{30}{100}$, and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$.	
Solve problems in the form of $\frac{2}{3} = \frac{8}{12}$	4	4.NF 2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Common Core State Standards covered above or below CK Grade Level
Add and subtract fractions with like denominators.	1, 4	4.NF 3. Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	
Express simple outcomes as fractions (for example, 3 out of 4 as $3/4$).	8		Recognizes fractional numbers as equal parts of a whole.
B. Decimals			
Read and write decimals to the nearest thousandth.	6		Read, write, and compare decimals to thousandths a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
Read and write decimals as fractions (for example, $0.39 = 39/100$).	8	4.NF 6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	Develop an understanding of decimals as part of a whole.
Write decimal equivalents for halves, quarters, eighths, and tenths.	8	4.NF 6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	Write decimal notations for fractions for halves, quarters, eighths, tenths.
Compare fractions to decimals using the signs $<$, $>$, and $=$.	8	4.NF 7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.	Use concrete materials and visual models to compare and order decimals (less than 1) to the hundredths place in a number line.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Write decimals in expanded form.	8		Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.
Round decimals to the nearest tenth; to the nearest hundredth.	6		Use place value understanding to round decimals to any place.
Compare decimals, using the signs $<$, $>$, and $=$.	6	4.NF 7. Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.	
Read and write decimals on a number line.	6	4.NF 6. Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $62/100$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.	3 Understand a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.
Add and subtract with decimal numbers to two places.	1, 4		Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
III. Money			
Solve problems involving making change in amounts up to \$100.00.	1, 4		Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Make change up to \$100.00 given a specific dollar amount.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve multiplication and division problems with money.	1, 4	4.MD 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	
IV. Computation			
A. Multiplication			
Review and reinforce basic multiplication facts to 10×10 .	1, 4		Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
Mentally multiply by 10, 100, and 1,000.	1, 4	4.NBT 5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
Identify multiples of a given number; common multiples of two given numbers.	1, 4		Use a number chart to identify multiples, prime, and composite numbers.
Multiply by two-digit and three-digit numbers.	1, 4	4.NBT 5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Use a variety of strategies to multiply two digit and three digit numbers with and without regrouping.
Write numbers in expanded form using multiplication.	8 4.NB	T 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.	Read and write whole numbers using word name, expanded, and standard form.
Estimate a product.	4		

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Common Core State Standards covered above or below CK Grade Level
Use mental computation strategies for multiplication, such as breaking a problem into partial products, for example: $3 \times 27 = (3 \times 20) + (3 \times 7) = 60 + 21 = 81$.	8	4.NBT 5. Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	
Check multiplication by changing the order of the factors.	1	4.OA 1. Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	Identify the associative and commutative properties of multiplication.
Multiply three factors in any given order			Identify the associative and commutative properties of multiplication.
Solve word problems involving multiplication.	2	4.OA 2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. 4.OA 3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	
B. Division			

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Level
Understand multiplication and division as inverse operations.	6, 7, 8		• Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \square \div 3$, $6 \times 6 = ?$. Apply properties of operations as strategies to multiply and divide.² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) • Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.
Review the meaning of dividend, divisor, and quotient.	1, 2, 4		Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, coefficient); view one or more parts of an expression as a single entity. For example, describe the expression $2(8 + 7)$ as a product of two factors; view $(8 + 7)$ as both a single entity and a sum of two terms.
Review and reinforce basic division facts to $100 \div 10$.	1, 4		Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. Know from memory all products of two one-digit numbers up to 100

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify different ways of writing division problems: $28 \div 7$ $7 \overline{)28}$ $28/7$			Understands that some ways of representing a problem are more helpful than others. Select an appropriate representation of a problem.
Identify factors of a given number; common factors of two given numbers.	8 4.OA	4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.	
Review: you cannot divide by 0; any number divided by 1 = that number.	7		Understand the zero property in division. Use 1 as the identity element of division.
Estimate the quotient.	4		
Divide dividends up to four-digits by one-digit and two-digit divisors.	1, 4	4.NBT 6. Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Develop strategies for selecting the appropriate computational and operational method in problem solving situations. Use tables patterns, halving, and manipulatives to provide meaning for division.
Solve division problems with remainders.	1, 4	4.OA 3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	Develop strategies for selecting the appropriate computational and operational method in problem solving situations. Use tables patterns, halving, and manipulatives to provide meaning for division.
Check division by multiplying (and adding remainder)			Understands meaning of operations and how they relate to each other.
C. Solving Problems and Equations			

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve two-step word problems.	1, 4	4.OA 3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	
Solve equations in the form of $\_\_\_ \times 9 = 63$; $81 \div \_\_\_ = 9$.	6, 7, 8		Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations Apply properties of operations as strategies to multiply and divide.² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.
Solve problems with more than one operation, as in $(72 \div 9) \times (36 \div 4) = \_\_\_$	1, 4	4.OA 3. Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	
Equality properties Know that equals added to equals are equal. Know that equals multiplied by equals are equal.	7		Understand how mathematical models represent quantitative relationships.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Use letters to stand for any number, as in working with a formula (for example, area of rectangle: $A = L \times W$).	2		6. EE 2. Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. <i>For example, express the calculation “Subtract y from 5” as $5 - y$.</i> c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). <i>For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.</i>
V. Measurement			
Linear measure: estimate and make linear measurements in yards, feet, and inches (to $\frac{1}{8}$ in.); and in meters, centimeters, and millimeters.	4	4.MD 1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two- column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	Predict results and find out why some results are more likely less likely or equally likely.
Weight: estimate and measure weight in pounds and ounces; grams and kilograms.	4	4.MD 1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two- column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	Predict results and find out which some result are more likely less likely or equally likely.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Capacity (volume): estimate and measure liquid capacity in teaspoons, tablespoons, cups, pints, quarts, gallons; and in milliliters and liters.	4	4.MD 1. Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two- column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	Predict results and find out why some results are more likely, less likely or equally likely using standard and metric systems.
Know the following equivalences among U. S. customary units of measurement, and solve problems involving changing units of measurement: Linear measure 1 ft. = 12 in. 1 yd. = 3 ft. = 36 in. 1 mi. = 5,280 ft. 1 mi. = 1,760 yd. Weight 1 lb. = 16 oz. 1 ton = 2,000 lb. Capacity (volume) 1 cup = 8 fl. oz. (fluid ounces) 1 pt. = 2 c. 1 qt. = 2 pt. 1 gal. = 4 qt.	2	4.MD 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Know and understand equivalent standards units of length using US customary units of measures. Select tools and units appropriate to the unit of measurement.

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Identify angles; identify angles as right, acute, or obtuse.	7	4.G 1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. 4.G 2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. 4.MD 5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through $\frac{1}{360}$ of a circle is called a “one-degree angle,” and can be used to measure angles. b. An angle that turns through n one-degree angles is said to have an angle measure of n degrees.	
Identify polygons: Triangle, quadrilateral, pentagon, hexagon, and octagon (regular) Parallelogram, trapezoid, rectangle, square	7		Identify and name polygons, recognizing that their name are are related to the number of to the number of sides . and angles.
Identify and draw diagonals of quadrilaterals.	7		Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
Circles: Identify radius (plural: radii) and diameter; radius = $\frac{1}{2}$ diameter	7		

Core Knowledge Sequence Grade 4	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Recognize similar and congruent figures.	7		Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
Know the formula for the area of a rectangle (Area = length x width) and solve problems involving finding area in a variety of square units (such as mi ² ; yd ² ; ft ² ; in ² ; km ² ; m ² ; cm ² ; mm ²)	7	4.MD 3. Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.	
Compute volume of rectangular prisms in cubic units (cm ³ , in ³).	7		Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Numbers and Number Sense			
Read and write numbers (in digits and words) up to the billions.	1, 2		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form up to billions. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
Recognize place value up to billions.	6	5.NBT 1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	
Order and compare numbers to 999,999,999 using the signs <, >, and =.	8		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.
Write numbers in expanded form			Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Integers Locate positive and negative integers on a number line. Compare integers using the symbols $<$, $>$, $=$. Know that the sum of an integer and its opposite is 0. Add and subtract positive and negative integers.	7		Understand that positive and negative numbers are used together to describe quantities having opposite directions or values. Use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.
Using a number line, locate positive and negative whole numbers.	5		Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Round to the nearest ten; to the nearest hundred; to the nearest thousand; to the nearest hundred thousand.	6		Use place value understanding to round whole numbers to the nearest 100; 1,000; 10,000 Use place value understanding to round multi-digit whole numbers to any place.
Exponents Review perfect squares and square roots to 144; recognize the square root sign, $\sqrt{}$. Using the terms squared and cubed and to the nth power, read and evaluate numerical expressions with exponents. Identify the powers of ten up to 10^6 .	7	5.NBT 2. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	Write and evaluate numerical expressions involving whole-number exponents. Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. For example, estimate the population of the United States as 3×10^8 and the population of the world as 7×10^9 , and determine that the world population is more than 20 times larger.
Identify a set and the members of a set, as indicated by $\{ \}$.	2	5.OA 1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Translate simpler verbal expressions to algebraic expressions and evaluate using order of operations. Create and explain patterns and algebraic relationships.
Identify numbers under 100 as prime or composite.	7		Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.
Identify prime factors of numbers to 100 and write using exponential notation for multiple primes.	7		Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.
Determine the greatest common factor (GCF) of given numbers.	6, 7, 8		Find the greatest common factor of whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Determine the least common multiple (LCM) of given numbers.	6, 7, 8		6.NS 4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i>
II. Ratio and Percent			
A. Ratio			
Determine and express simple ratios.	8		Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.” Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$, and use rate language in the context of a ratio relationship. For example, “This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar.” “We paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger.”
Use ratio to create a simple scale drawing.	8		Make tables of equivalent ratios relating quantities with whole- number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.
Ratio and rate: solve problems on speed as a ratio, using the formula $S = d/t$ (or $D = r \times t$).	1, 4		Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. b. Solve unit rate problems including those involving unit pricing and constant speed. <i>For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?</i>
B. Percent			

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Recognize the percent sign (%) and understand percent as “per hundred.”	2		Use ratio and rate reasoning to solve real-world and mathematical problems. Understands percent means part of 100 and write percents as fractions and decimals. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity);
Express equivalences between fractions, decimals, and percents, and know common equivalences: $1/10 = 10\%$ $1/4 = 25\%$ $1/2 = 50\%$ $3/4 = 75\%$	8		Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.4 <i>For example, express $3/10$ as $30/100$, and add $3/10 + 4/100 = 34/100$.</i> Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.
Find the given percent of a number			Find a percent of a quantity as a rate per 100. Use ratio and rate reasoning to solve real-world and mathematical problems.
III. Fractions and Decimals			
A. Fractions			
Determine the least common denominator (LCD) of fractions with unlike denominators.	6, 7, 8		6.NS 4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i>

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Recognize equivalent fractions (for example, $\frac{1}{2} = \frac{3}{6}$).	8 5.NF	1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.)	
Put fractions in lowest terms.	6, 7, 8		Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i>
Compare fractions with like and unlike denominators, using the signs $<$, $>$, and $=$.	8 5.NF	5. Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	
Identify the reciprocal of a given fraction; know that the product of a given number and its reciprocal = 1.	7		
Add and subtract mixed numbers and fractions with like and unlike denominators.	1, 4	5.NF 1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.)	
Multiply and divide fractions.	1, 4	5.NF 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product $(\frac{a}{b}) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \times \frac{1}{b}$. For example, use a visual fraction model to show $(\frac{2}{3}) \times 4 = \frac{8}{3}$, and create a story context for this equation. Do the same with $(\frac{2}{3}) \times (\frac{4}{5}) = \frac{8}{15}$. (In general, $(\frac{a}{b}) \times (\frac{c}{d}) = \frac{ac}{bd}$.) b. Find the area of a rectangle with fractional	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by the equation $\frac{5}{4} = 5 \times (\frac{1}{4})$. b. Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (\frac{2}{5})$ as $6 \times (\frac{1}{5})$, recognizing this product as $\frac{6}{5}$. (In general, $n \times (\frac{a}{b}) = (\frac{n \times a}{b})$.)

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Common Core State Standards covered above or below CK Grade Level
		side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.NF 5. Interpret multiplication as scaling (resizing), by: b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1. 5.NF 7. Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$. b. Interpret division of a whole number by a unit fraction, and compute such quotients. For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$. c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$-cup servings are in 2 cups of raisins?	a)/b.) c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Add and subtract fractions with like and unlike denominators.	1, 4	5.NF 1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.)	
Add and subtract mixed numbers and fractions; multiply mixed numbers and fractions.	1, 4	5.NF 1. Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad + bc)}{bd}$.) 5.NF 2. Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$, by observing that $\frac{3}{7} < \frac{1}{2}$. 5.NF 3. Interpret a fraction as division of the numerator by the denominator ($\frac{a}{b} = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. For example, interpret $\frac{3}{4}$ as the result of dividing 3 by 4, noting that $\frac{3}{4}$ multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size $\frac{3}{4}$. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie? 5 NF 6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	
Round fractions to the nearest whole number.	6		Compare and order fractions with like and unlike denominators.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Write fractions as decimals (e.g., $\frac{1}{4} = 0.25$; $\frac{17}{25} = 0.68$; $\square = 0.3333 \dots$ or 0.33, rounded to the nearest hundredth).			Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.
B. Decimals			
Read, write, and order decimals to the nearest ten-thousandth.	6	5.NBT 3. Read, write, and compare decimals to thousandths.	Read, write and compare decimals to nearest ten-thousandths
Write decimals in expanded form.	8	5.NBT 3. Read, write, and compare decimals to thousandths. a. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$.	Read, write and compare decimals to nearest ten-thousandths Read and write decimals to ten-thousands using base ten numbers, number names and expanded form.
Read and write decimals on a number line.	1		Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.
Round decimals (and decimal quotients) to the nearest tenth; to the nearest hundredth; to the nearest thousandth.	4	5.NBT 4. Use place value understanding to round decimals to any place.	Use place value understanding to round decimals to the nearest tenth, hundredth, and nearest thousandth.
Estimate decimal sums, differences, and products by rounding.	4		Use concrete materials and visual models to compare and order decimals.
Add and subtract decimals through ten-thousandths.	1, 4	5.NBT 7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Add subtract, multiply, and divide decimals through ten-thousandths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
Multiply decimals: by 10, 100, and 1,000; by another decimal.	1, 4	5.NBT 7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Add, subtract, multiply, and divide decimals through ten-thousandths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Divide decimals by whole numbers and decimals.	1, 4	5.NBT 7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	
IV. Computation			
A. Addition			
Commutative and associative properties: know the names and understand the properties.	6, 7, 8		Apply properties of operations as strategies to add and subtract. ³ <i>Examples: If $8 + 3 = 11$ is known, then $3 + 8 = 11$ is also known. (Commutative property of addition.) To add $2 + 6 + 4$, the second two numbers can be added to make a ten, so $2 + 6 + 4 = 2 + 10 = 12$. (Associative property of addition.)</i>
B. Multiplication			
Commutative, associative, and distributive properties: know the names and understand the properties.	7		Apply properties of operations as strategies to multiply and divide. ² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</i>
Multiply two factors of up to four digits each.	1, 4	5.NBT 5. Fluently multiply multi-digit whole numbers using the standard algorithm.	
Write numbers in expanded form using multiplication.	8		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form.
Estimate a product.	4	Estimate sums and differences and add and subtract fractions & mixed numbers	
Use mental computation strategies for multiplication, such as breaking a problem into partial products, for example: $3 \times 27 = (3 \times 20) + (3 \times 7) = 60 + 21 = 81$.	2, 8		Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve word problems involving multiplication.	1, 2, 4	5.NF 6. Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.	
C. Division			
Understand multiplication and division as inverse operations.	6, 7, 8	5.NBT 6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Interpret whole-number quotients of whole numbers, e.g., interpret 56×8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ Apply properties of operations as strategies to multiply and divide.² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. Fluently multiply and divide using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations.
Know what it means for one number to be “divisible” by another number.	7		Understands that mathematical statements can be supported using models, facts, etc.
Know that you cannot divide by 0; that any number divided by 1 = that number.	7		Understands and uses zero as an identity factor in division. Use 1 as an identity element for division.
Estimate the quotient.	4	Investigate	the use of knowledgeable guessing as a mathematical tool.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Know how to move the decimal point when dividing by 10, 100, or 1,000.	7 5.NBT	7. Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	Add, subtract, multiply, and divide decimals to 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.
Divide dividends up to four digits by one-digit, two-digit, and three-digit divisors.	1, 4	5.NBT 6. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Find whole number quotients of whole numbers up to four digit dividends and two and three digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Solve division problems with remainders; round a repeating decimal quotient.	1, 4		Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
Check division by multiplying (and adding remainder).	1		Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
D. Solving Problems and Equations			
Solve word problems with multiple steps.	1, 2, 4		Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve problems with more than one operation.	1, 4		Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
V. Measurement			
Convert to common units in problems involving addition and subtraction of different units.	8	5.MD 1. Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	
Time: Solve problems on elapsed time; regroup when multiplying and dividing amounts of time.	1, 2, 4		Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit.
VI. Geometry			
Identify and draw points, segments, rays, lines.	7		Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
Identify and draw lines: horizontal; vertical; perpendicular; parallel; intersecting.	7		Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
Measure the degrees in angles, and know that right angle = 90° acute angle: less than 90° obtuse angle: greater than 90° straight angle = 180°	7		Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
Identify and construct different kinds of triangles: equilateral, right, and isosceles.	7		Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Know what it means for triangles to be congruent.	7		Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.
Identify polygons: triangle, quadrilateral, pentagon, hexagon, and octagon parallelogram, trapezoid, rhombus, rectangle, square	7	5. G 3. Understand that attributes belonging to a category of two-dimensional figures also belongs to all sub categories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i> 5.G 4. Classify two-dimensional figures in a hierarchy based on properties.	
Know that regular polygons have sides of equal length and angles of equal measure.	7	5. G 3. Understand that attributes belonging to a category of two-dimensional figures also belongs to all sub categories of that category. <i>For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.</i>	
Identify and draw diagonals of polygons.	7		Identify and draw diagonals of polygons
Circles Identify arc, chord, radius (plural: radii), and diameter (radius = $\frac{1}{2}$ diameter). Using a compass, draw circles with a given diameter or radius. Find the circumference of a circle using the formulas $C = \pi d$, and $C = 2 \pi r$, using 3.14 as the value of pi.	5		Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Area Review the formula for the area of a rectangle (Area = length x width) and solve problems involving finding area in a variety of square units (such as mi²; yd²; ft²; in²; km²; m²; cm²; mm²). Find the area of triangles, using the formula $A = \frac{1}{2}(b \times h)$. Find the area of a parallelogram using the formula $A = b \times h$. Find the area of an irregular figure (such as a trapezoid) by dividing into regular figures for which you know how to find the area. Compute volume of rectangular prisms in cubic units (cm³, in³), using the formula $V = l \times w \times h$. Find the surface area of a rectangular prism.	6, 7, 8	5.MD 3. Recognize volume as an attribute of solid figures and understand concepts of volume measurement. a. A cube with side length 1 unit, called a “unit cube,” is said to have “one cubic unit” of volume, and can be used to measure volume. b. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. 5.MD 4. Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units. 5.NF 4. Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. 5.MD 5. Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. a. Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole- number edge lengths in the context of solving real world and mathematical problems. c. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms.

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
VII. Probability and Statistics			
Understand probability as a measure of the likelihood that an event will happen; using simple models, express probability of a given event as a fraction, as a percent, and as a decimal between 0 and 1.	4		Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around $\frac{1}{2}$ indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.
Collect and organize data in graphic form (bar, line, and circle graphs).	4		Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run frequency, and predict the approximate relative frequency given the probability. Develop the concept of sampling when data collecting data. Record data in a frequency table.
Solve problems requiring interpretation and application of graphically displayed data.	1, 4	5.MD 2. Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Construct diagrams to sort data. Determine the mean, mode, and median for a given set of data.
Find the average (mean) of a given set of numbers.	4		Determine the mean, mode, and median for a given set of data
Plot points on a coordinate plane, using ordered pairs of positive and negative whole numbers.	1, 4	5.G 1. Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). 5.G 2. Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	

Core Knowledge Sequence Grade 5	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Graph simple functions.	4		List the outcomes of a single even experiment and record the results using fractions/ratios.
VIII. Pre-Algebra			
Recognize variables and solve basic equations using variables.	1, 2		Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.
Write and solve equations for word problems.	1, 2	5.OA 2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.	Solve one step equations using inverse operations with whole numbers. Translate simple verbal expressions to algebraic expressions and evaluate using order of operations.
Find the value of an expression given the replacement values for the variables.	8	5.OA 2. Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as $2 \times (8 + 7)$. Recognize that $3 \times (18932 + 921)$ is three times as large as $18932 + 921$, without having to calculate the indicated sum or product.	Solve one step equations using inverse operations with whole. Translate simple verbal expressions to algebraic expressions and evaluate using order of operations.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
I. Numbers and Number Sense			
Read and write numbers (in digits and words) up to the trillions.	2		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
Recognize place value up to hundred-billions.	6		Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Level
Integers (review): Locate positive and negative integers on a number line. Compare integers using $<$, $>$, $=$. Know that the sum of an integer and its opposite is 0. Add and subtract positive and negative integers.	7	6.NS 7. Understand ordering and absolute value of rational numbers. a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right. b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3°C is warmer than -7°C. c. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of -30 dollars, write $-30 = 30$ to describe the size of the debt in dollars. d. Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars. 6.NS 6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $-(-3) = 3$, and that 0 is its own opposite. b. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.	Locate positive and negative integers on a number line. Compare integers using $<$, $>$, $=$ Compute the sum of an integer and its opposite is 0. Add and subtract positive and negative integers.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
<i>Continued:</i> Integers (review): Locate positive and negative integers on a number line. Compare integers using $<$, $>$, $=$. Know that the sum of an integer and its opposite is 0. Add and subtract positive and negative integers.	7	6.NS 6. Continued... c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a 6.EE 8. Write an inequality of the form $x > c$ or $x < c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x > c$ or $x < c$ have infinitely many solutions; represent solutions of such inequalities on number line diagrams.	
Determine whether a number is a prime number or composite number.	7		Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.
Round to the nearest ten; to the nearest hundred; to the nearest thousand; to the nearest hundred thousand; to the nearest million	1, 4		Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Compare and order whole numbers, mixed numbers, fractions, and decimals, using the symbols $<$, $>$, $=$.	8		Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons. Read, write, and compare decimals to thousandths. Compare two decimals to thousandths based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.
Determine the greatest common factor (GCF) of given numbers.	6, 7, 8	6.NS 4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$.	
Determine the least common multiple (LCM) of given numbers.	6, 7, 8	6.NS 4. Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. For example, express $36 + 8$ as $4(9 + 2)$.	

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Exponents: Review squares and square roots. Using the terms squared and cubed and to the nth power, read and evaluate numerical expressions with exponents. Review powers of ten. Write numbers in expanded notation using exponents.			Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. Write numbers in expanded notation using exponents.
II. Ratio, Percent, and Proportion			
A. Ratio and Proportion			
Solve proportions, including word problems involving proportions with one unknown.	2	6.RP 3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. b. Solve unit rate problems including those involving unit pricing and constant speed. For example, if it took 7 hours to mow 4 lawns, then at that rate, how many lawns could be mowed in 35 hours? At what rate were lawns being mowed?	
Use ratios and proportions to interpret map scales and scale drawings.	2		Use physical objects, drawings, charts, maps, equations as representations. Explain, describe and defend mathematical ideas using representations
Set up and solve proportions from similar triangles.	1, 4		Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .
Understand the justification for solving proportions by cross-multiplication.	7		
B. Percent			
Convert between fractions, decimals, and percents.	8		Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Find the given percent of a number, and find what percent a given number is of another number.	8 6.R	P3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	Given the percent of a given number in relationship to another given number.
Solve problems involving percent increase and decrease.	8		Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.
Find an unknown number when a percent of the number is known.	8	6.RP 3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. c. Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.	
Use expressions with percents greater than 100% and less than 1%.	8		
III. Computation			
A. Addition			

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Addition, commutative and associative properties: know the names and understand the properties. Understand addition and subtraction as inverse operations. Add and subtract with integers, fractions and decimals, both positive and negative.	7		Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. - Describe situations in which opposite quantities combine to make 0. - the solutions. Define and identify the commutative and associative properties of addition and subtraction.
B. Multiplication			

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Commutative, associative, and distributive properties: know the names and understand the properties.	6, 7, 8		3.OA 5. Apply properties of operations as strategies to multiply and divide. ² <i>Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.)</i> Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)
Multiply multi-digit factors, with and without a calculator.	1, 4		Fluently multiply multi-digit whole numbers using the standard algorithm.
Estimate a product.	4		
Multiply with integers, fractions, and decimals, both positive and negative.	6, 7, 8	6.NS 3. Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.	Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. - Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. - Apply properties of operations as strategies to multiply and divide rational numbers
Distributive property for multiplication over addition or subtraction, that is, $A \times (B+C)$ or $A \times (B-C)$: understand its use in procedures such as multi-digit multiplication.	6, 7, 8		
C. Division			

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Understand multiplication and division as inverse operations.	6, 7, 8		Interpret whole-number quotients of whole numbers, e.g., interpret 56×8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$ Apply properties of operations as strategies to multiply and divide.² Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) .Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. .Fluently multiply and divide within using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. . Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.
Estimate the quotient.	4		
Divide multi-digit dividends by up to three-digit divisors, with and without a calculator.	1, 4	6.NS 2. Fluently divide multi-digit numbers using the standard algorithm.	

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Divide with integers, fractions, or decimals, both positive and negative.	1, 4	6NS 1. Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.) How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $3/4$ -cup servings are in $2/3$ of a cup of yogurt? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?	• Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers • Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. • Interpret quotients of rational numbers by describing real-world contexts. • Apply properties of operations as strategies to multiply and divide rational numbers. • Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.
D. Solving Problems and Equations			
Solve word problems with multiple steps.	2		• Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. • Solve real-world and mathematical problems involving the four operations with rational numbers.
Solve problems with more than one operation, according to order of operations (with and without a calculator).	2		• Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.
IV. Measurement			

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Solve problems requiring conversion of units within the U. S. Customary System, and within the metric system.	8	6.RP 3. Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations. d. Use ratio reasoning to convert measurement units; manipulate and transform units appropriately when multiplying or dividing quantities.	
Associate prefixes used in metric system with quantities: kilo = thousand hecto = hundred deka = ten deci = tenth centi = hundredth milli = thousandth	8		
Time: solve problems on elapsed time; express parts of an hour in fraction or decimal form.	5, 8		. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.
V. Geometry			
Identify and use signs that mean congruent $\cong$ similar $\sim$ parallel $\parallel$ perpendicular $\perp$	2		

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Angles: Identify and measure the degrees in angles (review terms: right, acute, obtuse, straight). Bisect an angle. Construct an angle congruent to a given angle. Construct a figure congruent to a given figure, using reflection over a line of symmetry, and identify corresponding parts. Show how congruent plane figures can be made to correspond through reflection, rotation, and translation.	7		Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure. Verify experimentally the properties of rotations, reflections, and translations: • Lines are taken to lines, and line segments to line segments of the same length • Angles are taken to angles of the same measure. • Parallel lines are taken to parallel lines. • Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.
Triangles: Know that the sum of the measures of the angles of a triangle is 180° . Construct different kinds of triangles. Know terms by which we classify kinds of triangles: - by length of sides: equilateral, isosceles, scalene - by angles: right, acute, obtuse	7		Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. • Use informal arguments to establish facts about the angles sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measures.
Identify congruent angles and sides, and axes of symmetry, in parallelograms, rhombuses, rectangles, and squares.	7		High school

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Find the area (A) and perimeter (P) of plane figures, or given the area or perimeter find the missing dimension, using the following formulas: rectangle $A = lw$ $P = 2(l + w)$ square $A = s^2$ $P = 4s$ triangle $A = \frac{1}{2}bh$ $P = s_1 + s_2 + s_3$ parallelogram $A = bh$ $P = 2(b + s)$	2	6.G 1. Find the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. 6.G 4. Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.	
Circles: Identify arc, chord, radius (plural: radii), and diameter; know that radius = $\frac{1}{2}$ diameter. Using a compass, draw circles with a given diameter or radius. Solve problems involving application of the formulas for finding the circumference of a circle: $C = \pi d$, and $C = 2\pi r$, using 3.14 as the value of pi. Find the area of a circle using the formula $A = \pi r^2$	5, 7		• Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. Identify parts of a circle. Understand the relationship between the diameter and radius of a circle. Determine the area, sector area, and circumference of a circle.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicators
Find volume of rectangular solids, or given the volume find a missing dimension, using the formulas $V = lwh$, or $V = bh$ (in which b = area of base).	6, 7, 8	6.G 2. Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $V = lwh$ and $V = bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.	- Recognize volume as an attribute of solid figures and understand concepts of volume measurement. - Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. - Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, e.g., to represent the associative property of multiplication. - Apply the formulas $V = l \times w \times h$ and $V = b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. - Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.
VI. Probability and Statistics			
Find the range and measures of central tendency (mean, median, and mode) of a given set of numbers.	1, 4	6.SP 3. Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.	Determine the mean, mode, and median for a given set of data.
Understand the differences among the measures of central tendency and when each might be used.	7	6.SP 5. Summarize numerical data sets in relation to their context, such as by: Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered.	

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Understand the use of a sample to estimate a population parameter (such as the mean), and that larger samples provide more stable estimates.	4	6.SP 5. c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	1. Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. 2. Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be. 4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. For example, decide whether the words in a chapter of a sixth-grade science book are generally longer than the words in a chapter of a fourth-grade science book.
Represent all possible outcomes of independent compound events in an organized way and determine the theoretical probability of each outcome.	1, 4	6.SP 5 Summarize numerical sets in relation to their context, such as by: a. Reporting the number of observations b. Describing the nature of the attribute under investigation, including how it was measured and its unit of measurement.	1. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected. b. Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicators
Compute the probability of any one of a set of disjoint events as the sum of their individual probabilities.	1, 4		. Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. . Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected. . Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies? . Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. . Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. . Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. . Design and use a simulation to generate frequencies for compound events. For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?
Solve problems requiring interpretation and application of graphically displayed data.	4	6.SP 2. Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.	

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Given a set of data, find the mean, median, range, and mode.	4 6.SP	5. Summarize numerical data sets in relation to their context, such as by: c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.	
Construct a histogram; a tree diagram.	4	6.SP 4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots.	1. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.
Coordinate plane: Plot points on a coordinate plane, using ordered pairs of positive and negative whole numbers. Use the terms origin (0,0), x-axis, and, y-axis. Graph simple functions and solve problems involving use of a coordinate plane.	4	6.SP 4. Display numerical data in plots on a number line, including dot plots, histograms, and box plots. 6.NS 6. Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates. b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. c. Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane. 6.NS 8. Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate. 6.G 3. Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.	1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicaor
VII. Pre-Algebra			
Recognize uses of variables and solve linear equations in one variable.	6, 7, 8	6.EE 6. Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.	• Solve linear equations in one variable. a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.
Solve word problems by assigning variables to unknown quantities, writing appropriate equations, and solving them.	2, 4	6.EE 2. Write, read, and evaluate expressions in which letters stand for numbers. 6.EE 7. Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all nonnegative rational numbers.	
Find the value for an expression, given replacement values for the variables; for example, what is $7/x - y$ when x is 2 and y is 10?	8	6.EE 2 Write, read, and evaluate expressions in which letters stand for numbers. a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as $5 - y$. c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole- number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = 1/2$.	

Core Knowledge Sequence Grade 6	CCSS MP	Common Core State Standards covered at CK Grade Level	Performance Indicator
Simplify expressions with variables by combining like terms.	8 6.EE	2. Write, read, and evaluate expressions in which letters stand for numbers. c. Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations). For example, use the formulas $V = s^3$ and $A = 6s^2$ to find the volume and surface area of a cube with sides of length $s = \frac{1}{2}$.	
Understand the use of the distributive property in variable expressions such as $2x(2y + 3)$.	6, 7, 8	6.EE 3. Apply the properties of operations to generate equivalent expressions. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.	• Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. • Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.

Kindergarten, Science

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
- Plant and Plant Growth - Plants are all around us - Seeds grow into plants - What plants need to grow - Seeds to eat - We eat many plant parts - Growing good plants	<u>Performance Statement</u> A. Student can solve problems and investigate questions using <u>scientific methods</u> and tools and revise personal understanding to accommodate new knowledge <u>Standards</u> #1,2,3,4,5,6 page S1 B. Student shows an emerging understanding in the basic principles of <u>life sciences</u>, particularly in relation to the 6 themes: energy, evolution, patterns of change, patterns of stability, scale and structure, systems and interactions <u>Standard</u> #2,3 page S1	- germinating seeds and recording observations - investigating the needs of plants (experiment) - water 1 plant everyday - do not water - place in dark place
- Seasons and Weather - The Four Seasons - Deciduous and Evergreen Trees - Talking about the Weather - temperature - clouds - wind - rain and snow - storms	<u>Performance Statement</u> A. Student can solve problems and investigate questions using <u>scientific methods</u> and tools and revise personal understanding to accommodate new knowledge <u>Standards</u> #1,2,3,4,5,6 D. Student can show an emerging understanding in the basic principles of <u>earth-space sciences</u>, particularly in the relation to the 6 themes: energy, evolution, patterns of change, patterns of stability, scale and	- design and create a weather vane to observe which way wind is blowing - create snowflakes

	structure, systems and interactions. <u>Standard #4</u> page S3	
- Animals and Their Needs - Taking Care of Pets - Animals Care for their - Babies	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5,6</u> <u>Performance Statement B.</u> <u>Standards #1,2,3,6</u> page S1, S2	Develop rules for taking care of a class pet (Rubric)
- The Human Body -Your Five Senses -Taking care of your body	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5,6</u> <u>Performance Statement B</u> <u>Standards 2</u> page S1	Draw examples of what each sense can do. Ex: Nose—smelling flowers, food, etc.
- Taking Care of the Earth -The Forests and the Trees -Conservation: Saving and Protecting the Earth -It's smart to recycle -Keep the Earth Clean	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5,6</u> <u>Performance Statement B.</u> <u>Standards #2,3</u>	Create a poster to make people aware of the earth
An Invisible Force: Magnetism	<u>Performance Statement A.</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement C.</u> Student can show an emerging understanding in the basic principles of <u>physical sciences</u> , particularly in relation to the 6 themes: energy, evolution, patterns of change, patterns of stability, scale and structure, systems and interactions <u>Standard #1</u> page S2	- Identify objects that will allow magnetism to go through paper - Classify objects that magnets will and will not attract
Stores About Scientists	<u>Performance Statement</u>	Illustrate the scientist

• George Washington Carver • Jane Goodall • Wilbur and Orville Wright	A. <u>Standard</u> #5 page S1	and write a sentence of accomplishment

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Kindergarten, History and Geography

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
History and Geography • What a Ball! Our World • Oceans and Continents • Maps and the Globe • Which way are you going? (cardinal directions)	Geography <u>Performance Statement</u> A. Student can locate particular places on earth, identify spatial patterns on the earth's surface, and describe physical characteristics and human processes that shape these patterns. <u>Standards #1,2,6</u> page G1	The student produces evidence that demonstrates understanding • Constructing or sketching maps • Labeling continents and oceans of the world • Identifying major land and water formations on a map
• Around the World in 7 Ways (the 7 continents and different countries)	Geography <u>Performance Statement</u> B. Student can explain how earth's natural and human systems are connected and interact <u>Standards #2, 4</u> page G1	• Pointing and naming each of the 7 continents on a blank map
• Your Country (The U.S.) The American Flag	Geography <u>Performance Statement</u> B. Students can explain how earth's natural and human systems are connected and interact <u>Standards #1, 5</u> page G1	• Draw map of US
• Looking Back • The First Americans: Many Peoples and Many Places • Homes in the Desert, Homes by the Ocean	Geography <u>Performance Statement</u> B. Students can explain how earth's natural and human systems are connected and interact <u>Standards 2, 3</u> page G1 History <u>Performance Statement</u> A, Student understands what is meant by	• Read stories about the first Americans. Ex: "The Story of Jumping Mouse" • Compare and contrast the homes of the First Americans • Create a picture book of their home

	historical inquiry, recognizes major historical events and places them in chronological orders, understands and explains various perspectives concerning major historical events, and obtains historical information from different sources <u>Standards #2</u>	
• Christopher Columbus • The Voyage to the “New World” • Pilgrims in the New World • A Thanksgiving Feast	<u>Geography</u> <u>Performance Statement</u> B. Student can explain how earth’s natural and human systems are connected and interact <u>Standard #7</u> page G2 C. Student understands how spatial connections among people, places and regions affect the movement of people, goods, and ideas <u>Standard #1, 2, 4</u> Page G2 <u>History</u> B. Student can identify characteristics and accomplishments of map and world civilizations in such places as Europe, Africa, the Americans, and Asia. Each student can show an understanding of how selected cultures are represented in the beliefs and practices of the US and how they have helped to form a national heritage. A. <u>Standards #2,3,4</u>	• Create a big book of Christopher Columbus’ voyage • Demonstrate in a picture and a sentence (dictated oral response) their Thanksgiving feast
• Happy Birthday, America • “Democracy”—What’s That	<u>History</u> <u>Performance Statement</u> C. Student understands how democratic values	• Create an invitation to America’s Birthday Party

• Not Completely Free	came to be, along with the essential institutions at the federal, state and local levels that preserve and support those values, including especially those embodied in the US Constitution, local and state frameworks of government, and the rights and responsibilities of citizenship <u>Standard #1</u> page H2	
• Presidents: Leaders in a Democracy - George Washington - Father of our Country - The Cherry Tree - Thomas Jefferson -Idea Man - Abraham Lincoln -Honest Abe - Theodore Roosevelt -The Teddy Bear President • Mount Rushmore	History <u>Performance Statement</u> C. Student understands how democratic values came to be, along with the essential institutions at the federal, state and local levels that preserve and support those values, including especially those embodied in the US Constitution, local and state frameworks of government, and the rights and responsibilities of citizenship <u>Standard #2</u> D. Student can identify major figures and events in American history, and that of their own state, and can show a basic understanding of their significance <u>Standard #1</u> Page H2, 3	• Create an informational big book of “Leaders of the U.S.”

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Kindergarten, Visual Arts

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
• What Do Artists Do? • Color, Color Everywhere -Peter Bruegel the Elder <u>Hunter in the Snow</u> -Paul Gauguin <u>Tahitian Landscape</u>	<u>Performance Statement</u> A. Student can create with various art media to express ideas and experiences <u>Standards 1,3, 5\</u> <u>Performance Statement</u> C. Student can view and respond to works of visual art, and offer ideas about their purpose and meaning <u>Standards 1, 2</u>	• Separate crayons, markers, etc. into warm and cool colors. • Draw a tree using only warm colors • Sponge painting • Viewing and discussing various paintings • Renaming paintings
• Follow that Line! -Joan Miro <u>People and Dog in the Sun</u> -Henri Matisse <u>The Purple Robe</u> -Hokusai <u>Turning the Samiseri</u>	<u>Performance Statement</u> A <u>Standards 1, 2, 5</u> <u>Performance Statement</u> C <u>Standards 1,2</u> Page V1, V2	• Hunt for lines where you live • Analyze artists' use of lines in their paintings
Looking at Pictures—Really Looking • Winslow Homer—<u>Snap the Whip</u> • Pieter Bruegel—<u>Children's Games</u> • Pablo Picasso—<u>Le Gourmet</u> • Henry O. Tanner—<u>The Banjo Lesson</u> • Mary Cassatt—<u>The Bath</u> • Diego Rivera—<u>Mother's Helper</u>	<u>Performance Statement</u> A <u>Standards 1,2, 5</u> <u>Performance Statement</u> C. <u>Standards 1,2</u> p V1, V2	• Discussing and viewing artists' paintings
Sculpture: Statues, Monuments, and More	<u>Performance Statement</u> A <u>Standards 1, 5</u>	• Creating a sculpture out of clay, or play dough

	<u>Performance Statement</u> B. Student understands cultural and historical contexts of the visual arts <u>Standard #3</u> <u>Performance Statement</u> C. <u>Standards 1, 2</u>	• Designing mobiles

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Kindergarten, Music

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
Do you like music? • Moving Responsively to Music (“act out”) • Beat • Loud and Quiet e.g. Grieg’s “In the Hall of the Mountain King” from Peer Gynt • Fast and Slow (Tempo) • High and Low (Pitch) Favorite Songs (examples) • Bingo • Go in and out the Window • Hush, Little Baby • London Bridge is Falling Down • Here We go Round the Mulberry Bush • My Bonnie Lies Over the Ocean	<u>Performance Statement</u> A. Student can demonstrate the ability to create and perform music by singing, playing instruments, moving to music, and composing and improvising music <u>Standards</u> 1,2,5,6 C. Student shows skill in listening and responding to music, can identify certain features of music, and can offer ideas about the music’s meaning and purpose <u>Standard</u> 1	• Listening to a variety of recordings and identifying tempo, pitch, beat • Acting out different parts by using a variety of movements (hopping, skipping, etc.) • Clapping to a variety of beats in rhyme and music • Play a variety of instruments to a steady beat • Singing songs • Performing

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First Grade, Science

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
Living Things and Their Habitats • The Forest Habitat • The Underground Habitat • The Desert Habitat • The Water Habitat The Food Chain Animals and Plants Need Their Habitats Extinct but still popular: Dinosaurs	<u>Performance Statement</u> A Student can solve problems and investigate questions using scientific tools, and revise personal understanding to accommodate new knowledge <u>Standards</u> 1, 2,3,4,5,6 <u>Performance Statement</u> B Student shows an emerging understanding in the basic principles of <u>life sciences</u>, particularly in relation to the six themes: energy, evolution, patterns of change, patterns of stability, scale and structure, systems and interactions <u>Standards</u> 1,2,3,5,6 <u>Performance Statement</u> A <u>Standards</u> 1,2,3,4,5,6 <u>Performance Statement</u> B <u>Standards</u> 7	• Explain how living things, both human and other, cause changes in their environment • Make drawings of observations showing the needs of animals and plants
Oceans and Undersea Life • The Oceans and the Tides - Ocean Currents - Under the Ocean - Human and the Ocean World	<u>Performance Statement</u> A <u>Standards</u> 1, 2,3,4,5,6	

The Human Body • The Skeletal System • Muscular System • Circulatory System • Digestive System • Nervous System • In Sickness and in Health • Taking Care of Your Body	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u>	• Explain orally why people should take care of their body
Matter: Solid, Liquid and Gas • Air is Matter • Changing States of Matter	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement C</u> Student can show an emerging understanding in the basic principles of <u>physical sciences</u>, particularly in relation to 6 themes: energy, evolution, patterns of change, patterns of stability and interactions <u>Standard 1</u> <u>Performance Statement D</u> Student can show an emerging understanding in the basic principles of earth-space sciences, particularly in relation to 6 themes: energy, evolution, patterns of change, patterns of stability, scale and structure, systems of interactions <u>Standard 2</u>	• observe and discuss demonstrations of air taking up space • sorting objects into physical properties (solid, liquid)
Measurement • Units of measurement • How long? How tall? • How much space does it fill?--cups, quarts, gallons	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u>	• collect and record daily temperatures

• Temperature		
Electricity • Static electricity • On and off • Conductors • Safety, rules around electricity	<u>Performance Statement A.</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement C</u> <u>Standard 1</u>	• Test material and categories into conductors and non-conductors • Explain concept of conductor to another student
Astronomy: Our Solar System • Our solar system • The Moon • Constellations -The Big Dipper • Our Big, Round Moving Earth -Day and night	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement D</u> <u>Standard #1</u>	• Design original constellations • Create a solar system mobile • Maintain a daily log of the phases of the moon
Down to Earth • Inside the Earth -crust (mountains, rivers, deserts) • The Earth Makes Different Kinds of Rocks • igneous • sedimentary • metamorphic • The Earth's Important Minerals • gold • diamonds • quartz Stories About Scientists • Edward Jenner • Louis Pasteur • Thomas Edison • Rachel Carson	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement D</u> <u>Standard #5</u>	• create model of the earth and its parts • identify and sort different kinds of rocks

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First Grade, History and Geography

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
The Ice Age: Humans on the Move	Geography <u>Performance Statement</u> B Student can explain how earth's natural and human systems are connected and interact <u>Standards</u> 2,3 Geography <u>Performance Statement</u> C Student understands how spatial connections among people, places and regions affect the movement of people, goods and ideas <u>Standards</u> 2,4 History <u>Performance Statement</u> A Student understands what is meant by historical inquiry, recognize major historical events and place them in a chronological order, understand and explain various perspectives concerning major historical events, and obtain historical information from different sources <u>Standards</u> 1,2	• Illustrate the movement of humans across land bridge in sequential order
Egypt: Life of the Nile • Fantastic Pharaohs and Marvelous Monuments • Hieroglyphics: Picture Writing • Journey Down the Nile	Geography <u>Performance Statement</u> A <u>Standards</u> 1,3,4,5 Geography <u>Performance Statement</u> B	• Create their own picture writing book

• The Treasures of King Tut Mesopotamia—Another Gift • A Great Mesopotamia Story • What's a Ziggurat? • A Leader and the Laws -Hammuraki	<u>Standards 6,7</u> Geography <u>Performance Statement C</u> <u>Standards 1,2</u> History <u>Performance Statement A</u> <u>Standards 1,2,3</u> History <u>Performance Statement B</u> <u>Standards 1,3</u>	• Compare and contrast Mesopotamia and the Nile's "Gift"
Religions: What different people believe • Judaism -Story of Moses • Christianity -The first Christmas -Jesus, the teacher: The Parable of the Good Samaritan -Easter	Geography <u>Performance Statement B</u> <u>Standards 2,3,4</u>	• Create an attribute book "All about Christmas; All about Easter"
• Crossing the Land Bridge • Cities in the Jungle: The Maya • City on the Lake: The Aztecs • Cities in the Clouds: The Incredible Inca • The Arrival of the Europeans -Christopher Columbus • The Spanish Conquerors -Conquistador • Hernando Cortes • Montezuma • Francisco Pizarro • Why did the Spanish Win? • Mexico Today	Geography <u>Performance Statement A</u> <u>Standards 3,5,6</u> Geography <u>Performance Statement B</u> <u>Standard 2</u> Geography <u>Performance Statement C</u> <u>Standards 1,2,4</u> History <u>Performance Statement A</u> <u>Standards 1,2</u> History <u>Performance Statement B</u> <u>Standards 1,2,3</u>	• Create a diorama or triorama of a specific city • Illustrate a city and write a word or phrase • Role play to better understand a historical event

And then Came England -Queen Elizabeth -Sir Walter Raleigh • The Lost Colony • A Lasting English Colony: Jamestown • Pochahontas • The Pilgrims • The Puritans • Slavery Comes to the Colonies • 13 Colonies • Colonists and the King • Boston Tea Party • A Fight with Mother? • Midnight Ride of Paul Revere • A Nation is Born-July 4, 1776 - Liberty Bell	<u>Performance Statement</u> C Student understands how spatial connections among people, places and regions affect the movement of people, goods and ideas <u>Standards</u> 1,5 History <u>Performance Statement</u> A <u>Standards</u> 1,2,3 History <u>Performance Statement</u> B <u>Standards</u> 2,3 History <u>Performance Statement</u> C <u>Standard</u> 1 History <u>Performance Statement</u> D <u>Standards</u> 1,2,3	• Create a big book or picture book of information
• Some Revolutionary Lives -Ben Franklin -Deborah Sampson -Phyllis Wheatley -George Washington • Washington Monument	History <u>Performance Statement</u> D <u>Standard</u> 1	• Illustrate person and write a phrase or sentence of accomplishment • Play matching game of person with illustrated accomplishment
America Grows • Daniel Boone -Wilderness Road • Louisiana Purchase -Lewis & Clark	<u>Performance Statement</u> C <u>Standard</u> 2	• Identify major landmark on map

**ICAHN CHARTER SCHOOL
CORE CURRICULUM**

First Grade, Visual Arts

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
People Have Been Making Art for a Very Long Time cave paintings	<u>Performance Statement A</u> <u>Standards 1,4,5</u> <u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	Create their own cave in a box and draw inside
- A World of Color - Claude Monet "Tulips in Holland" - James McNeill Whistler "Whistler's Mother/Arrangement in Gray and Black"	<u>Performance Statement A</u> <u>Standards 1,2,3,5</u> <u>Performance Statement B</u> <u>Standards 1,2</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	Draw two pictures of same object, one in lots of bright colors, the other in dark colors. Write or discuss which you like better.
- Get in Line! - Henri Matisse "The Swan" - Georgia O'Keefe "Shell No. 1"	<u>Performance Statement A</u> <u>Standards 1,4,5</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	Draw animals using only lines
- Get in Shape! -rectangle -oval -diamond - Grant Wood "Stone City, Iowa" - Jacob Lawrence "Parade" - Diego Rivera "Pinata"	<u>Performance Statement A</u> <u>Standards 1,2,5</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	- Create a shape collage - Identify shapes and lines in various paintings
Texture: Oh, What a Feeling Native American	<u>Performance Statement A</u> <u>Standards 1,2,3</u>	Make a model of an Iroquois mask using a variety of textures

Masks - Edgar Degas "The Little Dancer of Fourteen Years" - Albrecht Durer "Young Hare"	<u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	
• Looking Good: Portraits - Leonardo daVinci "Mona Lisa" - Hans Holbein "Edward VI as a Child" - Francisco Goya "Don Manuel Osorio Manrique de Zuniga" • Self Portraits: Take a Good Look at Yourself - Vincent Van Gogh - Norman Rockwell "Triple Self-Portrait"	<u>Performance Statement A</u> <u>Standards 1,2,4,5</u> <u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	• Using mirrors, create a self portrait
• Hold Still! - Still life - Vincent VanGogh "Irises" - Paul Cezanne "Apples and Oranges"	<u>Performance Statement A</u> <u>Standards 1,2,5</u> <u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	• Decide what object you want to include and how you will arrange them and design a still life using paints
• Murals: Paintings on Walls - Diego Rivera "The History of Medicine in Mexico"	<u>Performance Statement A</u> <u>Standards 1,2,5</u> <u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	• Design a class mural

**ICAHN CHARTER SCHOOL
CORE CURRICULUM**

First Grade, Music

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
Instruments and Their Families	<u>Performance Statement A</u> <u>Standards 2,4,5</u> <u>Performance Statement C</u> <u>Standards 1,5</u>	• Play Instrument • Families (sorting)
The Orchestra • Conductor “Maestro” • “Peter and the Wolf” Sergei Prokofiev	<u>Performance Statement A</u> <u>Standards 3,4,5</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	• Listen to “Peter and the Wolf” and identify the instruments and the parts they play Ex: oboe=duck
Great Composers • Wolfgang Amadeus Mozart	<u>Performance Statement A</u> <u>Standard 3</u> <u>Performance Statement B</u> <u>Standards 1,3</u> <u>Performance Statement C</u> <u>Standards 1,2</u>	• Listen to various Mozart recordings • Write an illustrated biography
• Music Can Tell a Story - “Oh! Susanna” - “Abeyoyo” - “The Fox Went Out on a Chilly Night: An Old Song” - “Billy Boy” - “The Sorcerer’s Apprentice” Paul Dukas	<u>Performance Statement A</u> <u>Standards 1,3,5,6</u> <u>Performance Statement B</u> <u>Standards 3</u> <u>Performance Statement C</u> <u>Standards 1,5</u>	• Participate in group meeting to express the stories told by music • Identify the basic elements of a story: setting, characters and plot
• Music Can Make you Move -dance (tap, square dancing, ballet)	<u>Performance Statement A</u> <u>Standard 5</u>	• Participate in a square dance

• Jazz -Louis Armstrong • Melody and Harmony • I've Got Rhythm! • Reading and Writing Music - notes (whole note, half note, quarter note) • Favorite Songs - "America the Beautiful" - "Blow the Man Down" - "La Cucaracha" - "Billy Bo" - "Down by the Riverside" - "For He's a Jolly Good Fellow" - "Down in the Valley" - "Dry Bones" - "Frere Jacques" - "Michael, Row the Boat Ashore" - "On Top of Old Smoky" - "She'll be Comin' Round the Mountain"	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6,7</u> <u>Performance Statement B</u> <u>Standards 1,2,3</u> <u>Performance Statement C</u> <u>Standards 1,2,3,4,5</u>	• Listen to and identify different forms of jazz (blues, Dixieland, boogie woogie, and modern) • perform songs for other classes, parents, school • sing familiar rounds and songs in a group • work with peers to rehearse for a group performance

**ICAHN CHARTER SCHOOL
CORE CURRICULUM**

Second Grade, Science

CORE KNOWLEDGE	NYS Performance Statement and Standards	ASSESSMENT
The Cycle and the Seasons • The Life Cycle • From Seed to Seed; A Plant's Life Cycle • From Frog to Frog: An Amphibian's Life Cycle • The Cycle of the Seasons -spring -summer -fall -winter	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement B</u> <u>Standards 1,2</u> <u>Performance Statement D</u> <u>Standard 4</u>	• Make drawings of observations showing the life cycle of a plant or animal
The Water Cycle • Evaporation • Going Up, Going Down • Condensation and Precipitation • Putting it All Together: The Water Cycle	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement C</u> <u>Standard 1</u>	• Use diagrams to explain the characteristics of steam condensation
Insects • Insects Everywhere! • What makes an insect an insect? • Are they insects? • Insect Life Cycles • A Simpler kind of metamorphosis • Social Insects -An ant colony -In a beehive	<u>Performance Statement A</u> <u>Standards 1,2,3,4,5,6</u> <u>Performance Statement B</u> <u>Standard 1</u>	• Create a skit with classmates depicting the sequence of events of an insect's life cycle
The Human Body • Cells! The building blocks of living things • Cells and tissues, organs and systems • What happens to the food you eat? • A healthy Diet: the food pyramid • Vitamins and minerals	<u>Performance Statement A</u> <u>Standards 1,2,3,5</u> <u>Performance Statement B</u> <u>Standards 1,2,4</u>	• Make posters or charts to communicate effective nutrition • make recommendations to improve the selection of food in school cafeteria so students make healthier choices

Magnetism • The Special Magnetic Attraction • Magnetic poles • Using a compass	<u>Performance Statement A</u> Standards 1,2,3,4,5 <u>Performance Statement C</u> Standards 1,2	• Use magnetic properties to sort objects into two categories • participate in a scavenger hunt using a compass
Simple Machines • Tools and Machines • levers • wheels • friction • pulleys • inclined planes • wedges • screws	<u>Performance Statement A</u> Standards 1,2,3,4,5, <u>Performance Statement C</u> Standard 3	• Explain how simple machines make work easier • examine common objects and identify the machine it is • conduct a test on an inclined plane (slides) that would increase or decrease the speed of a rolling ball
Stories about scientists • Anton van LeeuwenHoek • Florence Nightingale • Daniel Hale Williams • Elijah McCoy		Cross-curricular assessment: Student produces a report such as: -an informative report -an attribute book

**ICAHN CHARTER SCHOOL
CURRICULUM**

2nd Grade, History and Geography

<u>CORE KNOWLEDGE</u>	NYS Performance Statement and Standard	ASSESSMENT
<u>Civilizations in Asia</u> • Long ago in Asia: Civilization in the Indus Valley • Hinduism • The story from the Holy Books of Hinduism - Rama and Seta: A Tale from the Ramayana • Buddha: The Enlightened One • King Asoka: From War to Peace • A Wise Teacher in China: Confucius • China: Great Rivers and a Great Wall • An Important Invention: Paper • Smooth as Silk • Chinese New Year • Let's Visit Japan	History <u>Performance Statement</u> A. <u>Standards</u> 1, 2 History <u>Performance Statement</u> B. <u>Standards</u> 1, 2, 3, 4, 5 Geography <u>Performance Statement</u> B. <u>Standards</u> 2, 7	• Present information to an audience of peers • Write an informative picture book • Role-play to better understand certain historical event • Plan a "visit" to Japan and list what they want to see and places to visit
<u>Ancient Greece</u> • Birthplace of the Olympics and more • A Civilization of city-state • Athens: Birthplace of Democracy • Rough, Tough Sparta • The Persian Wars • Battles that Live in Memory - Marathon - Thermopylae • Great Thinkers in Athens • Alexander the Great - The Gordian Knot	History <u>Performance Statement</u> A <u>Standards</u> 1, 2 History <u>Performance Statement</u> B <u>Standards</u> 1, 2, 3, 4	• Maintain a daily journal of a Spartan • Develop a pictorial map of places and objects in Greece • Write an informative report (as a picture book or chapter book)

- What Lies Beyond		

<u>Our Constitution</u> • Democracy: A Big Challenge • James Madison: Father of the Constitution	<u>Performance Statement</u> A <u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> C <u>Standards</u> 1, 2 History <u>Performance Statement</u> D. <u>Standards</u> 1, 3	• Write a set of class rules (Class Constitution)
<u>The War of 1812</u> • Another War Already? • Dolly Madison: A Brave Woman • Oh, Say, Can You See... • Our Changing Flag • The Battle After the War	History <u>Performance Statement</u> A <u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> C <u>Standards</u> 1, 2 History <u>Performance Statement</u> D <u>Standards</u> 1, 3	• Write a short report on a topic using information from at least 2 different sources • Design an original flag
<u>Westward Ho!</u> • The Call of the West • Boats and Canals • The Iron Horse • Wagons West • A Family Goes West • The Pony Express • Women's Work • Oregon Trail • Already There: The American Indians • Forced from Their Lands	History <u>Performance Statement</u> A. <u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> D <u>Standards</u> 1, 2, 3 Geography <u>Performance Statement</u> B <u>Standards</u> 2, 3, 7 Geography <u>Performance Statement</u> C <u>Standards</u> 1, 2, 4	• Create a list of items that they would take with them and reasons why • Design a map of their own which depicts their trail/path from home to school • Maintain a journal (written or illustrated) of their travels west
<u>The Civil War</u> • Fighting Against Each Other	History <u>Performance Statement</u> A.	• Role-play to better understand a certain historical event

• Slavery in America • Stop Slavery or Let it Spread? • Another Kind of Railroad - Follow the Drinking Gourd • Yankees Against Rebels - Songs of the North & South • Abraham Lincoln: A Man for the Union • The Emancipation Proclamation	<u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> B <u>Standards</u> 1, 2, 4 History <u>Performance Statement</u> C <u>Standards</u> 1, 2, 5 History <u>Performance Statement</u> D <u>Standards</u> 1, 2, 3	• Design a big book comparing the Underground Railroad and Following the Drinking Gourd
<u>A Nation of Immigrants</u> • E Pluribus Unum • Why did immigrants come to America? • A Land of Opportunity? • Becoming a Citizen	Geography <u>Performance Statement</u> C <u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> A <u>Standards</u> 1, 2, 3, 4 History <u>Performance Statement</u> B <u>Standards</u> 2, 3, 4 History <u>Performance Statement</u> C <u>Standards</u> 4 History <u>Performance Statement</u> D <u>Standards</u> 1, 2, 3	• Design passports or visas to visit another country • Creating a list of opportunities they have in public school • Interviewing parents, family members or other adults that immigrated to U.S.
Civil Rights: Liberty and Justice for All • All men are created equal • Susan B. Anthony & votes for women • Eleanor Roosevelt	History <u>Performance Statement</u> C <u>Standards</u> 2, 4, 5	• Design posters that would illustrate their own dream of making the world better • Write an informative big book • Present an oral

• Equality regardless of color - Cesar Chavez - Jackie Robinson - Rosa Parks - Martin Luther King	History <u>Performance Statement</u> D <u>Standards</u> 1, 2, 3	recounting of person's accomplishment
Geography of the Americas • The U.S. Today • Central America & the Caribbean • South America	Geography <u>Performance Statement</u> A. <u>Standards</u> 1, 2, 3, 4, 5, 6	• Identify the U.S., Central America, Caribbean Islands and South America on a blank map

**ICAHN CHARTER SCHOOL
CURRICULUM**

2nd Grade, Visual Arts

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Taking a line for a walk</u> • Vertical • Horizontal • Diagonal • Zigzag • Curved • Spiral • Wavy • Pablo Picasso – “Mother & Child”	<u>Performance Statement</u> <u>A</u> <u>Standards</u> 1, 2, 5 <u>Performance Statement</u> <u>B.</u> <u>Standards</u> 1,2	• Identify the suggested line in a painting
Lines and Movement • Hokusai – “The Great Wave at Kanagawa Nami-Ura”	<u>Performance Statement</u> <u>A.</u> <u>Standards</u> 1, 2, 4, 5	• Produce a computer generated design in which the understanding of lines & movement is used
Looking at Sculpture • “The Discus Thrower” • “Flying Horse” • “The Thinker” – Auguste Rodin	<u>Performance Statement</u> <u>A.</u> <u>Standards</u> 1, 2, 4, 5 <u>Performance Statement</u> <u>B.</u> <u>Standards</u> 1, 2, 3 <u>Performance Statement</u> <u>C.</u> <u>Standards</u> 1, 2	• Research the style of a sculptor and design a work based on that style
Looking at Landscape • Thomas Cole – “The Oxbow” • El Greco – “View of Toledo” • Henri Rousseau – “Virgin Forest” • Vincent Van Gogh – “The Starry Night”	<u>Performance Statement</u> <u>Standards</u> 1, 2, 3, 4, 5 <u>Performance Statement</u> <u>Standards</u> 1, 2, 3 <u>Performance Statement</u> <u>C.</u> <u>Standards</u> 1, 2	Make a model of “The Starry Night” using paint resistance. Design your own landscape (real or imaginary) Use primary colors to paint a picture from nature

<u>Animals: Real & Imagined</u> • Albrecht Durer – “Young Hare” • John James Audubon – “Birds of America” • Paul Klee – “Cat and Bird” • Pablo Picasso – “Bull’s Head” • Matisse – “The Snail”	<u>Performance Statement</u> A. <u>Standards</u> 1, 2, 3, 4, 5 <u>Performance Statement</u> B. Standards 1, 2, 3 <u>Performance Statement</u> C. <u>Standards</u> 1, 2	• Create an animal cutout with torn & cut paper & experiment with arrangement. Paste and give a title • Draw objects from observations & use their imagination to turn those drawings into objects or creatures
<u>Abstract Art</u> • Chagall – “I and the Village” • Constantin Brancusi – “Bird in Space”		• Design a dreamscape
Architecture: The Art of Designing Buildings • Parthenon - Symmetry • A Building of Curves - The Great Stupa Sphere - Dome • A Beautiful Castle - Himeji Castle • A Modern Museum - Guggenheim Museum	<u>Performance Statement</u> A. <u>Standards</u> 1, 2, 4, 5 <u>Performance Statement</u> B. <u>Standards</u> 2, 3 <u>Performance Statement</u> C. <u>Standards</u> 1, 2	• Research various architectural elements and design a building using a variety of materials

**ICAHN CHARTER SCHOOL
CURRICULUM**

2nd Grade, Music

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Many Kinds of Music</u> • Patriotic Music • Folk Music • Classical Music • Meet some Great Composers - Antonio Vivaldi – “The Four Seasons” - Johann Sebastian Bach - Ludwig van Beethoven • Mr. Bach at the Keyboard	<u>Performance Statement</u> A. <u>Standards</u> 2, 4, 5, 7 <u>Performance Statement</u> B. <u>Standard</u> 5 <u>Performance Statement</u> C. <u>Standards</u> 1,2,5	• Play a simple pattern on a mallet, for example, to accompany a familiar song • Explain how sound is produced on a variety of instruments
<u>Writing Music Down</u> • Follow the Notes • Pitch: High and Low - Staff - Music Alphabet • A Musical Scale - Do-Re-Mi	<u>Performance Statement</u> A. <u>Standards</u> 3, 5 <u>Performance Statement</u> C. <u>Standards</u> 3, 4	• Demonstrate on a rubber band how to raise and lower pitch
<u>Some Songs</u> • Clementine • Home on the Range • Goodbye, Old Paint • Buffalo Gals • Casey Jones	<u>Performance Statement</u> A. <u>Standards</u> 1, 3, 4, 5, 6 <u>Performance Statement</u> B. <u>Standards</u> 1, 2, 3 <u>Performance Statement</u> C. <u>Standard</u> 1	• Listen to two musical compositions on the same theme & compare & contrast • Sing folk music to a period of history in the U.S.

**ICAHN CHARTER SCHOOL
CURRICULUM**

3rd Grade. Science

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
Life Sciences • What is Nature? • The Balance of Nature (Food Chain) • How the Wolf Broke the chain • The Invisible Web • Hold Your Breath! - Air Pollution - Water Pollution • Conserving and Recycling	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5</u> <u>Performance Statement B.</u> <u>Standards #1,2,3,5,6</u>	The student produces evidence that demonstrates understanding • Create a terrarium and observe • Prepare a report with diagrams and charts, on the optimal number and placement of recycling containers in a classroom and school.
Animals that Work Together • Ants • Ants that grow their own food • Bees - Workers, drones, queens - Bee stings	<u>Performance Statement A.</u> <u>Standards #1,2,3, 4,5</u> <u>Performance Statement B.</u> <u>Standards 2,3,5,6</u>	• Describe the similarities and differences between ants and bees.
The Human Body and Health • The Nervous System - Reflexes - Sight - Hearing	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5</u>	• Describe factors that help to promote good health and growth
Physical Sciences Electricity • Static Electricity • Why the Paper Sticks to the Comb • Electric Circuits • A Simple Circuit	<u>Performance Statement A.</u> <u>Standards #1,2, 3,4,5</u> <u>Performance Statement C.</u> <u>Standard #2</u>	• Use knowledge of electricity to predict what materials conduct electricity. • Conduct a survey of students' use of electricity at home, compare and select an appropriate way to display data
Chemistry • Kinds of Matter: Metals and Non-Metals • What are Metal Uses?	<u>Performance Statement A.</u> <u>Standards #1,2,3,4,5</u>	• Use physical properties to sort objects into metals and non-metals and explain to another

• Atomic Vocabulary • A Very Important Metal: Iron • Other Metals • Alloys • Nonmetals in the Air • A Remarkable Nonmetal: Carbon • Chlorine • What element is the most plentiful? • Other things in the World • Combinations/ Molecules	Performance Statement C. <u>Standards</u> #1, 2,	student • Kitchen Chemistry experiments • Investigate the kinds of matter in foods and organize data in an appropriate chart, table or graph
<u>Gravity</u> • The Solar System - The Sun - Terrestrial Planets – Mercury, Venus, Earth and Mars • The Asteroids • The Gas Giants – Jupiter, Saturn, Uranus, and Neptune • Revolve and Rotate • Out Beyond Pluto • Beyond our Solar System • Constellations - Draco - Leo - Orion - Ursa Major - Little Dipper	<u>Performance Statement</u> A. <u>Standards</u> #1,2,3,4,5 Performance Statement D. <u>Standards</u> #1,3	• Write and illustrate a creative story to explain the solar system • Visit planetarium and report what they saw. • Create original constellations
<u>Stories of Scientists</u> • Charles Babbage and Ada Lovelace • John Muir • Jane Goodall • Edward Jenner • Elijah McCoy		Work with others to: • Create a skit depicting the sequence of events of characters of an important scientific discovery

**ICAHN CHARTER SCHOOL
CURRICULUM**

3rd Grade, History and Geography

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>World Geography</u> • Our Watery World - Oceans • Back to the Mediterranean • The Roman Empire: All Kinds of Land	Geography <u>Performance Statement</u> A. <u>Standards</u> #1,2,3,4,5,6 <u>Performance Statement</u> B. <u>Standards</u> #1,2,4	• Read about children living in other cultures • Use a variety of materials to make a model of a region
Geography of the Americas • Early visitors to North America: The Vikings • Finding – and Taking – a “New World” • Spanish Explorers of North America - Juan Ponce de Leon - Francisco Coronado • Spanish Settlements in the New World • In Search of the Northwest Passage • “New France” • The Voyages of Henry Hudson • The Land Shapes the Ways People Live	Geography <u>Performance Statement</u> A. <u>Standards</u> #1,6 <u>Performance Statement</u> C. <u>Standards</u> #1,2,3,5 History <u>Performance Statement</u> A. <u>Standards</u> 1,2,3 <u>Performance Statement</u> B. <u>Standards</u> #1,2,3,5	• Read historical narratives and talk about the importance of where places are located • Draw maps and pictures showing how people make use of and modify their physical environment. • Map the locations of places in a region or community, using appropriate symbols.
World Civilization • What We Owe to Ancient Rome • Writing Down Dates • Rome Begins With Two Boys and a Wolf - Remus and Romulus • Roman gods and goddesses • The Roman Republic: Something New • Plebeians Versus Patricians	History <u>Performance Statement</u> A. <u>Standards</u> # 1,2,3,4 <u>Performance Statement</u> B. <u>Standards</u> #1,2,3,4,5	• Create time lines (personal & family) • Create a list of characteristics for the concept of civilization • Study about the major cultural achievements of an ancient civilization • Identify key turning points and important events with the class • Create a mural-sized timeline of important events and

• The Proud Coriolanus • A Brave Mother and Wife - Venturia and Volumnia • War with Africa • The Romans as Rulers • The Greeks Conquer Roman Hearts • The Republic Ruined • A New Leader - Julius Caesar • A Republic No Longer • An Exciting Day - Circus Maximus • Cooling Off - Roman Baths • What Romans are really like - Gladiators - Olympic Games • A Big Family • Tasty Food • Child's Play • Bad Emperors - Nero • Good Emperors • The End is Near: - Constantine • Constantine and Christianity • The Byzantine Empire • The End of Rome • After Rome Fell •		achievements • Read historical stories • Write historical narratives • Listen and participate in classroom debates and discussions of important leaders: ex: Good vs. Bad Emperors
Islam: A New Civilization • The Spread of Islam		
American Civilization • The First Americans • East of the Mississippi - Woodlands - Powhatans • Familiar Names - Seminole - Cherokee - Confederacy - The Delaware - The Susquehanna	History <u>Performance Statement</u> B. <u>Standards</u> #1,2,3,4,5 <u>Performance Statement</u> D. <u>Standards</u> #1,2,3, Geography <u>Performance Statement</u>	• Explain ways that families long ago expressed and transmitted their beliefs and values through oral traditions, literature, songs, art, religion, etc. • Interpret simple time lines by recognizing

- The Mohican - The Massachusett - Iroquois Confederacy • A Day with Little Thunder (day in the life of an Algonquin) - work - games - war • The Jamestown Colony: - Hard Beginnings - Tobacco: A “Cash Crop” • The Pilgrims at Plymouth - Mayflower - Mayflower Compact • Massachusetts Bay: The Puritans • More Colonies • Farther South - Georgia, North Carolina, South Carolina (British Colonies)	C. <u>Standards</u> 1,2,4	correct chronological order of major events • Read stories about the early days of American society and discuss the way of life of those times.
• Hard Labor (slavery) • Songhai - Timbuktu • Benin - “oka” - “slave coast” • Sarah Sees a “Walking” (a day in the life of a colonial girl in Pennsylvania) • How the “Walk” Began - William Penn - The Delaware	Geography <u>Performance Statement</u> C. <u>Standards</u> #1,2 History <u>Performance Statement</u> D. <u>Standards</u> #2,3 <u>Performance Statement</u> A. <u>Standards</u> #1,2,3,4	• Role-play • Debate topics important to students • Write a narrative account of a historical event
• The Colonies Grow Up - 13 Colonies • Britain Wants Money - Stamp Act - Redcoats • “Boston Massacre” • The Boston Tea Party	History <u>Performance Statement</u> A. <u>Standards</u> # 1,2,3,4 <u>Performance Statement</u> B.	• Discuss and examine more than one viewpoint on some events and people • Write an informative report • Present a recounting of

• The Pot Boils Over • The Shot Heard “Round the World” • America Now - Concord & Lexington - George Washington • Declaration of Independence • A New Flag • “Give me Liberty...”	<u>Standards # 1,2,3,4</u> <u>Performance Statement</u> C. <u>Standard #5</u> <u>Performance Statement</u> D. <u>Standards #1,2,3</u>	an historical event • Compare governmental structures of the U.S. with other nations • Discuss the colors of the American flag and make personal flags as symbols of themselves

**ICAHN CHARTER SCHOOL
CURRICULUM**

3rd Grade, Visual Arts

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Elements of Art</u> • Lines Make Shapes - Shapes with Straight and Curved Lines - Lines Can Show Emotion - Different Ways to Make Shapes - What Quilts Tell us About Shapes • A Painting About an Idea - Edward Hicks – “The Peaceable Kingdom” • Shapes in Architecture - Pont du Gard • Shapes and Rhythm • All Kinds of Horses - Walter Crane • Pictures Like Puzzles - Mosaics • Slow Rhythms • Paintings that Are Part of Walls • The Mexican Muralists - A Mural that Makes a Message - Shapes that Frame a Picture • Pattern and Texture	<u>Performance Statement</u> A. <u>Standards # 1,2,3,4,5</u> <u>Performance Statement</u> B. <u>Standards # 1,2,3</u> <u>Performance Statement</u> C. <u>Standards #1,2</u>	• Visit a museum and write a short report of the elements they saw. • Visit a museum and look at original work of art and discuss differences between original and reproduction • Describe what they see in a work of art and tell what they think the work is about • Create a design using small pieces of paper (mosaic) • Make a mask • Create a mural • Work with others to plan and produce a group art work such as a mural

**ICAHN CHARTER SCHOOL
CURRICULUM**

3rd Grade, Music

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
Music • Rhythm • Meter • Tempo • African & Latin Rhythms • Instruments that keep rhythm • Notation: How Music is Written Down - Staff - Treble Clef - Bass - Whole note, half note, quarter note, eight notes	<u>Performance Statement</u> A. <u>Standards</u> # 2,3,4,5,7 <u>Performance Statement</u> B. <u>Standards</u> # 1,2,3 <u>Performance Statement</u> C. <u>Standards</u> #2,3,4,5	• Read and perform standard rhythmic notation on rhythm sticks or other class instruments • Make a shaker from a paper tube to accompany a Native American dance or Latino song

**ICAHN CHARTER SCHOOL
CURRICULUM**

4TH Grade, Science

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
Life Science • The History of the Earth and Its Life forms • Fossil Formation • Types of Fossils • How old Is the Earth	S2 Life Science S2D Demonstrates understanding of change over time	• Use more than one medium such as models, text or drawings to show how various organisms have changed over time. • Describe the similarities and differences between fossils and related contemporary organisms and explain how environmental factors contributed to these similarities and differences.
• Dividing the Earth's story into Chapters • The Precambrian Era • The Paleozoic Era • The Mesozoic Era • The Cenozoic Era	S2 Life Science S2D Demonstrates understanding of change over time.	• Explain how organisms both human and other, cause changes in their environments and how some of these changes can be detrimental to other organisms.
• The Human Body and Health • The Circulatory System • The Blood • The Blood Vessels • The Heart • The Respiratory System	S2 Life Science S2A Demonstrates understanding of characteristics of organisms S7 Scientific Communication S7A Represents data & results S7B Uses facts to support conclusions S7C Communicates in a form suited to the purpose S7D Critiques written	• Make a poster of charts and graphs to communicate effective nutrition and health habits.

	and oral explanations	
<u>Physical Science</u> • Earthquakes & The Earth's plates • Faults • Volcanoes • Predicting & measuring Earthquakes and Volcanoes • Under the ocean • Rocks and Minerals • Rock Formation • Types of Weathering • Types of Erosion • How the Great Lakes were formed • How rocks become soil • Weather • Our atmosphere • Hot and Cold Air • How air masses affect weather and climate • Clouds & Water Vapor	S3 Earth Science S3C Demonstrates understanding of changes in Earth and sky. S6 Scientific Tools & Technologies S6B Collect and Analyze data S6C Acquire information from multiple sources S3 Earth Science & Space Sciences Concepts S3A Demonstrates understanding of properties of Earth Materials S3B Demonstrates understanding of objects in the sky	• Collect information from the US Geological survey and use the information to identify trends in geological movement in your hometown or state. • Investigate how the properties of soil can affect the growth of a plant. • Write a story that describes what happens to a drop of water and the physical environment through which it flows as it travels from a lake to a river via the Earth's atmosphere.
<u>Energy Sources</u> • Electricity • Fossil Fuels-Coal, Oil & Natural gas • Hydroelectricity • Nuclear Energy from Fission • Wind & Solar Energy • Nuclear Fusion	S1 Physical Science S1C Demonstrates understanding of light, heat, electricity and magnetism.	• Investigate heat & friction by burning, rubbing or mixing substances together; explain similarities and differences.
<u>Stories of Scientists</u> • Marie Curie • Alexander Fleming • Elizabeth Blackwell • Daniel Hale Williams	S4 Scientific Connections and Applications S4D Science as a human endeavor, such as communication cooperation and diverse input in scientific research. S7 Scientific Communication	• Work with other students to create a skit depicting the sequence of events & the characters in an important scientific discovery

**ICAHN CHARTER SCHOOL
CURRICULUM**

4TH Grade, History and Geography

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Geography</u> • Diving the World into Sections • The Largest Section • Finding Coordinates • The Eastern Hemisphere • The Land of the Andes • The Rugged Rockies • The Rounded, Rolling Appalachians • The High peaks of the Himalayas • The Alps • Mount Kilimanjaro • Mount McKinley • Aconcagua • Mount Everest	Standard 3 Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national & global – including the distribution of people, place and environments and the earth’s surface • Locate places within the local community, state & nation; locate the earth’s continents in relation to each other & to principle parallels & meridians. • Draw maps & diagrams that serve as representations of places, physical features and objects. • Gather & organize geographical information from a variety of sources & display in a number of ways	• Examine different kinds of maps to identify & define their components, including key, title, legend, cardinal & intermediate directions, scale & grid • Map the location of places in the community or region by using appropriate symbols.
World Civilization • Germanic People on the move • The Byzantine Empire • The Rise of Christianity • Charles the Great • Charlemagne and the Spread of Learning	Standard 2 Students will use a variety of intellectual skills to demonstrate their major ideas, eras, themes, developments & turning points in world history & examine the broad sweep of history from a variety of perspectives.	• Create a list of characterizations for the concept of civilization • Create an illustrated timeline • Identify key turning points & important events in world history & explain their significance.

• Trial by jury • The Crusades • The Growth of Islam • Trade and the Rise of the African Empires • The slave Trade • West meets East • Civilizations Under the Tang Dynasty • The Wrath of Genghis Khan • The Adventures of Marco Polo	• Read historical narratives, myths, legends, biographies & autobiographies to learn about how historical figures lived. • Compare important events of accomplishments from different time periods. • Develop timelines that display important events & eras from world history	• Write historical narratives in the form of letters, diary accounts, or news reports from the point of view of a child who lived during a particular historic time period & who witnessed an important event or development.
<u>American Civilization</u> • Crossing the Delaware • Saratoga and a new ally • European Helpers • Valley Forge • His name Means Treason • Yorktown • State and Federal Governments • The Articles of Confederation • The Constitutional Convention • Madison's Plan • Checks and Balances • We the people • What about the slavery? • The Father of our Country • Thomas Jefferson	Standard 1 Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the US & New York. • Know the roots of American culture its development from many different traditions, & the ways many people from a variety of groups & backgrounds played a role in creating it. • Explain those values, practices & traditions that unite all Americans. • Identify individuals who have helped to strengthen democracy in the US.	• Create time-lines • Compare & Contrast documents • Participate in book talks. • Produce an informational essay • Produce an essay via an I-chart.

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
• The war of 1812 • The Monroe Doctrine • “Manifest Destiny” and the Mexican War • Horace Mann and the Public Schools	• Consider different interpretations of key events and/or issues in history & understand the differences on these accounts Standard 4 Economics • Students will use a variety of intellectual skills to demonstrate their understanding of how the US & other societies help economic systems & associated institutions to allocate scarce resources, how major decision-making units function in the US & other national economies and how economy solves the scarcity problem through market & non-market mechanisms. Standard 5 Civics, Citizenship & Government Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments: the governmental system of the US & other nations; the US constitution; the basic civic values of American Constitutional democracy; the roles, rights & responsibilities of citizenship, including	• Examine the basic principles of the Declaration of Independence & the Constitution of the US & NYS. • Create a chart listing reasons for creating govt.’s & reasons why all groups & societies create rules & laws. • Compose the organization of local, state & federal governments.

	avenues of participation.	

**ICAHN CHARTER SCHOOL
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4TH Grade, Visual Arts

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Design in Art</u> • A Church of Great Domes • Gothic Cathedrals • An Age of Faith • Rose Windows • Statues Standing Freely in Space • Vertical Lines in African Art	Standard 1 Creating, Performing & Participating in the Arts • Students will actively engage in the process that constitutes creation & performance in the arts (dance, music, theatre, and visual arts) and participate in various roles in the arts. Standard 2 Knowing & Using Arts Materials & Resources • Students will be knowledgeable about & make use of the materials & resources available for participation in the arts in various roles	• Make a drawing in which they decorate, depict 3-dimensional space by using overlapping, placement on the picture plane & objects diminishing in size. • Use a draw/paint computer program to create graphic images.
	Standard 3 Responding & Analyzing Works of Art • Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor & thought	• Describe what they see in a work of art & tell what they think the work of art is about.

	Standard 4 Understanding the Cultural Dimensions & Contributions of the arts Students will develop an understanding of the personal & cultural forces that shape artistic communication & how the arts in turn shape the diverse cultures of past and present society.	Look at & discuss a variety of art works & artifacts from world cultures to discover some important ideas, issues, and events of those cultures.

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4TH Grade, Music

CORE KNOWLEDGE	NYS Performance Statement and Standard	ASSESSMENT
<u>Music</u> • Harmony • The Major Scale • Classical Music • Bach • Four Part Harmony • The Orchestra • Vivaldi • Handel	Standard 1 Creating, Performing & Participating in the Arts • Students will actively engage in the process that constitutes creation & performance in the arts (dance, music, theatre, and visual arts) and participate in various roles in the arts. Standard 2 Knowing & Using Arts Materials & Resources • Students will be knowledgeable about & make use of the materials & resources available for participation in the arts in various roles	• Improvise a short composition using the black keys on the piano. • Sing familiar sounds, rounds, partner songs & harmonizing parts • Exhibit appropriate behavior when listening to classical music in school's auditorium. • Listen to another student's musical composition & identify elements such as harmony that they liked and disliked. • Recognize & identify some pieces of music and name the countries & composers associated with selections.
	Standard 3 Responding & Analyzing Works of Art • Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor & thought	

	Standard 4 Understanding the Cultural Dimensions & Contributions of the arts • Students will develop an understanding of the personal & cultural forces that shape artistic communication & how the arts in turn shape the diverse cultures of past and present society.	

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

SOCIAL STUDIES

6th Grade

Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.(continued)		
The Enlightenment - Faith in science and human reasoning.: Newton, Descartes - Two ideas of “human nature”: Thomas Hobbes and John Locke. - Influence of the Enlightenment on the beginnings of the US: Jefferson, Montesquieu The French Revolution - Influence of Enlightenment ideas, the English Revolution on movements in America and France. - The American Revolution: French alliance and affect on both sides. - The Old Regime in France (L’Ancien Regime): Social classes: three estates; Louis XIV, XV, XVI, Marie Antoinette 1789: from the three Estates to National Assembly: July 14, Bastille Day; Declaration of the Rights of Man; October 5: Women’s March on Versailles; Liberty, Equality, Fraternity”. - Louis XVI and Marie Antoinette to the guillotine - Reign of Terror - Revolutionary arts and new classicism		- investigate the roles and contributions of individuals and groups in relation to key social, political, cultural, and religious practices throughout world history - investigate important events and developments in world history by posing analytical questions, selecting relevant data, distinguishing fact from opinion, hypothesizing cause and effect relationships,, testing these hypotheses, and forming conclusions

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SOCIAL STUDIES

6th Grade

Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (continued)		
- Napoleon Bonaparte and First French Empire; Napoleon as a military genius; Emperor Napoleon I: reinventing the Roman Empire; the invasion of Russia; Exile to Elba; Wellington and Waterloo. Romanticism - As a cultural movement characterized by: Rejection of classicism and classical values; an emphasis instead on emotion and imagination instead of reason; emphasis on nature and the private self vs. society and man in society. - Influence of Jean-Jacques Rousseau’s “man is born free and everywhere he is in chains”; the idea of the “noble savage” - Romanticism in literature, visual arts and music. Industrialism, Capitalism, and Socialism The Industrial Revolution - Beginnings in Great Britain: Revolution in transportation - Revolution in textiles - Iron and Steel mills - The early factory system		classify historic information according to the type of activity or practice: social/cultural, political, economic, geographic, scientific, technological, and historic

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SOCIAL STUDIES

6th Grade

Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (continued)		
• Capitalism • Adam Smith and the idea of laissez fair vs. government intervention in economic and social matters. • Law of supply and demand • Growing gaps between social classes: Disraeli's image of "two nations" (the rich and the poor) • Socialism • An idea that took many forms; an attempt to offer an alternative to capitalism. • Marxism: the Communist form of Socialism; Karl Marx and Friedrich Engel's, The Communist Manifesto: "Workers of the world unite!"; Class struggle: bourgeoisie and proletariat; Communists, in contrast to Socialists, opposed to all forms of private property Latin American Independence Movements • History • The name "Latin America" comes from the Latin origin of the languages now mot widely spoken (Spanish and Portuguese). • Haitian revolutions • Mexican revolutions • Liberators		• study about major turning points in world history by investigating the causes and other factors that brought about change and the results of these changes • explain the literal meaning of a historical passage or primary source document, identifying who was involved, what happened, where it happened, what events led up to these developments, and what consequences of outcomes followed

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SOCIAL STUDIES

6th Grade

Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.		
• New nations in Central America. • Brazilian independence from Portugal		
Standard 3 – Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national and global – including the distribution of people, places and environments over the earth's service.		
Core Knowledge topics under American and World history are used to acquire skills under standard 3. Spatial Sense - Continents and major oceans - How to read maps and globes using longitude and latitude; coordinate; degrees - Tropic of Cancer and Tropic of Capricorn; relations to seasons and temperature - Climate zones: arctic, tropic, temperate - Arctic circle and Antarctic Circle Geography -Great Deserts of the World What is a desert? Hot/cold deserts; Major deserts in: Africa, Australia, Asia, North America, South America - Geography of Latin America: Mexico, Panama, Central America and South America: locate major cities and countries including Caracas, Bogotá, Quito, Lima, Santiago, La Paz; Andes Mountains; Brazil: largest country in South America; rain forest: Rio de Janeiro; Amazon River; Argentina: Rio de Plata; Buenos Aires; Pampas	Local, National and Global Spatial View • Environmental and society • Intellectual Skills • Human systems • Physical systems	• map information about people, places, and environments • understand the characteristics, function, and applications of maps, globes, aerial and other photographs, satellite-produced images, and models • investigate why people and places are located where they are located and what patterns can be perceived in these locations • describe the relationships between people and environments and the connections between people and places • formulate geographic questions and define geographic issues and problems • use a number of research skills to locate and gather geographical information about issues and problems • present geographic information in a variety of formats, including maps, tables, graphs, charts, diagrams, and computer-generated models • interpret geographic information by synthesizing data and developing conclusions and generalizations about geographic issues and problems

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6th Grade

Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 4 – Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resource, how major decisions making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and nonmarket mechanisms.		
Topic from standard 1 and 2	United States and Other Societies • Economics • Intellectual Skills • Needs; Wants • Human, Natural and Capital Resources Allocation	Students use topics under Standard 1 (United States History and Standard 2 (World History) to examine: • explain how societies and nations attempt to satisfy their basic needs and wants by utilizing scarce capital, natural, and human resources • define basic economic concepts such as scarcity, supply and demand, markets, opportunity costs, resources, productivity, economic growth, and systems • understand how scarcity requires people and nations to make choices which involve costs and future considerations • understand how people in the US and throughout the world are both producers and consumers of goods and services • investigate how people in the US and throughout the world answer the three fundamental economic questions and solve basic economic problems • describe how traditional, command, market, and mixed economies answer the three fundamental economic questions • explain how nations throughout the world have joined with one another to promote economic development and growth • evaluate economic data by differentiating fact from opinion and identifying frames of reference • develop conclusions about economic issues and problems by creating broad statements which summarize findings and solutions • present economic information by using media and other appropriate visuals such as tables, charts, and graphs to communicate ideas and conclusions

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Core Knowledge Topics across the standards	Standard Area Topic	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 5 – Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental system of the U. S. and other nations, the US. Constitution; the basic civic values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, including avenues of participation		
Topic from standard 1 and 2	New York, United States and World Government • Intellectual Skills • Citizenship, Civic Values, Government • Human Rights: Justice • Political Systems • Power	• consider the nature and evolution of constitutional democracies • explore the rights of citizens in other parts of the hemisphere and determine how they are similar to and different from the rights of American citizens • analyze the sources of a nation's values as embodied in its constitution, statutes and important court cases • value the principles, ideals, and core values of the American democratic system based upon the premises of human dignity, liberty, justice, and equality • understand how the US and NYS Constitutions support majority rule but also protect the rights of the minority • explain what citizenship means in a democratic society, how citizenship is defined in the Constitution and other laws of the land, and how the definition of citizenship has changed in the US and NYS over time • understand that the American legal and political systems guarantee and protect the rights of citizens and assume that citizens will hold and exercise certain civic values and fulfill certain civic responsibilities • respect the rights of other in discussions and classroom debates regardless of whether or not one agrees with their viewpoint • explain the role that civility plays in promoting effective citizenship in preserving democracy • participate in negotiation and compromise to resolve classroom, school, and community disagreements and problems

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

Mathematics

6th Grade

Mathematics Process Strands	Standard Area Topic	Performance Indicators
Standard 3 – Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, at analysis, probability, and trigonometry		
All Process Strands are integrated into the Core Knowledge Topics • Problem Solving • Reasoning and Proof • Communication Connections	• Problem Solving • Reasoning and Proof • Communication • Connections	• understand the efficiency of representing problems in different ways • act out a model with manipulatives • formulate problems and solutions • select an appropriate representation of a problem • translate from a picture to a numeric expression • analyze problems by observing patterns • differentiate between valid and invalid approaches • explain the problem solving strategy used • verify results • understand that mathematical statements can be supported, using models, facts, etc. • make, evaluate, and justify conjectures, using a variety of strategies, manipulatives, models, and expressions • support an argument through examples, and counter examples • provide an organized thought process that is correct and coherent • organize and accurately label work • raise challenging questions • increase use of mathematical vocabulary and language when communicating with others • understand and make connections and conjectures in their everyday life experiences • connect and apply mathematical ideas to solve problems

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Mathematics

6th Grade

Mathematics Process Strands	Standard Area Topic	Performance Indicators
Standard 3 – Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, at analysis, probability, and trigonometry (continued)		
All Process Strands are integrated into the Core Knowledge Topics	• Connections • Representations	• model situations and be able to draw conclusions • recognize and provide examples of mathematics in their daily lives • investigate mathematics in careers • connect mathematics to other disciplines • use physical objects, drawings, charts, tables, models, graphs, symbols, and equations, as representations • explain, describe, and defend mathematical ideas using representations • Use mathematics to show and understand mathematical phenomena i.e., find the missing value that makes the equation true: $(3 + 4) + 5 = 3 + (4 + 5)$

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Mathematics

6th Grade

Mathematics Content Strands	Standard Area Topic	Performance Indicators
Standard 3 – Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, at analysis, probability, and trigonometry		

Continued on next page.

Mathematics Content Strands	Standard Area Topic	Performance Indicators
Standard 3 – Students will understand mathematics and become mathematically confident by communicating and reasoning mathematically, by applying mathematics in real-world settings, and by solving problems through the integrated study of number systems, geometry, algebra, at analysis, probability, and trigonometry		
Number Sense and Operations	Number Sense and Operations	- read and write whole numbers to trillions - define and identify the commutative and associative properties of addition and multiplication; define and identify the identity elements for addition and multiplication - identify zero property of multiplication; understand the concepts of rate, ratio, and proportion - solve proportions using equivalent fractions as well as the products test - identify percents of whole numbers and solve percent problems - define absolute value - locate and order rational numbers on a number line - add, subtract, multiply and divide fractions and mixed numbers with unlike denominators - identify the multiplicative inverse of a number - represent fractions as terminating or repeating decimals - use exponential form - translate two-step verbal expressions into algebraic expressions as well as evaluate algebraic expressions - solve two-step equations - evaluate formulas, i.e. circumference, area, volume, distance, etc.
Pre-Algebra/Algebra	Algebra	
Geometry	Geometry	- find the length of corresponding sides of similar triangles - find the area of triangles, quadrilaterals, and regular and irregular polygons - develop and use the formula for the volume of a rectangular prism - identify parts of a circle - understand the relationship between the diameter and radius of a circle - determine the area, sector area, and circumference of a circle - plot points in all four quadrants
Measurement	Measurement	- calculate volume of a rectangular prism - identify customary and metric units of capacity - find equivalent measures within a system - develop the concept of sampling when collecting data - record data in a frequency table - construct Venn diagrams to sort data - determine the mean, mode, and media for a given set of data
Statistics and Probability	Statistics and Probability	- list possible outcomes for compound events - determine the probability of dependent events - use the fundamental counting principle to determine the number of

SCIENCE

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**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
-Energy as distinguished from work – to have energy. -Two main types of energy: Kinetic and potential; Some types of potential energy-gravitational chemical, elastic electromagnetic Some types of kinetic energy: moving objects, heat, sound and other waves Energy is conserved in a system • Power -Relationship between work and time: a measure of work done and the time it takes to do it -Common units of measuring power foot –pounds per second, horsepower (English); watts, kilowatts (metric system) Energy, Heat, and Energy Transfer • Energy -Six forms of energy: mechanical, heat electrical, wave, chemical, nuclear	• Dependence of plants & animals on each other & environment • Impact of human activities impact environment	* knows that energy is a property of many substances * understands the law of conservation of energy * knows that most chemical and nuclear reactions involve a transfer of energy * knows that only a narrow range of wavelengths of electromagnetic radiation can be seen by the human eye • Develop mental models to explain common chemical reactions and changes in the states of matter

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
Many forms of energy are interchangeable, such as gasoline in a car, windmills, and hydroelectric plants, -Sources of energy: coal,, natural, gas solar, atomic geothermal, mechanical motion such as falling water and wind -Fossil fuels: carbon; coal oil; natural gas, fossil fuel as finite resource; -Environmental impact of fossil fuels; carbon dioxide and global warming theory; greenhouse effect; oil spills; acid rain., -Nuclear energy Uranium; fission Nuclear reactor; radioactive waste; Nuclear poser plants; safety and accidents (i.e. Three Mile Island, Chernobyle		

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
• Heat -Heat and temperature: how vigorously atoms are moving and colliding -Three ways that heat energy can be transfered; conduction, convection radiation; the direction of heat transfer. • Physical Change: Energy Transfer -Properties of different phases of matter (review) -A change of phase is a physical change (no new substance is produced) -Matter can be made to change phases by adding or removing energy -Expansion and contraction Changes phases: each substance has its own melting and boiling point; freezing point and boiling points in Celsius and Fahrenheit		*knows that chemical and nuclear reactions involve the transfer of energy

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
-Distillation: separation of mixtures of liquids with different boiling points. • Astronomy: Gravity, Stars, and Galaxies Gravity -An attractive force; keeps planets in orbit Stars -Sun is a star -Kinds of stars -Supernova; black holes - Movement of stars caused by rotation of the earth Constellations -Astronomical distance: measured in light years Galaxies -Milky Way -Andromeda Galaxy, Quasars		*knows that chemical and nuclear reactions involve the transfer of energy *knows that gravitational force keeps planets in orbit round the Sun. Moons in orbit around the planets *knows characteristics and movement patterns of asteroids, comets, and meteors *knows the universe consists of many billions of galaxies, each containing billions of stars, that incomprehensible distance (measured in light years) separate these galaxies and stars from one another far from the earth *knows the Earth and Solar System appear to be somewhat unique, in that it is the only celestial body known to support life, although similar systems might yet be discovered in the universe *explains daily, monthly, seasonal, changes on Earth

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
Life Science The Forest -Interdependence of forest life -Woody perennials; the importance of lignin; difference between a tree and a shrub -Growth and structure of trees; single stem (trunk) for height; advantages of height stem structure; xylem, cambium, phloem heartwood, sapwood, rays, rings, bark -The “crow”; actively growing leaf area -Types of roots; how water gets from the ground to the top -Tropical rain forest; distinguishing characteristics and species types. In Central and South America, Africa,		*knows that all organisms are composed of cells, which are the fundamental units of life; most organisms are single *knows how an organisms ability to regulate its internal environment enables the organism to obtain and use resources, grow, reproduce, and maintain stable internal conditions while living in a constantly changing external environment *knows factors that affect the number and types of organisms that ecosystems can support such as abiotic factors such as quantity of light and water, range of temperatures, and oil composition; disease, competition from other organisms within the ecosystem

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Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
Asia, Australia; High average rainfall and temperature; Mostly evergreen trees and plants, many vines; contain half of the planet's species -Temperate hardwood forest; distinguishing characteristics and species types in North American, Europe, Asia; Seasonal rainfall; Succession of trees from conifers to deciduous depending on different climates and soil -Effects of deforestation; Change of weather patterns; Instability of humidity; temperature, carbon dioxide level; desertification The Human Body -Circulatory and lymphatic systems: Lymph, lymph nodes, white cells, tonsils, blood pressure, hardening and clogging of arteries.		• explain the functioning of the major human organ systems *knows that multi-cellular organisms have a variety of specialized cells, tissues, organs, and organs systems. *knows that disease in organisms can be caused by intrinsic failure of the system or infection by other organisms specialized functions *explains the functioning of the major human organ systems and their interactions

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment living environment and recognize the historical development of ideas in science <i>*All Performance Indicators in our Science Curriculum follow the NYSED guidelines. However, it is necessary to list and indicate additional Performance Indicators developed by us since our Science Curriculum currently exceeds that which is prescribed by NYSED.</i>		
The immune system fights infections from bacteria, viruses, fungi; White cells, antibodies, antigens; Vaccines, communicable and non-communicable disease, epidemics; Bacterial diseases: tetanus, typhoid, tuberculosis; antibiotics like penicillin discovered by Alexander Fleming; Viral diseases: common cold, chickenpox, mononucleosis, rabies, polio, AIDS Science Biographies -Marie Curie Albert Einstein Lewis Howard Latimer Isaac Newton		• explain the functioning of the major human organ systems *knows that multi-cellular organisms have a variety of specialized cells, tissues, organs, and organs systems. *knows that disease in organisms can be caused by intrinsic failure of the system or infection by other organisms specialized functions *explains the functioning of the major human organ systems and their interactions

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 5 - Technology		
Technology is a non-content area. Core Knowledge Topics are non-applicable	Technology Foundation Standards for Students 1.Basic operations and concepts 2.Social, ethical, and human issues 3.Technology productivity tools	Students will: • demonstrate a sound understanding of the nature and operation of technology systems • demonstrate proficiency in the use of technology • understand the ethical, cultural, and societal issues related to technology • practice responsible use of technology systems, information, and software • develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity • use technology tools to enhance learning, increase productivity, and promote creativity • use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 5 - Technology		
Technology is a non-content area. Core Knowledge Topics are non-applicable	4. Technology communications tools	• use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences • use a variety of media and formats to communicate information and ideas effectively to multiple audiences
	5. Technology research tools	• use technology to locate, evaluate, and collect information from a variety of sources • use technology tools to process data and report results • evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks
	6. Technology problem-solving and decision-making tools	• use technology resources for solving problems and making informed decisions • employ technology in the development of strategies for solving problems in the real world.

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 5 - Technology Technology is a non-content area. Core Knowledge Topics are non-applicable		Prior to completion of Grade 8 and during grades 6 ,7 , and 8 students will: • Apply strategies for identifying and solving routine hardware and software problems that occur during everyday use. (1) • Demonstrate knowledge of current changes in information technologies and the effect those changes have on the workplace and society. (2) • Exhibit legal and ethical behaviors when using information and technology, and discuss consequences of misuse. (2) • Use content-specific tools, software, and simulations (e.g., environmental probes, graphing calculators, exploratory environments, Web tools) to support learning and research. (3, 5) • Apply productivity/multimedia tools and peripherals to support personal productivity, group collaboration, and learning throughout the curriculum. (3 , 6)

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SCIENCE

6th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 5 - Technology Technology is a non-content area. Core Knowledge Topics are non-applicable		• Design, develop, publish, and present products (e.g., Web pages, videotapes) using technology resources that demonstrate and communicate curriculum concepts to audiences inside and outside the classroom. (4, 5, 6) • Collaborate with peers, experts, and others using telecommunications and collaborative tools to investigate curriculum-related problems, issues, and information, and to develop solutions or products for audiences inside and outside the classroom. (4, 5) • Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems. (5, 6) • Demonstrate an understanding of concepts underlying hardware, software, and connectivity, and of practical applications to learning and problem solving. (1, 6) • Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems. (2, 5, 6)

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

HEALTH, PHYSICAL EDUCATION, FAMILY AND CONSUMER SCIENCES 6th to 8th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Personal Health and Fitness – Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity and maintain personal health.		
Health, Physical Education, Family and Consumer Sciences are non-content areas. Core Knowledge Topics are non-applicable	• Human growth and development • Positive healthy behaviors • Basic motor and manipulative skills • Proficiency in complex motor and sport activities • Personal fitness programs • Good nutrition for appropriate diets • Healthy food preparation	• demonstrate competency in a variety of physical activities (games, sports, exercises) that provide conditioning for each fitness area • know that motor skills progress in complexity and need to be used in the context of games and sports with additional environmental constraints • combine and integrate fundamental skills and adjust technique based on feedback, including self assessment • understand the relationship between physical activity and the prevention of illness, disease and premature death • develop and implement a personal fitness plan based on self assessment and goal setting understand physiological changes that result from training and understand the health benefits of regular participation in activity • develop leadership, problem solving, cooperation and team work by participating in group activities
Standard 2 – A safe and Healthy Environment – Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.		
	• Responsible for personal and social behavior • Care for the environment • Home and community safety	• understand the risks of injury if physical activity is performed incorrectly or performed in extreme environmental conditions and recognize the importance of safe physical conditions • develop skills of cooperation and collaboration, as well as fairness, sportsmanship, and respect for others

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

HEALTH, PHYSICAL EDUCATION, FAMILY AND CONSUMER SCIENCES 6th to 8th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 2 – A safe and Healthy Environment – Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.		
	• Influences of culture, media and technology on healthy families and communities. • Informed and active consumers of community programs on physical fitness • Positive relationships in home, workplace and communities	• work constructively with others to accomplish a goal in a group activity, demonstrating consideration for others involved • understand the physical and environmental dangers associated with particular activities and demonstrate proper procedures for participation in games sports and recreational pursuits • understand the role of physical activity, sport, and games as a balance between cooperative and competitive behaviors and as a possible arena in which to develop and sharpen leadership and problem solving skills, and understand the physical, emotional, and social benefits of participation in physical activities
Standard 3 – Resource Management - Students will understand and e able to manage their personal and community resources.		
	• Influences of culture, media and technology on healthy families and communities. • Informed and active consumers of community programs on physical fitness • Positive relationships in home, workplace and communities	• should be informed consumers, aware of the alternatives available to them within their communities for physical activity and should be able to evaluate facilities and programs available • demonstrate the ability to locate physical activity information, products and services • know some career options in the field of physical fitness and sports

THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM

THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 1 – Creating, Performing and Participating in the Arts - Students will actively engage in the process that constitute creation and performance in the arts (dance, music, theatre, and visual arts) and participate in various roles in the arts.		
Note: Core Knowledge Topics under other The Arts are linked to address all four Arts Standards, as well as being linked to other disciplines.	• Dance Students will perform dance forms and understand choreography • Music Students will play their own music and music written by others • Theatre Students will create and perform theatre pieces • Visual Arts Students use a variety of materials and techniques to create art	• dance a range of forms from free improvisation to structured choreography • demonstrate the ability to take various roles in group productions and performances. • improvise short musical compositions that exhibit cohesiveness and musical expression • use language, voice, gesture, movement, and observation to create character and interact with others in improvisation, rehearsal and performance. • imitate various experiences through pantomime, play making dramatic play, story dramatization, storytelling, role playing improvisation, and guided playwriting • use the elements and principles of art to communicate specific meanings to others in their art work
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles. (continued)		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards Elements of Music • Review from earlier grades: The orchestra and families of, instruments; keyboard instruments;	<u>Dance, Music, Theatre & Visual Arts</u> Students will: Evaluate and interpret art forms Express opinions, using vocabulary of the art form Connect art form to other disciplines	• demonstrate knowledge of sources for understanding dance technologies: live, print video, computer, etc. • demonstrate knowledge of how human structure and function affect movement in parts of dances and dances that they know or have been choreographed • use school and community resources to develop information on music and musicians

THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM

THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.(continued)		
Vocal ranges: soprano, mezzo-soprano, alto; tenor baritone, bass - Recognize frequently used Italian terms: <i>grave, largo, adagio, andante, mderto, allegro, presto, prestissimo, ritardando and accelerando, crescendo and decrescendo, legato.</i> - Recognize introduction, interlude, and coda in musical selection. - Recognize theme and variation. - Identify chords[such as I(tonic, IV (subdominant), V(dominant); V7]; major and minor chords; chord changes; intervals (third, fourth, fifth). - Understand what an octave is - Understand notation and fermis: treble clef, bass clef, staff, barline, double bar line, measure, repeat signs, whole note, half note, quarter note, eighth note, whole rest, half rest, quarter rest, eighth rest, grouped sixteenth notes, tied notes and dotted notes, sharps, flats, naturals, <i>Da capo al fine</i>, meter signature: 4/4 or common time 2/2, _ 6/8, quiet <i>pp p mp</i>		- demonstrate appropriate listening and other participatory responses to music of a variety of genres and cultures. - investigate some career options related to their musical interests. - use the school or community library/media centers and other resources to develop information on various theatre-related topics - know about local theatrical institutions, attend performances in school and in the community, and demonstrate appropriate audience behavior - discuss vocations/avocations with theatre professionals and identify the skills and preparation necessary for theatre vocations/avocations. - develop skills with a variety of art materials and competence in at least one medium - use the computer and other electronic media as designing tools and to communicate visual ideas - take advantage of community opportunities and cultural institutions to learn from professional artists, look at original art, and increase their understanding of art - understand the variety of careers related to the visual arts and the skills necessary to pursue some of them

THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM

THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles. (continued)		
Classical Music: From Baroque to Romantic <i>Baroque (ca. 1600 – 1750)</i> • Counterpoint; fugue; oratorio • Johann Sebastian Bach: selections from <i>Brandenburg Concertos</i>; selections from <i>The Well Tempered Clavier</i>, Chorus, “Wachet auf, ruft uns die Stimme” from <i>Cantata BWV 140 Wachet Auf (Sleeper Awake)</i> • George Frederick Handel: selections from <i>Water Music</i>, “Hallelujah Chorus” from <i>The Messiah</i> <i>Classical (ca. 1750 – 1825)</i> • Classical symphony (typically in four movements) Wolfgang Amadeus Mozart, <i>Symphony No. 40</i> • The classical concerto: soloist, cadenza Wolfgang Amadeus Mozart, <i>Symphony No. 21</i> • Chamber music; string quartet; sonata; lieder (art songs) Franz Joseph Haydn, <i>String Quartet Opus 76 No. 3, “Emperor”</i> Ludwig van Beethoven, <i>Piano Sonata No.14</i>		

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CORE KNOWLEDGE CURRICULUM

THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.(continued)		
<i>Romantic (ca. 1800-1900)</i> • Beethoven as a transitional figure: <i>Symphony No. 9</i> (fourth movement) • Romantic composers and works: Frank Schubert, lieder: <i>Die Forelle</i>("the Trout) <i>Gretchen am Spinnrade</i> ("Gretchen at the Spinning Wheel") Frederick Chopin: "Funeral March" from <i>Piano Sonata No. 2 in B flat minor</i>, "Minute Waltz; "Revolutionary" <i>Etude in C minor</i> Robert Schumann, <i>Piano Concerto in A Minor</i>		
Standard 3 - Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards Listening and Understanding • Composers and their Music Classical Music: From Baroque to Romantic <i>Baroque (ca. 1600 – 1750)</i> • Counterpoint; fugue; oratorio	<u>Dance</u> Students will: • Express through written and oral language their understanding, interpretation, and evaluation of dances they see, do, and read about. <u>Music</u> Students will: • Demonstrate the capacity to listen to and comment on music	• demonstrate knowledge of choreographic principles and processes • express to others their understanding of specific dance performances, including perceptions descriptions, analyses, interpretations, and evaluations • through listening analyze and evaluate their own and others' performances, improvisations and compositions by identifying and comparing them with similar works and events • use appropriate terms to reflect a working knowledge of social-musical functions and uses (appropriate choices of music for common ceremonies and other events)

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CORE KNOWLEDGE CURRICULUM

THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 3 - Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.(continued)		
- Johann Sebastian Bach: selections from <i>Brandenburg Concertos</i>; selections from <i>The Well Tempered Clavier</i>, Chorus, "Wachet auf, ruft uns die Stimme" from <i>Cantata BWV 140 Wachet Auf (Sleeper Awake)</i> - George Frederick Handel: selections from <i>Water Music</i>, "Hallelujah Chorus" from <i>The Messiah</i> <i>Classical (ca. 1750 – 1825)</i> - Classical symphony (typically in four movements) Wolfgang Amadeus Mozart, <i>Symphony No. 40</i> - The classical concerto: soloist, cadenza Wolfgang Amadeus Mozart, <i>Symphony No. 21</i> - Chamber music; string quartet; sonata; lieder (art songs) Franz Joseph Haydn, <i>String Quartet Opus 76 No. 3, "Emperor"</i> Ludwig van Beethoven, <i>Piano Sonata No. 14 (Moonlight" Sonata)</i>	<u>Visual Arts</u> Students will: - Reflect on, interpret, and evaluate plays and theatrical performances, both live and recorded, using the language of dramatic criticism. - Reflect on, interpret and evaluate works of art, using the language of art criticism.	

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THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 3 - Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought. (continued)		
<i>Romantic (ca. 1800-1900)</i> • Beethoven as a transitional figure: <i>Symphony No. 9</i> (fourth movement) • Romantic composers and works: Frank Schubert, lieder: <i>Die Forelle</i>("the Trout) <i>Gretchen am Spinnrade</i> ("Gretchen at the Spinning Wheel") Frederick Chopin: "Funeral March" from <i>Piano Sonata No. 2 in B flat minor</i>, "Minute Waltz"; "Revolutionary" <i>Etude in C minor</i> Robert Schumann, <i>Piano Concerto in A Minor</i>		
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society.(continued)		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards Visual Arts • Art History: Periods & Schools <i>Classical Art: The art of Ancient Greece and Rome.</i>	<u>Dance</u> • Know dances from many cultures and time and recognize their relationship to various cultural, social, and historic contexts. •	• identify the major dance forms of specific world cultures past and present • identify some of the major dance artists from diverse cultures • show how specific dance forms are related to the culture from which they come • identify from a performance or recording the titles and composers of well-known examples of classical concert music and blues/jazz selections

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THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society.(continued)		
- Observe characteristics considered “classic” with emphasis on balance and proportion; idealization of hum form in - The Parthenon and the Pantheon; <i>The Discus Thrower and Apollo Belvedere.</i> <i>Gothic Art (12th – 15 centuries)</i> - Review the religious inspiration and characteristic features of Gothic cathedrals. <i>The Renaissance (1350-1600)</i> - Briefly review main features of Renaissance art (revival of classical subjects and techniques; emphasis on humanity; discovery of perspective, etc.) and examine representative working, including - Raphael, <i>The School of Athens</i> - Michelangelo, <i>David</i> <i>Baroque (17century)</i> - Note the dramatic use of light and shade, turbulent compositions, and vivid emotional expression in: El Greco, <i>View of Toledo</i>); Rembrandt: a self portrait; <i>Landscape with Obelisk</i>	<u>Music</u> Students will: Develop a performing and listening repertoire of music of various genres, styles, and cultures that represent the peoples of this world and their manifestations in the United States. <u>Theatre</u> Students will: - Gain knowledge about past and present cultures as expressed through theatre. <u>Visual Arts</u> Students will: - Explore art and artifacts from various historical periods and world cultures to discover the roles that art plays in the lives of people of a given time and place and to understand how the time and place influence the visual characteristics of the art work.	- identify the major dance forms of specific world cultures past and present - identify some of the major dance artists from diverse cultures - show how specific dance forms are related to the culture from which they come - identify from a performance or recording the titles and composers of well-known examples of classical concert music and blues/jazz selections - identify the cultural contexts of a performance or recording and perform (with movement, where culturally appropriate) a varied repertoire of folk, art and contemporary selections from the basic cultures that represent the peoples of the world - improvise scenes based on information about various cultures - create intercultural celebrations using props, settings and costumes explain how drama/theatre experiences relate to themselves and others - knows similarities and differences in steps and movement styles among old and classical dances from various cultures - demonstrate how art works and artifacts from diverse world cultures reflect aspects of those cultures

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THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society.(continued)		
<i>Rocco (ca mid – to late 1700's)</i> - Note the decorative and “pretty” nature of Rococo art, the use of soft pastel colors, and the refined, sentimental, or playful <i>subjects</i> in Jean Honoré Fragonard, <i>The Swing</i>. <i>Neoclassical (ca late 18th – early century)</i> - Characteristics of Neoclassical art the reaction against Baroque and Rococo; the revival of classical forms and subjects; balanced, clearly articulated forms; and belief in high moral purpose of art, in Jacques Louis David, <i>Oath of the Horatii</i> <i>Romantic (ca late 18th – 19th century)</i> - Now Romantic art is in part a reaction against Neoclassicism, with a bold, expressive, emotional style, and a characteristic interest in the exotic or in powerful forces in nature in Francisco Goya, <i>the Bullfight</i> Eugene Delacroix, <i>Liberty Leading the People</i> Casper David Friedrich, <i>The Chalk Cliffs of Rugen</i>		

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THE ARTS

6th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society.(continued)		
<i>Realism (ca. mid to late 19th century)</i> - The Realist's characteristic belief that art should represent ordinary people and activities, that are does not have to be up lifting, edifying, or beautiful, in Jean Millet, <i>The Gleaners</i> Gustave Courbet, <i>The Stone Breakers</i>. - Become familiar with examples of American realism, including Winslow Homer, <i>Noreaster</i> Thomas Easkins, <i>The Gross Clinic</i> Henry O. Tanner, <i>The Banjo Lesson</i>.		

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

6th to 8th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.		
Career Development and Occupational Studies is a non-content area. Core Knowledge Topics are non-applicable.	• Career Planning • Changing Role of Men and Women • Changing Workplace	• continue to development of a career plan that would assist in the transition from school to eventual entry into a career option of their choosing • demonstrate and understanding of the relationship among personal interests, skills and abilities and career research • understand the relationship among personal interests, skills, and abilities, and career research • understand the relationship of personal interests, skills and abilities to successful employment • demonstrate an understanding of the relationship between the changing nature of work and educational requirements • understand the relationship of personal choices to future career
Standard 2 – Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings		
	• Application to “Real World” Settings	• apply academic knowledge and skills using an interdisciplinary approach to demonstrate the relevance of how these skills are applied in work-related situations in local, state, national, and international communities • solve problems that call for applying academic knowledge and skills • use academic knowledge and skills in an occupational context, and demonstrate the application of these skills by using a variety of communication techniques (e.g., sign language, pictures, videos, reports and technology)

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CORE KNOWLEDGE CURRICULUM**

CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

6th to 8th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 3a – Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace		
	• Communication Skills • Information Gathering Skills • Problem Solving Skills • Social Skills	• listen to and read the ideas of others and analyze what they hear and read; acquire and use information from a variety of sources, and apply a combination of mathematical operations to solve problems in oral or written form • demonstrate an understanding of the relationship between individuals and society and interact with others in a positive manner • demonstrate the ability to work with others, present facts that support arguments, listen to dissenting points of view, and reach a shared decision • select and use appropriate technology to complete a task • select and communicate information in an appropriate format (e.g., oral, written, graphic, pictorial, multimedia) • understand the material, human and financial resources needed to accomplish tasks and activities • understand the process of evaluating and modifying systems within an organization
Standard 3b – Students will choose a career major, will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in post secondary programs.		
	• Interpersonal Skills • Interrelatedness of Business, Social, Economic Systems • Resources Allocation • Targeted Technical Knowledge/Skills	• demonstrate an understanding of business, marketing, and multinational economic concepts, perform business-related mathematical computations, and analyze/interpret business related numerical information

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CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

6th to 8th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 3b – Students will choose a career major, will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in post secondary programs.		
		• prepare, maintain, interpret/analyze and transmit/distribute information in a variety of formats while demonstrating the oral, nonverbal and written communication skills, essential for working in today's international service-/information-/technological-based economy • demonstrate an understanding of the interrelatedness of business, social and economic systems/subsystems • identify, organize, plan, and allocate resources (e.g., financial, materials/ facilities, human, time) in demonstrating the ability to manage their lives as learners, contributing family members, globally competitive workers and self –sufficient individuals • exhibit interpersonal skills essential for success in the multinational business world, demonstrate basic leadership abilities/skills, and function effectively as members of a work group or team.

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

5th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Students will be knowledgeable about the world of work, explore career options, and relate personal skills, aptitudes, and abilities to future career decisions.		
	• Career Planning • Changing Role of Men and Women • Changing Workplace	• continue the development of a career plan that would assist in the transition from school to eventual entry into a career option of their choosing • demonstrate an understanding of the relationship among personal interests, skills, and abilities and career research • understand the relationship among personal interests, skills, and abilities, and career research • understand the relationship of personal interests, skills and abilities to successful employment • demonstrate an understanding of the relationship between the changing nature of work and educational requirements • understand the relationship of personal choices to future career decisions
Standard 2 – Students will demonstrate how academic knowledge and skills are applied in the workplace and other settings		
	• Application to “Real World” Settings	• apply academic knowledge and skills using an interdisciplinary approach to demonstrate the relevance of how these skills are applied in work-related situations in local, state, national, and international communities • solve problems that call for applying academic knowledge and skills • use academic knowledge and skills in an occupational context, and demonstrate the application of these skills by using a variety of communication techniques (e.g., sign language, pictures, videos, reports and technology).

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CAREER DEVELOPMENT AND OCCUPATIONAL STUDIES

5th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 3a – Students will demonstrate mastery of the foundation skills and competencies essential for success in the workplace		
	• Communication Skills • Information Gathering Skills • Problem Solving Skills • Social Skills	• listen to and read the ideas of others and analyze what they hear and read; acquire and use information from a variety of sources; and apply a combination of mathematical operations to solve problems in oral or written form • evaluate facts, solved advanced problems, and make decisions by applying logic and reasoning skills • demonstrate an understanding of the relationship between individuals and society and interact with others in a positive manner • demonstrate the ability to work with others, present facts that support arguments, listen to dissenting points of view, and reach a shared decision • select and use appropriate technology to complete a task • select and communicate information in an appropriate format (e.g. oral, written, graphic, pictorial, multimedia) • understand the material, human and financial resources needed to accomplish tasks and activities • understand the process of evaluating and modifying systems within an organization
Standard 3b – Students will choose a career major, will acquire the career-specific technical knowledge/skills necessary to progress toward gainful employment, career advancement, and success in post secondary programs.		
	• Interpersonal Skills • Interrelatedness of Business, Social, Economic Systems • Resources Allocation • Targeted Technical Knowledge/Skills	Not applicable to 5 th grade students

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

Social Studies

5th Grade

Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York.		
Westward expansion before the Civil War • Early exploration of the west • Pioneers quest for the west - Santa Fe and Oregon Trails, gold rush. • Indian resistance: - The battle of Tippecanoe - Osceola: the Seminole leader - Tecumseh (Shawnee) attempt to unite tribes • The meaning of the “Manifest Destiny” and the conflict with Mexico - The Battle of the Alamo - Mexican successions to the U.S. Westward expansion after the Civil War • Homestead Act • “Go west. Man” (Horace Greeley’s advice)	United States & New York History • Intellectual Skills • Belief Systems • Conflict • Cultural Identity, Diversity and interdependence.	• investigate key turning points in New York State and United States history and explain why these events or developments are significant. • describe historic events through the eyes and experiences of those who were there. • complete well-documented and historically accurate case studies about individuals and groups who represent different ethnic, national, and religious groups who represent different ethnic, national, and religious groups, including Native American Indians, in New York State and the United States at different times and in different locations. • gather and organize information about the important achievements and contributions of individuals and groups living in New York State and the United States. • explore the meaning of American culture by identifying the key ideas, beliefs, and patterns of behavior, and traditions that help define it and unite all Americans

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

Social Studies

5th Grade

Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. (Continued)		
• Railroads: Transcontinental Rail Roads links the east to west; immigrant labor. • Cowboys; the cattle drives • The “wild west”, reality versus legend: Billy the Kid, Jesse James, Annie Oakley, Buffalo Bill. • Buffalo Soldiers: African American troops in the west. • US purchases Alaska from Russia: “Seward’s Folly” • 1890: The closing of the American frontier as • acknowledged by the U.S. Census; the symbolic significance of the frontier. The Civil War: Causes, Conflicts, and Consequences Toward the Civil War • Abolitionists: William Lloyd • Garrison and <i>The Liberator</i>, Fredrick Douglas		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. (Continued)		
- Industrial North versus the agricultural South - The Mason-Dixon Line - The importance of Harriet Beecher Stowe’s “Uncle Tom’s Cabin. - Lincoln: “A house divided against itself cannot stand” Lincoln-Douglas Debates The Civil War - Fort Sumter - Confederacy: Jefferson Davis, President - Yankees and Rebels: Blue and Grey - First Battle of Bull Run - Robert E. Lee and Ulysses S. Grant - General Stonewall Jackson - Emancipation Proclamation - Ironclad ships: battle of USS monitor and CSS Virginia (The Merrimack) - Gettysburg and the Gettysburg Address.		- describe how ordinary people and famous historic figures in the local community, State, and the United States have advanced the fundamental democratic values, beliefs, and traditions expressed in the Declaration of Independence, the New York State and United States Constitutions, the Bill of Rights, and other important historic documents. - consider the sources of historic documents, narratives, or artifacts and evaluate their reliability. - understand how different experiences, beliefs, values, traditions, and motives cause individuals and groups to interpret historic events and issues from different perspectives. - compare and contrast different interpretations of key events and issues in New York State and United States history and explain reasons for these different accounts

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. (Continued)		
• Battle of Antietam Creek • African-American troops: Massachusetts regiment led by Colonel Shaw • Sherman’s march to the sea; burning of Alabama • Lincoln re-elected: concluding words of the Second Inaugural Address (“With malice toward none, with charity for all...”) • Richmond (confederate capital) falls to Union Forces • Surrender at Appomattox • Assassination of Lincoln by John Wilkes Booth Reconstruction • The South in ruins • Struggles for control of the south: Radical Republicans vs. Andrew Johnson: impeachment • Carpetbaggers and scalawags		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. (Continued)		
• Freedmen’s Bureau: “40 acres and a mule” • 13th, 14th, and 15th Amendments to the constitution • Black Codes; the Ku Klux Klan and the “vigilante justice” • End of Reconstruction: Compromise of 1877, all federal troops removed from the South Native American: Cultures and Conflicts • Culture and Life: - Great Basin and Plateau - Northern and Southern Plains - Pacific Northwest • American Government Policies - Bureau of Indian Affairs - Forced removal to reservations		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 1 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in the history of the United States and New York. (Continued)		
- Attempts to break down tribal life; Assimilation policies; Carlisle School. Conflicts - Sand Creek Massacre - Little Big Horn: Crazy Horse, Sitting Bull, Custer’s Last Stand - Wounded Knee, Ghost Dance		
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.		
Meso-American Civilizations Maya, Inca, and Aztec Civilizations - Ancient Maya lived in modern day southern Mexico and parts of Central America; descendants will live here today. - Pyramids and temples as accomplishments as architects and artisans.	World history - Intellectual Skills - Belief Systems - Conflict - Cultural Identity, Diversity, and Interdependence	- know the social and economic characteristics, such as customs, traditions, child-rearing practices, ways of making a living, education and socialization practices, gender roles, foods and religious and spiritual beliefs that distinguish different cultures and civilizations - know some important historic events and developments of past civilizations - interpret and analyze documents and artifacts related to significant developments and events in world history - study about major turning points in world history by investigating the causes and other factors that brought about change and the results of these changes

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives.		
- Development of a hieroglyphic writing system. - Knowledge of astronomy and mathematics; development of a 365 day calendar, early use of the concept of zero. • The Aztecs - A warrior culture, at its height of the 1400s and 1500s, the empire covered much of what is now central Mexico. - Island city of Tenochtitlan: aqueducts, massive temples. - Moctezuma - Ruler-priests: Practice of human sacrifices • The Incas - Rulers of empire stretching Pacificcoast of South America Builders of great cities such as Machu Picchu, Cuzco High in the Andes mountains, connected by a system of roads.		• classify historic information according to the type of activity or practice: social, cultural, political, economic, geographic, scientific, technological and historic

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (Continued)		
• Spanish Conquerors - Conquistadors Cortes and Pizzaro - Advantages of Spanish weapons (guns and cannons) - Diseases devastate native peoples. European Exploration, Trade, and the Clash of Cultures • European Exploration, trade, and colonization - Portugal Exploration of the West African Coast; the Cape of good hope; spice trade with India; exploration of East Africa; East African Swahili city-states - Spain Two worlds meet: Columbus and the Tainos Treaty of Tordesillas, Magellan crosses the Pacific; first round the world voyage		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (Continued)		
- England and France - Search for Northwest passage. Colonies in North America and West Indies - Trading posts in India - Holland Dutch take over Portuguese trade routes and colonies in Africa and East Indies .Dutch in South Africa and Cape Town and North America • Trade and Slavery - The sugar trade - Transatlantic slave trade: the “triangle trade” from Europe to Africa to colonies. The “Slave Coast” in West Africa - The Middle Passage The Renaissance and the Reformation • The Renaissance - Islamic scholars translate Greek works - A “rebirth” of ideas		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (Continued)		
- New trade, new wealth - Patrons of the arts and learning - Renaissance ideals and values are embodied. • The Reformation - Gutenberg’s printing press - The Protestant Reformation - The counter reformation - Conflicts between science and the church. England from the Golden Age of the “Glorious Revolution” • England in the Golden Age - British naval dominance - British exploration and North American settlements		• investigate the roles and contributions of individuals and groups in relation to key social, political, cultural, and religious practices throughout world history • explain the literal meaning of a historical passage or primary source document, identifying who was involved, what happened, where it happened, what events led up to these developments and what consequences or outcomes followed • investigate important events and developments in world history by posing analytical questions, selecting relevant data, distinguishing fact from opinion, hypothesizing cause-and-effect relationships, testing these hypotheses, and forming conclusions

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (Continued)		
- Elizabeth I; Henry VIII and the Church of England • From the English Revolution to the Glorious Revolution - The English Revolution\ King Charles I vs. Puritans and Parliament Civil War The Restoration - The “Glorious Revolution” (The Bloodless Revolution) King James II Replaced by William and Mary - Bill of Rights Russia: Early Growth and Expansion • History and Culture Successor to Byzantine Empire; Ivan the Great; Ivan the Terrible; Peter the Great;		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will use a variety of intellectual skills to demonstrate their understanding of major ideas, eras, themes, developments, and turning points in world history and examine the broad sweep of history from a variety of perspectives. (Continued)		
Catherine the Great Feudal Japan History and Culture Emperor as nominal leader; Samurai; Rigid class system; Japan closed to outsiders;		
Standard 3 – Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national and global – including the distribution of people, places and environments over the earth’s service.		
Core Knowledge topics under American and World history are used to acquire skills under standard 3. U. S. Geography - Locate: Western Hemisphere, North American, Caribbean Sea, Gulf of Mexico - The Gulf Stream and how it affects climates	Local, National and Global Spatial View - Environmental and society - Intellectual Skills - Human systems - Physical systems	- map information about people, places and environments - understand the characteristics, functions, and applications of maps, globes, aerial, and other photographs, satellite-produced images, and models - investigate why people and places are located where they are located and what patterns can be perceived in these locations - describe the relationships between people and environments and the connections between people and places - formulate geographic questions and define geographic issues and problems

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 3 – Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national and global – including the distribution of people, places and environments over the earth’s service. (Continued)		
- Regions and their characteristics: New England, Mid-Atlantic, South, Midwest, Great Plains, Southwest, West, Pacific Northwest. - Fifty States and capitals World Geography - Spatial Sense - Read maps and globes using longitude and latitude: coordinates; degrees - Tropic of Cancer and Tropic of Capricorn; relations to seasons and temperature - Climate zones; Arctic, Tropic, Temperate - Time zones - Artic and Antarctic Circles - From a round globe to a flat map; Mercator projection; conic and plane projections. - Great Lakes of the World - Eurasia: Caspian Sea - Asia: Aral Sea		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 3 – Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national and global – including the distribution of people, places and environments over the earth’s service. (Continued)		
- Africa: Victoria, Tanganyika, Chad - North America: Superior; Huron, Michigan - South America: Maracaibo, Titicaca • Russia - Moscow and St. Petersburg - Ural Mountains; Siberia; steppes - Volga and Don Rivers - Black, Caspian, and Baltic Seas - Search for a warm-water port • Japan - Pacific Ocean: Sea of Japan - Four main islands: Tokkaido, Honshu, Shikoku, Kyushu - Tokyo - Typhoons; earthquakes - The Pacific Rim		

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 3 – Students will use a variety of intellectual skills to demonstrate their understanding of the geography of the interdependent world in which we live – local, national and global – including the distribution of people, places and environments over the earth’s service. (Continued)		
• Geography of the Spice Trade - The Moluccas (The Spice Islands) - Locate region known as Indochina: the Malay Peninsula; the Philippines - Definition of archipelago “Ring of Fire: earthquakes and volcanic activity		
Standard 4 – Students will use a variety of intellectual skills to demonstrate their understanding of how the United States and other societies develop economic systems and associated institutions to allocate scarce resource, how major decisions making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and nonmarket mechanisms.		
• Exploration • Restoration of America • Westward Expansion • The Civil War	United States and Other Societies • Economics • Intellectual Skills • Needs; Wants • Human, Natural and Capital Resources Allocation	Students use topics under Standard 1 (United States History and Standard 2 (World History) to examine: • explain how societies and nations attempt to satisfy their basic needs and wants by utilizing scarce capital, natural, and human resources • define basic economic concepts such as scarcity, supply and demand, markets, opportunity costs, resources, productivity, economic growth, and systems • understand how scarcity requires people and nations to make choices which involve costs and future considerations • understand how people in the United States and throughout

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Core Knowledge Topics across the standards	Standard Area Topic	PERFORMANCE INDICATORS Knowledge and skills students attain by the end of the grade.
Standard 5 – Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental system of the U. S. and other nations, the US. Constitution; the basic civic values of American constitutional democracy; and the roles, rights, and responsibilities of citizenship, including avenues of participation		
See American History topics	New York, United States and World Government • Intellectual Skills • Citizenship, Civic Values, Government • Human Rights: Justice • Political Systems • Power	• democracies • explore the rights of citizens in other parts of the hemisphere and determine how they are similar to and different from the rights of American citizens • analyze the sources of a nation’s values as embodied in its constitution, statutes, and important court cases • value the principles, ideals, and core values of the American democratic system based upon the premises of human dignity, liberty, justice and equality • explain what citizenship means in a democratic society, how citizenship is defined in the Constitution and other laws of the land, and how the definition of citizenship has changed in the United States and New York State over time • understand that the American legal and political systems guarantee and protect the rights of citizens and assume that citizens will hold and exercise certain civic values and fulfill certain civic responsibilities • explain how Americans are citizens of their states and of the United States • respect the rights of others in discussions and classroom debates regardless of whether or not one agrees with their viewpoint • explain the role that civility plays in promoting effective citizenship in preserving democracy • participate in negotiation and compromise to resolve classroom, school and community disagreements and problems

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SCIENCE

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science.		
Classification of living things into kingdoms: • Plant, animal fungus, protist, moneran • Kingdoms divided into smaller groups • Phylum, class, order, family, genus, species, variety. • Scientists use names in Latin to classify living things, i.e. Homo sapiens Cells: Structure and Processes • All living things are made up of cells • Structure of cells both plant and animal • Plant cells, unlike animal cells, have cell walls and chloroplasts • Cells without nuclei: moneran (bacteria) • Some organisms consist of only a single cell. • Cells are shaped differently in order to perform different functions.	<u>Physical Setting</u> • Earth & celestial phenomena • Interactions among air, water, land • Properties of matter • Energy • Energy & matter Interactions <u>Living Environment</u> • Living things/non-living things (similarities & differences) • Inherited genetic information • Organisms/species change over time • Continuity of life reproduction • Organisms & dynamic equilibrium, • Dependence of plants & animals on each other & environment • Impact of human activities impact environment.	• compare and contrast the parts of plants, animals, and one-celled organisms

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SCIENCE

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- Organizations of cells into tissues, organs, and systems. Plant Structures and Processes - Structure: Non-Vascular and Vascular Plants - Non-vascular such as algae - Vascular plants - Parts and functions of vascular plants: roots, stems and buds, leaves - Photosynthesis - Photosynthesis as an important life process that occurs in plant - Cells, but not animal cells. Unlike animals, plants make their own food, through the process of photosynthesis. - Role in photosynthesis of : energy from sunlight; chlorophyll; carbon dioxide and water; xylem and phloem; stomata; oxygen; sugar - Reproduction.	<u>Physical Setting</u> - Earth & celestial phenomena - Interactions among air, water, land - Properties of matter - Energy - Energy & matter Interactions <u>Living Environment</u> - Living things/non-living things (similarities & differences) - Inherited genetic information - Organisms/species change over time - Continuity of life reproduction - Organisms & dynamic equilibrium, - Dependence of plants & animals on each other & environment - Impact of human activities impact environment.	compare and contrast the parts of plants, animals, and one-celled organisms

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Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- Asexual reproduction - Sexual reproduction by spore-baring plants (moss and ferns) - Sexual reproduction of flowering plants such as peas Life Cycles and Reproduction • The Life Cycles and Reproduction - Life cycle: development of an organism from birth to growth, reproduction, death. - All living things reduce. Reproduction may be sexual joining of special male and female cells, called gametes, to form a fertilized egg) or asexual.(fission, spores, molds, budding, regeneration and cloning). • Sexual Reproduction in Animals - Reproductive organs: testes and ovaries	<u>Physical Setting</u> • Earth & celestial phenomena • Interactions among air, water, land • Properties of matter • Energy • Energy & matter Interactions <u>Living Environment</u> • Living things/non-living things (similarities & differences) • Inherited genetic information • Organisms/species change over time • Continuity of life reproduction • Organisms & dynamic equilibrium, • Dependence of plants & animals on each other & environment • Impact of human activities impact environment.	• describe sexual and asexual mechanisms for passing genetic materials from generation to generation • describe sources of variation in organisms and their structures and relate the variations to survival

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Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- Asexual reproduction - Sexual reproduction by spore-bearing plants (moss and ferns) - Sexual reproduction of flowering plants such as peas Life Cycles and Reproduction • The Life Cycles and Reproduction - Life cycle: development of an organism from birth to growth, reproduction, death. - All living things reproduce. Reproduction may be sexual joining of special male and female cells, called gametes, to form a fertilized egg) or asexual.(fission, spores, molds, budding, regeneration and cloning). • Sexual Reproduction in Animals - Reproductive organs: testes and ovaries		• describe sexual and asexual mechanisms for passing genetic materials from generation to generation • describe sources of variation in organisms and their structures and relate the variations to survival

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Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- External fertilization: spawning - Internal fertilization: birds, mammals - Development of the embryo: zygote; embryo; growth in uterus; fetus; newborn The Human Body • Changes in Human Adolescence - Puberty: Glands and hormones • The Endocrine System - The human body has two types of glands: duct and ductless - Pituitary gland: controls other glands, and hormones affecting growth. - Thyroid gland: control the rate at which body burns and uses food. - Pancreas: Duct and ductless gland; secretes hormone controlling insulin which regulates insulin; diabetes.		• explain the functioning of the major human organ systems and their interactions

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SCIENCE

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- Adrenal glands; secretes adrenaline which controls fear/anger, causing rapid heartbeat and breathing. • The Reproductive System - Females: ovaries; fallopian tubes; uterus; vagina; menstruation. - Males: testes; scrotum; penis; urethra; semen - Sexual reproduction; intercourse; fertilization; zygote; implantation of zygote in the uterus; pregnancy; embryo; fetus; newborn. • Chemistry: Matter and Change • Atoms, molecules, and compounds - Basics of atomic structure: nucleus; protons; neutrons, electrons. - Atoms are constantly in motion; electrons move round the nucleus in paths called shells.		Knowledge and skills students attain by the end of each grade • describe simple mechanisms related to the inheritance of some physical traits in offspring • distinguish between chemical and physical changes • develop their own mental models to explain common chemical reactions and changes in states of matter

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SCIENCE

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
- Atoms may joint together to form molecules and compounds - Common compounds and their formulas, i.e. water H₂O; salt NaCl, and carbon dioxide CO₂. • Elements - Elements have atoms of only one kind, have the same number protons. More than 100 different elements. - The Periodic Table: organized elements with common properties. - Well-known elements and their symbols. - Two different kinds of elements; metals and non-metals. Metals comprise about 2/3 of the known elements. Properties of metals: most are shiny, ductile, malleable, and conductive.		

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SCIENCE

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Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 4 – Students will understand and apply scientific concepts, principles, and themes pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (Continued)		
Chemical And Physical Change • Chemical changes what a molecule is made up and results in a new substance. I.e. Rusting of iron • Physical change changes only the properties or appearance of the substance but not what the substance is made of. i.e. breaking glass, freezing water		• observe and describe properties of materials, such as density, conductivity and solubility

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TECHNOLOGY

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade

Standard 5 – Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs.

	Technology Foundation Standards for Students 1. Basic operations and concepts 2. Social, ethical, and human issues 3. Technology productivity tools 4. Technology communications tools	Students will: • Demonstrate a sound understanding of the nature and operation of technology systems • Be proficient in the use of technology • understand the ethical, cultural, and societal issues related to technology • practice responsible use of technology systems, information, and software • use technology tools to enhance learning, increase productivity, and promote creativity • use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works. • use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences • use a variety of media and formats to communicate information and ideas effectively to multiple audiences

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TECHNOLOGY

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 5 – Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs. (Continued)		
	5.Technology research tools	• use technology to locate, evaluate, and collect information from a variety of sources. • use technology tools to process data and report results • evaluate and select new information resources and technological innovations based on their appropriateness for specific tasks
	6.Technology problem-solving and decision-making tools	• use technology resources for solving problems and making informed decisions • employ technology in the development of strategies for solving problems in the real world. Prior to completion of Grade 5 students will: • Use keyboards and other common input and output devices (including adaptive devices when necessary) efficiently and effectively. (1) • Discuss common uses of technology in daily life and the advantages and disadvantages those uses provide. (1, 2)

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Technology

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 5 – Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs. (Continued)		
		• Discuss basic issues related to responsible use of technology and information and describe personal consequences of inappropriate use. (2) • Use general purpose productivity tools and peripherals to support personal productivity, remediate skill deficits, and facilitate learning throughout the curriculum. (3) • Use technology tools (e.g., multimedia authoring, presentation, Web tools, digital cameras, scanners) for individual and collaborative writing, communication, and publishing activities to create knowledge products for audiences inside and outside the classroom. (3, 4) • Use telecommunications efficiently and effectively to access remote information, communicate with others in support of direct and independent learning, and pursue personal interests. (4) • Use telecommunications and online resources (e.g., e-mail, online discussions, Web environments) to participate in collaborative problem-solving activities for the purpose of developing solutions or products for audiences inside and outside the classroom. (4, 5)

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TECHNOLOGY

5th Grade

Core Knowledge Topics	Standard Area Topic	Curriculum Knowledge and skills students attain by the end of each grade
Standard 5 – Students will apply technological knowledge and skills to design, construct, use, and evaluate products and systems to satisfy human and environmental needs. (Continued)		
		• Use technology resources (e.g., calculators, data collection probes, videos, educational software) for problem solving, self-directed learning, and extended learning activities. (5, 6) • Determine when technology is useful and select the appropriate tool(s) and technology resources to address a variety of tasks and problems. (5, 6) • Evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources. (6)

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HEALTH, PHYSICAL EDUCATION, FAMILY AND CONSUMER SCIENCES 5th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Standard 1 – Personal Health and Fitness – Students will have the necessary knowledge and skills to establish and maintain physical fitness, participate in physical activity and maintain personal health.		
	• Human growth and development • Positive healthy behaviors • Basic motor and manipulative skills • Proficiency in complex motor and sport activities • Personal fitness programs • Good nutrition for appropriate diets • Healthy food preparation	• demonstrate competency in a variety of physical activities (games, sports, exercises) that provide conditioning for each fitness area • know that motor skills progress in complexity and need to be used in the context of games and sports with additional environmental constraints • combine and integrate fundamental skills and adjust technique based on feedback, including self assessment • understand the relationship between physical activity and the prevention of illness, disease and premature death • develop and implement a personal fitness plan based on self assessment and goal setting, understand physiological changes that result from training and understand the health benefits of regular participation in activity • develop leadership, problem solving, cooperation, and team work by participating in group activities
Standard 2 – A safe and Healthy Environment – Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.		
	• Responsible for personal and social behavior • Care for the environment • Home and community safety	• understand the risks of injury if physical activity is performed incorrectly or performed in extreme environmental conditions and recognize the importance of safe physical conditions (equipment, facilities) as well as the emotional conditions essential for safety

		• develop skills of cooperation and collaboration, as well as fairness, sportsmanship, and respect for others • work constructively with others to accomplish a goal in a group activity, demonstrating consideration for others involved

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM**

HEALTH, PHYSICAL EDUCATION, FAMILY AND CONSUMER SCIENCES 5th Grade

Core Knowledge Topics	Standard Area Topic	Performance Indicators
Knowledge and skills students attain by the end of the grade.		
Standard 2 – A safe and Healthy Environment – Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.		
		• understand the physical and environmental dangers associated with particular activities and demonstrate proper procedures for safe participation in games sports and recreational pursuits • understand the role of physical activity, sport, and games as a balance between cooperative and competitive behaviors and as a possible arena in which to develop and sharpen leadership and problem solving skills, and understand the physical, emotional, and social benefits of participation in physical activities
Standard 3 – Resource Management - Students will understand and e able to manage their personal and community resources.		
	• Influences of culture, media and technology on healthy families and communities. • Informed and active consumers of community programs on physical fitness • Positive relationships in home, workplace and	• should be informed consumers, aware of the alternatives available to them within their communities for physical activity and should be able to evaluate facilities and programs available • demonstrate the ability to locate physical activity information, products, and services • know some career options in the field of physical fitness and sports

	communities	

**THE ICAHN CHARTER SCHOOL
CORE KNOWLEDGE CURRICULUM
THE ARTS**

5th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators
Knowledge and skills students attain by the end of the grade.		
Standard 1 – Creating, Performing and Participating in the Arts - Students will actively engage in the process that constitute creation and performance in the arts (dance, music, theatre, and visual arts) and participate in various roles in the arts.		
Note: Core Knowledge Topics under other The Arts are linked to address all four Arts Standards, as well as being linked to other disciplines.	• Dance Students will perform dance forms and understand choreography • Music Students will play their own music and music written by others • Theatre Students will create and perform theatre pieces • Visual Arts Students use a variety of materials and techniques to create art	• dance a range of forms from free improvisation to structured choreography • demonstrate the ability to take various roles in group productions and performances. • improvise short musical compositions that exhibit cohesiveness and musical expression • use language, voice, gesture, movement, and observation to create character and interact with others in improvisation, rehearsal and performance. • imitate various experiences through pantomime, play making, dramatic play, story dramatization, storytelling, role playing, improvisation, and guided playwriting • use the elements and principles of art to communicate specific meanings to others in their art work
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards Elements of Music • Through participation,	<u>Dance, Music, Theatre & Visual Arts</u> Students will: • Evaluate and interpret art forms • Express opinions, using	• demonstrate knowledge of sources for understanding dance technologies: live, print video, computer, etc. • demonstrate knowledge of how human structure and function affect movement in parts of dances and dances that they know or have been choreographed • use school and community resources to develop information

become familiar with basic elements of music (rhythm, melody, harmony, form, timbre, etc.)	vocabulary of the art form	on music and musicians

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CORE KNOWLEDGE CURRICULUM**

THE ARTS

5th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators Knowledge and skills students attain by the end of the grade.
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.		
- Recognize a steady beat, accents, and the downbeat; play a steady beat, a simple rhythm pattern, simultaneous rhythm patterns, and syncopation patterns - Discriminate between fast and slow; gradually slowing down and getting faster (<i>accelerando</i> and <i>ritardando</i>) - Discriminate between differences in pitch; high and low - Discriminate between loud and quiet; gradually increasing and decreasing volume (<i>crescendo</i> and <i>decrescendo</i>) - Understand <i>legato</i> and <i>staccato</i>		• demonstrate knowledge of sources for understanding dance technologies: live, print video, computer, etc. • demonstrate knowledge of how human structure and function affect movement in parts of dances and dances that they know or have been choreographed • use school and community resources to develop information on music and musicians • demonstrate appropriate listening and other participatory responses to music of a variety of genres and cultures. • investigate some career options related to their musical interests. • use the school or community library/media centers and other resources to develop information on various theatre-related topics • know about local theatrical institutions, attend performances in school and in the community, and demonstrate appropriate audience behavior • discuss vocations/avocations with theatre professionals and identify the skills and preparation necessary for theatre vocations/avocations. • develop skills with a variety of art materials and competence in at least one medium • use the computer and other electronic media as designing tools and to communicate visual ideas

		take advantage of community opportunities and cultural institutions to learn from professional artists, look at original art, and increase their understanding of art

THE ICAHN CHARTER SCHOOL CORE KNOWLEDGE CURRICULUM

THE ARTS

5th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators
Standard 2 – Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.		
- Sing unaccompanied, accompanied, and in unison - Recognize harmony; sing rounds and canons; two and three part singing. - Recognize introduction, interlude, and coda in musical selections. - Recognize verse and refrain; also, introduction and coda. - Recognize theme and variations. - Name the ledger lines and spaces of the treble clef. - Sing or play simple melodies		understand the variety of careers related to the visual arts and the skills necessary to pursue some of them
Standard 3 - Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards	<u>Dance</u> Students will: Express through written and oral language their	- demonstrate knowledge of choreographic principles and processes - express to others their understanding of specific dance performances, including perceptions, descriptions, analyses, interpretations, and evaluations

Listening and Understanding • Composers and their Music	understanding, interpretation, and evaluation of dances they see, do, and read about.	through listening analyze and evaluate their own and others' performances, improvisations and compositions by identifying and comparing them with similar works and events

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THE ARTS

5th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators
Standard 3 - Students will respond critically to a variety of works in the arts, connecting the individual work to other works and to other aspects of human endeavor and thought.		
- Ludwig van Beethoven. <i>Symphony No. 5</i> - Modest Mussorgsky. <i>Pictures at an Exhibition</i> <i>Also see</i> <i>Songs</i> <i>Music Connections</i> <i>American Music al Traditions</i>	<u>Music</u> Students will: - Demonstrate the capacity to listen to and comment on music <u>Visual Arts</u> Students will: - Reflect on, interpret, and evaluate plays and theatrical performances, both live and recorded, using the language of dramatic criticism. - Reflect on, interpret and evaluate works of art, using the language of art criticism.	use appropriate terms to reflect a working knowledge of social-musical functions and uses (appropriate choices of music for common ceremonies and other events)
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society.		
	<u>Dance</u> Know dances from many	identify the major dance forms of specific world cultures past and

Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards	cultures and time and recognize their relationship to various cultural, social, and historic contexts.	present - identify some of the major dance artists from diverse cultures - show how specific dance forms are related to the culture from which they come

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THE ARTS

5th Grade

Core Knowledge Topics	Standards Area Topics	Performance Indicators
Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society. (Continued)		
Note: Core Knowledge Topics under other The Arts may be linked to address all four Arts Standards Songs - Battle Hymn of the Republic - Danny Boy - Dona Nobis Pacem (round) - Git Along Little Doggies - God Bless America - Greensleeves - The Happy Wanderer - Hava Nagilah - If I had a Hammer - Red River Valley - Sakura - Shenandoah - Sweet Betsy from Pike	<u>Dance</u> - Know dances from many cultures and time and recognize their relationship to various cultural, social, and historic contexts. <u>Music</u> Students will: - Develop a performing and listening repertoire of music of various genres, styles, and cultures that represent the peoples of this world and their manifestations in the United States. <u>Theatre</u> Students will: - Gain knowledge about past and present cultures as expressed through theatre.	- identify the major dance forms of specific world cultures past and present - identify some of the major dance artists from diverse cultures - show how specific dance forms are related to the culture from which they come - identify from a performance or recording the titles and composers of well-known examples of classical concert music and blues/jazz selections - identify the cultural contexts of a performance or recording and perform (with movement, where culturally appropriate) a varied repertoire of folk, art and contemporary selections from the basic cultures that represent the peoples of the world - improvise scenes based on information about various cultures - create intercultural celebrations using props, settings and costumes - explain how drama/theatre experiences relate to themselves and others - demonstrate how art works and artifacts from diverse world cultures reflect aspects of those cultures - demonstrate the ways in which some particular art works and artifacts reflect important aspects of the diverse cultures of the United States - create art works that reflect a particular historical period of a culture

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Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society. (Continued)		
Visual Arts • Art of the Renaissance - The shift in world view from medieval to Renaissance art: a new emphasis on humanity and the natural world - The influence of Greek and Roman art on Renaissance artist (classical subject matter idealization of human form, balance and proportion) - The development of linear perspective during the Italian Renaissance. The advantage point or point of view of the viewer. Convergence of parallel lines toward a vanishing point; the horizon line. - Observe and discuss works in different genres such	<u>Visual Arts</u> Students will: • Explore art and artifacts from various historical periods and world cultures to discover the roles that art plays in the lives of people of a given time and place and to understand how the time and place influence the visual characteristics of the art work.	

as portrait, fresco, Madonna by Italian Renaissance artists, including: Sandro Botticelli, <i>The Birth Of Venus</i>		

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Leonardo Da Vinci: <i>The Proportions of Man</i>: <i>Mona Lisa</i>: <i>The last Supper</i> Michelangelo, Ceiling of the Sistine Chapel, especially the detail known as <i>The Creation of Adam</i> Raphael: <i>The Marriage of the Virgin</i>; examples of his Madonna's, (such as <i>Madonna and Child with the Infant St. John</i>, <i>The Alba Madonna</i>, or <i>The Small Cowper Madonna</i>) - Become familiar with Renaissance sculpture, including: Donato Donatello, <i>Saint George</i> Michelangelo, <i>David</i> - Become familiar with Renaissance architecture: including: The Florence Cathedral, dome	<u>Visual Arts</u> Students will: • Explore art and artifacts from various historical periods and world cultures to discover the roles that art plays in the lives of people of a given time and place and to understand how the time and place influence the visual characteristics of the art work.	

designed by Filippo Brunelleschi St. Peter's In Rome		

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Standard 4 – Understanding the Cultural Dimensions and Contributions of the Arts – Students will develop an understanding of the personal and cultural forces that shape artistic communication and how the arts in turn shape the diverse cultures of past and present society. (Continued)		
- Observe and discuss paintings of the Northern Renaissance, including: Pieter Brueghel the Elder, <i>Peasant Wedding</i> Albrecht Durer, <i>Self-Portrait</i> (such as from 1498 and 1500) Jan van Eyck, <i>Giovanni Arnolfini and His Bride</i> (also known as <i>Arnolfini Wedding</i>) American Art: Nineteenth Century United States - Become familiar with the - Hudson River School of landscape painting including: Thomas Cole, <i>The Oxbow (The Connecticut River Near Northampton)</i> (also known As <i>View from Mount Holyoke,</i>		

<i>Northampton, Massachusetts, after a Thunderstorm)</i> Albert Biersdadt, <i>Rocky Mountains, Lander's Peak</i>		

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- Become familiar with genre paintings, including: George Caleb Bingham, <i>Fur Traders Descending the Missouri</i> William Sidney Mount <i>Eel Spearing at Setauket</i> - Become familiar with art related to the Civil War, including: Civil War photography of Matthew Brady and his Colleagues <i>The Shaw Memorial</i> with popular prints by Currier and Ives • Art of Japan - Become familiar with The Great Buddha (also known as the Kamakura Buddha) Landscape gardens		