



Charter Schools Institute
State University of New York

Charter

BRONX CHARTER SCHOOL FOR EXCELLENCE

FINAL CHARTERED AGREEMENT

Sec. 2852(5) Submission to the Board of Regents

VOLUME 3 OF 4

REDACTED COPY

Fifth Grade Key Math Vocabulary

Number Sense and Operations

>, < and =
 composite number
 decimal
 decimal point
 decimal quotient
 dividend
 equal to
 factor
 greater than
 greatest common factor
 hundredth
 least common denominator (LCD)
 least common multiple
 less than
 negative
 negative integer
 non-terminating decimal
 number
 percent (%)
 place value
 positive
 powers of 10
 prime
 product
 ratio
 reciprocal
 rounding
 tenth
 ten thousandths
 terminating decimal
 thousandth
 unlike denominator

Functions and Algebra

algebraic expression
 arithmetic sequence
 coefficients
 cubic number
 fraction
 linear equation
 multiplicative inverse
 power
 product
 rate
 rational solution
 reciprocal
 square
 substitution

Measurement and Geometry

$\frac{3}{4}$ turn=270°
 full turn=360°
 angle
 arc
 area of a circle
 bilateral
 central angle
 chord
 circumference of a circle
 compass
 cube
 cubic centimeter (cm³)
 cubic inches (in³)
 cubic meter (m³)
 cubic yard (yd.³)
 customary system
 diameter
 drawing software
 duration
 geometric solid
 metric
 midpoints
 parallel line
 perpendicular
 pi
 prism
 protractor
 radius
 rectangular solid
 rotational symmetry
 ruler
 straight edge
 surface
 time interval

Data Analysis, Statistics and Probability

area comparison
 bar graph
 drawing conclusion
 expected probability
 frequency table
 histogram
 mean
 median
 measure of central tendency
 mode
 note trend

relative frequency
range
sample space
tree diagram

*Problem Solving, Mathematical Reasoning and
Communication*

area
diagram
false

justified
logical
perimeter
premise
problem statement
reasoning
symbolic
volume
translate

Sixth Grade

I. Number Sense and Operations

A. Students read, write, compute and estimate whole numbers, fractions, decimals and percentages, and ratios and proportions.

1. Students read, write and compute with whole numbers in scientific notation (i.e. $325,600=3.256 \times 10^5$).
2. Students find common multiples and factors, including the least common multiple and the greatest common factor, using prime factorization.
3. Students determine whether a number is a prime number or a composite number and explain the concepts of prime and composite numbers.
4. Students write fractions as equivalent terminating or repeating decimals and explain the process used.
5. Students interpret and model percentage terms of parts of 100, determine the percentage equivalent to decimals (expressed as tenths or hundredths) and simple fractions (i.e. $\frac{1}{2}=50\%$, $\frac{3}{5}=60\%$, $\frac{1}{20}=5\%$).
6. Students identify the reciprocal of a given fraction and know that the product of a given number and its reciprocal is 1 (multiplicative inverse).
7. Students illustrate and solve division of fractions (i.e. $\frac{5}{8} \div \frac{3}{4} = \frac{5}{8} \times \frac{4}{3} = \frac{20}{24}$ or $\frac{5}{6}$).
8. Students describe and compare two quantities using ratios and appropriate notations (a/b , a to b , $a:b$) and give ratios in lowest terms.
9. Students illustrate and solve problems for a missing value (i.e. determine the value of n if $\frac{4}{7} = \frac{n}{21}$).

B. Students identify, represent, add, subtract, multiply and divide positive and negative rational numbers.

1. Students identify, compare and order rational numbers and represent them on a number line.
2. Students illustrate and solve addition, subtraction, multiplication and division problems using positive and negative numbers, including fractions and decimals.

II. Functions and Algebra

A. Students write verbal expressions/sentences as algebraic expressions/equations, graph them and interpret the results in all three representations.

1. Students write and solve one- and two-step linear equations and inequalities in one variable, using strategies involving inverse operations, integers, fractions and decimals.
2. Students apply order of operations and the commutative, associative and distributive properties to solve problems involving combinations of the four operations.

B. Students analyze tables, graphs and rules to determine functional relationships.

1. Students translate between verbal, numeric, graphical and symbolic representations of linear functional relationships.
2. Students demonstrate understanding that rate is a measure of one quantity per unit value of another quantity.
3. Students solve multi-step problems involving rate, average speed, distance and time.

C. Students investigate and describe geometric and exponential patterns.

1. Students apply a functional perspective to questions in geometry (i.e. the number of sides of a regular polygon and the sum of its interior angles).
2. Students identify, represent, extend and create number patterns involving multiples, squares and cubes.

III. Measurement and Geometry

A. Students use ratios and proportional reasoning to convert within measurement systems.

1. Students determine perimeter, area, volume and circumference of a given geometric figure.
2. Students create and solve proportions to convert between units of time (i.e. $60 \text{ min./1 hr}=700 \text{ min./x hr.}$)
3. Students know and use the formulas for the volume of triangular prisms and cylinders (area of base x height); compare these formulas and explain the similarity between them and the formula for the volume of a rectangular solid.
4. Students determine whether geometric figures (quadrilaterals and triangles) are similar and write proportions to express the relationships between corresponding parts of similar figures).

B. Students identify and describe the properties of and relationships among two- and three-dimensional figures.

1. Students identify, describe and classify angles as vertical, adjacent, complementary and/or supplementary.
2. Students define, describe and draw polygons, given information about them.
3. Students identify and describe properties of simple geometric figures and parallel and perpendicular lines.
4. Students identify congruent angles and sides and axes of symmetry and show how congruent plane figures can be made to correspond through reflection, rotation and translation.
5. Students visualize, represent and interpret two-dimensional views of three-dimensional objects made from rectangular solids.

IV. Data Analysis, Statistics and Probability

A. Students read and analyze data taken from tables or graphs and use the concept of *average* to answer relevant questions.

1. Students identify ordered pairs of data from a graph (bar, circle, line or broken line) and interpret the meaning of the data in terms of the situation depicted by the graph.
2. Students describe the possible effects of missing or incorrect information.
3. Students find and model the mean, median, mode and range of a set of data.
4. Students determine a missing quantity if the mean of a set of quantities is unknown.

B. Students determine theoretical and experimental probabilities and use these to make predictions about events.

1. Students carry out and interpret a simulation (by hand or using computer software) to predict the likelihood of an event.
2. Students compute the probability of an event using counting principles, sample spaces and geometric arguments and compare it with results from a simulation.
3. Students demonstrate understanding that the sum of the probabilities of all possible events is 1.0, that the probability of any event lies between 0.0 and 1.0 inclusively, and that the probability of an event not happening is 1 minus the probability of the event's happening.
4. Students organize and display data in appropriately designed and labeled tables, charts and graphs.

V. Problem Solving, Mathematical Reasoning and Communication

A. Students incorporate the Grade 6 mathematics of proportions, rates, inequalities and exponents in problem-solving strategies.

1. Students identify rates and proportions in problem situations, carry units through all steps of the solution and describe each step in terms of the units involved, using appropriate mathematical language.
2. Students identify and correct errors when rates or proportions are inverted in incorrect problem solutions.
3. Students explain and justify each step of a solution to an inequality problem.
4. Students describe situations involving patterns of increasing exponents, explain how they relate to repeated multiplication, and illustrate the mathematics of the example symbolically.
5. Students extract pertinent information from situations and figures and identify what additional information is needed.

6. Students invoke problem-solving strategies, such as illustrating with sketches to help make sense of complex situations or organize information in a table.
7. Students solve problems for unknown or undecided quantities, using algebra, graphing, sound reasoning and other strategies.

B. Students recognize and explain simple logic.

1. Students use estimation and reasonableness of solutions as a guide and identify and correct errors in the application of scientific notation to problem solutions.
2. Students formulate conjectures and argue, short of formal proof, why they must be or seem to be true.
3. Students explain, where helpful, how to break a problem into simpler parts.
4. Students verify and interpret results of a problem.
5. Students generalize solutions and strategies to new problems.

C. Students communicate knowledge of basic skills, conceptual understanding and problem solving, and demonstrate understanding of mathematical communications of others.

1. Students use mathematical language and representations with appropriate accuracy, including numerical tables and equations, simple algebraic equations, formulas, charts, graphs and diagrams (see Grade 6 Key Vocabulary).
2. Students organize work, explain facets of a solution orally and in writing, label drawings and use other techniques to make meaning clear to the audience.
3. Students explain their solutions and/or thinking processes in well-constructed sentences and paragraphs.
4. Students use mathematical language to make complex situations easier to understand.
5. Students exhibit developing reasoning abilities by justifying statements and defending work.
6. Students demonstrate understanding of concepts by explaining ideas not only to teachers but also to fellow students or younger children.
7. Students demonstrate comprehension of mathematics from reading assignments and other sources.

D. Students explain how the mathematics learned in Grade 6 is used in occupational fields.

1. Students demonstrate the use of rates, proportions and/or percentages in a specific career.
2. Students identify a career that requires use of linear equations and gives examples to demonstrate the kind of problems solved with linear equations in this career.

3. Students use examples to show how a particular career involves three different areas of Grade 6 mathematics.

Sixth Grade Key Math Vocabulary

Number Sense and Operations

appropriate notation
 common multiples
 factor
 greatest common factor
 least common multiple
 negative rational number
 number line
 positive rational number
 prime factorization
 proportion
 ratio
 rational number
 reciprocal
 repeating decimal
 scientific notation
 terminating decimal

Functions and Algebra

algebraic expression
 associative property
 average speed
 commutative property
 decimal
 distance
 distributive property
 equations
 exponent
 exponential pattern
 fraction
 functional relationship
 generalize
 geometric growth
 graphical
 inequality
 integer
 interior angle
 inverse operation
 linear equation
 numeric
 quantity
 rate
 regular polygon
 relationship
 rule
 scientific notation
 square root
 symbolic
 time

variable
 verbal

Measurement and Geometry

adjacent
 area
 axes of symmetry
 circumference
 classifying angles
 cylinder
 complementary
 congruent
 convert
 parallel
 perimeter
 perpendicular
 plane figure
 polygon
 property
 proportion
 quadrilateral
 rectangular solid
 reflection
 rotation
 similar figures
 supplementary
 three-dimensional
 translation
 triangle
 two-dimensional
 vertical
 volume

Data Analysis, Statistics and Probability

broken line
 chart
 circle
 counting principles
 graph
 line
 mean
 median
 mode
 modeling
 ordered pair
 predict
 sample space
 set of data
 simulation

theoretical probability

*Problem Solving, Mathematical Reasoning and
Communication*

accuracy

chart

complex situation

conjecture

diagram

equation

estimation

formula

formulate

generalize

graph

increasing exponents

inequality

interpret

inverted

numerical table

justify

proportion

rate

reasonableness

scientific notation

symbolically

verify

Seventh Grade**I. Number Sense and Operations**

A. Students apply, explain attributes and compute with real numbers expressed in a variety of forms.

1. Students read, write and compute with rational numbers in scientific notation (positive and negative powers of 10), approximate numbers using scientific notation and explain the process.
2. Students use the law of exponents to solve problems.
3. Students model and express rational numbers as fractions, terminating or repeating decimals or percentages and describe the equivalence relationship among these representations.
4. Students demonstrate understanding of the square root symbol, determine the two integers between which a particular square root lies and explain how they know it.
5. Students interpret the absolute value of a real number as its distance from zero on a number line and determine the absolute value of real numbers.

B. Students use correct order of operations and number properties to add, subtract, multiply and divide positive and negative rational numbers, extract roots and determine whole number powers of positive rational numbers.

1. Students add, subtract and divide rational numbers, integers, fractions and decimals and raise rational numbers to whole number powers.
2. Students explain and use the inverse relationship between exponentiation/root extraction.
3. Students explain and apply properties of real numbers (associative, commutative, distributive, identity, inverse) to simplify numerical expressions.

C. Students reason proportionately and use ratios and rates to solve problems.

1. Students use proportions to solve problems involving a change of scale (drawing, models, maps) or a comparison of two quantities.
2. Students identify and interpret situations involving direct variation and represent these situations on a coordinate graph.
3. Students solve consumer application problems involving discount, markup, commission, profit and simple compound interest.

II. Functions and Algebra

A. Students identify, describe, represent, extend and create linear and non-linear number patterns.

1. Students identify Pythagorean triples and describe patterns found in Pascal's triangle.

2. Students identify, describe and generalize patterns involving geometric growth, square roots or exponents.
- B. Students relate the equation, coordinate graph and set of ordered pairs of a linear function.
1. Students graph linear function in two variables on the coordinate plane, given a set of ordered pairs.
 2. Students graph a linear function in two variables on the coordinate plane given its equation, slope and y-intercept or given both its x- and y-intercepts.
- C. Students express quantitative relationships using algebraic terminology, expressions, equations and inequalities.
1. Students use variable and appropriate operations to write an expression, equation, inequality or system of equations or inequalities representing a verbal description.
 2. Students apply the property of real number operations to evaluate algebraic expressions for given replacement values of variables.
 3. Students discuss the different uses of variables in expressions (i.e. $2w + 2L$), equations (i.e. $y = x - 4$), formulas (i.e. $c = 9d$) and properties (i.e. $a + b = b + a$).
- D. Students interpret and evaluate expressions involving integer powers and roots of monomials.
1. Students interpret whole number powers as repeated multiplication, negative integer powers as reciprocals and evaluate monomials that have them.
 2. Students simplify square roots of perfect square monomials.
- E. Students write verbal expressions/sentences as algebraic expressions/equations, graph them and interpret the results in all three representations.
1. Students write and solve two-step linear equations and inequalities in one variable, using strategies involving inverse operations, integers, fractions and decimals.

III. Measurement and Geometry

- A. Students choose appropriate units of measure and use proportional reasoning to convert within and between measurement and monetary systems.
1. Students select, use and explain a method for comparing weights, capacities, geometric measures, times and temperatures within and between measurement systems (i.e. miles per hour and feet per second, 4.5 meters is about 1190 inches, etc.).
 1. Students convert between monetary systems (i.e. US \$ and British pounds).
 2. Students use rates (i.e. speed, density) and other derived units to solve problems.

- B. Students know and use formulas for perimeter, circumference, area and volume of common geometric objects and uses these to derive methods for finding or approximating measures of less common objects.
1. Students estimate and find the area of polygons by subdividing them into rectangles and triangles.
 2. Students reason proportionately to find measures and the ratios in situations involving similar figures.
- C. Students describe and explain relationships among one-, two- and three-dimensional objects.
1. Students identify and construct line segments, altitudes, medians, angle bisectors and perpendicular bisectors.
 2. Students classify quadrilaterals using their properties (deductive reasoning).
 3. Students use the Pythagorean Theorem to find or approximate the length of the missing side of a right triangle or the diagonal of a square or rectangle.
 4. Students determine the number of diagonals and the measures of central, interior and exterior angles of regular polygons
 5. Students identify and sketch central and inscribed angles, arcs, radii, diameters and chords of circles.

IV. Data Analysis, Statistics and Probability

- A. Students demonstrate an understanding of displaying, analyzing and interpreting data they have generated or taken from resources.
1. Students construct and interpret frequency distributions, line plots, stem- and leaf-plots, box-and-whisker plots, and scattergrams.
 2. Students determine measures and appropriate uses of central tendencies (mean, median and mode), frequency and distribution (range, inter-quartile range) for a set of data.
 3. Students define, describe and use algebraic terminology correctly (equation, inequality, variable, expression, term, constant, coefficient).
- B. Students demonstrate an understanding of using probability to answer questions about the likelihood of an event.
1. Students construct a sample space to determine theoretical and experimental probabilities and represent it in the form of a list, chart, picture or tree diagram.
 2. Students determine the probability of a given simple event and express that probability as a ratio decimal or percentage.
 3. Students identify and describe the number of possible arrangements of several objects, using a tree diagram or the Fundamental Counting Principle.

V. Problem Solving, Mathematical Reasoning and Communication

A. Students use mathematical techniques and language accumulated by Grade 7 in explaining and justifying each step in problem solutions.

1. Students appropriately frame the symbolic representation of a problem (i.e. with introductory statements such as “Let x equal the quantity of fuel in gallons....”)
2. Students refer to properties by name or symbolic form (i.e. $ab=ba$) in justifying each step in manipulating an equation of expression.
3. Students explain both verbally and in the written language the sequence of steps in solving a problem (i.e. first convert all time values to minutes so that they will be in the same scale; then multiply durations by repetitions to get totals for each event; then add these products to get a grand total; and finally convert to hours and minutes so the solution is easier to comprehend) and state the reasons for selecting a particular response. Students will provide explanations in well-constructed sentences and paragraphs.
4. Students check solutions (i.e. by working backwards or substituting solutions back into original formulations) and explain how the process verifies the solution.
5. Students extract pertinent information from situations and figures and identify what additional information is needed.
6. Students invoke problem-solving strategies, such as illustrating with sense-making sketches to clarify situations or organizing information in a table.
7. Students solve for unknown or undecided quantities, using algebra, graphing, sound reasoning and other strategies.

B. Students recognize and explain simple logical errors.

1. Students integrate concepts and techniques from different areas of mathematics.
2. Students make sensible and reasonable estimates.
3. Students make justified and logical statements.
4. Students generalize solutions and strategies to new problems.
5. Students formulate conjectures and argue, short of formal proof, why they must be or seem to be true.
6. Students use and invent a variety of approaches and understand and evaluate those of others.

C. Students communicate knowledge of basic skills, conceptual understanding and problem solving and demonstrate understanding of mathematical communications of others.

1. Students use mathematical language and representations with appropriate accuracy, including numerical tables and equations, simple algebraic equations, formulas, charts, graphs and diagrams (see Grade 7 Key Vocabulary).
 2. Students organize work, explain facets of a solution orally and in writing, label drawings, and use other techniques to make meaning clear to the audience.
 3. Students will explain their solutions and/or thinking processes in well-constructed sentences and paragraphs.
 4. Students use mathematical language to make complex situations easier to understand.
 5. Students exhibit reasoning abilities by justifying statements and defending work.
 6. Students demonstrate understanding of concepts by explaining ideas not only to teachers but also to fellow students or younger children.
 7. Students demonstrate comprehension of mathematics from reading assignments and from other sources.
- D. Students explain how mathematics learned in Grade 7 is used in occupational fields.
1. Students identify a career that requires use of operations with scientific notation and give examples to demonstrate the kinds of problems solved.
 2. Students identify a career that uses some of the graphing and data analysis methods of Grade 7 mathematics and give examples to demonstrate the kinds of problems solved.
 3. Students use examples to show how a particular career involves three different areas of Grade 7 mathematics.

Seventh Grade Key Math Vocabulary

Number Sense and Operations

absolute value
 associative property
 attribute
 commission
 commutative property
 compound interest
 consumer application problem
 coordinate graph
 decimal
 direct variation
 discount
 distributive property
 equivalence relationship
 exponentiation
 exponent
 extract roots
 identity property
 integer
 inverse
 markup
 negative power
 number property
 numerical expression
 order of operation
 percent
 power
 profit
 proportionately
 ratio
 rational number
 real number
 repeating decimal
 scale
 scientific notation
 square root
 symbol
 terminating decimal

Functions and Algebra

algebraic expression
 algebraic terminology
 coefficient
 constant
 coordinate graph
 coordinate plane
 cube
 decimal
 equation

expression
 formula
 fraction
 inequality
 integer
 inverse operation
 linear equation
 linear function
 monomial
 multiple
 negative integer power
 non-linear
 number pattern
 ordered pair
 Pascal's triangle
 perfect square monomials
 Pythagorean triples
 quantitative relationships
 reciprocals
 set of ordered pairs
 square
 square root
 term
 system of equations
 variable
 verbal description
 whole number
 whole number powers

Measurement and Geometry

altitude
 angle bisector
 arc
 area
 central angle
 chords of circles
 circumference
 classify quadrilaterals
 diagonal
 diameter
 exterior angle
 inscribed angle
 interior angle
 line segment
 median
 one-dimensional object
 perimeter
 perpendicular bisector
 polygon

radii
three-dimensional object
two-dimensional object
volume

Data Analysis, Statistics and Probability

box-and-whisker plot
central tendencies
distribution
experimental probability
frequency
frequency distribution
Fundamental Counting Principle
inter-quartile range
line plot
mean
median
mode
range
scattergram
stem-and-leaf plot
theoretical

Problem Solving, Mathematical Reasoning and Communication

chart
complex situation
diagram
equation
expression
formula
generalize
graph
integrate
justify
logical
manipulate
manipulating
numerical table
sequence
solution
symbolic representation
verify

Eighth Grade

I. Algebra

A. Problem Solving

1. Students demonstrate problem-solving ability by using algebraic concepts and skills to solve problems for which specific and detailed steps toward solution are not provided. In the process, the students demonstrate mastery of all three elements of finding a solution: formulation, implementation and conclusion.

- a. Students represent and solve a variety of textbook and real-life problems involving linear, quadratic, exponential and absolute value expressions algebraically.
- b. Students translate among verbal, graphical, tabular and symbolic representations of a problem.

B. Symbol and Symbol Manipulation

1. Students simplify expressions and solve problems in symbolic form.

- a. Students solve linear equations and inequalities in one unknown and apply these skills to solve practical problems.
- b. Students demonstrate an understanding of the different conceptual uses of symbols (i.e. literal numbers, variables) and communicate their meanings.
- c. Students use algebraic techniques, including linear combinations and substitution, to solve quantitative problems involving systems of two linear equations in two variables and understands the relationship between the graphic and symbolic forms.
- d. Students apply the law of exponents to perform operations on expressions with integral exponents and use scientific notation when appropriate.
- e. Students add, subtract and multiply polynomials and divide polynomials with monomial and binomial divisors. Students also simplify algebraic expressions by combining like terms and by addition, subtraction, multiplication and division of polynomial components of these expressions.
- f. Students factor various factorable polynomials in one or two variables, including trinomials, quadratics, differences of two squares, expressions requiring regrouping or repeated factorizations and expressions with lead coefficients greater than 1 and extracts monomial and binomial factors from expressions of the third and fourth degree.
- g. Students use graphing, factoring or the quadratic formula to solve problems involving quadratic equations.
- h. Students simplify square root radical expressions, including those with constants and variables, and express given real numbers using radical sign.

C. Communication and Reasoning

1. Students demonstrate the ability to reason mathematically and use appropriate language and symbols to communicate this conceptual understanding of algebraic ideas.

- a. Using oral and written language, students justify steps used in simplifying expressions and solving equations and inequalities. Justifications include the use of concrete objects, pictorial representation, and the properties of the real number system.
- b. Students will explain their solutions and/or thinking processes in well-constructed sentences/paragraphs.

D. Functions and Relations

1. Students demonstrate an understanding of the concept of *function*. Students demonstrate this understanding by using it to solve problems and by representing it in multiple ways (graphically, symbolically, tabularly and verbally as well as with numbers and diagrams). Students demonstrate facility in using skills that are associated with the concept.

- a. Students analyze a given set of data for the existence of a pattern, represent the pattern algebraically and graphically, if possible, and determine whether it is a function.
- b. Students determine the domain and range of a relation, given a set of ordered pairs, and identify the relations that are functions.
- c. Students recognize relations that are linear; find slopes and understand their significance; and determine the three representations of a linear function (graphic, symbolic and tabular), given specific information about the function.
- d. Students select, justify and apply an appropriate technique to graph a linear function. Techniques include slope intercept, x and y intercepts and two points.
- e. Students determine the slope of a line when given the symbolic form, the graph or two points. Students understand the slope as the rate of change between two quantities and recognize when two lines are perpendicular or parallel.
- f. Students write the equation of a line when given the graph, two points, or the slope and a point. Students determine the length of a segment with given end points.
- g. Students, given the symbolic or graphic representation, find the value of x given y , or y given x and finds the zeros algebraically.
- h. Students demonstrate an understanding of families of functions, their characteristics and the relationships between the various representations.
- i. Students recognize quadratic relationships.
- j. Students analyze functional relationships between quantities and determine how a change in one affects the other.
- k. Students describe algebraically the relationship between quantities and answers questions about them, using various methods and tools.

l. Students analyze the effects of the changes of coefficients and constants on the graphs of functions.

m. Students analyze a relation to determine whether a direct or inverse variation exists and represent it algebraically and graphically, if possible.

E. Technology

1. Students demonstrate the ability to use the tools of new technologies to solve algebraic problems.

a. Students demonstrate the ability to use a calculator to solve problems and answer questions about real-world problems.

b. Students demonstrate the ability to use computer software to explore algebraic concepts.

F. Statistics, Data Analysis and Probability

1. Students demonstrate knowledge of basic skills, conceptual understanding and problem-solving in statistics

a. Students demonstrate the ability, given a set of data points, to draw a line approximating a line of best fit, to find the equation of the line and to use the graph and/or equation to make predictions.

G. Careers

1. Students explain how algebra can be used in occupational fields.

a. Students give three different examples of careers that require use of algebra, explains how algebra is useful in those careers, and gives examples to demonstrate the kinds of algebra problems and solutions in those careers.

Science

The Bronx Charter School for Excellence provides a rigorous science curriculum to its students culminating in a detailed singular focus on the disciplines of earth science, life science and physical science in the sixth, seventh and eighth grades, respectively. The content standards set forth by the Bronx Charter School for Excellence in Grades K-8 provides students with the essential skills and knowledge that they will need to undertake advanced coursework in high school in physics, chemistry, biology and earth sciences. Our content standards provide the foundational skills and knowledge our students need to ultimately become scientifically literate citizens of the 21st century.

The Bronx Charter School for Excellence's science standards contemplates giving students the opportunity to build connections that link science to technology and societal impacts. As is stated in the *Science Content Standards for California Public Schools, Kindergarten Through grade Twelve* (from which much of the Bronx Charter School for Excellence's science standards are drawn), "Science, technology and societal issues are strongly connected to community health, population, natural resources, environmental quality, natural and human-induced hazards, and other global challenges." Thus, these standards combined with our standards for Technology and Health provide the foundation for understanding these issues.

BCSE has tentatively chosen to use the Teaching Relevant Activities for Concepts and Skills (T.R.A.C.S.). T.R.A.C.S. is published by Kendall/Hunt Publishing and was developed by the Biological Science Curriculum Study (BSCS). T.R.A.C.S. consists of four areas of study each year—physical science, earth and space science, life science and science and technology. It emphasizes active, hands-on explorations in the early grades that help students build their understanding of key concepts and invites students to develop and explain concepts in their own words both orally and by writing and drawing.

New York State Mathematics, Science and Technology Standards

The State learning standards for science are integrated with standards for mathematics and technology. When a particular standard is predominately that of mathematics or technology, that standard will be addressed in the indicated section.

- Standard 1 Students will use mathematical analysis, scientific inquiry and engineering design, as appropriate, to pose questions, seek answers and develop solutions.
- Standard 2 Students will access, generate, process, and transfer information using appropriate technologies. (This standard will be addressed in the Technology section)
- 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, data analysis, probability and trigonometry. (This standard will be addressed in the Mathematics section)
- Standard 4 Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science.
- Standard 5 Students will apply technological knowledge and skills to design, construct, use and evaluate products and systems to satisfy human and environmental needs.
- Standard 6 Students will understand relationships and common themes that connect mathematics, science and technology and apply the themes to these and other areas of learning.
- Standard 7 Students will apply the knowledge and thinking skills of mathematics, science and technology to address real-life problems and make informed decisions.

The Bronx Charter School for Excellence Standards for Science

Kindergarten

I. Physical Sciences

A. Students observe, measure and predict properties of materials.

1. Students know objects can be described in terms of the materials they are made of (i.e. clay, cloth, paper) and their physical properties (i.e. color, size, shape, weight, texture, flexibility, attraction to magnets, floating, sinking).
2. Students know water can be a liquid or a solid and can be made to change back and forth from one form to another.
3. Students know water left in an open container evaporates (goes into the air) but water in closed container does not.

II. Life Sciences

A. Plants

1. Students know different types of plants inhabit the earth
 - a. Students observe and describe similarities and differences in the appearance and behavior of plants (i.e. seed-bearing plants, trees with leaves (deciduous), trees with needles (coniferous)).
 - b. Students can identify major structures of common plants (seed, root, stem, branch, leaves).
 - c. Students know what plants need to grow: sun, warmth, water.
 - d. Students know stories sometimes give plants attributes that they do not really have.

B. Animals

1. Students observe and describe similarities and differences in the appearance and behavior of animals (birds, fish, mammals, insects).
2. Students identify major structures of common animals (i.e. arms, wings, legs, head, eyes, ears, nose) and can describe their functions.
3. Students know what animals need to live and grow: food, water, homes, air.
4. Students learn that pets have special needs and must be cared for by their owners.

C. The Human Body

1. Students identify the five senses and know the body parts associated with them (sight/eyes, hearing/ears, touch/skin, taste/tongue, smell/nose).

2. Students understand the importance of taking care of their bodies: exercise, eating well, cleanliness, rest.

III. Earth Science

A. Earth

1. Students know we live on the planet earth.
2. Students know earth is made up of land, water and air.
3. Students know characteristics of mountains, rivers, oceans, valleys, deserts and local landforms.

B. Weather

1. Students identify the four seasons and the types of weather associated with them.
2. Students identify the sun as a source of light and warmth.
3. Students know changes in weather occur from day to day and across seasons, affecting the Earth and its inhabitants.
4. Students identify and describe daily weather changes using the following characteristics:
 - a. Temperature measured by thermometers
 - b. Clouds
 - c. Rainfall
 - d. Thunder/Lightning
 - e. Snow

C. Conservation

1. Students understand and can identify natural resources from Earth.
2. Students understand conservation and that some natural resources need to be conserved because they are limited.
3. Students understand practical ways to conserve everyday resources like energy (turning off lights) and water (turning off faucets).
4. Students understand recycling and know that certain materials can be recycled.
5. Students understand pollution and that people should take measures to reduce pollution.

IV. Investigation and Experimentation

- A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students observe common objects by using the five senses.
2. Students describe the properties of common objects.
3. Students describe the relative position of objects by using one reference (i.e. above or below).
4. Students compare and sort common objects by one physical attribute (i.e. color, shape, texture, size, weight).
5. Students communicate observations orally and through drawings.

First Grade**I. Physical Science**

A. Students know that materials or matter come in different forms (states): solids, liquids and gases.

1. Students know solids, liquids and gases have different properties and can identify those properties.
2. Students know the properties of substances can change when the substances are mixed, cooled or heated.
3. Students identify water as an example of changing states of matter of a single substance.
4. Students understand the basic concept of atoms and that matter is made up of atoms.

B. Students understand the measurement of matter

1. Students identify units of measurement for length (centimeter, inch, foot) and volume (gallon, quart) and know the instruments for measuring these units.
2. Students understand the measurement of temperature in degrees Fahrenheit and understand the thermometer measures temperature.

II. Life Science

A. Students understand that different plants and animals meet their needs in different ways.

1. Habitats

- a. Students know what habitats are and understand that living things, both plant and animal, live in environments to which they are particularly suited.
- b. Students know that plants and animals have external features that help them thrive in different kinds of places.
- c. Students can identify specific habitats and what lives there (i.e. what lives in forests, what lives underground, what lives in the ocean, what lives in the desert, what lives in meadows, etc.)
- d. Students know that animals use plants or other animals for shelter and nesting.

2. Food

- a. Students know that plants and animals need water, animals need food and plants need light.
- b. Students know animals eat plants and/or other animals for food.

- c. Students know plants make their own food and that roots of plants are associated with intake of water and soil nutrients and green leaves are associated with making food from sunlight.
- d. Students can infer what animals eat from the shapes of their teeth (i.e. sharp teeth: eats meat; flat teeth: eats plants).
- e. Students know the terms herbivores, carnivores and omnivores and can identify animals that fit in each of the three categories.

B. The Human Body

- 1. Students know some of the major body systems, their components and their functions.
 - a. Skeletal system
 - b. Muscular System
 - c. Digestive System
 - d. Circulatory System
 - e. Nervous System
 - f. Respiratory System
- 2. Students know how to care for their bodies
 - a. Students understand the importance of exercise, cleanliness, healthy foods, rest.
 - b. Students know what role doctors play in keeping people healthy.
 - c. Students understand why people need vaccinations.

III. Earth Science

A. Geography of the Earth's surface

- 1. Students understand that most of the earth is covered with water.
- 2. Students know the five oceans: Atlantic, Pacific, Indian, Arctic and Antarctic and can locate them on a map and globe.
- 3. Students know oceans are salt water while other bodies of water (rivers, lakes, streams) are fresh water.
- 4. Students identify coast, shore, waves, tides.
- 5. Students know that there is an ocean floor and it has a landscape that includes mountains and deep valleys.

6. Students can name the seven continents: North America, South America, Asia, Africa, Australia, Antarctica and Europe and can identify them on a map or globe.

7. Students can locate the North Pole, South Pole and Equator and understand the significance of the Equator.

B. Environmental Conservation and Preservation

1. Students know that environments are constantly changing, sometimes because of man-made problems—pollution, litter, oil spills, population and development—and the change can pose dangers to animal habitats.

2. Students understand the term extinct and can identify extinct animals.

C. Weather

1. Students observe, describe and measure weather.

a. Students know and use simple tools to measure weather (thermometer, wind vane)

b. Students know that weather changes day to day, but that there are trends in weather (temperature, type of precipitation) during a season and students can classify those trends.

c. Students know that the sun warms the land, air and water.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students draw pictures that portray some features of things being described.

2. Students record observations and data with pictures, numbers and written statements.

3. Students record observations on a bar graph.

4. Students describe the relative position of objects by using two references (above and next to, below and left of).

5. Students make new observations when discrepancies exist between two descriptions of the same object or phenomenon.

Second Grade

I. Physical Sciences

A. Students observe and measure the motion of objects.

1. Students know the position of an object can be described by locating it in relation to another object or to the background.
2. Students know an object's motion can be described by recording the change in position of the object over time.
3. Students know the way to change how something is moving is by giving it a push or a pull. The size of the change is related to the strength, or the amount of force, of the push or pull.
4. Students know the tools and machines are used to apply pushes and pulls (forces) to make things move.
5. Students know objects fall to the ground unless something holds them up.
6. Students know magnets can be used to make some objects move without being touched.
7. Students know sound is made by vibrating objects and can be described by its pitch and volume.

II. Life Sciences

A. Life Cycles of Plants and Animals

1. Students know that organisms reproduce offspring of their own kind and that the offspring resemble their parents and one another.
2. Students know the sequential stages of life cycles are different for different animals, such as butterflies, frogs and mice.
3. Students know many characteristics of an organism are inherited from the parents. Some characteristics are caused or influenced by the environment.
4. Students know there is variation among individuals of one kind within a population.
5. Students know light, gravity, touch or environmental stress can affect the germination, growth and development of plants.
6. Students know flowers and fruits are associated with the reproduction in plants.

B. The Human Body

1. Students understand what cells are and that we can only view them through a microscope.
2. Students know that cells are components of tissue.

3. Students know that organs are made up of tissue.
4. Students know that specific organs make up the different systems of the body, and students can identify major organs on a diagram of the human body.

C. Focus on Organisms—Insects

1. Students identify distinguish characteristics of insects
 - a. Exoskeleton; chitin
 - b. Six legs and three body parts: head, thorax, abdomen
 - c. Winged and nonwinged insects
2. Students understand the life cycles of insects
 - a. Metamorphosis
 - b. Molting
 - c. Distinct life stages: egg, larva, pupa, adult
3. Students understand social insects
 - a. Social versus solitary
 - b. Roles of individuals/groups in colonies of insects.
4. Students understand insects can be helpful and harmful to people.
 - a. Helpful: pollination; production of honey, beeswax, silk; predators of other harmful insects.
 - b. Harmful: destruction of crops, trees, wooden buildings, clothes; carriers of diseases; stings and bites.

IV. Earth Science

A. Students know the materials that make up the earth.

1. Rocks
 - a. Students know rocks are composed of different combinations of minerals.
 - b. Students know physical properties of different kinds of rock.
 - c. Students can compare different kinds of rocks by their physical properties
 - d. Students know that smaller rocks come from the breakage and weathering of larger rocks.

e. Students know that some rocks contain fossils and that fossils provide evidence about the plants and animals that lived long ago.

f. Students know that scientists can learn about the past history of the Earth by studying fossils.

2. Soil

a. Students know that soil is made partly from weathered rock and partly from organic materials.

b. Students know that there are different kinds of soil and soil can be distinguished by their color, texture, capacity to retain water and ability to support the growth of plants.

B. Students know that materials that make up the earth can provide resources for human activities.

1. Students know that rock, water, plants and soil can be used for food, fuel and building materials.

C. The Solar System

1. Students understand the sun as a source of energy, light and heat.

2. Students can list the nine planets of the solar system.

3. Students can list and draw pictures of the phases of the moon (full, half, crescent, new).

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students make predictions based on observed patterns and not random guessing.

2. Students measure length, weight, temperature and liquid volume with appropriate tools and express those measurements in standard metric system units.

3. Students compare and sort common objects according to two or more physical attributes (i.e. color, shape, texture, size, weight)

4. Students write or draw descriptions of a sequence of steps, events and observations.

5. Students construct bar graphs to record data, using appropriately labeled axes.

6. Students use magnifiers or microscopes to observe and draw descriptions of small objects or small features of objects.

7. Students follow oral instructions for a scientific investigation.

Third Grade

I. Physical Science

A. Students know energy and matter have multiple forms and can be changed from one form to another.

1. Students know energy comes from the Sun to Earth in the form of light.
2. Students know sources of stored energy take many forms, such as food, fuel and batteries.
3. Students know machines and living things convert stored energy to motion and heat.
4. Students know energy can be carried from one place to another by waves, such as water waves and sound waves, by electric current and by moving objects.
5. Students know matter has three forms: solid, liquid and gas.
6. Students know evaporation and melting are changes that occur when objects are heated.
7. Students know that when two or more substances are combined, a new substance may be formed with properties that are different from those of the original materials.
8. Students know all matter is made of small particles called atoms, too small to see with the naked eye.
9. Students know people once thought that earth, wind, fire and water were the basic elements that make up all matter. Science experiments show that there are more than 100 different type of atoms, which are presented on the periodic table of the elements.

B. Students know that light has a source and travels in a direction.

1. Students know sunlight can be blocked to create shadows.
2. Students know light is reflected from mirrors and other surfaces.
3. Students know the color of light striking an object affects the way the object is seen.
4. Students know an object is seen when light traveling from the object enters the eyes.

II. Life Sciences

A. Students know adaptations in physical structure or behavior may improve an organism's chance for survival.

1. Students know plants and animals have structures that serve different functions in growth, survival and reproduction.
2. Students know examples of diverse life forms in different environments, such as oceans, deserts, tundra, forests, grasslands and wetlands.

3. Students know living things cause changes in the environment in which they live: some of these changes are detrimental to the organism or other organisms and some are beneficial.
4. Students know when the environment changes, some plants and animals survive and reproduce, others die or move to new locations.
5. Students know that some kinds of organisms that once lived on earth have completely disappeared and that some of those resembled others that are alive today.

B. Students know the ways scientists classify animals

1. Students know the difference between warm-blooded and cold-blooded animals.
2. Students know the difference between vertebrates and invertebrates.
3. Students identify different classes of vertebrates and know the major physical characteristics and major habitats of each;
 - a. Fish: aquatic animals, breathe through gills, cold-blooded.
 - b. Amphibians: live part of their lives in water and part on land; have gills when young and develop lungs as they get older; cold-blooded.
 - c. Reptiles: dry, thick, scaly skin; hatch from eggs, cold-blooded.
 - d. Birds: most can fly; have feathers and wings; hatch from eggs; warm-blooded.
 - e. Mammals: warm-blooded; most live on land; give birth to live young.

III. Earth Science

A. Students know that objects in the sky move in regular and predictable patterns.

1. Students know the patterns of stars stay the same, although they appear to move across the sky nightly, and different stars can be seen in different seasons.
2. Students know the way in which the Moon's appearance changes during the four-week lunar cycle.
3. Students know telescopes magnify the appearance of some distant objects in the sky, including the Moon and the planets. The number of stars that can be seen through telescopes is dramatically greater than the number that can be seen by the unaided eye.
4. Students know that Earth is one of several planets that orbit the Sun and that the Moon orbits the Earth.
5. Students know the position of the Sun in the sky changes during the course of the day and from season to season.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students repeat observations to improve accuracy and know that the results of similar scientific investigations seldom turn out exactly the same because of differences in the things being investigated, methods being used, or uncertainty in the observation.
2. Students differentiate evidence from opinion and know that scientists do not rely on claims or conclusions unless they are backed by observations that can be confirmed.
3. Students use numerical data in describing and comparing objects, events, and measurements.
4. Students predict the outcome of a simple investigation and compare the result with the prediction.
5. Students collect data in an investigation and analyze those data to develop a logical conclusion.

Fourth Grade

I. Physical Science

A. Students know electricity and magnetism are related effects that have many useful applications in everyday life.

1. Students know how to design and build simple series and parallel circuits by using components such as wires, batteries and bulbs.
2. Students know how to build a simple compass and use it to detect magnetic effects, including the Earth's magnetic field.
3. Students know electric currents produce magnetic fields and know how to build a simple electromagnet.
4. Students know the role of electromagnets in the construction of electric motors, electric generators, and simple devices, such as doorbells and earphones.
5. Students know electrically charged objects attract or repel each other.
6. Students know that magnets have two poles (north and south) and that like poles repel each other while unlike poles attract each other.
7. Students know electrical energy can be converted to heat, light and motion.

II. Life Science

A. Students know that all organisms need energy and matter to live and grow.

1. Students know plants are the primary source of matter and energy entering most food chains.
2. Students know producers and consumers (herbivores, carnivores, omnivores and decomposers) are related in food chains and food webs and may compete with each other for resources in an ecosystem.
3. Students know decomposers, including many fungi, insects and microorganisms, recycle matter from dead plants and animals.

B. Students know living organisms depend on one another and on their environment for survival.

1. Students know ecosystems can be characterized by their living and nonliving components.
2. Students know that in any particular environment, some kinds of plants and animals survive well, some survive less well, and some cannot survive at all.
3. Students know many plants depend on animals for pollination and seed dispersal, and animals depend on plants for food and shelter.
4. Students know that most microorganisms do not cause disease and that many are beneficial.

III. Earth Science

A. Students know the properties of rocks and minerals reflect the processes that formed them.

1. Students know how to differentiate among igneous, sedimentary and metamorphic rocks by referring to their properties and methods of formation (the rock cycle).
2. Students know how to identify common rock-forming minerals (including quartz, calcite, feldspar, mica and hornblende) and ore minerals by using a table of diagnostic properties.

B. Students know waves, wind, water and ice shape and reshape the earth's land surface.

1. Students know some changes in the earth are due to slow processes, such as erosion, and some changes are due to rapid processes, such as landslides, volcanic eruptions and earthquakes.
2. Students know natural processes, including freezing and thawing and the growth of roots, cause rocks to break down in smaller pieces.
3. Students know moving water erodes landforms, reshaping the land by taking it away from some places and depositing it as pebbles, sand, silt and mud in other places (weathering, transport and deposition).

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students differentiate observation from inference (interpretation) and know scientists' explanations come partly from what they observe and partly from how they interpret their observations.
2. Students measure and estimate the weight, length or volume of objects.
3. Students formulate and justify predictions based on cause-and-effect relationships.
4. Students conduct multiple trials to test a prediction and draw conclusions about the relationships between predictions and results.
5. Students construct and interpret graphs from measurements.
6. Students follow a set of written instructions for a scientific investigation.

Fifth Grade

I. Physical Science

A. Students know elements and their combinations account for all the varied types of matter in the world.

1. Students know that during chemical reactions the atoms in the reactants rearrange to form products with different properties.
2. Students know all matter is made of atoms, which may combine to form molecules.
3. Students know metals have properties in common, such as high electrical and thermal conductivity. Some metals such as aluminum (Al), iron (Fe), nickel (Ni), copper (Cu), silver (Ag) and gold (Au) are pure elements, which others such as steel and brass, are composed of a combination of elemental elements.
4. Students know that each element is made of one kind of atom and that the elements are organized in the periodic table by their chemical properties.
5. Students know that scientists developed instruments that can create discrete images of atoms and molecules that show that the atoms and molecules often occur in well-ordered arrays.
6. Students know differences in chemical and physical properties of substances are used to separate mixtures and identify compounds.
7. Students know properties of solid, liquid and gaseous substances, such as sugar ($C_6H_{12}O_6$), water (H_2O), helium (He), oxygen (O_2), nitrogen (N_2), and carbon dioxide (CO_2).
8. Students know living organisms and most materials are composed of just a few elements.
9. Students know the common properties of salts, such as sodium chloride (NaCl).

II. Life Sciences

A. Students know plants and animals have structures for respiration, digestion, waste disposal and transport of materials.

1. Students know many multicellular organisms have specialized structures to support the transport of materials.
2. Students know how blood circulates through the heart chambers, lungs, and body and how carbon dioxide (CO_2) and oxygen (O_2) are exchanged in the lungs and tissues.
3. Students know the sequential steps of digestion and the roles of teeth and the mouth, esophagus, stomach, small intestine, large intestine, and colon in the function of the digestive system.
4. Students know the role of the kidney in removing cellular waste from blood and converting it into urine, which is stored in the bladder.

5. Students know how sugar, water and minerals are transported in a vascular plant.
6. Students know plants use carbon dioxide (CO₂) and energy from sunlight to build molecules of sugar and release oxygen.
7. Students know plant and animal cells break down sugar to obtain energy, a process resulting in carbon dioxide (CO₂) and water (respiration).

III. Earth Science

A. Students know water on Earth moves between the oceans and land through the processes of evaporation and condensation.

1. Students know most of Earth's water is present as salt water in the oceans, which cover most of Earth's surface.
2. Students know when liquid water evaporates, it turns into water vapor in the air and can reappear as a liquid when cooled or as a solid if cooled below the freezing point of water.
3. Students know water vapor in the air moves from one place to another and can form fog or clouds, which are tiny droplets of water or ice, and can fall to Earth as rain, hail, sleet or snow.
4. Students know that the amount of fresh water located in rivers, lakes, underground sources and glaciers is limited and that its availability can be extended by recycling and decreasing the use of water.
5. Students know the origin of the water used by their local communities.

B. Students know energy from the Sun heats Earth unevenly, causing air movements that result in changing weather patterns.

1. Students know uneven heating of Earth causes air movements (convection currents).
2. Students know the influence that the ocean has on the weather and the role that the water cycle plays in weather patterns.
3. Students know the causes and effects of different types of severe weather.
4. Students know how to use weather maps and data to predict local weather and know that weather forecasts depend on many variables.
5. Students know that the Earth's atmosphere exerts a pressure that decreases with distance above Earth's surface and that at any point it exerts this pressure equally in all directions.

C. Students know the solar system consists of planets and other bodies that orbit the Sun in predictable paths.

1. Students know the Sun, an average star, is the central and largest body in the solar system and is composed primarily of hydrogen and helium.

2. Students know the solar system includes the planet Earth, the Moon, the Sun, eight other planets and their satellites, and smaller objects, such as asteroids and comets.

3. Students know the path of a planet around the Sun is due to the gravitational attraction between the Sun and the planet.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students classify objects (i.e. rocks, plants, leaves) in accordance with appropriate criteria.

2. Students develop a testable question.

3. Students can plan and conduct a simple investigation based on a student-developed question and write instructions others can follow to carry out the procedure.

4. Students identify the dependent and controlled variables in an investigation.

5. Students identify a single independent variable in a scientific investigation and explain how this variable can be used to collect information to answer a question about the results of the experiment.

6. Students select appropriate tools (i.e. thermometers, meter sticks, balances, and graduated cylinders) and make quantitative observations.

7. Students record data by using appropriate graphic representations (including charts, graphs and labeled diagrams) and make inferences based on those data.

8. Students draw conclusions from scientific evidence and indicate whether further information is needed to support a specific conclusion.

9. Students write a report of an investigation that includes conducting tests, collecting data or examining evidence, and drawing conclusions.

Sixth Grade

I. Earth Science

A. Plate Tectonics and Earth's Structures

1. Students know plate tectonics accounts for important features of Earth's surface and major geological events.

a. Students know evidence of plate tectonics is derived from the fit of the continents, the location of earthquakes, volcanoes, and midocean ridges; and the distributions of fossils, rock types, and ancient climactic zones.

b. Students know earth is composed of several layers: a cold, brittle lithosphere; a hot, convecting mantle; and a dense, metallic core.

c. Students know lithospheric plates the size of continents and oceans move at rates of centimeters per year in response to movements in the mantle.

d. Students know that earthquakes are sudden motions along breaks in the crust called faults and that volcanoes and fissures are locations where magma reaches the surface.

e. Students know major geologic events, such as earthquakes, volcanic eruptions, and mountain building, result from plate motions.

f. Students know how to explain major features of New York State geology (including mountains, faults) in terms of plate tectonics.

g. Students know how to determine the epicenter of an earthquake and know that the effects of an earthquake on any region vary, depending on the size of the earthquake, the distance of the region from the epicenter, the local geology and the type of construction in the region.

B. Shaping Earth's Surface

1. Students know topography is reshaped by the weathering of rock and soil and by the transportation and deposition of sediment.

a. Students know water running downhill is the dominant process in shaping the landscape, including New York State's landscape.

b. Students know rivers and streams are dynamic systems that erode, transport sediment, change course, and flood their banks in natural and recurring patterns.

c. Students know beaches are dynamic systems in which the sand is supplied by rivers and moved along the coast by the action of waves.

d. Students know earthquakes, volcanic eruptions, landslides and floods changes human and wildlife habitats.

II. Physical Science

A. Heat (Thermal Energy)

1. Students know heat moves in a predictable flow from warmer objects to cooler objects until all the objects are at the same temperature.
 - a. Students know energy can be carried from one place to another by heat flow or by waves, including water, light and sound waves, or by moving objects.
 - b. Students know that when fuel is consumed, most of the energy released becomes heat energy.
 - c. Students know heat flows in solids by conduction (which involves no flow of matter) and in fluids by conduction and by convection (which involves flow of matter).
 - d. Students know heat energy is also transferred between objects by radiation (radiation can travel through space).

B. Energy in the Earth System

1. Students know many phenomena on Earth's surface are affected by the transfer of energy through radiation and convection currents.
 - a. Students know the sun is the major source of energy for phenomena on Earth's surface; it powers winds, ocean currents and the water cycle.
 - b. Students know solar energy reaches Earth through radiation, mostly in the form of visible light.
 - c. Students know heat from Earth's interior reaches the surface primarily through convection.
 - d. Students know convection currents distribute heat in the atmosphere and oceans.
 - e. Students know differences in pressure, heat, air movement, and humidity result in changes of weather.

III. Life Science

A. Ecology

1. Students know organisms in ecosystems exchange energy and nutrients among themselves and with the environment.
 - a. Students know energy entering ecosystems as sunlight is transferred by production into chemical energy through photosynthesis and then from organism to organism through food webs.
 - b. Students know matter is transferred over time from one organism to others in the food web and between organisms and the physical environment.

- c. Students know populations of organisms can be categorized by the functions they serve in an ecosystem.
- d. Students know different kinds of organisms may play similar ecological roles in similar biomes.
- e. Students know the number and types of organisms an ecosystem can support depends on the resources available and on abiotic factors, such as quantities of light and water, a range of temperatures and soil composition.

B. Resources

- 1. Students know sources of energy and materials differ in amounts, distribution, usefulness and the time required for their formation.
 - a. Students know the utility of energy sources is determined by factors that are involved in converting these sources to useful forms and the consequences of the conversion process.
 - b. Students know different natural energy and material resources, including air, soil, rocks, minerals, petroleum, fresh water, wildlife, and forests, and know how to classify them as renewable or nonrenewable.
 - c. Students know the natural origin of the materials used to make common objects.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

- 1. Students develop a hypothesis.
- 2. Students select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes, and binoculars) to perform tests, collect data and display facts.
- 3. Students construct appropriate graphs from data and develop qualitative statements about the relationships between variables.
- 4. Students communicate the steps and results from an investigation in written reports and oral presentations.
- 5. Students recognize whether evidence is consistent with a proposed explanation.
- 6. Students read a topographic map and a geologic map for evidence provided on the maps, and construct and interpret a simple scale map.
- 7. Students interpret events by sequence and time from natural phenomena (i.e. the relative ages of rocks and intrusions).
- 8. Students identify changes in natural phenomena over time without manipulating the phenomena (i.e a tree limb, a grove of trees, a stream, a hillslope).

Seventh Grade

I. Life Science

A. Cell Biology

1. Students know all living organisms are composed of cells, from just one to many trillions, whose details usually are visible only through a microscope.
 - a. Students know cells function similarly in all living organisms.
 - b. Students know the characteristics that distinguish plant cells from animal cells, including chloroplasts and cell walls.
 - c. Students know the nucleus is the repository for genetic information in plant and animal cells.
 - d. Students know that mitochondria liberate energy for the work that the cells do and that chloroplasts capture sunlight energy for photosynthesis.
 - e. Students know cells divide to increase their numbers through a process of mitosis which results in two daughter cells with identical sets of chromosomes.
 - f. Students know that as multicellular organisms develop, their cells differentiate.

B. Genetics

1. Students know a typical cell of any organism contains genetic instructions that specify its traits. Those traits may be modified by environmental influences.
 - a. Students know the differences between the life cycles and reproduction methods of sexual and asexual organisms.
 - b. Students know sexual reproduction produces offspring that inherit half their genes from each parent.
 - c. Students know an inherited trait can be determined by one or more genes.
 - d. Students know plant and animal cells contain many thousands of different genes and typically have two copies of every gene. The two copies (or alleles) of the gene may or may not be identical, and one may be dominant in determining the phenotype while the other is recessive).
 - e. Students know DNA (deoxyribonucleic acid) is the genetic material of living organisms and is located in the chromosome of each cell.

C. Evolution

1. Students know that biological evolution accounts for the diversity of species developed through gradual processes over many generations.

- a. Students know both genetic variation and environmental factors are causes of evolution and diversity of organisms.
- b. Students know the reasoning used by Charles Darwin in reaching in his conclusion that natural selection is the mechanism of evolution.
- c. Students know how independent lines of evidence from geology, fossils and comparative anatomy provide the bases for the theory of evolution.
- d. Students know how to construct a simple branching diagram to classify living groups of organisms by shared derived characteristics and how to expand the diagram to include fossil organisms.
- e. Students know that extinction of a species occurs when the environment changes and that the adaptive characteristics of a species are insufficient for its survival.

II. Earth Science

A. Earth and Life History

- 1. Students know evidence from rocks allows us to understand the evolution of life on Earth.
 - a. Students know Earth processes today are similar to those that occurred in the past and slow geologic processes have large cumulative effects over long periods of time.
 - b. Students know the history of life on Earth has been disrupted by major catastrophic events, such as major volcanic eruptions or the impacts of asteroids.
 - c. Students know that the rock cycle includes the formation of new sediment and rocks and that rocks are often found in layers, with the oldest generally on the bottom.
 - d. Students know that evidence from geologic layers and radioactive dating indicates Earth is approximately 4.6 billion years old and that life on this planet has existed for more than 3 billion years.
 - e. Students know that fossils provide evidence of how life and environmental conditions have changes.
 - f. Students know how movements of Earth's continental and oceanic plates through time, with associated changes in climate and geographic connections, have affected the past and present distribution of organisms.
 - g. Students know how to explain significant developments and extinctions of plants and animal life on the geologic time scale.

B. Structure and Function in Living Systems

- 1. Students know the anatomy and physiology of plants and animals illustrate the complementary nature of structure and formation.

- a. Students know plants and animals have levels of organization for structure and function, including cells, tissues, organs, organ systems, and the whole organism.
- b. Students know organ systems function because of the contributions of individual organs, tissues and cells. The failure of any part can affect the entire system.
- c. Students know how bones and muscles work together to provide a structural framework for movement.
- d. Students know how the reproductive organs of the human female and male generate eggs and sperm and how sexual activity may lead to fertilization and pregnancy.
- e. Students know the function of the umbilicus and placenta during pregnancy.
- f. Students know the structures and processes by which flowering plants generate pollen, ovules, seeds and fruit.
- g. Students know how to relate the structures of the eye and ear to their functions.

III. Physical Science

A. Physical Principles in Living Systems.

- 1. Students know physical principles underlie biological structures and functions.
 - a. Students know visible light is a small band within a very broad electromagnetic spectrum.
 - b. Students know that for an object to be seen, light emitted by or scattered from it must be detected by the eye.
 - c. Students know light travels in straight lines in the medium it travels through does not changes.
 - d. Students know how simple lenses are used in a magnifying glass, the eye, a camera, a telescope and a microscope.
 - e. Students know that white light is a mixture of many wavelenths (colors) and that retinal cells react differently to different wavelenghts.
 - f. Students know light can be reflected, refracted, transmitted and absorbed by matter.
 - g. Students know the angle of reflection of a light beam is equal to the angle of incidence.
 - h. Students know how to compare joints in the body (wrist, knee, shoulder) with structures used in machines and simple devises (hinge, ball and socket, and sliding joints).
 - i. Students know how levers confer mechanical advantage and how the application of this principle applies to the muscular-skeletal system.

- j. Students know that contractions of the heart generate blood pressure and that heart valves prevent backflow of blood in the circulatory system.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students select and use appropriate tools and technology (including calculators, computers, balances, spring scales, microscopes and binoculars) to perform tests, collect data and display data.
2. Students use a variety of print and electronic resources (including the internet) to collect information and evidence as part of a research project.
3. Students communicate the logical connection among hypotheses, science concepts, tests conducted, data collected and conclusions drawn from the scientific evidence.
4. Students construct scale models, maps, and appropriately labeled diagrams to communicate scientific knowledge (i.e. motion of the Earth's plates or cell structure).
5. Students communicate the steps and results from an investigation in written reports and oral presentations.

Eighth Grade

I. Physical Science

A. Motion

1. Students know the velocity of an object is the rate of change of its position.
 - a. Students know position is defined in relation to some choice of a standard reference point and a set of reference directions.
 - b. Students know that average speed is the total distance traveled divided by the total time elapsed and that the speed of an object along the path traveled can vary.
 - c. Students know how to solve problems involving distance, time and average speed.
 - d. Students know the velocity of an object must be described by specifying both the direction and the speed of an object.
 - e. Students know changes in velocity may be due to changes in speed, direction or both.
 - f. Students know how to interpret graphs of position versus time and graphs of speed versus time for motion in a single direction.

B. Forces

1. Students know unbalanced forces cause changes in velocity.
 - a. Students know a force has both direction and magnitude.
 - b. Students know when an object is subject to two or more forces at once, the result is the cumulative effect of all the forces.
 - c. Students know when the forces on an object are balanced, the motion of the object does not change.
 - d. Students know how to identify separately the two or more forces that are acting on a single static object, including gravity, elastic forces due to tension or compression in matter, and friction.
 - e. Students know that when the forces on an object are unbalanced, the object will change its velocity (that is, it will speed up, slow down, or change direction).
 - f. Students know the greater the mass of an object, the more force is needed to achieve the same rate of change in motion.
 - g. Students know the role of gravity in forming and maintaining the shapes of planets, stars and the solar system.

C. Structure of Matter

1. Students know that each of the more than 100 elements of matter has distinct properties and a distinct atomic structure. All forms of matter are composed of one or more of the elements.
 - a. Students know the structure of the atom and know it is composed of protons, neutrons and electrons.
 - b. Students know that compounds are formed by combining two or more different elements, and that compounds have properties that are different from their constituents elements.
 - c. Students know atoms and molecules form solids by building up repeating patterns, such as the crystal structure of NaCl or long-chain polymers.
 - d. Students know the states of matter (solid, liquid, or gas) depend on molecular motion.
 - e. Students know that in solids the atoms are closely locked in position and can only vibrate; in liquids the atoms and molecules are more loosely connected and can collide with and move past one another; and in gases the atoms and molecules are free to move independently, colliding frequently.
 - f. Students know how to use the periodic table to identify elements in simple compounds.

D. Periodic Table

1. Students know the organization of the periodic table is based on the properties of the elements and reflects the structure of atoms.
 - a. Students know how to identify regions corresponding to metals, nonmetals, and inert gases.
 - b. Students know each element has a specific number of protons in the nucleus (the atomic number) and each isotope of the element has a different but specific number of neutrons in the nucleus.
 - c. Students know substances can be classified by their properties, including their melting temperature, density, hardness and thermal and electrical conductivity.

E. Density and Buoyancy

1. Students know all objects experience a buoyant force when immersed in a fluid.
 - a. Students know density is mass per unit volume.
 - b. Students know how to calculate the density of substances (regular and irregular solids and liquids) from measurement of mass per unit volume.
 - c. Students know the buoyant force on an object in a fluid is an upward force equal to the weight of the fluid the object has displaced.
 - d. Students know how to predict whether an object will float or sink.

II. Earth Science

A. Earth in the Solar System

1. Students know the structure and composition of the universe can be learned from studying stars and galaxies and their evolution.
 - a. Students know galaxies are clusters of billions of stars and may have different shapes.
 - b. Students know that the Sun is one of many stars in the Milky Way galaxy and that stars may differ in size, temperature and color.
 - c. Students know how to use astronomical units and light years as measures of distances between the Sun, stars and Earth.
 - d. Students know that stars are the source of light for all bright objects in outer space and that the Moon and planets shine by reflected sunlight, not by their own light.
 - e. Students know the appearance, general composition, relative position and size, and motion of objects in the solar system, including planets, planetary satellites, comets and asteroids.

B. Reactions

1. Students know chemical reactions are processes in which atoms rearranged into different combinations of molecules.
 - a. Students know reactant atoms and molecules interact to form products with different chemical properties.
 - b. Students know the idea of atoms explains the conservation of matter: In chemical reactions, the number of atoms stays the same no matter how they are arranged, so their total mass stays the same.
 - c. Students know chemical reactions usually liberate heat or absorb heat.
 - d. Students know physical processes include freezing and boiling, in which a material changes form with no chemical reaction.
 - e. Students know how to determine whether a solution is acidic, basic or neutral.

III. Life Science

A. Chemistry of Living Systems

1. Students know principles of chemistry underlie the functioning of biological systems.
 - a. Students know that carbon, because of its ability to combine in many ways with itself and other elements, has a central role in the chemistry of living organisms.

b. Students know that living organisms are made of molecules consisting largely of carbon, hydrogen, nitrogen, oxygen, phosphorus and sulfur.

c. Students know that living organisms have many different kinds of molecules, including small ones, such as water and salt, and very large ones, such as carbohydrates, fats, proteins and DNA.

IV. Investigation and Experimentation

A. Students engage in the scientific process by asking meaningful questions and conducting careful investigations.

1. Students plan and conduct a scientific investigation to test a hypothesis.
2. Students evaluate the accuracy and reproducibility of data.
3. Students distinguish between variable and controlled parameters in a test.
4. Students recognize the slope of the linear graph as the constant in the relationship $y=kx$ and apply this principle in interpreting graphs constructed from the data.
5. Students construct appropriate graphs from data and develop quantitative statements about the relationships between variables.
6. Students apply simple mathematic relationships to determine a missing quantity in a mathematic expression given the two remaining terms (including $\text{speed}=\text{distance}/\text{time}$, $\text{density}=\text{mass}/\text{volume}$, $\text{force}=\text{pressure} \times \text{area}$, $\text{volume}=\text{area} \times \text{height}$).
7. Students distinguish between linear and nonlinear relationships on a graph of data.

Social Studies

E Pluribus Unum. No better phrase describes America. Initially describing the welding of one federal state from a group of individual colonies, the phrase *e pluribus unum* continued to grow in meaning and depth as our country grew. “Out of many, one” now not only describes our one nation of 50 states, but our one people made up of individuals who have come from every nation in this world, representing every religious group, every race, every walk of life. What binds Americans together despite different heritages, ethnicity, races, religions, cultures is our belief in the most fundamental concepts of our democracy—our basic rights, responsibilities and freedoms. It is our duty to impart to all of our children a better understanding of our own democratic ideals, their origins and an understanding of the countless sacrifices that have been made by others to assure the present generation of Americans the basic rights and freedoms we now enjoy. Without this deep civic knowledge, our children will not be prepared to figure out where we stand, what we believe in, what we must defend, and what we still must do—when confronted with a discrepancy between our behavior and our ideals—to ensure that America does achieve for all its citizens the ideals expressed in the preamble of our Constitution:

“We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.”

In a world of global interdependence, it is also imperative that American students not only are knowledgeable about U.S. History and the fundamental concepts of our democracy, but are also knowledgeable about Asian, African, European, Middle Eastern and Latin American history. In doing so, we are creating well-rounded, educated American and global citizens who have the knowledge and skills necessary to place conflicting ideas in context and the wisdom to make good judgments in dealing with the tensions inherent in our local, national and global society. As Colorado commissioner of education and chairman of the National Assessment Governing Board William T. Randall stated in 1995, in his statement on the 1994 NAEP History Results, “A firm knowledge of history is important because, without it, students are open to manipulation and deceit, and our system of democratic self-government, which depends on knowledgeable citizens, will be weakened.”

There is much division in this country, however, about what should be taught in history. The factions that make up the different sides of the debate on the teaching of American History and World History in our public schools rival those in the debate on the teaching of reading. In simplest terms, the struggle is between those that believe the focus of the teaching of history, and of American History in particular, should be on the “pluribus” and those that believe the focus should be on the “unum.” Like the two sides of the reading debate, those promoting phonics and those promoting whole language, the two sides in the history debate have become highly politicized. The proponents of the “pluribus” approach to the teaching of history became aligned with the liberal left and were about emphasizing the multicultural nature of our society, at the expense of teaching about our common culture. Their treatment of American history emphasized the nation’s wrongs and failings and diminished its genuine accomplishments. On the other hand, the proponents of the “unum” approach were aligned with the conservative right and were about teaching common culture, pride in our heritage as Americans filled with public patriotic affirmation, American history that de-emphasized our failings and weaknesses, and world history from a Western European perspective. The teaching of history has become a highly charged partisan issue with each side believing the two strains of thought are mutually exclusive. The irony of the debate on the teaching of history is the fact that the two sides have separated the nation’s original motto that characterizes our country “e pluribus unum” into two strains of thought when they are, in fact, inseparable.

While the debate swirls, American students’ knowledge of American history continues to decline. As Secretary of Education Rod Paige stated at the May 9, 2002 press conference in which the U.S. Department of Education released the less than positive results for the 2001 National Assessment Educational Progress U.S. History Assessment, “This is unacceptable. History is a critical part of our nation’s school curriculum. It is through

history that we understand our past and contemplate our future... The questions that stumped so many students involve the most fundamental concepts of our democracy, our growth as a nation and our role in the world.”

The Bronx Charter School for Excellence’s social studies content standards balance pluribus and unum. Through our Social Studies curriculum of which the study of History is its integral component, we seek to give our students the knowledge, intellectual skills, civic understanding and disposition toward democratic values that are necessary to function effectively in American society. Furthermore, we desire to create students who understand their rights and responsibilities as citizens of our country and citizens of this world. The standards draw on those from New York State, California, Texas and the revised 1996 standards from the National Center for History of Schools of UCLA.

Critical in the teaching of social studies will be a move away from standardized history textbooks. At the May 9, 2002 press conference announcing the results of the NAEP U.S. History Assessment, Indiana University Professor of Education John J. Patrick stated that he found some positive developments in the NAEP assessment, particularly regarding the increased use of nontextbook sources in the teaching and learning of U.S. History. The assessment showed that the use of primary sources was related to higher student achievement among 8th grade students, and 12th graders who read biographies performed better than students who did not. Patrick concluded, “it seems that there has been an increasing use of courses other than the textbook in the teaching and learning of U.S. History, which has led to improved achievement by students.” Furthermore, both Dr. Patrick and Historian and Professor of Education at NYU, Diane Ravitch, recommended that prospective teachers should demonstrate their knowledge of history before they are licensed to teach the subject in schools. Both these strategies will be employed by the Bronx Charter School for Excellence. Across all subject areas, BCSE will employ teachers who have demonstrated excellence in the subject area they will teach, while the materials used in the study of social studies and history will include the use of the following in addition to a standard text:

- original documents and letters to bring students into direct contact with important documents of American and world history;
- field trips to museums, exhibits and other historical sites;
- high quality documentaries that are integrated into classroom instruction; and
- art and literature to convey historical events and figures.

New York State Social Studies Standards

Standard 1 History of the United States and New York

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.

Standard 2 World History

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.

Standard 3 Geography

Students will use a variety of intellectual skills to demonstrate their understanding of the interdependent world in which we live—local, national and global—including the distribution of people, places and environments over the earth's surface.

Standard 4 Economics

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 resources, how major decision-making units function in the United States and other national economies, and how an economy solves the scarcity problem through market and non-market mechanisms.

Standard 5 Civics, Citizenship and Government

Students will use a variety of intellectual skills to demonstrate their understanding of the necessity for establishing governments; the governmental system of the United States and other nations; the United States Constitution; the basic civic values of American constitutional democracy; and the roles, rights and responsibilities of citizenship, including avenues of participation.

The Bronx Charter School for Excellence Standards for Social Studies**Kindergarten**

In Kindergarten, the focus is on the self, home, family and the classroom. The study of our state and national heritage begins with an examination of the celebration of patriotic holidays and the contributions of historical people. The concept of chronology is introduced. Students discuss geographic concepts of location and physical and human characteristics of places. Students are introduced to the basic human needs of food, clothing and shelter and to ways that people meet these needs. Students learn the purpose of rules and the role of authority figures in the home and school. Students learn customs, symbols and celebrations that represent American beliefs and principles and contribute to our national identity. Students compare family customs and traditions and describe examples of technology in the home and schools. Students acquire information from a variety of visual and oral sources.

- I. Living and Working in Families and Communities, Now and Long Ago
 - A. Students understand how people learn about themselves through family, customs and traditions.
 1. Students identify members of their families and their connections in order to construct a time line.
 2. Students identify family customs and traditions and explain their importance.
 3. Students compare family customs and traditions
 4. Students describe customs of the local community.
 5. Students know that people use folktales, legends, music and oral histories to teach values, ideas and traditions.
 - B. Students understand similarities and differences among people.
 1. Students identify personal attributes common to all people.
 2. Students identify differences among people.
 3. Students recognize that different people live in their neighborhoods
 - C. Students understand the importance of jobs.
 1. Students identify jobs in their home, their school and their community
 2. Students explain why people have jobs.
 - D. Students understand that basic human needs are met in many ways.
 1. Students identify basic human needs.
 2. Students explain how basic human needs of food, clothing and shelter can be met.
 - E. Students understand how technology has changed how people live.

1. Students identify examples of technology used in the home and school.
2. Students describe how technology helps accomplish specific tasks.
3. Students describe how their lives might be different without modern technology.
4. Students list ways in which technology meets people's needs.

F. Students understand the purpose of rules.

1. Students identify the purpose for having rules.
2. Students identify rules that provide order, security and safety in the home and school.
3. Students identify rules that exist in the community.
4. Students recognize there are consequences and punishments when rules are not followed.

G. Students understand the role of authority figures.

1. Students identify authority figures in the home, school and community.
2. Students explain how authority figures make and enforce rules.

H. Students understand the concept of location

1. Students locate places in the school and in the community and describe their relative locations.
2. Students use vocabulary that describes relative location including over, under, near, far, left and right.

I. Students understand the physical and human characteristics of the environment.

1. Students identify the physical characteristics of places such as landforms, bodies of water, natural resources and weather.
2. Students identify the human characteristics of places such as types of houses and ways of earning a living.

II. The History of New York City and New York State

A. Students know important facts about New York City

1. Students know there are five boroughs in New York City. They know the borough where they live and know the borough where they go to school.
2. Students know historical and cultural sites in New York City and their significance: the Statue of Liberty, the Empire State Building, Yankee Stadium, the Bronx Zoo.

3. Students can identify New York City on a New York State map.
4. Students know the name of the Mayor of New York City.

B. Students know important facts about New York State

1. Students know the capital of New York State is Albany.
2. Students can identify New York State on a map of the United States of America.
3. Students know the name of the Governor of New York State.

III. The History of the United States: Democratic Principles and Values, and the Myriad of People Who Contributed to our Cultural, Economic and Political Heritage.

A. Students understand that history relates to events, people and places of other times.

1. Students identify the purposes of, and the people and events honored in, commemorative holidays that celebrate the core democratic values and principles of this nation, and understand the human struggles that were the basis for the events.

- a. George Washington's Birthday
- b. Abraham Lincoln's Birthday
- c. Martin Luther King Jr. Day
- d. Independence Day
- e. Columbus Day
- f. Thanksgiving

2. Students know the triumphs in American legends and historical accounts through the stories of such people as George Washington, Booker T. Washington, Pocahontas, Daniel Boone, Benjamin Franklin, Martin Luther King Jr., and Thomas Edison.

3. Students know the symbols and figures that represent the United States and their significance

- a. The American Flag
- b. The White House
- c. The Statue of Liberty
- d. The Pledge of Allegiance
- e. The Bald Eagle

4. Students have a basic understanding of the United States government and how it was formed and our nation's basic democratic principles as set forth in the Declaration of Independence and the Constitution.

- a. The United States government was formed by our forefathers—colonists—who fought for independence from England.
- b. The United States is a democracy (ruled by people) and England, at that time, was ruled by a king.

5. Students identify key presidents and stories associated with them.

- a. George Washington—Father of our Country, 1st President, Story of Washington chopping down the cherry tree.
- b. Thomas Jefferson—wrote the Declaration of Independence
- c. Abraham Lincoln—President who freed the slaves.
- d. Current President

6. Students understand the concept of chronology

- a. Students can place historical events in chronological order.
- b. Students use vocabulary related to time and chronology, including before, after, next, first and last.

IV. The History of Peoples of Many Cultures around the World.

A. Students identify and locate the seven continents on a map and globe.

B. Students illustrate or retell the main ideas in folktales, legends, myths and stories of heroism that disclose the history and traditions of various cultures around the world.

C. Students perform dance and music and make drawings that symbolize various cultures around the world, and through the art forms make conclusions about the daily life, history and beliefs of the people in history.

D. Students understand great world movements of people now and long ago.

1. Students know the key elements of the voyage of Christopher Columbus.

- a. The year 1492.
- b. The names of the ships: Nina, Pinta, Santa Maria
- c. The prevailing view that the earth was flat.
- d. The discovery of the New World.

2. Students learn about other explorers such as Marco Polo and Ponce de Leon through stories and historical narratives and can describe their reasons for exploring and the knowledge they gained from their journeys.

3. Students understand key elements of the Pilgrim story, including:

- a. Their reasons for settling in America
- b. The Mayflower
- c. Plymouth Rock and its location on a map.
- d. The meaning, origin and custom of the Thanksgiving Day celebration

V. General Skills

A. Students communicate in oral and visual forms.

1. Students express ideas orally based on knowledge and experiences

2. Students create and interpret visuals including pictures and maps

B. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.

1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution and evaluate the effectiveness of a solution.
2. Students use decision-making processes to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

First Grade

In Grade 1, students learn about their relationship to the classroom, school and community. The concepts of time and chronology are developed by distinguishing among past, present and future events. Students identify anthems and mottoes of the United States and New York. Students make up simple maps to identify the location of places in the classroom, school and community. The concepts of goods and services and the value of work are introduced. Students identify historic figures and ordinary people who exhibit good citizenship. Students describe the importance of family customs and traditions and identify how technology has changed family life. Students sequence and categorize events.

- I. Living and Working Together in Families and Communities, Now and Long Ago.
 - A. Students understand how family life now and in the recent past has similarities and differences
 1. Students understand that different kinds of families that exist in the community.
 2. Students understand how families meet basic human needs.
 - a. Students describe ways that families meet basic human needs
 - b. Students describe similarities and differences in ways families meet basic human needs.
 3. Students understand the important of family beliefs, customs, language and traditions.
 - a. Students describe various beliefs, customs and traditions of families and explain their importance.
 - b.
 - c. Students know that folktales, biographies, oral histories and legends relate family histories.
 - d. Students retell stories from selected folktales and legends such as Aesop's Fables.
 - e. Students compare and contrast family life in the various cultures represented in the classroom both now and over time.
 4. Students trace their family history back to their grandparents, identifying various members and their connections, and construct a timeline.
 - a. Students identify places where their families lived
 - b. Students identify years in which various family members lived.
 5. Students understand the concepts of time and chronology
 - a. Students distinguish between past, present and future
 - b. Students create a calendar or timeline
 - c. Students use vocabulary related to chronology including yesterday, today and tomorrow.
 - B. Students understand the roles people have in the community.
 1. Students understand the concepts of goods and services

- a. Students identify examples of goods and services in the home, school and community.
 - b. Students identify ways people exchange goods and services
 - c. Students identify the role of markets in the exchange of goods and services.
2. Students understand the value of work.
 - a. Students describe the requirements of various jobs and the characteristics of a job well-performed.
 - b. Students describe how specialized jobs contribute to the production of goods and services.
 - c. Students know that people work to earn money to purchase goods and services they need and/or want.
 3. Students understand the condition of not being able to have all the goods and services one wants.
 - a. Students identify examples of people wanting more than they can have.
 - b. Students explain why wanting more than they can have requires that people make choices.
 - c. Students know that people must make decisions about how to spend the money they earn.
 - d. Students identify examples of choices families make when buying goods and services.
 4. Students understand the purpose of rules and laws.
 - a. Students explain the need for rules and laws in the home, school and community
 - b. Students give examples of rules or laws that establish order, provide security and manage conflict.
 - c. Students know the members of their school community and understand they have rights and responsibilities as part of the school community.
 5. Students understand the role of authority figures
 - a. Students identify leaders in the home and school community
 - b. Students identify the responsibilities of authority figures in the home and school community.
 - c. Students know that the greater community has authority figures—public officials.
- C. Students understand how technology has affected daily life, past and present, in their communities.
1. Students describe how household tools and appliances have changed the ways families live.
 2. Students describe how technology has changed communication, transportation and recreation.
 3. Students describe how technology has changed the way people work.
- D. Students understand various physical and human characteristics of the environment

1. Students identify and describe the physical characteristics of places such as landforms, bodies of water, natural resource and weather.
2. Students identify examples of and uses for natural resources in the community, state and nation.
3. Students identify and describe the human characteristics of places such as types of houses and ways of earning a living.
4. Students understand the relative location of place
 - a. Students locate places using the four cardinal directions
 - b. Students describe location of self and objects relative to other locations in the classroom and school.
5. Students understand the purpose and maps and globes.
 - a. Students create and use simple maps to identify the location of places in the classroom, school, community and beyond.
 - b. Students locate places of significance on maps and globes such as the local community, New York State and the United States.

II. The History of New York City and New York State

A. Students know important facts about New York City

1. Students know the political leaders of New York City.
 - a. Students describe the roles of public officials including the Mayor and the Borough President.
 - b. Students can name the Mayor of New York City
 - c. Students can name the Bronx Borough President
2. Students can identify major historical, educational and cultural institutions in New York City and understand their significance.
 - a. Metropolitan Museum of Art
 - b. Museum of Natural History
 - c. Madison Square Garden
 - d. Radio City Music Hall
 - e. Bronx Botanical Gardens
 - f. Fordham University

B. Students know important facts about New York State

1. Students know the name of the Governor of New York.
2. Students know that Native Americans were the first people who inhabited New York State and can name some tribes who are indigenous to the State.

3. Students are familiar with legends and myths of the Native Americans indigenous to New York State, which provide personal accounts of their history.

III. The History of the United States: Democratic Principles and Values and the People From Many Cultures Who Contributed to its Cultural, Economic and Political Heritage

A. Students understand how democratic principles came to be, and how they have been exemplified by people, events and symbols.

1. Students understand how the United States government was formed and the nation's basic democratic principles set forth in the Declaration of Independence and the Constitution.

- a. Students identify the Declaration of Independence as the document that declared our independence from England.
- b. Students identify the Constitution as the document that formed the United States government and delineates our rights and responsibilities as citizens.
- c. Students identify and explain the basic principles of American democracy that unify us as a nation: our individual rights to life, liberty and the pursuit of happiness; responsibility for the common good; equality of opportunity and equal protection under the law; freedom of speech and religion.
- d. Through stories and narratives, students can identify how since the birth of the nation, different individuals and groups in American society have struggled to achieve the liberties and equality promised in the principles of American democracy.
- e. Students understand the rule-making process in a direct democracy and in a representative democracy, giving examples of both in their classroom, school and community.

2. Students understand ordinary people who have exemplified values and principles of American democracy.

- a. Students understand characteristics of good citizenship such as belief in justice, truth, equality and responsibility for the common good.
- b. Students identify contributions of historical figures such as Abraham Lincoln who have influenced the community, state and nation.
- c. Students identify historic figures such as Clara Barton, Nathan Hale, Martin Luther King Jr., Eleanor Roosevelt who have exemplified good citizenship.
- d. Students identify historic figures such as Alexander Graham Bell and Thomas Edison who have exhibited a love of inventiveness.
- e. Students identify ordinary people who exemplify good citizenship and exhibit a love of individualism and inventiveness.
- f. Students identify the elements of fair play and good sportsmanship, respect for the rights and opinions of others and respect for rules by which we live, including the meaning of the "Golden Rule."

3. Students understand important customs, symbols and celebrations that represent American beliefs and principles and contribute to our national identity.

- a. Students explain the United States flag, the New York State flag, the Liberty Bell, the Statue of Liberty.
- b. Students can recite and explain the meaning of the Pledge of Allegiance.
- c. Students understand the process of voting in a democratic society.

- d. Students understand the meaning of Memorial Day.
- e. Students understand the meaning of Veterans Day.
- f. Students understand the meaning of Martin Luther King Jr. Day
- g. Students explain how selected customs, symbols and celebrations reflect an American love of individualism, inventiveness and freedom.
- h. Students identify anthems and mottos of the United States and New York State.
- i. Students know the National Anthem and learn such songs as "Oh Beautiful," "My Country 'tis of Thee".

IV. The History of Peoples of Many Cultures Around the World.

A. Students can name and identify on a map the seven continents and five oceans.

B. Students understand the cultures and historical developments of selected societies in such places as Africa, the Americas, Asia and Europe.

- 1. Students compare and contrast various aspects of family life, structures and roles in difference cultures and in many eras with students' own family lives.
- 2. Students illustrate or retell the main ideas in folktales, legends, myths and stories of heroism that disclose the history and traditions of various cultures around the world.
- 3. Students analyze the dance, music and art of various cultures around the world to draw conclusions about the history, daily life and beliefs of the people in history.
- 4. Students explain the customs related to important holidays and ceremonies in various countries in the past.

C. Students understand great world movements of people now and long ago.

- 1. Students draw upon historical narratives to identify early explorers and world travelers and describe the knowledge gained from their journeys.
- 2. Students draw upon historical narratives in order to identify European explorers of the 15th and 16th centuries and explain their reasons for exploring, the information gained from their journeys and what happened as a result of their travels.

A. Students understand the development of technological innovations, the major scientists and inventors associated with them and their social and economic effects.

- 1. Students compare and contrast the behaviors of hunters and gatherers with those people who cultivated plants and raised domesticated animals for food.
- 2. Students draw upon visual data to illustrate the development of the wheel and its early uses in ancient societies.
- 3. Students identify and describe the significant achievements of important scientists and inventors.

4. Students draw upon photographs, illustration, models and nonfictional resource materials to demonstrate the developments in marine vessels constructed by people from ancient times until today.

V. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

1. Students obtain information about a topic using a variety of oral sources such as conversation, interview and music.
2. Students obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer images, literature and artifacts.
3. Students sequence and categorize information.
4. Students identify main ideas from oral, visual and print sources and a variety of historical records.

B. Students communicate in written, oral and visual forms.

1. Students express ideas orally based on knowledge and experiences.
2. Students create visual and written material including pictures, maps, timelines and graphs.

C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings

1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution and evaluate the effectiveness of a solution.
2. Students use decision-making processes to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Second Grade

In Grade 2, students **focus** on the study of their local community by examining the impact of significant individuals and events **on the** history of the community as well as on the state and nation. Students begin to develop the concepts of **time and chronology** by measuring calendar time by days, weeks, months and years. The relationship between the physical environment and human activities is introduced as are the concepts of consumers and producers. Students identify functions of government as well as services provided by the local government. Students continue to acquire knowledge of important customs, symbols and celebrations that represent American beliefs and principles. Students identify the significance of works of art in the local community and explain how technological innovations have changed transportation and communication. Students communicate **what they** have learned in written, oral and visual forms.

I. Living and Working Together in Families and Communities Now and Long Ago

A. The Community

1. Students know distinguishing characteristics of urban, suburban and rural communities.
2. Students characterize their own community as urban, suburban or rural.
3. Students identify how their community has changed over time including changing from a rural to urban community, and the ways in which that change also changed the roles and responsibilities of families over time.
4. Students recognize that communities in the future may be different in many ways.
5. Students identify events, people, traditions, practices and ideas that made up their community.
6. Students use symbols, find locations and determine directions on maps and globes.
7. Students draw maps to show places and routes.
8. Students understand the significance of works of art in the local community.
 - a. Students identify and explain the significance of selected stories, poems, statues, paintings and other examples of the local cultural heritage.

B. Human, Capital and Natural Resources

1. Students understand how humans use and modify the physical environment
 - a. Students identify ways in which people depend on the physical environment, including natural resources, to meet basic needs.
 - b. Students identify ways in which people have modified the physical environment (including ways in their own community) such as building roads, clearing land for urban development, and mining coal.
 - c. Students identify positive consequences of human modification of the physical environment such as the use of irrigation to improve crop yields, roads to facilitate transportation and negative consequences such as removal of greenery, pollution, etc.
 - d. Students identify ways people can conserve and replenish natural resources.

- e. Students describe how weather patterns, natural resources, seasonal patterns and natural hazards affect activities and settlement patters.
- f. Students identify how communities and lifestyles in communities are influenced by environmental and geographic factors.

2. Students understand the importance of work.

- a. Students explain how work provides income to purchase goods and services.
- b. Students explain the choices people in the U.S. free enterprise system can make about earning, spending, and saving money and where to live and work.

3. Students understand the role of producers and consumers in the production of goods and services.

- a. Students distinguish between producing and consuming.
- b. Students identify ways in which people are both producers and consumers.
- c. Students trace the development of a product from a natural resource to a finished product.
- d. Students know that people must make choices due to unlimited needs and wants and limited resources and can give examples of this situation.

4. Students understand how technology has affected daily life, past and present, in their communities.

- a. Students describe how science and technology have changed communication, transportation and recreation.
- b. Students describe how science and technology have changed the ways in which people meet basic needs.

II. History of New York State

1. Students know the name of the Governor of New York.

2. Students know the history of the Native Americans who originally inhabited New York State.

- a. Students draw upon data in paintings and artifacts to hypothesize about the culture of the early Native Americans who lived in the State.
- b. Students draw upon legends and myths of these Native Americans in order to describe personal accounts of their history.

3. Students understand the history of the first European explorers and settlers who came to New York State.

- a. Students examine visual data in order to describe ways in which early settlers adapted to, utilized and changed the environment.
- b. Students use a variety of sources to construct an historical narrative about daily life in the early settlements of New York State.

4. Students understand that a variety of other groups from regions around the world came to New York State long ago and during the recent past.

- a. Students use a variety of visual data, fiction and nonfiction sources, and speakers to identify the groups that have come to New York State and New York City and to generate ideas about why they came.
 - b. Students examine photographs and pictures of people from the various racial and ethnic groups who lived in New York State in the last century in order to hypothesize about their lives, feelings, plans and dreams and to compare ways in which their experiences were similar and different.
5. Students understand the ideas that were significant in the development of the State and that helped to forge its unique identity.
- a. Students draw upon visual and other data to identify symbols, slogans and mottos and research why they represent New York State.
 - b. Students research in order to explain why important buildings, statues, monuments and place names are associated with New York State history.

III. The History of the United States: Democratic Principles and Values and the People From Many Cultures Who Contributed to its Cultural, Economic and Political Heritage.

A. Students understand how democratic principles came to be, and how they have been exemplified by people, events and symbols

- 1. Students understand how the United States government was formed and the nation's basic democratic principles set forth in the Declaration of Independence and the Constitution.
 - a. Students can explain the Declaration of Independence as a statement of grievances against King George III and an assertion of fundamental human rights.
 - b. Students know there were 13 original colonies and can name them.
 - c. Students know the significance of the Boston Tea Party.
 - d. Students understand the significance of "Taxation without Representation"
 - e. Students understand the story of Paul Revere's ride and the meaning of "One if by land, two if by sea"
 - f. Students know what the Revolutionary War was fought for and the sides represented by the Minutemen and the Redcoats.
 - g. Students identify Thomas Jefferson's role as the primary author of the Declaration of Independence.
 - h. Students identify George Washington, and his role as military commander and first President
 - i. Students know who Betsy Ross is and the story of her role in the creation of the American flag.
 - j. Students know the first capital of the United States was New York City and that the capital of the United States was moved to Washington.
- 2. Students understand the importance of individual action and character and explain how heroes from long ago and the recent past have made a difference in others' lives
 - a. Students identify characteristics of good citizenship such as belief in justice, truth, equality and responsibility for the common good.
 - b. Using historical biographies, fictionalized accounts or news articles of historical and more recent figures such as Abraham Lincoln, George Washington Carver, Louis Pasteur, Marie Curie, Jackie Robinson, the rescue workers of 9/11, students describe how people

in the United States and in other parts of the world influenced the community, exemplified good citizenship and exhibited a love of individualism and inventiveness.

- c. Students can identify ordinary people who exemplify good citizenship.
3. Students understand important customs, symbols and celebrations that represent American beliefs and principles and contribute to our national identity.
 - a. Students identify selected songs as Patriotic songs
 - b. Students identify symbols such as the state and national birds and flowers and patriotic symbols like the American and New York State flag, Uncle Sam, etc.
 - c. Students explain how selected customs, symbols and celebrations reflect an American love of individualism, inventiveness and freedom.
 4. Students understand the purpose of governments
 - a. Students identify the functions of governments.
 - b. Students know that there are local, state and national governments.
 - c. Students compare the role of public officials in particular, the mayor, the governor and the president.
 5. Students identify ways that public officials are selected including election and appointment to office.
 - a. Students understand that governments provide facilities and services like libraries, schools, parks and hospitals, to help meet the needs and wants of people in the United States.
 - b. Students describe how governments establish order, provide security and manage conflicts.
 - c. Students know that governments collect taxes from people in order to pay for the services it provides.
 6. Students explain governmental institutions and practices in the United States
 - a. Students explain how the United States make laws, carry out laws, determine whether laws have been violated and punish wrongdoers.
 - b. Students describe the ways in which the United States interacts with other countries to try to resolve problems in such areas as trade, cultural contacts, treaties, diplomacy and military force.

IV. The History of Peoples of Many Cultures Around the World

- A. Students demonstrate map skills by describing the absolute and relative locations of people, places and environments
 1. Students can name and identify on a map or globe the seven continents and the five oceans.
 2. Students can label from memory a simple map of the North American continent, including the countries, oceans, Great Lakes, major rivers and mountain ranges.

3. Students identify Asia as the largest continent and know among the major countries that comprise Asia are Japan, Korea, India and Taiwan and can locate these countries on a map or globe.

B. Students understand the cultures and historical developments of selected societies in such places as Africa, the Americas, Asia and Europe.

1. Students compare and contrast various aspects of family life, structures and roles in different cultures and in many eras with students' own family lives.

2. Students illustrate or retell the main ideas in folktales, legends, myths and stories of heroism that disclose the history and traditions of various cultures around the world.

3. Students analyze the dance, music and art of various cultures around the world to draw conclusions about the history, daily life and beliefs of the people in history.

4. Students explain the customs related to important holidays and ceremonies in various countries in the past.

C. Students understand great world movements of people now and long ago.

1. Students draw upon historical narratives to identify early explorers and world travelers and describe the knowledge gained from their journeys.

2. Students draw upon historical narratives in order to identify European explorers of the 15th and 16th centuries and explain their reasons for exploring, the information gained from their journeys and what happened as a result of their travels.

D. Students understand the development of technological innovations, the major scientists and inventors associated with them and their social and economic effects.

1. Students identify and describe the significant achievements of important scientists and inventors (such as Louis Pasteur, Marie Curie, the Wright Brothers, Robert Fulton, Alexander Graham Bell)

2. Students draw upon photographs, illustrations, models and nonfictional resource materials to demonstrate the developments in marine vessels constructed by people from ancient times until today.

3. Students compare and contrast ways people communicate with each other now and long ago, and list chronologically the technological developments that facilitated communication.

4. Students compare and contrast various systems of long distance communication, including runners, "talking drums" of Africa, smoke signals of Native Americans, the pony express, the telegraph, telephones and satellite systems of worldwide communication.

V. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources, including electronic technology.

1. Students obtain information about a topic using a variety of sources such as conversations, interview and music.
 2. Students obtain information about a topic using a variety of visual sources such as pictures, graphics, television, maps, computer software, literature, reference sources and artifacts.
 3. Students use various parts of a source, including the table of contents, glossary, and index, as well as keyword computer searches to locate information.
 4. Students sequence and categorize information.
 5. Students interpret oral, visual and print materials by identifying the main idea, predicting, and comparing and contrasting.
 6. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written sentences or well-constructed oral responses.
- B. Students communicate in written, oral and visual forms.
1. Students express ideas orally based on knowledge and experiences.
 2. Students create written and visual material such as stories, poems, maps and graphic organizers to express ideas.
- C. Students use problem-solving and decision-making skills working independently and with others, in a variety of settings.
1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
 2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Third Grade

In Grade 3, students learn how individuals have changed their communities and world. Students study the effects inspiring heroes have had on communities, past and present. Students learn about the lives of heroic men and women who made important choices, overcame obstacles, sacrificed for the betterment of others, and embarked on journeys that resulted in new ideas, new inventions and new communities. Students expand their knowledge through the identification and study of people who made a difference, influenced public policy and decision-making, and participated in resolving issues that are important to all people. Throughout Grade 3, students develop an understanding of the economic, cultural and scientific contributions made by individuals.

I. Living and Working Together in Families and Communities, Now and Long Ago

A. Students understand the history of their region

1. Students describe the Native American nations in New York State, both long ago and in the recent past.

- a. Students describe national identities, religious beliefs, customs and various folklore traditions.
- b. Students describe the ways in which physical geography, including climate, influenced how the local Indian nations adapted their natural environment (i.e. how they obtained food, clothing, tools).
- c. Students describe the economy and systems of government, particularly those with tribal constitutions and their relationship to federal and state government.
- d. Students discuss the interaction of new settlers with the already established Indians of the region.

2. Students draw from historical and community resources to organize the sequence of local historical events and describe how each period of settlement left its mark on the land.

- a. Students research the explorers who visited here, the newcomers who settled here, and the people who continue to come to the region, including their cultural and religious traditions and contributions.
- b. Students describe the economies established by settlers and their influence on present-day economy, with emphasis on the importance of private property and entrepreneurship.
- c. Students trace why their community was established, how individuals and families contributed to its founding and development, and how the community has changed over time, drawing on maps, photographs, oral histories, letters, newspapers, and other primary source.

3. Students describe the physical and human geography and use maps, tables, graphs, photographs and charts to organize information about people, places and environments in a spatial context.

- a. Students identify geographical features in their local region (oceans, rivers, hills)
- b. Students trace the ways in which people have used the resources of the local region and modified the physical environment.

B. Students demonstrate basic economic reasoning skills and an understanding of the economy of the local region.

1. Students describe the ways in which local producers have used and are using natural resources, human resources, and capital resources to produce goods and services in the past and present.
2. Students understand that some goods are made locally, some elsewhere in the United States, and some abroad.
3. Students understand that individual economic choices involve trade-offs and the evaluation of costs and benefits.
 - a. Students identify ways of earning, spending and saving money.
 - b. Students analyze a simple budget that allocates money for spending and saving.
4. Students discuss the relationship of students' work in school and their personal human capital.
5. Students understand the concept of an economic system.
 - a. Students define and identify examples of scarcity.
 - b. Students explain the impact of scarcity on the production, distribution and consumption of goods and services.
 - c. Students explain the impact of scarcity on interdependence within and among communities.
 - d. Students explain the concept of a free market.
6. Students understand how businesses operate in the U.S. free enterprise system
 - a. Students give examples of how a simple business operates.
 - b. Students explain how supply and demand affect the price of a good or service.
 - c. Students explain how the cost of production and selling price affect profits.
 - d. Students identify historic figures, such as Henry Ford, and ordinary people in the community who have started new businesses.

C. Students understand the basic structures and functions of local government

1. Students describe the basic structure of government in the local community.
2. Students identify services commonly provided by local governments.
3. Students identify local government officials and explain how they are chosen.
4. Students explain how local government services are financed.
5. Students explain the importance of the consent of the governed to the functions of the local government.

II. The History of the United States: Democratic Principles and Values and the People from Many Cultures who Contributed to its Cultural, Economic and Political Heritage

A. Students understand how democratic values came to be, and how they have been exemplified by people, events and symbols

1. Students identify and explain the basic principles that Americans set forth in the documents that declared the nation's independence from England (Declaration of Independence) and that created the new nation's government (U.S. Constitution).

2. Students know and explain the histories of important local and national landmarks, symbols and essential documents that create a sense of community among citizens and exemplify cherished ideals (the U.S. flag, the bald eagle, the Statue of Liberty, the U.S. Constitution, the Declaration of Independence, the U.S. Capitol, the Washington Monument, Lincoln Memorial).

3. Students understand characteristics of good citizenship as exemplified by historic figures and people.

a. Students identify characteristics of good citizenship such as belief in justice, truth, equality and responsibility for the common good.

b. Students identify historic figures such as Jane Addams, Harriet Tubman and Helen Keller who have exemplified good citizenship.

c. Students identify ordinary people who exemplify good citizenship.

4. Students understand the role of rules and laws in our daily lives and the basic structure of the U.S. government.

a. Students determine the reasons for rules, law and the U.S. Constitution; the role of citizenship in the promotion of rules and laws; and the consequences for people who violate rules and laws.

b. Students discuss the importance of public virtue and the role of citizens, including how to participate in the home, classroom, in the community and in civic life.

5. Students understand the impact of individual and group decisions on the communities in a democratic society.

a. Students give examples of community changes that result from individual or group decisions.

b. Students identify examples of actions individuals and groups can take to improve the community

c. Students identify examples of nonprofit and/or civic organizations such as the Red Cross and explain how they serve the common good.

6. Students know why the Civil War was fought.

a. Students can explain why slavery does not represent the democratic ideals of our country.

b. Students know that the abolition of slavery was the reason why the nation entered into a Civil War.

c. Students know that the North fought the South, and that the North advocated for abolition of slavery, while the South was against it.

d. Students know President Lincoln fought to end slavery.

B. Students understand the basic structure of the Federal government

1. Students understand the three branches of government: Executive, Legislative and Judicial.
2. Students describe the ways in which New York State, the other states and sovereign Native American tribes contribute to the making of our nation and participate in the federal system of government.

C. Students understand the ethnic and/or cultural celebrations of the United States and other nations

1. Students explain the significance of selected ethnic and/or cultural celebrations in New York State, the United States and other nations such as St. Patrick's Day, Kwanzaa, Chinese New Year, and the ethnic parades held in New York City.
2. Students compare the ethnic and/or cultural celebrations in New York, the United States and other nations.

D. Students understand the role of real and mythical heroes in shaping the cultures of communities, the state and the nation.

1. Students identify the heroic deeds of state and national heroes.
2. Students retell the heroic deeds of characters from American folktales and legends.
3. Students retell the heroic deeds of characters of Greek and Roman myths
4. Students identify how selected fictional characters such as Robinson Crusoe and Romulus and Remus created new communities.

III. The History of Peoples of Many Cultures Around the World

A. Students understand the concepts of location, distance and direction on maps and globes.

1. Students use cardinal and intermediate directions to locate such places as the Amazon River, Himalayan Mountains and Washington D.C. on maps and globes.
2. Students use a scale to determine the distance between places on maps and globes.
3. Students identify and use the compass rose, grid and symbols to locate places on maps and globes
4. Students draw maps of places and regions that contain map elements, including a title, compass rose, legend, scale and grid system.

B. Students understand the concepts of time and chronology

1. Students use vocabulary related to chronology, including ancient and modern times and past, present and future.
2. Students create and interpret timelines.

3. Students describe historical times in terms of years, decades and centuries; and know and use the terms A.D. and B.C.

C. Students understand the cultures and historical developments of selected societies in such places as Africa, the Americas, Asia and Europe.

1. Students understand the importance of writers and artists to the cultural heritage of communities.
2. Students identify selected individual writers and artists and their stories, poems, statues, paintings and other examples of cultural heritage from communities around the world.
3. Students explain the significance of selected individual writers and artists and their stories, poems, statues, paintings and other examples of cultural heritage to communities around the world.
4. Students draw conclusions about the history, daily life and beliefs of different world communities based on these stories, poems, statues, paintings and other examples of cultural heritage.
5. Students investigate ways historians learn about the past if there are no written records.
6. Students describe the effects geography has had on societies, including their development of urban centers, food, clothing, industry, agriculture, shelter, trade and other aspects of cultures.
7. Students describe significant historical achievements of various cultures of the world.

D. Students understand great world movements of people now and long ago.

1. Students trace on maps and explain migrations of large groups, among them the movement of Native American ancestors across the Bering Strait land bridge, the movement of Europeans and Africans to the Western Heritage.
2. Students identify ways in which the migrations of distinct people impacted the culture of the communities in which they settled.

E. Students understand that all world communities face the challenge of meeting needs and wants.

1. Students know that societies organize their economies to answer three fundamental economic questions: What goods and services should be produced and in what quantities? How shall goods and services be produced? For whom shall goods and services be produced?
2. Students know that human needs and wants differ from place to place
3. Students know people in world communities make choices due to unlimited needs and wants and limited resources.
4. Students know that people in world communities must depend on others to meet their needs and wants.

5. Students know that production, distribution, exchange and consumption of goods and services are economic decisions all societies must make.
6. Students know people in world communities use human, capital and natural resources.
7. Students know people in world communities locate, develop and make use of natural resources.
8. Students know resources are important to economic growth in world communities.

F. Students understand how individuals have created or invented new technology and affected life in communities around the world, past and present.

1. Students identify scientists and inventors who have created or invented new technology such as Louis Deguerre, Cyrus McCormick, Louis Pasteur and Jonas Salk.
2. Students identify the impact of new technology in photography, farm equipment, pasteurization and medical vaccines in communities around the world.

IV. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

1. Students obtain information, including historical and geographic data about the community, using a variety of print, oral, visual and computer resources.
2. Students sequence and categorize information.
3. Students interpret oral, visual and print material by identifying the main idea, identifying cause and effect, and comparing and contrasting.
4. Students use various parts of a source, including the table of contents, glossary, index as well as keyword computer searches, to locate information.
5. Students interpret and create visuals including graphs, charts, tables, timelines, illustrations and maps
6. Students use appropriate mathematical skills to interpret social studies information such as maps and graphs.
7. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written sentences and/or paragraphs or well-constructed oral presentations.

B. Students communicate effectively in written, oral and visual forms.

1. Students express ideas orally based on knowledge and experiences.
2. Students create written and visual material such as stories, poems, pictures, maps and graphic organizers to express ideas.

3. Students use standard grammar, spelling, sentence structure and punctuation.

C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.

1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.

2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Fourth Grade

In Grade 4, students **examine** the history of New York from the early beginnings to the present within the context of influences of the **Western Hemisphere**. Historical content focuses on New York State history including the **Native American Indians of New York State**, the European encounter, the colonial and Revolutionary War period, the new nation, and the period of industrial growth and development in New York State. Students describe how early Native Americans in New York and the Western Hemisphere met their basic economic needs and identify economic motivations for European exploration and colonization. A focus on location, distribution and patterns of economic activities and of settlement in New York further enhances the concept of regions. The in-depth study of local government will emphasize the structure and function of the different branches and the roles of civic leaders. Students **continue** to learn about the rights, responsibilities and duties of citizenship. Students discuss important issues, events and individuals of the 19th and 20th centuries. Students identify the contributions of people of various racial, ethnic and religious groups to New York and describe the impact of science and technology on life in the state.

I. The Early Inhabitants of New York State

A. Students **know** Native Americans were the first inhabitants of our local region and State

1. Students study the Iroquois and the Algonquian
2. Students identify the basic needs of these Native Americans
3. Students understand how they used the environment and how environmental and geographic factors influenced these Native American settlements.
4. Students know important accomplishments and contributions of Native American Indians who lived in the State.
5. Students examine the art forms, traditions, customs and religion of these Native Americans.

B. Students **compare** the ways of life of Native American groups in New York and others in the Western Hemisphere **before** European exploration.

C. Students **understand** the causes and effects of European exploration and colonization of New York State and the Western Hemisphere.

1. Students know the major explorers of New York State.
2. Students summarize the reasons for European exploration and settlement of New York and the Western Hemisphere.
3. Students explain the impact of exploration from a social/cultural, economic, political and geographic perspective.
4. Students explain the rise of the slave trade and slavery in the colonies.
5. Students identify groups of people who migrated to our local region and into our State.
6. Students understand the ways that people depended on and modified their physical environment.

D. The Colonial and Revolutionary Period

1. Students can identify the Dutch, English and French influences in New York State.
2. Students compare and contrast lifestyles in the colonies and the lifestyles during different time periods before and after colonial times.
3. Students identify the different types of daily activities that made up the social/cultural, political, economic and religious life of the period as well as identify scientific and technological innovations of the period.
4. Students understand the ways that colonists depended on and modified their physical environments.
5. Students identify cultural similarities and difference, including folklore, ideas and other cultural contributions that helped shape our community, local region and State.
6. Students understand that colonial societies were organized to answer three fundamental economic questions: What goods and services do we produce? How do we produce them? For whom do we produce them?
7. Students understand ways of making a living in our local region and State during colonial times.
8. Students understand and can explain causes for revolution: social, political and economic.

II. The Revolutionary War and New York State

- A. Students locate New York State on a map.
- B. Students understand the significance of New York State's location and its relationship to the locations of other people and places.
- C. Students understand the geographic features that influenced the War.
- D. Students understand how Native American Indians in New York State influenced the War.
- E. Students understand the war strategy: Saratoga and other local battles.
- F. Students identify loyalists and patriots in New York State.
- G. Students identify leaders of the Revolution in New York.
- H. Students identify the effect of the Revolutionary War on New York.

III. The New Nation

- A. Students understand the ideals of the Declaration of Independence
 - I. Students understand the proposition that "All men are created equal."

2. Students understand the responsibility of government to protect the “unalienable rights” of the people.
 3. Students understand natural or “God given” rights of “Life, Liberty and the pursuit of Happiness”
 4. Students understand the “rights of the people to institute new government.”
 5. Students identify Thomas Jefferson as the author of the Declaration of Independence.
- B. Students know the events leading up to the writing of the Constitution of the United States
1. Students know the definition of “republican” government.
 2. Students know the precursor to the Constitution, the Articles of Confederation, and know that it lead to a weak central government.
 3. Students identify the “Founding Fathers;” identify James Madison as the “Father of the Constitution”
 4. Students understand key facts about the Constitutional Convention
 - a. The arguments between small and large states.
 - b. The divisive issue of slavery, and the “three-fifths” compromise.
- C. Students understand that the Constitution created the government of the United States.
1. Students know that the purposes of government in the United States are to protect the rights of the individuals and to promote the common good.
 2. Students know, understand the meaning of and can recite from memory the preamble to the Constitution, “We the people of the United States, in order to form a more perfect union, establish justice, insure domestic tranquility, provide for the common defense, promote the general welfare, and secure the blessings of liberty to ourselves and our posterity, do ordain and establish this Constitution for the United States of America.”
 3. Students know the fundamental values of the American democracy include an understanding of the following concepts: individual rights to life, liberty, property and the pursuit of happiness; the public or common good; justice, equality of opportunity; diversity; truth and patriotism.
 4. Students know that these fundamental values and principles are expressed in the Declaration of Independence, the United States Constitution, the Bill of Rights, the Pledge of Allegiance, speeches, songs and stories.
 5. Students identify the separation and sharing of powers in American government as described in the Constitution.
 - a. Students know the components and the roles and responsibilities of the Legislative Branch.

- b. Students know the components and roles and responsibilities of the Executive Branch.
 - c. Students know the components and roles and responsibilities of the Judicial Branch.
6. Students understand the concept of “checks and balances” within the government and understand why that is important.
7. Students know the first ten amendments to the Constitution are the Bill of Rights in particular:
- a. Freedom of religion, speech and the press—the First Amendment
 - b. Protection against “unreasonable searches and seizures”
 - c. The right to “due process of law”
 - d. The right to trial by jury
 - e. Protection against “cruel and unusual punishments”
8. Students see the parallel between the structure of the Federal Government and the State and local Governments.
- a. Students identify current government officials including the United States President and Vice President and the Governor of New York State.
 - b. Students identify the structure and function of the branches of government of New York State and local governments including the Executive, Legislative and Judicial branches.
 - c. Students understand key terms and concepts related to government, including democracy, power and citizenship.
 - d. Students parallel the Constitution of the State of New York and its Bill of Rights with the United States Constitution and its Bill of Rights as written plans for organizing the functions of government and safeguarding individual liberties.
 - e. Students identify representatives in the legislative, executive and judicial branches at the local, State and Federal levels of government and how they are elected or appointed to office.
 - f. Students understand the roles and responsibilities of Federal, state and local governments.
 - g. Students understand how government services are paid for.
 - h. Students know how people can participate in government.
 - i. Students know our responsibilities as citizens (voting, jury duty)

IV. The Industrial Growth and Expansion in New York State

- A. Students identify technological advances in transportation and communication and their impact on the social/cultural and economic environment.
- B. Students understand New York’s unique role in immigration and migration (i.e. Ellis Island; the mass starvation in Ireland 1845-50; forced relocation of Native American Indians in New York State)
- C. Students understand the important contributions of immigrants to New York State.
- D. Students understand the geographic influences of industrialization and expansion (i.e. natural resources, location) and the interactions between economic and geographic factors.

V. Urbanization of New York State: Economic, Political and Social Impact

- A. Students trace the migration from rural to urban and suburban communities
- B. Students understand the interdependence of the rural, urban and suburban communities (i.e. resource use; from farm to market)
- C. Students understand the impact of urbanization on the labor movement and child labor.
- D. Students understand the impact of urbanization on ways of learning and public education.

VI. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

- 1. Students differentiate between, locate and use primary and secondary sources such as computer software; interview; biographies; oral, print and visual material; and artifacts to acquire information about the United States and New York.
- 2. Students analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.
- 3. Students organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines and maps;
- 4. Students identify different points of view about an issue or topic.
- 5. Students identify the elements of frame of reference that influenced the participants in an event.
- 6. Students use appropriate mathematical skills to interpret social studies information such as maps and graphs.
- 7. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written essays or well-constructed oral presentations.

B. Students communicate in written, oral and visual forms.

- 1. Students use social studies terminology correctly.
- 2. Students incorporate main and supporting ideas in verbal and written communications.
- 3. Students express ideas orally based on research and experiences.
- 4. Students create written and visual material such as journal entries, reports, graphic organizers, outlines and bibliographies.
- 5. Students use standard grammar, spelling, sentence structure and punctuation.

C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.

1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Fifth Grade

In grade 5, students expand their understanding of history by studying the people and events that ushered in the dawn of major Western and non-Western ancient civilizations. Geography is of special significance in the development of the human story. Continued emphasis is placed on the everyday lives, problems and accomplishments of people their role in developing social, economic, everyday lives, problems and accomplishments of people, their role in developing social, economic, and political structures, as well as in establishing and spreading ideas that helped transform the world forever. Students develop higher levels of critical thinking by considering why civilizations developed where and when they did, why they became dominant and why they declined. Students analyze the interactions among the various cultures, emphasizing their enduring contributions and the link, despite time, between the contemporary and ancient worlds.

- I. Students describe what is known through archaeological studies of the early physical and cultural development of humankind from the Paleolithic era to the agricultural revolution.
 - A. Students describe hunter-gatherer societies, including the development of tools and the use of fire.
 - B. Students identify the locations of human communities that populated the major regions of the world and describe how humans adapted to a variety of environments.
 - C. Students discuss the climatic changes and human modifications of the physical environment that gave rise to the domestication of plants and animals and new sources of clothing and shelter.
- II. Students analyze the geographic, political, economic, religious and social structures of the early civilizations of Mesopotamia, Egypt and Kush.
 - A. Students locate and describe major river systems and discuss the physical settings that supported permanent settlement and early civilizations.
 - B. Students trace the development of agricultural techniques that permitted the production of economic surplus and the emergence of cities as centers of culture and power.
 - C. Students understand the relationship between religion and the social and political order in Mesopotamia and Egypt.
 - D. Students know Mesopotamia was the “cradle of civilization” and understand the importance of the Tigris and Euphrates Rivers.
 - E. Students know the significance of Hammurabi’s Code.
 - F. Students discuss the main features of Egyptian art and architecture.
 - G. Students describe the role of Egyptian trade in the eastern Mediterranean and Nile Valley.
 - H. Students understand the significance of Queen Hatshepsut and Ramses the Great.
 - I. Students identify the location of the Kush civilization and describe its political, commercial and cultural relations with Egypt.
 - J. Students trace the evolution of language and its written forms.

- III. Students analyze the geographic, political, economic, religious and social structures of the Ancient Hebrews.
- A. Students **describe** the origins and significance of Judaism as the first monotheistic religion based on the concept on **one God** who sets down moral laws for humanity.
 - B. Students identify the sources of the ethical teachings and central beliefs of Judaism (the Hebrew Bible, the Commentaries): belief in God, observance of law, practice of the concepts of righteousness and justice, and ethical traditions of Western civilization.
 - C. Students explain the significance of Abraham, Moses, Naomi, Ruth, David and Yohanan ben Zaccai in the development of the Jewish religion.
 - D. Students discuss the locations of the settlements and movements of Hebrew peoples, including the Exodus and their movement to and from Egypt, and outline the significance of the Exodus to the Jewish and other people.
 - E. Students discuss how Judaism survived and developed despite the continuing dispersion of much of the Jewish population from Jerusalem and the rest of Israel after the destruction of the second Temple in A.D. 70.
- IV. Students analyze the geographic, political, economic, religious and social structures of the early civilizations of Ancient Greece.
- A. Students discuss the connections between geography and the development of the city-states in the region of the Aegean Sea, including patterns of trade and commerce among Greek city-states and within the wider Mediterranean region.
 - B. Students trace the transition from tyranny and oligarchy to early democratic forms of government and back to dictatorship in ancient Greece, including the significance of the invention of the idea of citizenship (i.e. from *Pericles' Funeral Oration*).
 - C. Students state the key differences between Athenian, or direct, democracy and representative democracy.
 - D. Students explain the significance of Greek mythology to the everyday life of people in the region and how Greek literature continues to permeate our literature and language today, drawing from Greek mythology and epics, such as Homer's *Iliad* and *Odyssey*, and from *Aesop's Fables*.
 - E. Students outline founding, expansion and political organization of the Persian Empire.
 - F. Students compare and contrast life in Athens and Sparta, with emphasis on their roles in the Persian and Peloponnesian Wars.
 - G. Students trace the rise of Alexander the Great and the spread of Greek culture eastward and into Egypt.
 - H. Students describe the enduring contributions of important Greek figures in the arts and sciences (i.e. Hypatia, Socrates, Plato, Aristotle, Euclid, Thucydides).
- V. Students analyze the geographic, political, economic, religious and social structures of the early civilizations of India.

- A. Students locate and describe the major river system and discuss the physical setting that supported the rise of this civilization.
 - B. Students discuss the significance of Aryan invasions.
 - C. Students explain the major beliefs and practices of Brahmanism in India and how they evolved into early Hinduism.
 - D. Students outline the social structure of the caste system.
 - E. Students know the life and moral teachings of Buddha and how Buddhism spread into India, Ceylon (Sri Lanka) and Central Asia.
 - F. Students describe the growth of the Maurya empire and the political and moral achievements of the emperor Asoka.
 - G. Students discuss important aesthetic and intellectual traditions (i.e. Sanskrit literature, including the *Bhagava Gita*; medicine; metallurgy; and mathematics, including Hindu-Arabic numerals and the zero).
- VI. Students analyze the geographic, political, economic, religious and social structures of the early civilizations of China.
- A. Students locate and describe the origins of Chinese civilization in the Huang-He Valley during the Shang Dynasty.
 - B. Students explain the geographic features of China that made governance and the spread of ideas and goods difficult and served to isolate the country from the rest of the world.
 - C. Students know about the life of Confucius and the fundamental teachings of Confucianism and Taoism.
 - D. Students identify the political and cultural problems prevalent in the time of Confucius and how he sought to solve them.
 - E. Students list the policies and achievements of the emperor Shi Huangdi in unifying northern China under the Qin Dynasty.
 - F. Students detail the political contributions of the Han Dynasty to the development of the imperial bureaucratic state and the expansion of the empire.
 - G. Students cite the significance of the trans-Eurasian "silk roads" in the period of the Han Dynasty and Roman Empire and their locations.
 - H. Students describe the diffusion of Buddhism northward to China during the Han Dynasty.
- VII. Students analyze the geographic, political, economic, religious and social structures during the development of Rome
- A. Students identify the location and describe the rise of the Roman Republic, including the importance of such mythical and historical figures as Aeneas, Romulus and Remus, Cincinnatus, Julius Caesar and Cicero.

- B. Students describe the government of the Roman Republic and its significance (i.e. written constitution and tripartite government, checks and balances, civic duties).
- C. Students identify the location of and the political and geographic reasons for the growth of Roman territories and expansion of the empire, including how the empire fostered economic growth through the use of currency and trade routes.
- D. Students discuss the influence of Julius Caesar and Augustus in Rome's transition from republic to empire.
- E. Students trace the migration of Jews around the Mediterranean region and the effects of their conflict with the Romans, including the Romans' restrictions on their right to live in Jerusalem.
- F. Students note the origins of Christianity in the Jewish Messianic prophecies, the life and teachings of Jesus of Nazareth as described in the New Testament and the contribution of St. Paul the Apostle to the definition and spread of Christian beliefs (i.e. the belief in the Trinity, resurrection and salvation)
- G. Students describe the circumstances that led to the spread of Christianity in Europe and other Roman territories.
- H. Students discuss the legacies of Roman art and architecture, technology and science, literature, language and law.

VIII. General Skills

- A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.
 - 1. Students differentiate between, locate and use primary and secondary sources such as computer software; interview; biographies; oral, print and visual material; and artifacts to acquire information about the United States and New York.
 - 2. Students analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.
 - 3. Students organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines and maps;
 - 4. Students identify different points of view about an issue or topic.
 - 5. Students identify the elements of frame of reference that influenced the participants in an event.
 - 6. Students use appropriate mathematical skills to interpret social studies information such as maps and graphs.
 - 7. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written essays or well-constructed oral presentations.
- B. Students communicate in written, oral and visual forms.

1. Students use social studies terminology correctly.
 2. Students incorporate main and supporting ideas in verbal and written communications.
 3. Students express ideas orally based on research and experiences.
 4. Students create written and visual material such as journal entries, reports, graphic organizers, outlines and bibliographies.
 5. Students use standard grammar, spelling, sentence structure and punctuation.
- C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.
1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
 2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Sixth Grade

In Grade 6, students study the social, cultural and technological changes that occurred in Europe, Asia and Africa in the years A.D. 500-1789. After reviewing the ancient world and the ways in which archaeologists and historians uncover the past, students study the history and geography of great civilizations that were developing concurrently throughout the world during medieval and early modern times. They examine the growing economic interaction among civilizations as well as the exchange of ideas, beliefs, technologies and commodities. They learn about the resulting growth of Enlightenment philosophy and the new examination of the concepts of reason and authority, the natural rights of human beings and the divine right of kings, experimentalism in science and the dogma of belief. Finally, students assess the political forces let loose by the Enlightenment, particularly the rise of democratic ideas, and they learn about the continuing influence of these ideas in the world today.

- I. Students analyze the causes and effects of the vase expansion and ultimate disintegration of the Roman Empire.
 - A. Students study the early strengths and lasting contributions of Rome (i.e. significance of Roman citizenship; rights under Roman law; Roman art, architecture, engineering and philosophy; preservation and transmission of Christianity) and its ultimate internal weaknesses (i.e. rise of autonomous military powers within the empire, undermining of citizenship by the growth of corruption and slavery, lack of education and distribution of news).
 - B. Students discuss the geographic borders of the empire at its height and the factors that threaten its territorial cohesion.
 - C. Students describe the establishment by Constantine of the new capital in Constantinople and the development of the Byzantine Empire, with an emphasis on the consequences of the development of two distinct European civilizations, Eastern Orthodox and Roman Catholic and their two distinct views on church-state relations.
- II. Students analyze the geographic, political, economic, religious and social structures of the civilizations of Islam in the Middle Ages.
 - A. Students identify the physical features and describe the climate of the Arabian peninsula, its relationship to surrounding bodies of land and water, and nomadic and sedentary ways of life.
 - B. Students trace the origins of Islam and the life and teachings of Muhammad, including Islamic teachings on the connection with Judaism and Christianity.
 - C. Students explain the significance of the Koran and the Sunnah as the primary sources of Islamic beliefs, practice and law, and their influence in Muslims' daily life.
 - D. Students discuss the expansion of Muslim rule through military conquests and treaties, emphasizing the cultural blending within Muslim civilization and the spread and acceptance of Islam and the Arabic language.
 - E. Students describe the growth of cities and the establishment of trade routes among Asia, Africa and Europe, the products and inventions that traveled along these routes (i.e. spices, textiles, paper, steel, new crops) and the role of merchants in Arab society.

F. Students understand the intellectual exchanges among Muslim scholars of Eurasia and Africa and the contributions Muslim scholars made to later civilizations in the areas of science, geography, mathematics, philosophy, medicine, art and literature.

III. Students analyze the geographic, political, economic, religious and social structures of the civilizations of China in the Middle Ages.

A. Students describe the reunification of China under the Tang Dynasty and reasons for the spread of Buddhism in Tang China, Korea and Japan.

B. Students describe agricultural, technological and commercial developments during the Tang and Sung periods.

C. Students analyze the influences of Confucianism and changes in Confucian thought during the Sung and Mongol periods.

D. Students understand the importance of both overland trade and maritime expeditions between China and other civilizations in the Mongol Ascendancy and the Ming Dynasty.

E. Students trace the historic influence of such discoveries as tea, the manufacture of paper, wood-block printing, the compass and gunpowder.

F. Students describe the development of the imperial state and the scholar-official class.

IV. Students analyze the geographic, political, economic, religious and social structures of the sub-Saharan civilizations of Ghana and Mali in Medieval Africa.

A. Student study the Niger River and the relationship of vegetation zones of forest, savannah and desert to trade in gold, salt, food and slaves; and the growth of the Ghana and Mali empires.

B. Students analyze importance of family, labor specialization, and regional commerce in the development of states and cities in West Africa.

C. Students describe the role of the trans-Saharan caravan trade in the changing religious and cultural characteristics of West Africa and the influence of Islamic beliefs, ethics and law.

D. Students trace the growth of the Arabic language in government, trade and Islamic scholarship in West Africa.

E. Students describe the importance of written and oral traditions in the transmission of African history and culture.

V. Students analyze the geographic, political, economic, religious and social structures of the civilizations of Medieval Japan.

A. Students describe the significance of Japan's proximity to China and Korea and the intellectual, linguistic, religious and philosophical influence of those countries on Japan.

B. Students discuss the reign of Prince Shotoku of Japan and the characteristics of Japanese society and family life during his reign.

- C. Students describe the values, social customs, and traditions prescribed by the lord-vassal system consisting of *shogun*, *daimyo*, and *samurai* and the lasting influence of the warrior code in the 20th century.
- D. Students trace the development of distinctive forms of Japanese Buddhism.
- E. Students study the ninth and tenth centuries' golden age of literature, art, and drama and its lasting effects on culture today, including Murasaki Shikibu's *Tale of Genji*.
- F. Students analyze the rise of a military society in the late 12th century and the role of the samurai in that society.

VI. Students analyze the geographic, political, economic, religious and social structures of the civilizations of Medieval Europe.

- A. Students study the geography of Europe and the Eurasian land mass, including its location, topography, waterways, vegetation, and climate and their relationship to the ways of life in Medieval Europe.
- B. Students describe the spread of Christianity north of the Alps and the roles played by the early church and by monasteries in its diffusion after the fall of the western half of the Roman Empire.
- C. Students understand the development of feudalism, its role in the medieval European economy, the way in which it was influenced by physical geography (the role of the manor and the growth of towns), and how feudal relationships provided the foundation of political order.
- D. Students demonstrate an understanding of the conflict and cooperation between the Papacy and European monarchs (i.e. Charlemagne, Gregory VII, Emperor Henry IV).
- E. Students know the significance of developments in medieval English legal and constitutional practices and their importance in the rise of modern democratic thought and representative institutions (i.e. Magna Carta, parliament, development of habeas corpus, an independent judiciary in England).
- F. Students discuss the causes and course of the religious Crusades and their effects on the Christian, Muslim, and Jewish populations in Europe with emphasis on the increasing contact by Europeans with cultures of the Eastern Mediterranean world.
- G. Students map the spread of the bubonic plague from Central Asia to China, the Middle East, and Europe and describe its impact on global population.
- H. Students understand the importance of the Catholic church as a political, intellectual and aesthetic institution (i.e. founding of universities, political and spiritual roles of the clergy, creation of monastic and mendicant religious orders, preservation of the Latin language and religious texts, St. Thomas Aquinas' synthesis of classical philosophy with Christian theology, and the concept of "natural law."
- I. Students know the history of the decline of Muslim rule in the Iberian Peninsula that culminated in Reconquista and the rise of Spanish and Portuguese kingdoms.

VII. Students compare and contrast the geographic, political, economic, religious, and social structures of the Meso-American and Andean civilizations.

- A. Students study the locations, landforms, and climates of Mexico, Central America and South America and their effects on Mayan, Aztec and Incan economies, trade, and development of urban societies.
- B. Students study the roles of people in each society, including class structures, family life, warfare, religious beliefs and practices, and slavery.
- C. Students explain how and where each empire arose and how the Aztec and Incan empires were defeated by the Spanish.
- D. Students describe the artistic and oral traditions and architecture in the three civilizations.
- E. Students describe the Meso-American achievements in astronomy and mathematics, including the development of the calendar and the Meso-American knowledge of seasonal changes to the civilizations' agricultural systems.

VIII. Students analyze the origins, accomplishments, and geographic diffusion of the Renaissance.

- A. Students describe the way in which the revival of classical learning and the arts fostered a new interest in humanism (i.e. a balance between intellect and religious faith).
- B. Student explain the importance of Florence in the early stages of the Renaissance and the growth of independent trading cities (i.e. Venice), with emphasis on the cities' importance in the spread of Renaissance ideas.
- C. Students understand the effects of the reopening of the ancient "Silk Road" between Europe and China, including Marco Polo's travels and the location of his routes.
- D. Students describe the growth and effects of new ways of disseminating information (i.e. the ability to manufacture paper, translation of the Bible into the vernacular, printing).
- E. Students detail advances made in literature, the arts, science, mathematics, cartography, engineering, and the understanding of human anatomy and astronomy (i.e. by Dante Alighieri, Leonardo da Vinci, Michelangelo di Buonarroti Simoni, Johann Gutenberg, William Shakespeare).

IX. Students analyze the historical developments of the Reformation

- A. Students list the causes for the internal turmoil in and weakening of the Catholic church (i.e. tax policies, selling of indulgences)
- B. Students describe the theological, political and economic ideas of the major figures during the Reformation (i.e. Desiderius Erasmus, Martin Luther, John Calvin, William Tyndale).
- C. Students explain Protestants' new practices of church self-government and the influence of those practices on the development of democratic practices and ideas of federalism.
- D. Students identify and locate the European regions that remained Catholic and those that become Protestant and explain how the division affected the distribution of religions in the New World.
- E. Students analyze how the Counter-Reformation revitalized the Catholic church and the forces that fostered the movement (i.e. St. Ignatius Loyola and the Jesuits, the Council of Trent)

F. Students understand the institution and the impact of missionaries on Christianity and the diffusion of Christianity from Europe to other parts of the world in the medieval and early modern periods; students locate missions on a world map.

G. Students describe the Golden Age of cooperation between Jews and Muslims in medieval Spain that promoted creativity in art, literature and science, including how that cooperation was terminated by the religious persecution of individuals and groups (i.e. the Spanish Inquisition and the expulsion of Jews and Muslims from Spain in 1492).

X. Students analyze the historical developments of the Scientific Revolution and its lasting effect on religious, political and cultural institutions.

A. Students discuss the roots of the Scientific Revolution (i.e. Greek rationalism; Jewish, Christian and Muslim science; Renaissance humanism; new knowledge from global expansion).

B. Students understand the significance of the new scientific theories (i.e. those of Copernicus, Galileo, Kepler, Newton) and the significance of new inventions (i.e. the telescope, microscope, thermometer, barometer).

C. Students understand the scientific method advanced by Bacon and Descartes, the influence of new scientific rationalism on the growth of democratic ideas, and the coexistence of science with traditional religious beliefs.

XI. Students analyze the political and economic change in the 16th, 17th and 18th centuries (The Age of Exploration, the Enlightenment and the Age of Reason)

A. Students know the great voyages of discovery, the locations of the routes and the influence of cartography in the development of a new European worldview.

B. Students discuss the exchanges of plants, animals, technology, culture and ideas among Europe, Africa, Asia and the Americas in the 15th and 16th centuries and the major economic and social effects on each continent.

C. Students examine the origins of modern capitalism; the influence of mercantilism and cottage industry; the elements and importance of a market economy in 17th century Europe; the changing international trading and marketing patterns, including their locations on a world map; and the influence of explorers and map makers.

D. Students explain how the main ideas of the Enlightenment can be traced back to such movements as the Renaissance, the Reformation, and the Scientific Revolution and to the Greeks, Romans, and Christianity.

E. Students describe how democratic thought and institutions were influenced by Enlightenment thinkers (i.e. John Locke, Charles-Louis Montequieu, American founders).

F. Students discuss how the principles of the Magna Carta were embodied in such documents as the English Bill of Rights and the American Declaration of Independence.

XII. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

1. Students differentiate between, locate and use primary and secondary sources such as computer software; interview; biographies; oral, print and visual material; and artifacts to acquire information about the United States and New York.
2. Students analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.
3. Students organize and interpret information in outlines, reports, databases, and visuals including graphs, charts, timelines and maps;
4. Students identify different points of view about an issue or topic.
5. Students identify the elements of frame of reference that influenced the participants in an event.
6. Students use appropriate mathematical skills to interpret social studies information such as maps and graphs.
7. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written essays or well-constructed oral presentations.

B. Students communicate in written, oral and visual forms.

1. Students use social studies terminology correctly.
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3. Students express ideas orally based on research and experiences.
4. Students create written and visual material such as journal entries, reports, graphic organizers, outlines and bibliographies.
5. Students use standard grammar, spelling, sentence structure and punctuation.

C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.

1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences and take action to implement a decision.

Seventh Grade

In Grade 7, students learn about the history of the United States from its early beginning through Reconstruction with an emphasis on the people who were already here, when and from where others arrived, and why they came. Students learn about the colonial government founded on Judeo-Christian principles, the ideals of the Enlightenment, and the English traditions of self-government. Students identify the roots of representative government in this nation as well as the important ideas in the Declaration of Independence and the U.S. Constitution. They recognize the United States is a nation that has a constitution that derives its power from the people, which has gone through a revolution, which once sanctioned slavery, which experienced conflict over land with the original inhabitants, and which experienced a westward movement that took its people across the continent. Historical content focuses on the political, economic and social events and issues related to the colonial and revolutionary eras, the creation and ratification of the U.S. Constitution, challenges of the early Republic, westward expansion, sectionalism, Civil War and the Reconstruction. Studying the cause, course and consequences of the early explorations through the War for Independence and western expansion to the Civil War and Reconstruction is central to students' fundamental understanding of how the principles of the American republic form the basis of a pluralistic society in which individual rights are secured. Students also evaluate the impact of Supreme Court cases and major reform movements of the 19th century and examine the rights and responsibilities of citizens of the United States as well as the importance of effective leadership in a democratic society. Throughout the course of study, the political, geographic, economic and social trends in United States history are tied to parallel trends and timeframes in New York State history.

I. The Global Heritage of the American People

A. The History of Social Sciences: The Study of People

1. Students understand the social scientific method and techniques used by social scientists to understand human cultures.
 - a. Students understand the role of history and the historian.
 - b. Students know other social sciences including anthropology, economics, geography, political science, psychology and sociology and what each subject entails.
2. Students know how to use the social scientific method as a technique for problem solving and decision making.

B. Geographic Factors Influence Cultures—Students study different theories that attempt to explain human settlement in the Americas. Students explore how geographic factors affected the settlement patterns and living conditions of the earliest Americans, including major Native American civilizations in Central and South America. In doing so,

1. Students describe the relationships between people and the environments and the connections between people and places.
2. Students describe the reasons for periodizing history in different ways
3. Students map information about people, places and environments
4. Students identify and compare the physical, human, and cultural characteristics of different regions and people.

5. Students understand the geography of settlement patterns and the development of cultural patterns.

C. Iroquoian and Algonquian Cultures on the Atlantic coast of North America—In order to know the social and economic characteristics (customs, traditions, child-rearing practices, gender roles, foods and religious and spiritual beliefs) that distinguish different cultures and civilizations; map information about people, places and environments; understand the worldview held by native peoples of the Americas and how it developed; and to understand the ways different people view the same event or issues from a variety of perspectives, we undergo a study of two Native American groups indigenous to New York State.

1. Students understand how the Iroquois and the Algonquian people adapted to the environment in which they settled.

- a. Geographic regions of New York
- b. Diversity of fauna and flora
- c. Seasons and weather patterns
- d. Kinds of settlements and settlement patterns.

2. Students explore the cultural patterns that the Iroquois developed that reflected their needs and values

- a. Creation and religious beliefs
- b. Importance of the laws of nature and the wise use of natural resources
- c. Patterns of time and space
- d. Family and kinship
- e. Education
- f. Government—Iroquois confederacy and political organizations at the village level.
- g. Conceptions of land ownership and use.
- h. Language

3. Algonquian Culture

- a. Spiritual beliefs
- b. Spatial patterns.

D. European Conceptions of the World in 1500

1. Students understand the worldview held by Europeans prior to 1500

- a. Students know that the European knowledge was based on accounts of early travelers and explorers; a variety of different maps; writing of ancient scholars; guesswork and oral traditions and history.
- b. Students know that misconceptions resulted from different worldviews and ethnocentrism.

II. European Exploration and Colonization of the Americas—In studying the exploration and colonization of the Americas, students understand major turning points by investigating the causes and other factors that brought about changes and the results of these changes. In addition, students understand the impacts of European settlement on Native Americans and Europeans, investigate why people and places are located where they are and what patterns can be perceived in these locations, and understand the ways different people view the same event of issues from a variety of perspectives.

A. European Exploration and Settlement

1. Students understand the motivating factors for exploration and settlement
 - a. Technological improvements in navigation
 - b. Consolidation of political power within certain countries in Europe
 - c. Desire to break into the Eastern trade markets
 - d. Missionary zeal
2. Students learn how geographic factors influenced European exploration and settlement in North and South America
 - a. Effects of weather and natural hazards on the Atlantic crossings
 - b. Characteristics of different physical environments in the Americas and where different Europeans settled.
 - c. The development of “New England,” “New France,” “New Netherland,” and “New Spain.”
3. Students study the effects of exploration and settlement in America and Europe—human-induced changes in the physical environment in the Americas caused changed in other places.
 - a. Impact of introduction of new diseases to the Americas
 - b. The continued growth of population in the colonies resulted in the unjust acquisition of Native American lands.
 - c. New types of food improved both European and Native American health and life spans.
 - d. Economic and political changes in the balance of power in Europe and the Americas.
 - e. Introduction of African slaves into the America.

4. Students study the exploration and settlement of the New York State area by the Dutch and English

- a. Relationships between the colonists and the Native American Indians.
- b. Similarities between the Europeans and Native American Indians—role of traditions; importance of family and kinship; hierarchical nature of the community and family; the need to be self-sufficient.
- c. Differences between the Europeans and Native American Indians—ideas about land ownership; roles of men and women; beliefs about how people from different cultures should be addressed.
- d. Rivalry between Dutch and English eventually resulted in English supremacy.

B. Colonial Settlement: Geographic, Political and Economic Factors—Students investigate the roles and contributions of individuals and groups in relation to key social, political cultural and religious practices. They investigate why people and places are located where they are and what patterns can be perceived in these locations. Students explain how societies and nations attempt to satisfy basic needs and wants by utilizing scarce capital and natural and human resources and analyze how the values of colonial powers affected the guarantee of civil rights and made provisions for human needs.

1. Students study the English colonies in New England, the Middle Atlantic and southern regions.

- a. Reviewed as a geographic region—criteria to define regions, types of regions.
- b. Description of settlement patterns—who, when, why?
- c. Study of how economic patterns emerged to meet diverse needs—agricultural and urban settlements.
- d. Political systems of the region—Mayflower Compact
- e. Social Order

2. Students study New Netherlands, French and Spanish colonies

- a. Reviewed as a geographic region—types, connections between regions.
- b. Description of settlement patterns—who, when, why?
- c. Study of how economic patterns emerged to meet diverse needs
- d. Political systems and social order.

C. Life in Colonial Communities—In studying life in the colonial communities, students understand how Europeans and other settlers adapted to life in the American colonies. Students learn to classify major developments as social, political, geographic, technological, scientific, religious or cultural ones. Students investigate the roles and contributions of individuals and groups in relation to key social,

political, cultural and religious practices. Students will learn how to present geographic information in a variety of forms, including maps, tables, graphs, charts, diagrams and computer-generated models. Students investigate how people in colonial communities answered the three fundamental economic questions—What goods and services shall be produced and in what quantities? How shall these goods and services be produced? For whom shall goods and services be produced? Students analyze how values of a people affect the guarantee of civil rights and make provision for human needs.

1. Students learn that colonial communities were the center of social, economic and political life and tended to develop along European patterns.
 - a. Variations were found based on religion, slave and free-black communities, place of national origin.
 - b. Social structures promoted interdependence
 - c. Social goals promoted community consciousness over individual rights.
 - d. Roles of religions.
 - e. Survival demanded cooperation and a strong work ethic
 - f. Importance of waterways.
 - g. A hierarchical social order created social inequity.
2. Students study the structure and roles of colonial families
 - a. Nuclear families made up the basic social and economic unit.
 - b. Authority and obligation followed kinship lines.
 - c. Roles of family members.
3. Students learn life in colonial communities was a reflection of geographic and social conditions.
 - a. Impact of physical environments on travel, communication, settlements, and resource use.
 - b. Social conditions led to different forms of government, religion, inequalities of economic conditions, unequal treatment of blacks.
 - c. Impact of geographic and social conditions could be seen in the divergent landholding systems that developed in New England, New Netherland (patroonship system); southern colonies (plantation systems)
 - d. Life in French and Spanish colonies was both similar to and different from life in other colonies.

III. A Nation is Created

A. Background causes of the American Revolution—Students understand the economic, political and social causes of the American Revolution. Students 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. Students are able to investigate how people in the United States and throughout the world answer the three fundamental economic questions and solve basic economic problems. Students consider the nature and evolution of a constitutional democracy.

1. Students explore economic factors
 - a. Growth of mercantilism—triangular trade.
 - b. Rise of an influential business community in the colonies
 - c. Cost of colonial wars against the French.
2. Students explore political factors
 - a. Role of the British Civil War
 - b. Periods of political freedom in the colonies
 - c. Impact of the French & Indian War: Albany Plan of Union.
 - d. Political thought of Enlightenment influenced prominent colonial leaders.
3. Students examine the new social relationships between European powers and the American colonies—development of a new colonial identity.

B. The Shift from Protest to Separation—Students understand how colonists' concerns regarding economic and political issues resulted in the movement for independence. Students 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. Students consider the nature and evolution of constitutional democracies.

1. Students understand the new British attitude toward colonies following victory over France.
 - a. Colonies could not protect themselves
 - b. Colonies were not paying a fair amount towards their support.
2. New British policies antagonized many colonists
 - a. Various acts of Parliament such as the Quebec Act
 - b. New tax policies and taxes: Stamp Act and others.
 - c. Other acts of repression: Zenger case and others
3. Public opinion was shaped in different forums
 - a. Political bodies

- b. Public display and demonstration
 - c. Print media
4. Wide variety of viewpoints evolved
- a. Complete separation
 - b. More autonomy for the colonies
 - c. No change in status quo—the Loyalist population

C. Early Attempts to Govern the Newly Independent States—Students understand how the colonists attempted to establish new forms of self-government. They investigate key turning points in New York State and United States history and explain why these events or developments are significant. Students 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. Students 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.

- 1. Students trace the beginning of the Revolution
 - a. Early confrontations
 - b. Important Leaders
 - c. First Continental Congress
- 2. Students understand that the Second Continental Congress represented the first attempt to govern the colonies
 - a. “Republican” government
 - b. Requests for State constitutions and political systems
 - c. Asserts independence
- 3. Students examine how the movement for independence evolved from the political debate of the day
- 4. Students examine the Declaration of Independence
 - a. Its origins
 - b. Its content
 - c. Its impact

- d. Its embodied ideals
5. Students examine how independence created problems for New York
 - a. Organizing new State government
 - b. Economic problems
 - c. Political factions
 - d. Slavery
 - e. Recruiting soldiers for war

D. Military and Political Aspects of the Revolution—Students understand how the colonists were able to unite against British power to win a major military and political victory. Students understand how events on the national level influenced and affected New Yorkers. Students complete well-documented and historically accurate case studies about individuals and groups who represent different ethnic, national and religious groups. Students explain how societies and nations attempt to satisfy their basic needs and wants by utilizing capital, natural and human resources.

1. Students describe strategies of the principal military engagements
 - a. Washington's leadership
 - b. New York as the object of strategic planning
 - c. Evolution of the war from North to South: Lexington and Concord to Saratoga and Yorktown.
2. Students understand the role of the Loyalists
 - a. In New York City
 - b. Colonists of Nova Scotia, Quebec and Prince Edward Island did not join the Revolution; became a refuge for Loyalists and a staging ground for attacks on New York's patriots.
3. Students explain how the outcome of the war was influenced by many factors
 - a. Personalities and leadership
 - b. Geography
 - c. Allocation of resources
 - d. Foreign aid: funds and volunteers
 - e. Role of women, blacks and Native American Indians
 - f. Haphazard occurrences

g. Clash between colonial authority and Second Continental Congress

E. Economic, Political and Social Changes Brought About by the American Revolution—Students understand how a revolution can have a profound effect on the economic, political and social fabric of a nation. Students analyze how the values of a nation affect the guarantee of human rights and make provisions for human needs. They present information by using media such as tables, charts and graphs to communicate ideas and conclusions. Students understand how different experiences, beliefs, values, traditions, and motives cause individuals and groups to interpret historic events and issues from different perspectives. Students explain how societies and nations attempt to satisfy their basic needs and wants by utilizing capital, natural and human resources.

1. Students understand impact on the national level

- a. Britain gave up claims to govern
- b. Slavery began to emerge as a divisive sectional issue because slaves did not receive their independence.
- c. American economy was plagued by inflation and hurt by isolation from the world.

2. Students understand impact on the New York State level

- a. The effects of the American Revolution on the Iroquois Confederacy
- b. Disposition of Loyalist property and resettlement of many to Canada after the revolution, thus changing the French/British balance.
- c. A republican ideology developed which emphasized shared power and citizenship participation.

3. Students understand impact on the Western Hemisphere

- a. Britain did not accept the notion of American dominance of the hemisphere
- b. The remaining British colonies in Canada strengthened their ties to Great Britain.
- c. Many leaders in South America drew inspiration from American ideas and actions in their struggle against Spanish rule.

IV. Experiments in Government

A. The Articles of Confederation and the Critical Period—Students understand the earliest formal structure of the United States government as expressed in the Articles of Confederation and consider the nature and evolution of constitutional democracies.

1. Students understand the need for a formal plan of union.

- a. Historical precedent: The Albany Plan of Union.

- b. Development of state constitutions
 - c. Inadequacy of Continental Congress as a national government.
- 2. Students trace the development of a formal plan of government
 - a. Draft and debate in Congress, 1776-1777
 - b. Ratification by the states, 1778-1781; period of operation, 1781-1789
- 3. Students understand the structure of government under the Articles of Confederation
 - a. Congress was the only branch of government
 - b. Each state had equal representation
 - c. Congress's power under the Articles included: Making war and peace; Conducting foreign and Native American Indian affairs; Settling disputes between and among state; and Issuance of currency and borrowing
- 4. Students recognize the weaknesses of the Articles
 - a. Indirect representation
 - b. No coercive power; decision more advisory than binding (i.e. Shay's rebellion)
 - c. Lack of national executive and judicial functions.
 - d. Lack of taxing power.
 - e. Difficulty in passing legislation
- 5. Students recognize the achievements and contributions of the Articles
 - a. The Land Ordinance of 1785 and the Northwest Ordinance, 1787
 - b. Development of the privileges and immunities of citizenship
 - c. Development of the concept of limited government.

B. The New York State Constitution of 1777—Students understand the earliest formal structure of the New York State government, as expressed in the first New York State Constitution. Students compare and contrast the development and evolution of the United States and New York State constitutions. Students understand how both constitutions support majority rule but also protect minority rights.

- 1. Students know that the Constitution was adopted by convention without submission to popular vote.
 - a. Included Declaration of Independence
 - b. Influenced by leaders such as John Jay.

2. Students can trace the chronology of the document
 - a. Draft and debate in convention, 1776-1777
 - b. Period of operation, 1777-1822
3. Students understand the form of early State government
 - a. Similar to colonial government
 - b. Governor with limited authority and three-year term.
 - c. Inclusion of rights and liberties
 - d. First system of State courts
 - e. Limited franchise
 - f. Bicameral legislature: Senate—four-year term; Assembly—one-year term.
4. Students can describe the effectiveness of the early State government
 - a. Smoother functioning than national government under the Articles of Confederation
 - b. Cumbersome administrative procedures
 - c. Excessive use of veto procedures
 - d. A model for the United States Constitution of 1787.

C. The Writing, Structure and Adoption of the United States Constitution—Students understand the importance of the events that took place during the writing and adoption of the United States Constitution and recognize its significance beyond their time and place. Students 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. Students understand that the New York State Constitution, along with other documents, served as a model for the development of the United States Constitution. Students can compare and contrast the development and evolution of the US and NYS Constitution. Students define federalism and describe the powers granted to the national and state governments by the United States Constitution.

1. Students study the Annapolis Convention, 1786
 - a. Impracticality of correcting weaknesses in the Articles of Confederation
 - b. Need for an improved form of government without losing key elements of a new philosophy of government.
 - c. Decision to write a constitution.
2. Students study the Constitutional Convention: Setting and Composition

3. Students consider the major issues
 - a. Limits of power: national versus state
 - b. Representation: slaves and apportionment
 - c. Electoral procedures: direct versus indirect election
 - d. Rights of individuals
4. Students study the need for compromise
 - a. The issue of a “federal” or “national” government
 - b. The Great Compromise on representation
 - c. The three-fifths compromise on slavery
 - d. The commerce compromises
5. Students understand the underlying legal and political principles of the Constitution
 - a. Federalism
 - b. Separation of powers
 - c. Provisions for change
 - d. Protection of individual rights
6. Students relate the Constitution and the functioning of the Federal Government
 - a. The Preamble states the purpose of the document.
 - b. The structure and function of the legislative, executive and judicial branch (Articles I, II, III)
 - c. The relation of states to the federal union (Article IV)
 - d. Assuming the responsibility for a federal system (Article VI)
7. Students understand the Constitution as a living document.
 - a. The elastic clause and delegated power facilitate action.
 - b. Amendment procedure as a mechanism for change (Article V)
 - c. The Bill of Rights
 - d. Supreme Court decision (i.e. Tinker v. DesMoines School District, 1969)

8. Students understand the evolution of an “unwritten constitution”
 - a. Political parties
 - b. The President’s Cabinet
 - c. President’s relation to Congress
 - d. Committee system in Congress
 - e. Traditional limitations on Presidential term
9. Students know the ratification process
 - a. The debates in the states, especially New York State
 - b. The Federalist Papers
 - c. Poughkeepsie Convention—Federalists (Hamilton), Anti-Federalists (Clinton)
 - d. Formal ratification of the Constitution and launching of the new government
 - e. The personal leadership of people like Washington, Franklin, Hamilton, Madison.

V. Life in the New Nation

A. **New Government in Operation**—Students understand how the new nation established itself and began to operate. They understand how political parties emerged in response to concerns at the local, State and national levels. They understand how civic values reflected in the United States and New York State constitutions have been implemented through law and practice. Students understand the relationship between and the relative importance of United States domestic and foreign policies over time. Students analyze the role played by the United States in international politics, past and present. Students explain how societies and nations attempt to satisfy their basic needs and wants by utilizing scarce capital, natural and human resources. Students investigate how people in the United States solve the three fundamental economic questions and solve basic economic problems. Students can complete well-documented and historically correct case studies about individuals and groups who represent different ethnic, national and religious groups, including Native American Indians in New York State and the United States.

1. Students study Washington as President
2. Students examine the establishment of stability
 - a. Hamilton’s economic plan
 - b. The Whiskey Rebellion
 - c. Preservation of neutrality: the French Revolution, Citizen Genet, Jay and Pinckney Treaties.
 - d. Political Parties

- e. The Election of 1800
 - f. The Judicial Review (*Marbury v. Madison*, 1803)
3. Students examine the expansion of the nation's boundaries
- a. Pinckney Treaty with Spain
 - b. Louisiana Purchase
 - c. War of 1812—guaranteeing boundaries
 - d. Monroe Doctrine—sphere of influence
 - e. Purchase of Florida
 - f. Native American Indian concessions and treaties.
4. Students explore the challenges to stability
- a. French and English trade barriers and the Embargo Act.
 - b. War of 1812—second war for independence
5. The Era of Good Feelings
- a. Clay's American System
 - b. Internal expansion: new roads, canals, railroads
 - c. Protective tariffs
 - d. National assertions: Marshall's decision (i.e. *Gibbons v. Ogden*, 1824)
 - e. Extension of slavery by the Missouri Compromise
 - f. Threats to Latin America: the Monroe Doctrine
 - g. Disputed election of 1824

B. The Age of Jackson—Students understand how an American consciousness began to develop during Jackson's administration. Students complete well-documented and historically accurate case studies about individuals and 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. Students describe how ordinary people and famous historic figures in the local community, the 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 State Constitutions, the Bill of Rights and other important historic documents. Students gather and organize information about the important achievements and contributions of individuals and groups living in New York State and the

United States. Students develop conclusions about economic issues and problems by creating broad statements that summarize findings and solutions.

1. Students study the age of the “common man”
 - a. Expansion of suffrage
 - b. Citizenship
 - c. Election of 1828
 - d. Jackson: man , politician, President
 - e. The “spoils system”
 - f. New political parties
2. Students understand Jackson’s Native American policy
 - a. Some Native Americans resisted government attempts to negotiate their removal by treaty.
 - b. Government policy of forced removals (1820-1840) resulted in widespread suffering and death
 - c. Native American Indian territory
3. Students recognize intensifying sectional differences.
 - a. Protective tariff, 1828
 - b. Nullification controversy, 1828, 1832
 - c. Clay’s compromise tariff, 1833

C. Pre-Industrial Age (1790-1860s)—Students understand the way of life of an agrarian society. They understand the nature and effect of changes on society and individuals as the United States began to move from an agrarian to an industrial economy. They describe historic events through the eyes and experiences of those who were there. They explore the meaning of American culture by identifying the key ideas, beliefs, patterns of behavior, and traditions that help define it and unite all Americans. Students define basic economic concepts such as scarcity, supply and demand, markets, resources and economic systems. They understand how scarcity requires people and nations to make choices that involve costs and future considerations. They develop conclusions about economic issues and problems by creating broad statements that summarize findings and solutions. They describe relationships between people and environments and the connections between people and places. Students use a number of research skills (i.e. computer databases, periodicals, census reports, maps, standard reference works, interviews, surveys) to locate and gather geographical information about issues and problems.

1. Students describe a portrait of the United States, 1800
 - a. Agriculturally based economy

- b. Urban centers on the coast
 - c. Poor communication and transportation systems
 - d. Self-sufficiency
 - e. Regional differences
2. Students identify patterns of community organizations, work and family life in agrarian America
 3. Students track how technological changes altered the way people dealt with each other.
 - a. Improved transportation made travel and communication easier.
 - b. Greater ties between communities were possible.
 - c. The Erie Canal and its impact (reasons for building, technology involved in construction, types and sources of labor, results of its building)
 4. Students explore the impact of early industrialization and technological changes on work and workers, the family, and the community.
 - a. An increase in the production of goods for sale rather than personal use.
 - b. Increased purchasing of what was formerly produced at home.
 - c. Emergence of a new work ethic.
 5. Students describe the way family roles changed, affecting society in general.
 - a. Changing role of women
 - b. Childhood became a more distinct stage of life
 - c. Roles of private agencies
 6. Students study slavery and abolition
 - a. Review the institution of slavery
 - b. The meaning and morality of slavery
 - c. Abolition movement (Leaders like Harriet Tubman, Garrison; Activities like the Freedom Trail and the Underground Railroad).
 - d. Abolition in New York State.
 - e. Canada's role

- f. Effects of Abolition
7. Students understand social changes
 - a. Religious revival
 - b. Women's rights
 - c. Mental hospital and prison reform
 - d. Education
 - e. Temperance
 8. Students learn how an American culture begins to emerge.
 - a. Literature
 - b. Art
 9. Students paint a portrait of the United States, 1860
 - a. Growth brought about many changes and regions—the spatial patterns of settlement in different regions in the United States.
 - b. Size and shape of communities
 - c. Environmental impacts due to development of natural resources and industry—human modification of the physical environment.
 - d. Diversity of people within the larger communities and regions
 - e. Ability of the Political system within communities to deal with deviance.
 - f. The Pre-Industrial Age took place at different times and different places.
 - g. The North—industrial base, increasing population, urban centered
 - h. The South—agricultural base (cotton), impact of Industrial Revolution on agriculture, increasing slave population.

VI. Division and Reunion

A. Underlying Causes of the Civil War—Students understand the series of events and resulting conditions that led to the American Civil War. They understand how different experiences, beliefs, values, traditions, and motives cause individuals and groups to interpret historic events and issues from different perspectives. Students participate in a negotiating and compromising role-playing activity that mirrors the attempts at political compromise in the 1850s.

1. Students explore territorial expansion and slavery.

- a. The secession of Texas, 1836
 - b. The Mexican War, 1846-1848
 - c. Oregon Territory
 - d. The westward movement and its effects on the physical, social and cultural environments
2. Students understand the emotional impact of slavery
 - a. *Uncle Tom's Cabin*
 - b. John Brown's raid on Harper's Ferry
 - c. Fugitive slave laws
 3. Students understand the failure of political compromise
 - a. Compromise of 1850
 - b. Kansas-Nebraska Act, 1854
 - c. Founding of the Republican Party, 1854-1856
 - d. *Dred Scott v. Sanford (1857)*
 - e. Lincoln-Douglas debate, 1858
 - f. Election of 1960
 - g. Firing on Fort Sumter, 1861

B. The Civil War Breaks Out—Students understand the development and progress of the Civil War. They investigate key turning points in the Civil War and New York State and United States history and explain why these events or developments are significant. They map information about people, places and environments, and describe relationships between people and environments and the connections between people and places. Students identify and collect economic information related to the Civil War from standard reference works, newspapers, periodicals, computer databases, textbooks, and other primary and secondary sources.

1. Students examine the Presidency of Lincoln
 - a. Personal leadership
 - b. Opposition
 - c. Emancipation Proclamation
2. Students delineate the advantages and disadvantages of each side

- a. Advantages of South: military leadership; commitment of people to preserve their way of life
- b. Advantages of north: effective navy, larger army, manufacturing, agricultural production, transportation system.
- c. Disadvantages of South: lacked manufacturing, lacked a navy, ill-prepared for war.
- d. Disadvantages of North: lacked quality military leadership, ill-prepared for war.
- e. Military and political dimensions of the war
- f. Geographic factors influenced the war's progress and outcome—role of physical and other barriers.
- g. Major campaigns evolved around a changing strategy on both sides.
- h. Wartime problems and political issues.
- i. Foreign policy maneuvering was crucial to the final outcome (Seward's concern with Mexico, Emancipation Proclamation as an element of foreign policy).
- j. Technology of the war.

3. Students study New York State's role in the Civil War

- a. Military role
- b. Political opposition in New York City
- c. Conscription laws and draft riots (undemocratic nature of the draft, conscription as a factor in racism).

4. Students understand individuals, issues and events of the Civil War

- a. Students explain the roles played by significant individuals during the Civil War including Jefferson Davis, Ulysses S. Grant, Robert E. Lee, and Abraham Lincoln.
- b. Students explain the issues surrounding significant events of the Civil War, including the firing on Fort Sumter, The battles of Gettysburg and Vicksburg, the announcement of the Emancipation Proclamation, the assassination of Lincoln, and Lee's surrender at Appomattox Court House.

C. Results of the Civil War—Students understand how the Civil War affected the development of the postwar United States and influenced other countries. Students describe how ordinary people and famous historic figures in the local community, the State, and the United States have advanced 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. Students consider the sources of historic documents, narratives or artifacts and evaluate their reliability. Students value the principles, ideals and core values of the American democratic system based upon the premises

of human dignity, liberty, justice and equality. Students analyze the role played by the United States in international politics, past and present.

1. Students understand the preservation of the Union.
2. Students study the abolition of slavery
 - a. The Emancipation Proclamation
 - b. Civil Rights and the 13th Amendment
3. Students explore political power and decision making
 - a. Secession
 - b. State's rights
4. Students understand the Reconstruction—theory, practice and termination
 - a. Lincoln's Plan
 - b. Johnson's Plan and Congressional opposition
 - c. Congressional Reconstruction
 - d. Constitutional Amendments 14 and 15 guarantee equal rights for all races except Native American Indians
 - e. Problems of economic and social reconstruction led to sharecropping as a substitute for slavery
 - f. The official end of Reconstruction in 1877
 - g. Segregation held legal: *Plessy v. Ferguson (1896)*
5. Students understand the enormous human suffering and loss of life caused by the War.

VII. Students understand the effects of the Reconstruction on the political, economic, and social life of the nation.

- A. Students evaluate legislative reform programs of the Radical Reconstruction Congress and reconstructed state governments.
- B. Students describe the economic difficulties faced by the United States during Reconstruction.
- C. Students explain the social problems that faced the South during Reconstruction and evaluate their impact on different groups.

VIII. Students understand the process of changing the U.S. Constitution and the impact of amendments on American society.

- A. Students summarize the purposes for and processes of changing the U.S. Constitution.
- B. Students describe the impact of 19th century amendments including the 13th, 14th and 15th amendments on life in the United States.
- C. Students identify the origin of judicial review and analyze examples of congressional and presidential responses.

IX. Students understand the impact of landmark Supreme Court cases

- A. Students summarize the issues, decisions and significance of landmark Supreme Court cases including *Marbury v. Madison*, *McCulloch v. Maryland* and *Gibbons v. Ogden*.
- B. Students evaluate the impact of selected landmark Supreme Court decisions including *Dred Scott v. Sanford* life in the United States.

X. Students understand how the virtue of citizenship has permeated American life and history

- A. Students understand the rights and responsibilities of citizens in the United States
 - 1. Students define and give examples of unalienable rights.
 - 2. Students summarize rights guaranteed by the Bill of Rights
 - a. Students describe the importance of free speech and press in a democratic society.
 - 3. Students explain the importance of personal responsibilities such as accepting responsibility for one's behavior and supporting one's family.
 - 4. Students identify examples of responsible citizenship, including obeying rules and laws, voting and serving on juries.
 - 5. Students summarize the criteria and explain the process for becoming a naturalized citizen of the United States.
 - 6. Students explain how the rights and responsibilities of U.S. citizens reflect our national identity.
- B. Students understand the importance of voluntary individual participation in the democratic process.
 - 1. Students explain the role of significant individuals such as William Penn in the development of self-government in colonial America.
 - 2. Students evaluate the contributions of the Founding Fathers as models for civic virtue.
 - 3. Students identify reasons for and the impact of selected examples of civil disobedience in U.S. history such as Henry David Thoreau's refusal to pay a tax.
- C. Students understand the importance of effective leadership in a democratic society.

1. Students analyze the leadership qualities of elected and appointed leaders of the United States such as Abraham Lincoln, George Washington, and John Marshall.
2. Students describe the contributions of significant political, social, and military leaders of the United States such as Frederick Douglass, John Paul Jones, James Monroe and Elizabeth Cady Stanton.

XI. Students understand the impact of science and technology on economic development and social life in the United States through Reconstruction.

- A. Students explain the effects of the technological and scientific innovations such as the steamboat, the cotton gin, and the Bessemer steel process.
- B. Students analyze the impact of transportation systems on the growth, development and urbanization of the United States.
- C. Students analyze how technological innovation changed the way goods were manufactured and marketed, nationally and internationally.
- D. Students explain how technological innovations led to rapid industrialization.
- E. Students compare the effects of scientific discoveries and technological innovations that have influenced daily in different periods in U.S. history.
- F. Students describe how scientific ideas influenced technological developments during different periods in U.S. history
- G. Students identify examples of how industrialization changed life in the United States.

XII. Students understand the cultural development in the United States through Reconstruction

- A. Students understand the relationships between and among people from various groups, including racial, ethnic and religious groups during the 17th, 18th and 19th centuries.
 1. Students identify selected racial, ethnic, and religious groups that settled in the United States and their reasons for immigration.
 2. Students explain the relationship between urbanization and conflicts resulting from differences in religion, social class and political beliefs.
 3. Students identify ways conflicts between people from various racial, ethnic and religious groups were resolved.
 4. Students analyze the contributions of people of various racial, ethnic, and religious groups to our national identity.
- B. Students understand the major reform movements of the 19th century.
 1. Students describe the historical development of the abolitionist movement

2. Students evaluate the impact of reform movements including public education, temperance, women's rights, prison reform and care of the disabled.

C. Students **understand** the impact of religion on the American way of life.

1. Students trace the development of religious freedom in the United States

2. Students describe religious influences on immigration and on social movements, including the impact of the first and second Great Awakenings

3. Students analyze the impact of the first amendment guarantees of religious freedom on the American way of life.

D. Students **understand** the relationship between the arts and the times during which they were created.

1. Students describe developments in art, music, literature, drama and other cultural activities in the history of the United States.

2. Students analyze the relationship between fine arts and continuity and change in the American way of life.

3. Students identify examples of American art, music and literature that transcend American culture and convey universal themes.

XIII. Students **understand** traditional historical points of reference in U.S. history through 1877.

A. Students identify the major eras in U.S. history through 1877

B. Students apply absolute and relative chronology through the sequencing of significant individuals, events and time periods.

C. Students explain the significance of the following dates: 1607, 1776, 1787, 1803, 1861-1865.

XIV. Students know the name and location of the current 50 states and the names of their state capitals.

XV. General Skills

A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology.

1. Students differentiate between, locate and use primary and secondary sources such as computer software, databases, media and news services, biographies, interview and artifacts to acquire information about New York.

2. Students analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions and drawing inferences and conclusions.

3. Students organize and interpret information from outlines, reports, databases, and visuals including graphs, charts, timelines and maps.

4. Students identify points of view from the historical context surrounding an event and the frame of reference that influenced the participants.
 5. Students support a point of view on a social studies issue or event
 6. Students identify bias in written, oral and visual material.
 7. Students evaluate the validity of a source based on language, corroboration with other sources and information about the author.
 8. Students use appropriate mathematical skills to interpret social studies information such as maps and globes.
 9. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written essays or well-constructed oral presentations.
- B. Students communicate in written, oral and visual forms.
1. Students use social studies terminology correctly
 2. Students use standard grammar, spelling, sentence structure and punctuation.
 3. Students transfer information form one medium to another, including written to visual and statistical to written or visual, suing computer software as appropriate.
 4. Students create written, oral and visual presentations of social studies information.
- C. Students use problem-solving and decision making skills, working independently and with others, in a variety of settings.
1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
 2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

Eighth Grade

In Grade 8, which is the second part of a two-year study of U.S. History that begins in Grade 7, students study the history of the United States since Reconstruction to the present. Historical content focuses on the political, economic and social events and issues related to industrialization and urbanization, major wars, domestic and foreign policies of the Cold War and post-Cold War eras, and reform movements including civil rights. Students examine the impact of geographic factors on major events and analyze causes and effects of the Great Depression. Students examine the impact of constitutional issues on American society, evaluate the dynamic relationship of the three branches of federal government, and analyze efforts to expand the democratic process. Students describe the relationship between the arts and the times during which they were created. Students analyze the impact of technological innovations on the American labor movement. Throughout the course of study, parallels will be drawn between the political, geographic, economic and social trends in United States history and the trends and time frames in New York State history.

I. An Industrial Society

- A. The Maturing of an Industrial Society in the Second Half of the 19th Century—Students understand how industrialization led to significant changes in the economic patterns for producing, distributing, and consuming goods and services. Students explain how societies and nations attempt to satisfy their basic needs and wants by utilizing scarce capital, natural and human resources. Students define basic economic concepts such as scarcity, supply and demand, markets, resources, and economic growth. Students understand how scarcity requires people and nations to make choices that involve costs and future considerations. Students understand how people in the United States and throughout the world are both producers and consumers of goods and services.
 1. Students explore the problems and progress in American politics: Framework for a changing United States.
 - a. New Problems created a changing role for government and the political system.
 - b. Scandals, depressions, and limitations of traditional politics resulted in reluctant change, i.e. civil service.
 - c. National politics were dominated by the Democratic and Republican parties, but third parties occasionally arose to meet special interests.
 - d. New York State and New York City in an era of machine politics, i.e. Tweed Ring and Tammany Hall.
 - e. Prevailing attitude of noninterference (“laissez-zfiare”) as the appropriate role for government with some regulations to meet excesses.
 2. Students understand how the United States developed as an industrial power.
 - a. Changes in methods of production and distribution of manufactured goods: Transportation developments and their effects on economic developments, 1865-1900; Communication developments, 1865-1900; Industrial technology, 1865-1900; Rise of banking and financial institutions
 - b. Increase in the number and size of firms engaged in manufacture and distribution of goods.

- c. Increase in the number and skill level of workers; new labor markets
 - d. Expansion of markets for manufactured goods.
 - e. The growth and emerging problems of the cities.
3. Students trace the growth of the corporation as a form of business organization: Case studies: oil, railroads, steel.
 - a. One of several forms of business organization
 - b. Many firms maintained traditional ways of doing business
 - c. Advantages and disadvantages of a corporation.
 4. Students understand the government's response to industrial development and abuses
 - a. Laissez-faire versus regulation
 - b. Interstate commerce: state and national control
 - c. Sherman Antitrust Act: bigness as a threat.
 5. Students observe changing patterns of agricultural organization and activity in the United States and New York.
 - a. Unprecedented growth in agriculture
 - b. Changes in the methods of production and distribution of farm products—spatial distribution of economic activities.
 - c. Efficient use of resources combined with competition and the profit motive to improve methods of production.
 6. Students study the occurrence of many significant and influential changes
 - a. Communities grew in size and number
 - b. Interdependence increased
 - c. Decision-making procedures changed
 - d. Technology advanced.
 - e. Adaptation of, rather than to, the environment—human modifications of the physical environment.
 - f. Perceptions of time became more formal, i.e. railroad schedules.
 - g. Political machines influenced daily life.

7. Students understand the response of labor to industrialization
 - a. Industrialization created a larger workforce and more complex work.
 - b. Working conditions underwent extensive change, which often placed hardships on the workers; roles of women, children, minorities and the disabled changed.
 - c. Early attempts to unionize the workforce met with resistance and failure (i.e. the Knights of Labor and the Haymarket Riot, American Railway Union, the Industrial Workers of the World).
 - d. Roots of modern labor unionism, i.e. American Federation of Labor.
 - e. Labor as a reform movement in other aspects of society.
 8. Students understand the response of the farmer to industrialization
 - a. Expanding agricultural production and railroads
 - b. Cheap money and high railroad rates
 - c. The Grange and state reforms
 - d. The Populist movement
 - e. The closing of the frontier—limitations of the physical environment
- B. Changes in the Social Structure Altered the American Scene—Students understand how industrialization altered the traditional social pattern of American society and created a need for reform. They investigate key turning points in New York State and United States history and explain why these events or developments are significant. They complete well-documented and historically accurate case studies about individuals and groups who represent different ethnic, national and religious groups including Native Americans, in New York State and the United States at different times and in different locations. Students consider the sources of historic documents, narratives or artifacts and evaluate their reliability. Students describe historic events through the eyes and experiences of those who were there. Finally, students understand how scarcity requires people and nations to make choices that involve costs and future considerations.**
1. Students study the immigration experience
 - a. The two distinct waves of immigration—the 1840s to 1890s and the 1890s to 1920s.
 - b. Differences were based on national origins, cultural patterns and religion.
 - c. Similarities included motivations for coming and patterns of community settlement.
 - d. Initial clashes ended in varying degrees of acculturation.
 - e. Occupational and political experiences varied.
 2. Students explore case studies of the immigrant experience in the United States and New York State

- a. A comparison of European immigrants and the black slave experience—human migration’s effects on the character of different places and regions.
 - b. Immigrants as rural settlers in the Midwest
 - c. The Chinese experience in the Far West.
 - d. Mexicans in the Southwest
 - e. New York City’s ethnic neighborhoods
 - f. French-Canadian settlement in northern New York State
 - g. Immigration patterns and experiences throughout New York State
 - h. Irish immigrants: Mass starvation in Ireland, 1845-1850
 - i. Immigrants in the local community.
3. Students understand the legal basis for citizenship in the United States
 - a. Citizenship by the “law of the soil”
 - b. Citizenship by birth to an American parent.
 - c. Citizenship through naturalization
 4. Students understand the responsibilities of citizenship
 - a. Civic Responsibilities
 - b. Legal Responsibilities
 5. Students explore how America becomes a more mobile society
 - a. Mobility motivated by new economic opportunities
 - b. Changing patterns of movement: i.e. blacks begin to move North
 - c. The westward settlement
 - d. The disappearance of the frontier—physical limits of geography
 6. Students trace how America developed as a consumer society
 - a. Improved standard of living increased consumption
 - b. Greater variety of goods and services available
 - c. Continually rising expectations

7. Students explore how the leisure activities of the time reflected the prevailing attitudes and view of the time.
 - a. Greater variety of leisure activities became available as less time was spent on work.
 - b. Leisure activities reflected general characteristics of modern society, i.e. organized use of technology, emphasis on the individual role, and reliance on experts.

- C. The Progressive Movement, 1900-1920: Efforts to Reform the New Society—Students understand how industrialization led to a need for reevaluating and changing the traditional role of government in relation to the economy and social conditions. Students investigate key turning points in New York State and United States history and explain why these events or developments are significant. They gather and organize information about the important achievements and contributions of individuals and groups living in New York State and the United States. Students classify major developments into categories such as social, political, economic, geographic, technological, scientific, cultural or religious. Students describe historic events through the eyes and experiences of those who were there.
 1. Students explore the social ills of the time and means to address them.
 - a. The Muckrakers—exposing corruption and abuses in industry, government and urban living conditions
 - b. Fighting racial discrimination
 - c. Temperance and prohibition
 - d. Settlement houses
 2. Students understand the efforts made to reform government and politics
 - a. Need for responsive government
 - b. Progressive leaders like LaFollette, Roosevelt, Taft, Debs
 - c. The Socialist Party
 - d. Direct election of Senators—the 17th Amendment
 - e. Women’s suffrage—the 19th Amendment
 3. Students understand the economic reform efforts
 - a. Labor-related legislation: minimum wage laws, workmen’s compensation insurance, safety regulations, child labor laws
 - b. Prosecuting trusts
 - c. Government regulation of the railroads
 - d. The Federal Reserve Act

e. Graduated income tax—the 16th Amendment

II. The United States as an Independent Nation in an Increasingly Interdependent World

A. The United States expands its territories and builds an overseas empire—Students understand how and why the United States grew during the 19th century. They recognize that American territorial and economic growth had widespread economic, political and social impacts at home and abroad. They describe the reasons for periodizing history in different ways. Students understand the relative importance of United States domestic and foreign policies over time and analyze the role played by the United States in international politics, both past and present. Students compare and contrast different interpretations of key events and issues in New York State and United States history and offer reasons for these different accounts.

1. Students learn that imperialist sentiment was caused by several factors
 - a. A belief that the nation had a right to the land: Manifest Destiny
 - b. Perceived moral obligations to extend America’s way of life to others: ethnocentrism and racism.
 - c. American citizens were already migrating into new lands in North America—the effects of human migration on the characteristics of different places.
 - d. Increased foreign trade led to a growing interest in gaining control over some foreign markets.
 - e. Fear that other foreign nations would gain control of strategic locations at the expense of the United States.
 - f. Developing technology in transportation and communication contributed to American expansion potential—the importance of location and certain physical features.
2. Students understand the Spanish-American War signaled the emergence of the United States as a world power.
 - a. The war’s origins lay in Cuban attempts to gain freedom from Spain
 - b. Concerns of the United States, i.e. pro-expansionist sentiment, Cuba’s location, Spanish tactics
 - c. Newspapers shared public opinion over the Maine incident—“yellow journalism”
 - d. Conduct of the war created domestic and international problems
 - e. Opposition to American imperialist movement
3. Students understand why the victory in the Spanish-American War created a need for a new foreign policy

- a. Acquisition of land far from America's shores—importance of resources and markets
 - b. Emphasis on doing what the government felt was necessary and possible to protect American interest, i.e. maintaining a strong navy, gaining control of other strategic locations, advocating equal trading rights in Asia (The Open Door Policy).
 - c. Actions created conflict between the Philippines and Japan.
4. Students understand United States policies in Latin America
- a. The United States attempted to control a number of locations in Latin America for economic and political reasons
 - b. The quest for Latin American stability through the Roosevelt Corollary to the Monroe Doctrine.
 - c. The Panama Canal
 - d. Armed intervention in Latin America
- B. The United States begins to take a role in global politics—Students understand how American relations with other nations developed between the end of the Civil War and the end of WWI. They describe the reasons for periodizing history in different ways. Students understand the relative importance of the United States domestic and foreign policies over time and analyze the role played by the United States in international politics, past and present. Students describe the relationships between people and environments and the connections between people and places.
1. Students understand that United States policy on noninvolvement in European affairs was based on a number of factors
- a. Tradition dating back to the earliest days of the century
 - b. Focus on the international problems of the new nation
 - c. Recognition of United States military unpreparedness
 - d. Impacts of geography (i.e. location, resources) on United States foreign policy
2. Students explore Pre-WWI involvements
- a. Application of the Monroe Doctrine in the Western hemisphere
 - b. Threats to American foreign trade
 - c. Roosevelt's Treaty of Portsmouth
3. Students understand that WWI occurred as a result of international problems
- a. Intense nationalism

- b. Power struggles among European nations
 - c. A failure of leadership
 - d. European alliances
4. Students explore the events that led up to United States involvement in WWI
- a. The American people were divided in ways that made involvement difficult
 - b. There was fear that the United States involvement would increase intolerance at home.
 - c. Initial attempts to follow traditional policy of neutrality failed.
 - d. Unwillingness of warring nations to accept President Wilson as mediator
 - e. England was a major United States trade partner
 - f. Despite varied ethnic backgrounds in the United States, leaders felt closer to the English than the Germans.
 - g. While both sides attempted to restrict United States trade with the opponent, Germany did so by sinking American ships
 - h. Recognition that the United States would have no say at any peace conference if it remained neutral.
5. The United States entrance into the War
- a. Combining new technology with old strategies: Chemical warfare
 - b. The war was supported by the majority of Americans
 - c. The war effort created changes on the home front: economic controls, the role of women in the workforce, black migrations to the North, attempts to organize labor to improve conditions
 - d. War promoted intolerance, i.e. the Espionage Act of 1917 and the Sedition Act of 1918. Certain groups of Americans have their loyalty questioned
6. The United States and the peace negotiations
- a. Wilson's failed attempts to establish leadership with his Fourteen Points
 - b. Senate opposition to the League of Nations
 - c. The Versailles Treaty
7. Students study the Bolshevik Revolution
- a. The effect on WWI

- b. Civil War in Russia
- c. Western intervention
- d. Threat of international communism

III. The United States Between the Wars

A. The Roaring Twenties Reflected the Spirit of the Postwar Period—Students understand the economic, social, and political development of America in the period between WWI and WWII. They understand the relative importance of United States domestic and foreign policies over time. They analyze the role that the United States played in international politics past and present. Students classify the major developments into categories such as social, political, economic, geographic, technological, scientific, cultural or religious. They understand how people in the United States and throughout the world are both producers and consumers of goods and services.

1. Students study Prohibition and the 18th Amendment
 - a. End of reform era
 - b. The rise of organized crime
 - c. Economic, social, political
2. Students explore the Republican decade
 - a. Political developments—back to “normalcy” (the election of 1920); scandals; Coolidge (austerity and integrity); Government and business: laissez-faire and protection; election of 1928.
3. Relative isolation of the United States in world political affairs
 - a. General policy of noninvolvement in European Affairs, the League of Nations controversy
 - b. Limited participation in international activities (World Court, Naval disarmament 1924, Kellogg-Briand Pact 1928, Postwar reparation talks, relief efforts in Europe)
 - c. Expansion of international trade and tariffs
 - d. Restrictions on immigration (i.e. Quota Act 1924)
4. Students explore how the rising standard of living resulted in the growth of a consumer economy and the rise of the middle class.
 - a. Increase in single-family homes; move to nuclear families
 - b. Emergence of suburbs

- c. Spread of middle-class values
 - d. Increased use of credit
5. Students explore the changes in the workplace
- a. Shift from agrarian to industrial workforce
 - b. Lessened demand for skilled workers
 - c. Working conditions and wages improved
 - d. Increase in white-collar employees
 - e. Women continued to increase their presence in the workforce
6. Students learn of the problems that developed in the midst of this unprecedented prosperity
- a. Not all groups benefited equally (low farm prices, high black unemployment, millions of poor)
 - b. New trends conflicted with tradition
 - c. Environmental balance was jeopardized
7. Students understand the foreign immigration and black migration resulted in a very diverse population and an increase in social tensions—the effects of human migrations on the nature and characteristics of places and regions.
- a. Restrictions on immigration
 - b. Black migration to Northern cities
 - c. Growth of organizations to fight discrimination, NAACP
 - d. Growth of black art, music and cultural identity (the Harlem Renaissance)
 - e. Generational conflicts
 - f. Widespread emergence of retired workers
 - g. Right-wing hate groups
8. Students explore the new ideas that emerged about the use of leisure time
- a. Impact of the automobile: Henry Ford
 - b. Organized sports: Babe Ruth
 - c. Search for heroes and heroines: Lindbergh, Earhart

- d. Motion pictures
 - e. Popular literature
 - f. Fads and fashion
 - g. Changes in social behavior
9. Students learn of the stock market crash and how it marked the beginning of the worst economic period the country has ever known
- a. National prosperity had been structured on the investments of the wealthy
 - b. There were problems with the economic structure
 - c. People lost faith in the system
 - d. The government was unwilling or unable to correct the downturn
 - e. The economic depression that followed was the worst in our history
- B. The Great Depression—Students understand the economic, political and social impacts of the Great Depression on the United States. They understand the economic, political and social changes that took place in the world during the 1930s. They explain how societies and nations attempt to satisfy basic needs and wants by utilizing scarce capital, natural and human resources. Students understand how scarcity requires people and nations to make choices that involved costs and future considerations. They evaluate economic data by differentiating fact from opinion and identifying frames of reference. Students develop conclusions about economic issues and problems by creating broad statements that summarize findings and solutions.
1. Students understand the contributing factors to the Great Depression
 - a. Economic growth declined during the late 1920s
 - b. Stock purchases were made on margin/credit
 - c. Corporations and individuals became overextended
 - d. The stock market crash led to a cycle of low demand and high unemployment
 2. Students understand the responses to the economic crisis
 - a. Hoover administration response
 - b. Local and State actions (soup kitchens, a modified “New Deal” in New York State)
 - c. Election of 1932
 3. Students focus on the New Deal

- a. Franklin Delano Roosevelt
 - b. Relieving human suffering; providing for dignity and jobs
 - c. Helping business and industry recover
 - d. Adjusting the economic system to prevent recurrence (Government regulation of banking and business; institution of Social Security; the Wagner Act)
 - e. Other voices
4. Students explore the effects of the Great Depression on work, family and communities
 - a. People tended to retain jobs, but at reduced hours and wages
 - b. Loss of jobs fell unequally on women, blacks and the unskilled
 - c. Psychological strain of potential job loss on workforce
 - d. The effect of unemployment on men in their role of provider
 - e. Strain on charitable resources
 - f. Local communities' response to meet needs of their people
 - g. The Dust Bowl and the Okies—human modification of the physical environment
5. Students explore the cultural environment during the Great Depression
 - a. How art and literature reflected the times
 - b. Escapism in fiction and film
 - c. Social commentary and criticism
 - d. Federal government supports the arts through the Works Project Administration
6. Students explore the effects of the Great Depression on industrialized Europe
 - a. Trade and loans tied Western economies together
 - b. The Great Depression followed similar patterns in affected nations (tighter credit, business failure, decreased money supply, lowered demand, lower production, widespread unemployment)
 - c. Developing totalitarian responses (in Germany, Italy, Spain, Japan) intensified communism
7. Students understand how European conflicts resulted in several basic problems for United States policy makers
 - a. The question of whether to shift focus from domestic problems to foreign policy

- b. Issue of neutrality versus the growing power of totalitarian states
- c. Continued efforts to improve Latin American relations through the “Good Neighbor Policy” without losing influence in that area’s affairs.

IV. The United States Assumes Worldwide Responsibilities

A. Students engage in a study of WWII—Students understand why WWII began and how it changed the lives of millions of people. They become aware of the much different world left as a legacy of WWII. They investigate key turning points in New York State and United States history and explain why these events or developments are significant. Students understand the relative importance of United States domestic and foreign policies over time. They analyze the role played by the United States in international politics, past and present. They describe historic events through the eyes of those who were there.

1. Students explore the origins of the war
 - a. The Versailles Treaty
 - b. The Great Depression
 - c. The rise of totalitarianism; expansionism and persecution
 - d. The rearming of Germany
 - e. Isolationism
 - f. Failure of the League of Nations
2. Students understand the prewar alliances
 - a. Axis powers
 - b. Allied powers
 - c. Role of the United States
3. Students explore the failure of peace efforts
 - a. Aggression by Germany in Europe; Italy in Europe and Africa; and Japan in Asia
 - b. Appeasement: Chamberlain in Munich
 - c. German attack on Poland—WWII begins
 - d. United States role to 1941—guarded isolationism and aid to allies
4. Students study the United States entrance and involvement in WWII
 - a. Japanese attack on Pearl Harbor

- b. Two-front war (Europe: Eisenhower; Pacific: MacArthur)
5. Students explore new aspects of the war
 - a. German Blitzkrieg
 - b. Aerial bombing
 - c. New technology and its impact on people and the physical environment
 - d. Atomic Bomb—the Manhattan Project
 - e. The Nazi Holocaust
 - f. Concept of unconditional surrender
 6. Students explore life on the homefront
 - a. Total mobilization of resources
 - b. Rationing
 - c. The role of women
 - d. War bonds
 - e. Internment to incarceration of Japanese-Americans
 - f. Limited progress toward economic, political and social equality for black Americans (Roosevelt's Executive Order 8802)
 7. Students study the End of the War
 - a. Allied agreement—the Yalta Conference
 - b. The defeat of Germany
 - c. The defeat of Japan—dropping of the Atomic Bomb
 8. Students explore the impact of the War
 - a. Entire countries were physically and demographically devastated
 - b. Millions of families suffered losses
 - c. The Nazi Holocaust
 - d. United States response to Holocaust: Fort Ontario, Oswego, New York
 - e. The Nuremberg Trials

- f. Global impact; rise of nationalism in Asia and Africa
 - g. Advent of the United Nations
 - h. Advent of the nuclear age
- B. The United States as Leader of the Free World—Students understand why the United States assumed a leadership role in the post-WWII world. They appreciate the historical background for the formation of United States foreign policy of this era. They understand the relative importance of United States domestic and foreign policies over time and analyze the role played by the United States in international politics, past and present.
- 1. Students understand the role of the United Nations (Human rights issues: Commission on Human Rights; Actions of UN to promote peace)
 - 2. Students see the United States and the Soviet Union emerge as world leaders
 - a. The Cold War
 - b. Truman Doctrine and the Marshall Plan
 - c. Alliances: NATO, The Warsaw Pact
 - 3. Students explore how communist expansion led to the United States policy of containment
 - a. In Europe: Berlin airlift, Berlin Wall
 - b. In Asia: Communist China, Korean War
 - c. In Latin America: Cuban missile crisis
 - d. In Southeast Asia: Vietnam War
 - 4. Students explore the superpower rivalry
 - a. Spread of nuclear weapons
 - b. The arms race
 - c. The race to space
- C. The United States in the Post-Cold War World—Students understand the historic, political and social context in which United State foreign policy has evolved during the post-Cold War era. They understand the relative importance of United States domestic and foreign policy over time and analyze the role that the United States has played in international politics, past and present.
- 1. Students explore the shifting foreign policies that helped lead to the end of the Cold War
 - a. Détente and arms control beginning with President Nixon
 - b. Military buildup and treaties to bring about reductions

- c. Fall of the Berlin Wall (1989) and the collapse of the Soviet Union
 2. Students explore the new role that the United States has in the world
 - a. Arab-Israeli conflicts: Camp David Accord
 - b. Persian Gulf War
 - c. Peacekeeping missions; Somalia, Bosnia
 - d. Afghanistan; Axis of Evil
 3. Students explore the relationships in the Western hemisphere
 - a. Economic cooperation and competition: NAFTA
 - b. Immigration patterns between the United States and Mexico, Latin America
 - c. Spread of democratic principles in Latin America

V. The Changing Nature of the American People From WWII to the Present

A. Postwar society characterized by Prosperity and Optimism—Students understand that the period immediately following WWII was a prolonged period of prosperity with a high level of public confidence in the United States. They investigate key turning points in New York State and United States history and explain why these events or developments are significant. They 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.

1. Students explore changing patterns of production and consumption and how it resulted in economic expansion.
 - a. Increased productivity as a result of improving technology and rising consumer demand led to higher wages and declining unemployment
 - b. Number of service jobs and the number of women in the workforce increased.
 - c. Poverty continued to exist despite the prosperity.
2. Students explore how families and communities underwent significant changes
 - a. Postwar baby boom had major effects on social and economic decisions made by families
 - b. Growth of suburbs paralleled movement from major cities
 - c. Effect of automobiles reflected in interstate highway system, shopping centers, increased commuting to work.
3. Students understand how the civil rights movement placed focus on equality and democracy

- a. Important executive and judicial decisions supported equal rights
 - b. *Brown v. Board of Education of Topeka (1954)* overturned legal basis of segregation
 - c. Activists and leaders such as Dr. Martin Luther King Jr. and Malcolm X developed strategies to secure civil rights for African-Americans.
 - d. Women, Native Americans and others sought for greater equality
 - e. Supreme Court moved to protect individual rights: *Miranda v. Arizona (1966)*, *Tinker v. Des Moines Independent School District (1969)*
4. Students observe how self-confidence of the early postwar years eroded by series of events
- a. Assassinations of major leaders: Kennedy and King
 - b. Nation split over involvement in Vietnam War
 - c. Groups in society turn to violence to reach goals
 - d. Resignation of President Nixon; Watergate
 - e. Oil crisis and skyrocketing inflation
- B. United States Begins a New Century—Students understand the economic, social and political trends that shaped the end of the 20th century and point to the 21st century. They investigate the problems and opportunities that the United States faces in its immediate future.
- 1. Students understand the United States' role as a competitor in the world economy
 - a. Competition from Europe, Asia and rest of Western Hemisphere
 - b. Effects on the economy of the United States
 - 2. Students understand how the Federal and state governments have reevaluated their roles
 - a. Fiscal and monetary policies: taxation, regulation, deregulation
 - b. Social programs: health, welfare, education
 - 3. Students explore the old and new problems that must be addressed
 - a. Violent crime and substance abuse
 - b. Protection of the environment
 - c. Growing number of elderly Americans
 - d. The continuing struggle for economic and social justice for all citizens
 - e. Balancing the ideals of national unity with growing cultural diversity

- f. Civic and legal responsibilities of citizenship
- g. The growing threat of terrorism

VI. Citizenship in the Period from Reconstruction to the Present

A. Students understand efforts to expand the democratic process

1. Students identify and analyze methods of expanding the ways to participate in the democratic process, including lobbying, protesting, court decisions and amendments to the U.S. Constitution.
2. Students evaluate various means of achieving equality of political rights, including the 19th, 24th and 26th amendments.
3. Students explain how participation in the democratic process reflects our national identity.

B. Students understand the importance of effective leadership in a democratic society.

1. Students describe qualities of effective leadership.
2. Students evaluate the contributions of significant political and social leaders in the United States such as Andrew Jackson, Shirley Chisom, and Franklin Delano Roosevelt.
3. Students identify the contributions of New Yorkers who have been President of the United States.

VII. Reconstruction to the Present: From a Cultural Perspective

A. Students understand the relationship between the arts and the times during which they were created.

1. Students describe how the characteristics and issues of various eras in U.S. history have been reflected in works of art, music, and literature, such as paintings by Georgia O’Keeffe, rock and roll, and John Steinbeck’s *Grapes of Wrath*.
2. Students describe the impact of significant examples of cultural movements in art, music, and literature on American society, including the Harlem Renaissance.
3. Students identify examples of American art, music and literature that transcend American culture and convey universal themes.
4. Students analyze the relationship between culture and the economy and identify examples such as the impact of the entertainment industry on the U.S. economy.
5. Students identify the impact of popular American culture on the rest of the world.

B. Students understand how people from various groups, including racial, ethnic and religious groups, adapt to life in the United States and contribute to our national identity.

1. Students explain actions taken by people from racial, ethnic and religious groups to expand economic opportunities and political rights in American society.

2. Students explain efforts of the Americanization movement to assimilate immigrants into American culture.
3. Students analyze how the contributions of people of various racial, ethnic and religious groups have helped to shape the national identity.
4. Students identify the political, social and economic contributions of women to American society.

VIII. Scientific and Technological Changes During the Period of Reconstruction to the Present

- A. Students understand the impact of science and technology on the economic development of the United States
 1. Students explain the effects of scientific discoveries and technological innovations such as electric power, the telegraph and telephone, petroleum-based products, medical vaccinations, and computers on the development of the United States.
 2. Students explain how scientific discoveries and innovations such as those in agriculture, the military and medicine resulted from specific needs.
 3. Students analyze the impact of technological innovations on the nature of work, the American labor movement and businesses.
- B. Students understand the influence of scientific discoveries and technological innovations on daily life in the United States.
 1. Students analyze how scientific discoveries and technological innovations including those in transportation and communication have changed the standard of living in the United States.
 2. Students explain how technological innovations in areas such as space exploration have led to other innovations that affect daily life and the standard of living.

IX. General Skills

- A. Students apply critical-thinking skills to organize and use information acquired from a variety of sources including electronic technology
 1. Students locate and use primary and secondary sources such as computer software, databases, media and news services, biographies, interviews and artifacts to acquire information about the United States.
 2. Students analyze information by sequencing, categorizing, identifying cause-and-effect relationships, comparing, contrasting, finding the main idea, summarizing, making generalizations and predictions, and drawing inferences and conclusions.
 3. Students explain and apply different methods that historians use to interpret the past, including the use of primary and secondary sources, points of view, frames of reference, and historical context.
 4. Students use the process of historical inquiry to research, interpret and use multiple sources of evidence.

5. Students evaluate the validity of a source based on language, corroboration with other sources, and information about the author.
 6. Students identify bias in written, oral and visual language.
 7. Students support a point of view on a social studies issue or event.
 8. Students use appropriate mathematical skills to interpret social studies information such as maps and globes.
 9. Students can respond to document-based questions through the interpretation of a variety of types of historical records and the expression of their understanding of them through well-written essays or well-constructed oral presentations.
- B. Students communicate in written, oral and visual forms.
1. Students use social studies terminology correctly
 2. Students use standard grammar, spelling, sentence structure, and punctuation.
 3. Students transfer information from one medium to another, including written to visual and statistical to written or visual, using computer software as appropriate.
 4. Students create written, oral and visual presentations of social studies information.
- C. Students use problem-solving and decision-making skills, working independently and with others, in a variety of settings.
1. Students use a problem-solving process to identify a problem, gather information, list and consider options, consider advantages and disadvantages, choose and implement a solution, and evaluate the effectiveness of the solution.
 2. Students use a decision-making process to identify a situation that requires a decision, gather information, identify options, predict consequences, and take action to implement a decision.

Physical Education

There is no shortage of headlines in newspapers and on news programs about how Americans are getting more and more overweight. Sedentary lives combined with poor nutritional habits foster this rampant problem in our country which is contributing to all sorts of physical and medical problems in our citizenry. Disturbingly, in a September 2000 article in the *New York Times* entitled, "Fitness Gap is America's Recipe for Fat Youth," Jane E. Brody informs us that "American children today are fatter than ever and less fit than they were in the 1960s, when John F. Kennedy established the President's Council on Physical Fitness." But, it is really no wonder that children should be less fit than they were in the 60s given the growth in fast foods and the growth in the types of technological advancements that have kept kids indoors doing sedentary activities like watching TV, playing with their Playstations and other videogames and sitting behind the computer surfing the Web. While studies have been done to link the relationship between time spent in front of the TV and overweight children, we did not need that kind of proof to know that if the average child from age 6 to 11 watches 25 hours of television a week, the less fit and the fatter the child is likely to be versus the child who watches less television and is leading an active life. What is worse is that public schools have been complicit in the fattening of our children as the same budget cuts that forced art and music out of the school have also forced the curtailment or total abandonment of physical education classes. According to Ms. Brody in the same article, 25% of all school-age children receive no physical education in school, and Illinois is the only state that requires daily phys-ed for all children, K through high school. "In most school districts, the idea of a sound mind in a sound body has been abandoned, despite evidence that physically active children tend to do better in school," Ms. Brody reports.

In the changing environment outside of school where children live in homes where parents are sanctioning sedentary activities for their children versus vigorous physical activity, the Bronx Charter School for Excellence is committed to ensuring that our children develop sound bodies as well as sound minds. According to the Centers for Disease Control, the goal for elementary schoolchildren should be a total of 30 to 60 minutes of physical activity each day, and preferably more; participation in a variety of activities that work different parts of the body, and at least one period of 10 to 15 minutes a day of vigorous exercise that gets the heart to beat faster.

The fact that the Bronx Charter School for Excellence has an extended school day could allow us to incorporate *daily* physical education time. Since the school day at Bronx Charter School for Excellence ends at 5:00 p.m., we are in a unique position to ensure that the "normal" after-school hours of 3-5 pm are filled with enrichment activities like art and music and physical (as well as enrichment) activities like sports and dance for our kids who might otherwise be in front of the television or the Playstation at home. As the Bronx Charter School for Excellence grows to incorporate the middle school grades of 6-8, we will explore the possibility of creating interscholastic sports teams for those children who would like to participate in competitive sports. Given the extended school day of the school, we will investigate the feasibility and appropriateness of having the physical education period for those students function as the practice for their specific sports team. Ultimately, if this plan is implemented, we will work to ensure that the sports team practice will work towards the same standards for physical education set forth for all students.

In addition to contributing to our students physical health, the physical education program at the Bronx Charter School for Excellence will help our children develop physical skills, athletic skills, make friends, have fun, learn to play as a member of a team and excel on an individual level, learn the rules of playing fair and good sportsmanship, and improve self-esteem.

The Bronx Charter School for Excellence has adopted those standards that relate to physical education from the State of Texas Standards for Physical Education.

New York State Health, **Physical Education**, and Family and Consumer Sciences Standards

New York State's learning standards in the area of Physical Education are combined with those for Health and Family and Consumer Sciences. The Bronx Charter School for Excellence deals with each area separately: Physical Education, Health Education and Family and Consumer Sciences. This section, and the section that follows, focus on Physical Education and Health Education, respectively. Family and Consumer Sciences does not have its own section as the standards for Family and Consumer Sciences as contemplated by New York State appear throughout the curriculum of the Bronx Charter School for Excellence in Health Education, Physical Education, Science, Social Studies and Mathematics.

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.

Standard 2 A Safe and Healthy Environment

Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

Standard 3 Resource Management

Students will understand and be able to manage their personal and community resources.

The Bronx Charter School for Excellence Standards for Physical Education**Kindergarten**

- I. Students will perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.
 - A. Students demonstrates competency in fundamental movement patterns and proficiency in a few specialized movement forms.
 1. Students travel in different ways in a large group without bumping into others or falling.
 2. Students demonstrate clear contrasts between slow and fast movement when traveling.
 3. Students demonstrate non-locomotor (axial) movements such as bend and stretch.
 4. Students maintain balance while bearing weight on a variety of body parts.
 5. Students walk forward and sideways the length of a beam without falling.
 6. Students demonstrate a variety of relationships such as under, over, behind, next to, through, right, left, up, down, forward, backward and in front of.
 7. Students roll sideways (right or left) without hesitation.
 8. Students toss a ball and catch it before it bounces twice.
 - B. Students apply movement concepts and principles to the learning and development of motor skills.
 1. Students identify selected body parts such as head, back, chest, waist, hips, arms, elbows, wrists, hands, fingers, legs, knees, ankles, feet and toes.
 2. Students demonstrate movement forms of various body parts such as head flexion, extension and rotation.
 - C. Students exhibit a health enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge.
 1. Students describe and select physical activities that provide opportunities for enjoyment and challenge.
 2. Students participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate and perspiration.
 3. Students participate in appropriate exercises for flexibility in shoulders, legs, trunk.
 4. Students lift and support their own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back and legs such as hanging, hopping and jumping.

5. Students are able to describe benefits from involvement in daily physical activity such as feeling better and sleeping better.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand safety practices associated with physical activity and space.

1. Students know how to handle sports equipment and use space safely.
2. Students wear appropriate attire and protective gear as necessary while they participate in sports, games, activities and exercises and explain how proper shoes and clothing promotes safe play and prevents injury.
3. Students explain appropriate reactions during emergencies.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students respond appropriately to starting and stopping signals.
2. Students demonstrate the ability to play within boundaries during games and activities.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students take turns in playing various roles in games.
2. Students follow directions, procedures and safe practices in order to perform safely and correctly.
3. Students work in a group setting in cooperation with others.
4. Students share space and equipment with others.

First Grade

I. Students will perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.

1. Students demonstrate an awareness of personal and general space while moving at different directions and levels such as high, medium and low.
2. Students demonstrate proper foot patterns in hopping, jumping, skipping, leaping, galloping and sliding.
3. Students demonstrate control in balancing and traveling activities.
4. Students demonstrate the ability to work with a partner such as leading and following.
5. Students clap in time to a simple rhythmic beat.
6. Students create and imitate movement in response to selected rhythms.
7. Students jump a long rope.
8. Students demonstrate on cue key elements in overhand throw, underhand throw and catch.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students recognize that motor skill development requires correct practice.
2. Students demonstrate a base of support and explain how it affects balance.

C. Students exhibit a health-enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge.

1. Students describe and select physical activities that provide opportunities for enjoyment and challenge.
2. Students participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate and perspiration.
3. Students participate in appropriate exercises for flexibility in shoulders, legs and trunk.
4. Students lift and support his/her own weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back and legs such as hanging, hopping and jumping.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression,

self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students know and apply safety practices associated with physical activities.

1. Students use equipment and space safely and properly.
2. Students describe the importance of protective equipment in preventing injury such as helmets, elbow/knee pads, wrist guards, proper shoes and clothing.
3. Students describe how to protect himself/herself from harmful effects of the sun.
4. Students describe and demonstrate appropriate rescue reactions to emergency situations common to physical activity.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students demonstrate starting and stopping signals.
2. Students explain boundaries and rules for simple games.

C. Students develop positive self-management and social skills need to work independently and with others in physical activity settings.

1. Students follow directions and apply safe movement practices.
2. Students interact, cooperate and respect others.
3. Students resolve conflicts in socially acceptable ways such as talking and asking the teacher for help.

Second Grade

I. Students will perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students will demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.

1. Students travel independently and in a large group while safely and quickly changing speed and direction.
2. Students demonstrate skills of chasing, fleeing, and dodging to avoid or catch others.
3. Students combine shapes, levels and pathways into simple sequences.
4. Students demonstrate mature form in walking, hopping and skipping.
5. Students demonstrate balance in symmetrical and non-symmetrical shapes from different basis of support.
6. Students demonstrate a variety of relationships in dynamic movement situations such as under, over, behind, next to, through, right, left, up or down.
7. Students demonstrate simple stunts that exhibit personal agility such as jumping with one or two foot takeoffs and landing with good control.
8. Students demonstrate smooth transition from one body part to the next in rolling activities such as side roll, log roll, balance/curl and roll/balance in a new position.
9. Students demonstrate control weight transfers such as feet to hands with controlled landing and feet to back.
10. Students demonstrate the ability to mirror a partner.
11. Students walk in time to a 4/4 underlying beat.
12. Students perform rhythmical sequences such as simple folk, creative and ribbon routines.
13. Students jump a self-turned rope repeatedly.
14. Students demonstrate on cue key elements of hand dribble, foot dribble, kick and strike such as striking a balloon or kicking ball.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students recognize that attention to the feeling of movement is important in motor-skill development

2. Students identify similar movement concepts and terms in a variety of skills such as straddle position, ready position and bending knees to absorb force.

C. Students exhibit a health enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge.

1. Students describe and select physical activities that provide opportunities for enjoyment and change.
2. Students participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate and perspiration.
3. Students participate in appropriate exercises for flexibility in shoulders, legs and trunk.
4. Students lift and support their weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back and legs such as hanging, hopping and jumping.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure a safe and positive experience for all participants.

A. Students know and apply safety practices associated with physical activities.

1. Students use equipment and space safely and properly.
2. Students select and use appropriate protective equipment in preventing injuries such as helmets, elbow/knee pads, wrist guards, proper shoes and clothing.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students identify goals to be accomplished during simple games such as not getting tagged.
2. Students identify strategies in simple games and activities such as dodging to avoid being tagged.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students display good sportsmanship.
2. Students treat others with respect during play.

Third Grade

I. Students will perform basic motor and manipulative skills. They will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.

1. Students travel forward, sideways and backwards and change direction quickly and safely in dynamic situations.
2. Students demonstrate proper form and smooth transitions during combinations of fundamental locomotor and body control skills such as running and jumping safely in dynamic situations.
3. Students demonstrate mature form in jogging, running and leaping.
4. Students demonstrate moving in and out of a balanced situation with control.
5. Students demonstrate proper body alignment in lifting, carrying, pushing and pulling.
6. Students demonstrate control and appropriate form such as curled position and protection of neck in rolling activities such as forward roll, backward roll, shoulder roll and safety rolls.
7. Students transfer on and off equipment with good body control such as boxes, benches, stacked mats, bar and balance beam.
8. Students clap echoes in a variety of one measure rhythmical patterns.
9. Students demonstrate various step patterns and combinations of movement in repeatable patterns.
10. Students demonstrate key elements in manipulative skills such as underhand throw, overhand throw, catch and kick such as position your side to the target.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students identify similar positions in a variety of movements such as straddle positions, ready positions and bending knees to absorb force.
2. Students know that practice, attention and effort are required to improve skills.

C. Students exhibit a health enhancing, physically-active lifestyle that improves health and provides opportunities for enjoyment and challenge.

1. Students describe and select physical activities that provide opportunities for enjoyment and change.

2. Students participate in moderate to vigorous physical activities on a daily basis that cause increased heart rate, breathing rate and perspiration.
3. Students participate in appropriate exercises for flexibility.
4. Students lift and support their weight in selected activities that develop muscular strength and endurance of the arms, shoulders, abdomen, back and legs such as hanging, hopping and jumping.
5. Students identify opportunities for participation in physical activity in the community such as little league and parks and recreation.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure a safe and positive experience for all participants.

A. Students understand and apply safety practices associated with physical activities.

1. Students use equipment and space safely.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students identify and apply safety precautions when jogging and skating in the community such as use of sidewalks, walk on the left side of the street when facing traffic, wear lights/reflective clothing and be considerate of other pedestrians.
4. Students identify exercise precautions such as awareness of temperature and weather conditions and need for warm-up and cool-down exercises.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students identify components of games that can be modified to make the games and participants more successful.
2. Students explain the importance of basic rules in games and activities.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students follow rules, procedures and etiquette.
2. Students persevere when not successful on the first try in learning movement skills.
3. Students accept and respect differences and similarities in physical abilities of self and others.

Fourth Grade

I. Students will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.

1. Students demonstrate changes in speed during straight, curved and zig zag pathways in dynamic situations.
2. Students catch an object while traveling such as catching a football pass on the run.
3. Students combine shapes, levels, pathways and locomotor patterns smoothly into repeatable sequences.
4. Students jump and land for height and distance using key elements for creating and absorbing force such as bending the knees, swinging the arms and extending.
5. Students perform sequences that include traveling, showing good body control combined with stationary balances on various parts of body parts.
6. Students demonstrate body control in jumping and landing such as land on feet, bend knees, and absorb force.
7. Students transfer weight along and over equipment with good body control.
8. Students create a movement sequence with a beginning, middle and end.
9. Students perform basic folk dance steps such as grapevine, schottische and step-together-step.
10. Students travel into and out of a rope turned by others without hesitation.
11. Students demonstrate key elements in manipulative skills such as volleying, hand dribble, foot dribble, punt, striking with body part, racquet or bat.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students identify similar movement elements in sports skills such as underhand throwing and underhand volleyball serving.
2. Students identify ways movement concepts such as time, space, effort and relationships can be used to refine movement skills.
3. Students make appropriate changes in performance based on feedback.
4. Students describe key elements of mature movement patterns of throw for distance or speed such as catch, kick, strike and jump.

II. Students exhibit a health enhancing, physically-active lifestyle that provides opportunities for enjoyment and challenge.

1. Students describe and select physical activities that provide for enjoyment and challenge.
2. Students name the components of health-related fitness such as strength, endurance and flexibility.
3. Students identify and demonstrate a variety of exercises that promote flexibility.
4. Students improve flexibility in shoulders, trunk and legs.
5. Students participate in activities that develop and maintain muscular strength and endurance.
6. Students identify opportunities for participation in physical activity in the community such as little league and parks and recreation.

III. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand and apply safety practices associated with physical activities.

1. Students use equipment safely and properly.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students describe and apply safety precautions when cycling and skating.
4. Students identify potential risks associated with physical activities.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students distinguish between compliance and noncompliance with rules and regulations.
2. Students analyze potential risks associated with unsafe movement and improper use of equipment.

C. Students develop positive self-management and social skills needed to work independently and with others in physical settings.

1. Students follow rules, procedures and etiquette.
2. Students respond to winning and losing with dignity and understanding.
3. Students work independently and stay on task.

4. Students demonstrate effective communication, consideration and respect for the feelings of others during physical activities such as encouraging others, allowing others equal turns and inviting others to join.

Fifth Grade

I. Students will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in movement patterns and proficiency in a few specialized movement forms.

1. Students demonstrate appropriate use of levels in dynamic movement situations such as jumping high for a rebound and bending knees and lowering the center of gravity when guarding an opponent.
2. Students demonstrate smooth combinations of fundamental locomotor skills such as running and dodging and hop-step-jump.
3. Students demonstrate attention to form, power, accuracy and follow-through in performing movement skills.
4. Students demonstrate controlled balance on a variety of objects as a balance board, stilts, scooters and skates.
5. Students demonstrate simple stunts that exhibit ability such as jumping challenges with proper landings.
6. Students combine traveling and rolling with smooth transitions.
7. Students combine weight transfer and balance on mats and equipment.
8. Students demonstrate the ability to contrast a partner's movement.
9. Students perform selected folk dances.
10. Students jump a rope using various rhythms and foot patterns repeatedly.
11. Students demonstrate competence in manipulative skills in dynamic situations such as overhand throw, catch, shooting, hand dribble, foot dribble, kick and striking activities such as hitting a softball.
12. Students demonstrate combinations of locomotor and manipulative skills in complex and/or game-like situations such as pivoting and throwing, twisting and striking, and running and catching.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students identify common phases such as preparation, movement, follow-through, or recovery in a variety of movement skills such as tennis serve, handstand and free throw.
2. Students identify the importance of various elements of performance for different stages during skill learning such as form, power, accuracy and consistency.

3. Students choose appropriate drills/activities to enhance the learning of a specific skill.

C. Students exhibit a health-enhancing, physically-active lifestyle that provides opportunities for enjoyment and challenge.

1. Students participate in moderate to vigorous physical activities on a daily basis that develop health-related fitness.
2. Students identify appropriate personal fitness goals in each of the components of health-related fitness.
3. Students explain the value of participation in community physical activities such as little league and parks and recreation.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand and apply safety procedures associated with physical activities.

1. Students use equipment safely and properly.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students describe the importance of taking personal responsibility for reducing hazards, avoiding accidents, and preventing injuries during physical activities.
4. Students identify potentially dangerous exercises and their adverse effects on the body.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students describe fundamental components and strategies used in net/wall, invasion, target, and fielding games such as basic positions—goalies, offense, or defense.
2. Students explain the concept and importance of teamwork.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students follow rules, procedures and etiquette.
2. Students use sportsmanship skills for settling disagreements in socially acceptable ways such as remaining calm, identifying the problem, listening to others, generating solutions or choosing a solution that is acceptable to all.
3. Students describe how physical activity with a partner or partners can increase motivation and enhance safety.

Sixth Grade

I. Students will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in movement patterns and proficiency in a few specialized movement forms.

1. Students perform locomotor skills in dynamic fitness, sport, and rhythmic activities.
2. Students use relationships, levels, speed, direction, and pathways effectively in complex group and individual physical activities such as crouching low for volleyball digs, stretching high during lay-ups, positioning for a soccer pass, or passing ahead of a receiver.
3. Students perform sequences that combine traveling, rolling, balancing, and weight transfer into smooth, flowing sequences.
4. Students move in time to complex rhythmical patterns such as $\frac{3}{4}$ time or $\frac{6}{8}$ time.
5. Students design and refine a jump rope routine to music.
6. Students throw a variety of objects demonstrating both accuracy and distance such as a Frisbee, softball, basketball and football.
7. Students strike a ball using a golf club or a hockey stick consistently so it travels in an intended direction and height.
8. Students hand and foot dribble while preventing an opponent from stealing the ball.
9. Students keep an object in the air without catching it in a small group such as volleyball and football.
10. Students throw and catch a ball consistently while guarded by an opponent.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students know that appropriate practice in static and dynamic setting, attention and effort are required when learning movement skills.
2. Students make appropriate changes in performance based on feedback to improve skills.
3. Students practice in ways that are appropriate for learning skills such as whole/part/whole, shorter practice distributed over time is better than one long session, or practicing is best in game like conditions.

C. Students exhibit a health-enhancing, physically-active lifestyle that provides opportunities for enjoyment and challenge.

1. Students identify opportunities in the school and community for regular participation in physical activity.

2. Students participate in moderate to vigorous health-related physical activities on a regular basis.
3. Students establish and monitor progress toward appropriate personal fitness goals in each of the components of health-related fitness such as personal logs, group projects, and no/space or criterion-referenced tests.
4. Students identify and know how to use technological tools used for measuring and monitoring fitness parameters such as computer programs, heart rate monitors, skin-fold calipers and impedance testing equipment.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand and apply safety practices associated with physical activities.

1. Students use equipment safely and properly.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students include warm-up and cool-down procedures regularly during exercise, monitor potentially dangerous environmental conditions such as wind, cold, heat and insects, and recommend prevention and treatment.
4. Students identify potentially dangerous exercises and their adverse effects on the body.
5. Students explain water safety and basic rescue procedures.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students know basic rules for sports played such as setting up to start, restarting and violating rules.
2. Students keep accurate score during a contest.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students participate in establishing rules, procedures and etiquette that are safe and effective for specific activity settings.
2. Students handle conflicts that arise with others without confrontation.
3. Students identify and follow rules while playing sports and games.
4. Students accept decisions made by game officials such as student, teacher and officials outside of school.

5. Students accept successes and performance limitations of self and others, exhibit appropriate behavior responses and recognize that improvement is possible with practice.

6. Students modify games/activities to improve

Seventh Grade

I. Students will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in movement patterns and proficiency in a few specialized movement forms.

1. Students coordinate movement with teammates to achieve team goals.
2. Students demonstrate appropriate relationships to an opponent in dynamic game situations such as staying between opponent and goal and moving between opponent and ball.
3. Students demonstrate appropriate speed and generation of force such as running sprints, running distance, throwing a disc, jumping, kicking.
4. Students perform selected folk, country, square, line, creative and/or aerobic dances.
5. Students design and perform sequences of dance steps/movements in practiced sequences with intentional changes in speed, direction and flow.
6. Students demonstrate, without cue, critical elements in specialized skills related to sports such as overhand throw for distance/force, serving and bumping, volleyball, shooting a basketball, shooting a lay-up, forehand and backhand, striking with a racquet or club or batting.
7. Students combine skills competently to participate in modified versions of team and individual sports.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students create and modify activities that provide practice of selected skills to improve performance such as practice with non-dominant hand, practice specific game situations, or practice jumps or cartwheels in both directions.
2. Students identify and apply similar movement concepts and elements in a variety of sport skills such as throwing and tennis serving.
3. Students describe the importance of goal setting in improving skills.
4. Students detect and correct errors in personal or partner's skill performance.
5. Students make appropriate changes in performance based on feedback.
6. Students identify and apply basic biomechanical principles such as lowering the center of gravity and widening the base of support.
7. Students use basic offensive and defensive strategies while playing a modified version of a game.

C. Students exhibit health-enhancing and physically-active lifestyles that provide opportunities for enjoyment and challenge.

1. Students participate in games, sports, dance, and/or outdoor pursuits in and outside of school based on individual interest and capabilities.
2. Students identify favorite lifelong physical activities.
3. Students participate in moderate to vigorous health-related physical activities on a regular basis.
4. Students evaluate personal fitness goals and make appropriate changes for improvement
5. Students select and use appropriate technology tools to evaluate, monitor and improve physical development.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand and apply safety practices associated with physical activities.

1. Students use equipment safely and properly.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students include warm-up and cool-down procedures regularly during physical exercise; monitor potentially dangerous environmental conditions such as wind, cold, heat and insects, and recommend prevention and treatment.
4. Students recognize harmful effects of the sun such as sunburn, heatstroke, heat exhaustion, and heat cramps and recommended prevention methods

B. Students understand the basic components such as strategies and rules of structured physical activities including, but not limited to, game, sports, dance and gymnastics.

1. Students distinguish between compliance and noncompliance with rules and regulations and apply agreed upon consequences when officiating.
2. Students describe fundamental components and strategies used in net/wall, invasion, target, and fielding games such as in net/wall—alternating speed and direction of the ball; invasion—fakes, give and go; target—concentration, feel the movement; and fielding—back up and other players.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students solve problems in physical activities by analyzing causes and potential solutions.

2. Students work cooperatively in a group to achieve group goals in competitive as well as cooperative settings.
3. Students accept decisions made by game officials such as student, teachers, and officials outside of school.
4. Students use peer interaction positively to enhance personal physical activity and safety such as encouraging friends and joining teams.
5. Students recognize the role of games, sport and dance in getting to know and understand others.

Eighth Grade

I. Students will attain competency in a variety of physical activities and proficiency in a few select complex motor and sports activities. Students will design personal fitness programs to improve cardiorespiratory endurance, flexibility, muscular strength, endurance and body composition.

A. Students demonstrate competency in fundamental movement patterns and proficiency in a few specialized movement forms.

1. Students coordinate movement with teammates to achieve team goals.
2. Students demonstrate appropriate relationships of the body to an opponent in dynamic game situations such as staying between the opponent and the goal and moving between the opponent and the ball.
3. Students demonstrate appropriate speed and generation of force such as running sprints, running distance, throwing a disc, jumping or kicking.
4. Students perform selected folk, country, square, line, creative and/or aerobic dance.
5. Students design and perform sequences of dance steps/movements into practiced sequences with intentional changes in speed, direction and flow.
6. Students demonstrate without cue critical elements in specialized skills related to sports such as overhand throw for distance/force, serving and bumping, volleyball, shooting a basketball, shooting a lay-up, forehand and backhand striking with a racquet or club, or batting.
7. Students combine skills competently to participate in modified versions of team and individual sports.

B. Students apply movement concepts and principles to the learning and development of motor skills.

1. Students create and modify activities that provide practice of selected skills to improve performance such as practice with non-dominant hand, practice specific game situations and practice jumps or cartwheels in both directions.
2. Students identify and apply similar movement concepts and elements in a variety of sport skills such as throwing and tennis serving.
3. Students describe the importance of goal setting in improving skills.
4. Students detect and correct errors in their own or their partner's skill performance.
5. Students make appropriate changes in performance based on feedback.
6. Students identify and apply basic biomechanical principles such as lowering the center of gravity and widening the base of support to increase stability.
7. Students use basic offensive and defensive strategies while playing a modified version of a sport.

C. Students exhibit a health-enhancing and physically-active lifestyle that provides opportunities for enjoyment and challenge.

1. Students describe and select physical activities that provide for enjoyment challenge.
2. Students identify opportunities in the school and community for regular participation in physical activity.
3. Students participate in games, sports, dance and/or outdoor pursuits in and outside of school based on individual interests and/or capabilities.
4. Students identify favorite lifelong physical activities.
5. Students participate in moderate to vigorous physical activity for a sustained period of time on a regular basis.
6. Students maintain healthy levels of flexibility,
7. Students develop and maintain muscular strength and endurance of the arms, legs, shoulders, back, and abdomen.
8. Students evaluate personal fitness goals and make appropriate changes for improvement.
9. Students select and use appropriate technology tools to evaluate, monitor and improve physical development.

II. Students will demonstrate responsible personal and social behavior while engaged in physical activity. They will understand that physical activity provides the opportunity for enjoyment, challenge, self-expression, self-discipline and communication. Students will be able to identify safety hazards and react effectively to ensure and safe and positive experience for all participants.

A. Students understand and apply safety practices associated with physical activities.

1. Students use equipment safely and properly.
2. Students select and use proper attire that promotes participation and prevents injury.
3. Students include warm-up and cool-down procedures during exercise, monitor potentially dangerous environments in which to exercise, and recommend prevention and treatment of injuries.
4. Students analyze exercises for their effects on the body such as beneficial/potentially dangerous.
5. Students recognize the harmful effects of the sun and heat when exercising.

B. Students understand basic components such as strategies and rules of structured physical activities including, but not limited to, games, sports, dance and gymnastics.

1. Students distinguish between compliance and noncompliance rules and regulations and apply agreed upon consequences when officiating.

2. Students describe fundamental components and strategies used in net/wall, invasion, target, and fielding games such as in net/wall—alternating speed and direction of the ball; invasion—fakes, give and go; target—concentration, feel the movement; and fielding—back up and other players.

C. Students develop positive self-management and social skills needed to work independently and with others in physical activity settings.

1. Students solve problems in physical activities by analyzing causes and potential solutions.
2. Students work cooperatively in a group to achieve group goals in competitive as well as cooperative settings.
3. Students identify and follow rules while playing sports and games.
4. Students accept decisions made by game officials including students, teachers, and officials outside of school.
5. Students use peer interaction positively to enhance personal physical activity and safety such as encourage friends and join teams.

Health Education

Every day, students make decisions affecting their health and well-being: What foods to eat. What company to keep. What risks to take. What to do for exercise. These decisions often lead to habits that stay with them throughout life. The standards for health education, combined with those discussed earlier for physical education, can help students make better decisions about their health. They learn that their decisions can affect their health and set a pattern for their lives. Students learn to protect their health by acquiring good information, by seeking good advice and friendships, and by taking responsibility for their own health.

Health education gives students the knowledge and skills to thrive physically, mentally, emotionally, and socially. This knowledge helps students meet the challenges of growing up. It helps students to recognize the causes of ill health and to understand the benefits of prevention, good hygiene, and appropriate medical care. Through health education, students become aware of the dimensions of good health: physical soundness and vigor; mental alertness and ability to concentrate; expressing emotions in a healthy way; resiliency; and positive relations with family and peers. Health education also includes a set of skills to help students be better consumers of information, to manage stress and conflict, and to make better decisions in the face of conflicting messages, thus assisting them to live healthier lives.

In order to make informed decisions for leading healthy lives, students must understand about their bodies, how the bodies work, how what we do to and with our bodies impact the body's ability to function well. Therefore, the Bronx Charter School for Education's Health Education curriculum complements and in some cases intersects with our Science curriculum in the area of life science or biology by focusing specifically on the human body. Students learn about their bodies: what makes it up, how it works and how we need to take care of it.

New York State **Health, Physical Education, and Family and Consumer Sciences Standards**

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.

Standard 2 A Safe and Healthy Environment

Students will acquire the knowledge and ability necessary to create and maintain a safe and healthy environment.

Standard 3 Resource Management

Students will understand and be able to manage their personal and community resources.

The Bronx Charter School for Excellence Standards for Health Education**Kindergarten**

I. Students will understand human growth and development and recognize the relationship between behaviors and healthy development. They will understand ways to promote health and prevent disease and will demonstrate and practice positive health behaviors.

A. The Human Body (Covered in Science)

1. Students identify the five senses and know the body parts associated with them (sight/eyes, hearing/ears, touch/skin, taste/tongue, smell/nose).
2. Students understand the importance of taking care of their bodies: exercise, eating well, cleanliness, rest.

B. Students know about some diseases and disorders and how they are prevented and treated.

1. Students understand knowledge of health practices that prevent them from transferring colds and the flu from one student to another.

B. Our Bodies and Exercise

1. Students can observe and describe the immediate effect of physical activity on the heart, breathing rate and perspiration.
2. Students locate the lungs and can explain their purpose.

II. Safety in School and Home

A. Students understand basic safety rules.

1. Students know the rules to follow if there is a fire in the school or in the home.
2. Students know that they should talk with an adult, like their parents, their principal, their teacher or their counselor, if they do not feel safe.
3. Students know that they should not talk with strangers.
4. Students demonstrate refusal skills to protect self.
5. Students no not to touch harmful substances.

B. Students know some personal and social skills that contribute to individual safety.

1. Students know that they must look both ways when crossing a street.
2. Students know the symbols on the walk sign that indicate it is safe to cross the street and when they should not cross the street.
3. Students know to conduct themselves properly in school.

4. Students know that they should pay attention to and follow the instructions of adults in their school and in their home

5. Students will treat each other with care and respect.

C. Students recognize the characteristics of the environment that contribute to health.

1. Students understand and can identify natural resources from Earth. (Covered in Science)

2. Students understand conservation and that some natural resources need to be conserved because they are limited. (Covered in Science)

3. Students understand practical ways to conserve everyday resources like energy (turning off lights) and water (turning off faucets). (Covered in Science)

4. Students understand recycling and know that certain materials can be recycled. (Covered in science)

5. Students understand pollution and that people should take measures to reduce pollution. (Covered in Science)

III. Students know and apply safety practices

A. Students know they should dial 911 when an emergency takes place in the home or in the community.

B. Students demonstrate they know their home phone number and address in case of an emergency.

First Grade

I. Students will **understand** human growth and development and recognize the relationship between behaviors and healthy **development**. They will understand ways to promote health and prevent disease and will demonstrate and practice **positive** health behaviors.

A. The Human Body (covered in Science)

1. Students **know** the major body systems, their components and their functions.
 - a. Skeletal system
 - b. Muscular System
 - c. Digestive System
 - d. Circulatory System
 - e. Nervous System
 - f. Respiratory System
2. Students **know** how to care for their bodies
 - a. Students understand the importance of exercise, cleanliness, healthy foods, rest.
 - b. Students distinguish between active and inactive lifestyles.
 - c. Students describe food as a source of energy.
 - d. Students know what role doctors play in keeping people healthy.
 - e. Students understand why people need vaccinations.
 - f. Students can explain the negative effects of smoking, lack of sleep and poor eating **habits** on physical performance and on the body.

II. Students **demonstrate** personally and socially responsible behaviors. They will care for and respect themselves and others. They will recognize threats to the environment and offer appropriate strategies to minimize them.

A. Students **recognize** potentially dangerous situations and know how to avoid or reduce their risk.

1. Students **know** that household products such as cleaning fluids are poisonous and should not be played with.
2. Students **know** to call 911 if a dangerous situation arises in the home or community.
3. Students **know** the safety procedures in case of a fire at home or in the school.

B. Students **know** some personal and social skills that contribute to individual safety.

1. Students know that they must look both ways when crossing a street.
2. Students know the symbols on the walk sign that indicate it is safe to cross the street and when they should not cross the street.
 1. Students know to conduct themselves properly in school.
 2. Students know that they should pay attention to and follow the instructions of adults in their school and in their home
 3. Students can explain how following safety rules and codes of conduct help to protect people at home, in the school and in the community.

C. Students identify ways to protect and preserve the environment.

1. Students know that environments are constantly changing, sometimes because of man-made problems—pollution, litter, oil spills, population and development—and the change can pose dangers to animal habitats. (Covered in Science)

Grade 2

I. Students **understand** human growth and development and recognize the relationship between behaviors and healthy development. They will understand ways to promote health and prevent disease and will demonstrate and practice positive health behaviors.

A. Students **know** how basic body systems work and interrelate in normal patterns of growth and development.

1. The Human Body (Covered in Science)

- a. Students understand what cells are and that we can only view them through a microscope.
- b. Students know that cells are components of tissue.
- c. Students know that organs are made up of tissue.
- d. Students know that specific organs make up the different systems of the body, and students can identify major organs on a diagram of the human body.

2. A Healthy Diet and Regular Physical Activity

- a. Students know the food groups and explain the food pyramid.
- b. Students know why certain food groups are better for us than others.
- c. Students can make healthy choices for snacks among different alternatives.
- d. Students explain the need for foods as a source of nutrients that provide energy for physical activity.
- e. Students identify how regular physical activity strengthens the heart, lungs and muscular system.

II. Students will **demonstrate** personally and socially responsible behaviors. They will care for and respect themselves and others. They will recognize threats to the environment and offer appropriate strategies to minimize them.

A. Students **recognize** potentially dangerous situations and know how to reduce their risks.

- 1. Students demonstrate refusal skills to protect health (avoiding negative peer pressure, saying no to **drugs**).
- 2. Students describe personal safety rules to avoid such things as abuse, abduction, poisoning and accidents.

Third Grade

I. Students know **how** basic body systems work and interrelate normal patterns of growth and development.

A. The Muscular System

1. Students identify the muscles

a. Students know the voluntary muscles and the involuntary muscles.

b. Students know how muscles and bones work together with each other in the musculoskeletal system.

B. The Skeletal System

1. Students identify the skeleton, bones, marrow

2. Students understand musculoskeletal connections

a. Ligaments

b. Tendons; Achilles tendon

c. Cartilage

3. Students identify major bone structures in the body: skull (cranium), spinal chord (vertebrae), ribs, rib cage, femur, pelvis, sternum, tibia, fibula.

4. Students know that bones can be fractured or broken.

a. X-rays give pictures of the skeletal system and through them, we can see if bones are broken or fractured.

b. Broken and fractured bones heal when bone tissue grows back.

C. The Nervous System

1. Students explain the role of the nervous system in the body.

2. Students identify the major components of the nervous system.

3. Students know nerves are associated with the sense of touch.

4. Students understand why the body has automatic reflexes.

D. Vision: How the Eye Works

1. Students identify parts and know the functions of the eye: cornea, iris and pupil, lens, retina, optic nerve.

2. Students understand the meaning of farsightedness and nearsightedness.

3. ~~Students~~ explain the importance of eye care and regular eye checkups.
4. ~~Students~~ know ways in which poor vision can be corrected.

E. Hearing: How the Ear Works

1. Students understand sound as vibration
2. Students identify and locate outer ear, ear canal, eardrum, and auditory nerve and know their functions.
3. Students explain the importance of regular hearing checks.
4. ~~Students~~ know ways in which poor hearing can be corrected.

II. Students understand the effects of activity on the body, the risks associated with inactivity and the basic components of health-related fitness.

- A. Students ~~describe~~ the long term effects of physical activity on the heart.
- B. Students ~~distinguish~~ between aerobic and anaerobic activities.
- C. Students identify foods that increase or reduce bodily function.
- D. Students identify principles of good posture and its impact on physical activity.

Fourth Grade

I. Students know how basic body systems work and interrelate normal patterns of growth and development.

A. The Circulatory System

1. Students identify and locate the heart, and know its components (auricles and ventricles) and their roles in blood circulation
2. Students identify, locate and know the function of the aorta.
3. Students understand the purpose of blood
 - a. The components of blood and their function: red and white blood cells, platelets, hemoglobin, plasma and antibodies
 - b. Blood vessels: arteries, veins and capillaries.
 - c. Blood pressure and pulse
 - d. Coagulation of blood.
4. Students understand the filtering function of the liver and spleen.
5. Students understand the role that poor diet can play in heart attacks.
6. Students know the different types of blood types and why it is important to donate blood.

B. The Respiratory System

1. Students understand the components and functions of the respiratory system, and can locate the components on a diagram of the human body.
2. Students understand the symbiotic relationship between plants and humans in the exchange of carbon dioxide and oxygen.
3. Students understand the interaction of the respiratory system and the circulatory system.
4. Students understand the damage smoking can cause to the respiratory system.
5. Students can identify different diseases linked to smoking.

II. Personal Behavior and Its Impact on the Body

A. Students describe the effects of exercise on heart rate through the use of manual pulse checking or heart rate monitors.

B. Students identify methods for measuring cardiovascular endurance, muscular strength and endurance and flexibility.

- C. Students **describe** the relationship between food intake and physical activity such as calories consumed and **calories** expended.
- D. Students **explain** the link between physical activity/inactivity and health such as **reducing** stress and **burning** calories.
- E. Students can **describe** the cause and effect relationship that exists between personal behaviors (diet, exercise, use of substances like alcohol, drugs and tobacco) and damage to the circulatory and respiratory system.

Fifth Grade

- I. Students know how basic body systems work and interrelate normal patterns of growth and development.
 - A. The Digestive and Excretory Systems.
 1. Students understand the role of the digestive and excretory systems, and the relationship between them.
 2. Students identify the major components of these two systems and can identify them on a diagram of the human body.
 3. Students understand the role of the circulatory system in the process of the digestive and excretory system.
 4. Students understand the role of a healthy eating plan in preventing disease and medical conditions in the organs associated with these two systems (colon and other cancers, ulcers)
 5. Students understand the role of physical activity in maintaining the functioning of these systems.
- II. Students will learn to respond to emergency situations.
 - A. Students will learn resuscitation skills.
 - B. Students will learn ways in which to cope with distressful situations.
- III. Students will make healthy decisions
 - A. Students will read and adhere to safety information on labels.
 - B. Students will read and understand food label information.
 - C. Students understand the harmful effects of drugs and alcohol on the body and on decision making skills.
 - D. Students practice and support each other in making healthy decisions.

Sixth Grade

- I. The Life Cycle and Reproduction
 - A. Students understand the life cycle and its stages in different organisms, including human beings.
 - B. Students understand that all living things reproduce themselves either asexually or sexually.
- II. Puberty
 - A. Students understand puberty is a stage in the life cycle of humans.
 - B. Students understand the physical signs of puberty that occur in each sex.
 - C. Students understand the inward or emotional issues they may deal with during puberty and know that they are normal feelings.
- III. The Human Reproductive System
 - A. Students understand the purpose of the human reproductive system.
 - B. Students know the components of the male and female reproductive system and can identify them on a diagram of the human body.
 - C. Students understand the process of fertilization of the egg and sperm and the development of the embryo from egg, zygote, embryo, growth in uterus, fetus, newborn.
- IV. Students identify and adhere to principles for living healthy lives
 - A. Students apply prevention and risk reduction strategies to promote healthy adolescent development.
 - B. Students understand the importance of physical activity and healthy eating in maintaining good health and learn to develop personal fitness goals that incorporate exercise and diet.
 - C. Students explain and identify real life examples of how abuse of drugs and alcohol can destroy personal, educational, career and life goals.
 - D. Students learn and use nonviolent methods to resolve conflicts.
- V. Students learn appropriate responses to emergency situations.
 - A. Students know first aid for shock victims.
 - B. Students know first aid for choking victims.
 - C. Students know first aid for bleeding victims.
 - D. Students know first aid for ingesting poison.
 - E. Students know first aid for burns.

Seventh Grade

The curriculum in the seventh grade for Health Education involves two half-year project-based learning projects that incorporate learning standards not only for Health Education but almost every other subject area as well. In the seventh grade, students will use the knowledge and skills gained Health Education linking lifestyle choices (diet, exercise, refusing to take part in negative behaviors) to physical and emotional health to produce two Health Fairs. The first semester will be devoted to the planning and production of a Health Fair targeted the school community that will be held at the end of the first semester. The second semester will be devoted to the planning and production of a Health Fair targeting the community at large and would be held at the end of the school year.

Each project will require students at the minimum to:

- work cooperatively as a team
- set goals and priorities
- plan and budget time and set deadlines
- undertake a needs assessment and take an inventory of school and community resources
- engage in group decision-making, compromise and debate
- balance individual strengths, talents and interests in assigning roles (committees)
- identify and elect leaders
- play leadership and support roles

The skills that the students will have to utilize in planning, developing, producing and putting on the Health Fairs will ultimately combine standards in the areas of Health Education, Physical Education, Social Studies, Science, English Language Arts and Foreign Language Study.

Upon completion of the first Health Fair, Grade 7 students will each write a self-assessment of the their own and the team's efforts in producing the event—identifying areas that were done well and areas that could have been improved. Through a questionnaire produced by the Grade 7 students, the school community will have an opportunity to provide feedback on the event. Students will use the school community feedback to make improvements as necessary in the second Health Fair. Likewise, students will produce a questionnaire for the community to provide them with feedback. This feedback will be shared with the Grade 7 class the following year in their development of their projects.

When the Bronx Charter School for Excellence has its first Grade 8, the eighth graders will work as advisors and as a resource to the seventh graders as they develop their school and community projects.

Grade 8**I. Human Sexuality****A. Dealing with the pressure and emotions of adolescence**

1. Students describe the pressures they encounter as teenagers in today's society.
2. Students discuss the sources of that pressure: peers, media, etc.
3. Students discuss coping skills for dating and sexuality.

B. Sexual Activity and Pregnancy

1. Students can identify and explain their personal, educational, financial, career and life goals and the steps that must be taken through high school and college to reach them.
2. Students discuss the responsibilities of parents in nurturing and providing for children and the sacrifices that must be made in order to ensure children's needs are met.
3. Students evaluate the hardships in teenage parents achieving personal, educational, career and life goals.
4. Students understand the correlation between poverty and teenage parents and poverty and high school dropouts.
5. Students evaluate abstinence and contraception.
6. Students know resources in the community that can help them in decision-making.
7. Students are aware of sexually transmitted diseases and their impact on physical and psychological health.
8. Students know how sexually transmitted diseases can be prevented.

II. Drugs, Alcohol and Violence

- A. Students evaluate how drugs and alcohol can prevent the achievement of personal, educational, financial, career and life goals and can identify real life examples of this.
- B. Students know and understand the legal repercussions of the sale and use of drugs.
- C. Students understand the implications of driving drunk on self and others. Students understand how alcohol impairs thinking and judgement.
- D. Students identify and use nonviolent methods for resolving conflicts.

Spanish Language

It is a shame that in the United States, despite our designation as “the most powerful nation” in the world, most of our citizenry can communicate in only one language. It is standard in many other countries for children to study not only their own language, but English as well. Furthermore, children in many European countries can communicate in the languages of those countries they border in addition to their native language. Where the rest of the world is bilingual and in many cases multilingual, the majority of Americans can communicate only in English. In this increasingly interdependent global economy and society, it is important to instill in children the love of language and the desire to learn languages and the nations and cultures associated with them.

The Bronx Charter School for Excellence begins the course of study of Spanish in the fifth grade. While we recognize that there are merits to beginning the study of a second language as early as Kindergarten, we are realistic about the fact that many of our students will be entering Kindergarten with English language skills well below their more affluent counterparts who are entering Kindergarten. Given the ethnic diversity of the community from which our students come, many of whom are relatively recent immigrants, we would also expect that many children entering the Bronx Charter School for Excellence may not speak English at all. In many ways, in the early grades the Bronx Charter School for Excellence we will be making up for the English language skills that may not have been provided in the home in the preschool years. We feel it is critically important for our children to learn and develop correct skills in standard English in reading, writing and speaking before we embark upon the teaching of a second language.

We have chosen to teach Spanish as opposed to another foreign language due to its relevance in our Bronx community and in the New York City community as a whole.

New York State Language other than English Standards

Standard 1 **Students will be able to use a language other than English for communication.**

Standard 2 **Students will develop cross-cultural skills and understanding (this standard is also met in Social Studies)**

The Bronx Charter School for Excellence Standards for Spanish Language

Grade 5

I. Listening, Understanding and Speaking

- A. Students know the names of the letters in Spanish and the sounds that they make.
- B. Students write vocabulary words while listening to the teacher.
- C. Students write dictated sentences with correct spelling and punctuation.
- D. Students read words out loud, demonstrating proper pronunciation and intonation.
- E. Students understand classroom instructions.
- F. Students recognize and use greetings and leave-takings.
- G. Students play matching and alphabet games.

II. Vocabulary Building

- A. Students use vocabulary words in response to questions posed by the teacher.
- B. Students know vocabulary words including nouns, verbs, adjectives and adverbs and use the correct definitive article associated with nouns for:
 - 1. Greetings
 - 2. Classroom Instruction
 - 3. Words related to time (months, days of week, etc.)
 - 4. Seasons and Holidays
 - 5. Colors
 - 6. Numbers to 100
 - 7. Components of the community (school, houses, streets, etc.)
 - 8. Body parts
 - 9. Animal
 - 10. Clothing
 - 11. Food
 - 12. Family members
 - 13. Question words (who, what, when, etc.)

- C. Students know Spanish equivalents of their classmates' names, where applicable.

III. Grammar

- A. Students learn the gender of nouns and the singular and plural forms.
- B. Students learn the definite and indefinite articles in the singular and plural forms.
- C. Students use and conjugate the forms of *ser* and *estar* in the present and past tense.

- D. Students learn the subject, indirect object, direct object and possessive forms of personal pronouns.
- E. Students conjugate regular *-ar*, *-ir*, and *-er* verbs in the present and the past tense.
- F. Students conjugate certain irregular verbs in the present and past tense.
- G. Students identify and correctly use certain verbs reflexively and non-reflexively.
- H. Students use adjectives and adverbs in sentences correctly.
- I. Students recognize and construct interrogative sentences.
- J. Students answer questions in complete sentences.
- K. Students learn basic prepositions.
- L. Students know correct writing of punctuation for questions and exclamatory sentences.

IV. Writing .

- A. Students, reacting to a picture, write complete sentences to describe it.
- B. Students, in response to questions posed by the teacher, write a complete sentence.
- C. Students can write one-paragraph papers on assigned topics using correct grammar, spelling and punctuation.

V. Reading Comprehension

- A. Students can read a text and answer true and false questions about the reading.
- B. Students can answer multiple choice questions on tests based on written text.
- C. Students can read short stories, understand questions and provide answers.

Grade 6**I. Listening, Understanding and Speaking**

- A. Students write vocabulary words while listening to the teacher.
- B. Students practice phonics, and identify vowels and syllables.
- C. Students write dictation with correct spelling and punctuation.
- D. Students read out loud with proper pronunciation and intonation.
- E. Students understand and follow classroom instructions.

II. Vocabulary Building

A. Students increase vocabulary including nouns, verbs, adverbs and adjectives related to the following and other categories and use the correct gender associated with nouns:

- 1. Greetings
- 2. Names of Family Members
- 3. Different parts of the house
- 4. Food and Beverages
- 5. Vehicles
- 6. Celebrations
- 7. Time
- 8. Seasons
- 9. Body
- 10. Businesses
- 11. Emotions
- 12. Animals
- 13. Work and jobs
- 14. Numbers to 1000

B. Students use Spanish/English dictionaries to define new words encountered or when needing to identify a Spanish word for an English equivalent.

C. Students learn idiomatic expressions.

III. Grammar

- A. Students learn the gender and singular and plural forms of nouns.
- B. Students learn the definite and indefinite article associated with the singular and plural noun.
- C. Students learn, conjugate and use more regular *-ar*, *-er*, and *-ir* verbs in the present and past tense.
- D. Students conjugate certain irregular verbs in the present and past tense.
- E. Students conjugate the future tense of regular *-ar*, *-er*, and *-ir* verbs.

- C. Students recognize, understand, write and use properly in speaking, conditional sentences (*If...then*).
- F. Students answer questions using complete sentences.
- G. Students know and use prepositions.

IV. Writing

- A. Students look at a picture and write affirmative, negative and interrogative sentences.
- B. Students, in response to a statement by the teacher, write affirmative, negative and interrogative sentences.
- C. Students can write two-paragraph papers on assigned topics using correct grammar, spelling and punctuation.

V. Reading Comprehension

- A. Students read and understand the meaning of different texts—stories, poems, narratives.
- B. Students can read and answer questions about the texts.

Grade 7

By Grade 7, Spanish class is conducted entirely in Spanish.

I. Listening, Understanding and Speaking

- A. Students read out loud with perfect pronunciation and intonation.
- B. Students write dictation with correct spelling and punctuation.
- C. Students can converse with each other regarding a variety of everyday topics.

II. Vocabulary Building

A. Students expand their vocabulary base, correctly identifying, spelling and pronouncing a growing list of words including nouns, verbs, adjectives and adverbs about and related to (but not limited to) the following:

- 1. Greetings
- 2. Family
- 3. Numbers
- 4. The Home
- 5. The Environment
- 6. The community, city, state and nation
- 7. Time
- 8. Celebrations
- 9. Geography
- 10. Sports
- 11. Weather
- 12. Nature
- 13. Lifestyles
- 14. Culture
- 15. Religion
- 16. History

C. Students use Spanish/English and Spanish-only dictionaries to define new words encountered or when needing to identify a Spanish word for an English equivalent.

D. Students learn idiomatic expressions.

III. Grammar

A. Students know the declension and use of an increasing number of regular *-ar*, *-er*, and *-ir verbs* in the present, past and future tenses.

B. Students know the declension and use of an increasing number of irregular verbs in the present, past and future tenses.

C. Students write in using correct grammar construction in interrogative, demonstrative, exclamatory, affirmative and negative sentences.

IV. Reading Comprehension and Writing

- A. Students read stories and can ask and answer questions about what they have read.
- B. Students are able to write one-page compositions about an assigned topic using correct grammar, punctuation and spelling.
- C. Students can discuss aloud what they have read.

Grade 8***Spanish Class continues to be conducted entirely in Spanish*****I. Listening, Understanding and Speaking**

- A. Students are proficient in conversational Spanish when discussing familiar topics.
- B. Students write dictation with correct spelling and punctuation.
- C. Students read passages out loud with perfect pronunciation, intonation and expression.
- D. Students can watch and understand short Spanish videos.

II. Vocabulary Building

A. Students expand their vocabulary base, correctly identifying, spelling and pronouncing a growing list of words including nouns, verbs, adjectives and adverbs about and related to (but not limited to) the following:

1. Greetings
2. Family
3. Numbers
4. The Home
5. The Environment
6. The community, city, state and nation
7. Time
8. Celebrations
9. Geography
10. Sports
11. Weather
12. Nature
13. Lifestyles
14. Culture
15. Religion
16. History

B. Students use Spanish/English dictionaries to define new words encountered or when needing to identify a Spanish word for an English equivalent.

III. Grammar

A. Students are proficient with constructing sentences with the present, past, and future tense using regular *-ar*, *-ir*, and *-er* verbs and known irregular verbs.

B. Students recognize, understand and write sentences in the present perfect, past perfect and future perfect tense.

C. Students use knowledge of sentence structure, verb tenses and increasing vocabulary to construct more complex writing samples and verbal presentations.

IV. Reading Comprehension and Writing

- A. Students read ~~and~~ comprehend a variety of genres of work from noted Spanish authors.
- B. Students write up to two-page essays, which focus on key elements in Spanish literature they have read.
- C. Students can write original one-page compositions in a variety of genres: poetry, short story, essays, plays, journals.

Technology

The Bronx Charter School for Excellence is committed to ensuring that our children are technologically literate. Therefore, our school believes in the use of computers and appropriate software across appropriate curriculum areas as our students progress from Kindergarten through 8th grade. On the most basic level, it is important that we teach children appropriate use of the computer, provide them with the proper technique for efficiency on the keyboard and help them become adept with the Internet and word processing, spreadsheet, database and desktop publishing programs. It is important that we prepare students for a technologically sophisticated world by using software used by professional adults to create their own projects. However, technology in the classroom can be much more than that. Technology can be used to support curriculum and bolster student academic achievement in powerful ways.

In many schools, technology means placing kids in front of a computer and having them randomly play games that they really don't understand, clicking away at the mouse as if it were a television remote control. Like watching an MTV video, children are absorbed by the flashy colorful images on the screen. Little else is happening let alone understanding the concept that is supposed to be taught. That will not happen at our school. The Bronx Charter School for Excellence is committed to using educational software in the classroom with a purpose—directly connecting computer activities with subject specific learning standards. We are committed to utilizing computer equipment, both hardware and software, in the classroom as effective and efficient tools for instruction.

The Bronx Charter School for Excellence understands that regular and meaningful access to equipment essential if students are to meet our technology goals. The school recognizes that it is difficult for classroom teachers to coordinate with a just few computers in her class. As such, the Bronx Charter School for Excellence most likely will adopt technology mini-lab structure that can accommodate one-quarter to one-half of the class on computers while the other half works in small groups on related curriculum projects. Unlike traditional computer labs where students go to a computer teacher once or twice a week while the classroom teacher has prep, this space is used as an extension of the regular classroom. It provides classroom teachers with an easy-to-manage way to provide every child with 1) frequent access to technology, and 2) intensive small-group instruction in core curriculum areas.

The Bronx Charter School for Excellence will take great pains to select meaningful educational software that will support the work of the teacher in the classroom. There are a number of educational software packages such as Successmaker™ that create individualized courses for every student based on teacher design, student choice and student abilities in a stimulating, challenging learning environment. Teachers are constantly developing strategies for managing mixed ability classes—providing differentiated and challenging work for a number of students with different needs, interests and backgrounds—and educational software provides them with a tool to accomplish this. Furthermore, educational software has incorporated many sophisticated tools that can provide real benefits for teachers. Among them are detailed assessments and reports on each student's progress every lesson, the reporting provides detailed feedback on a comprehensive set of skills in each subject area, targets specific areas of need and clearly shows progress achieved with carefully monitored data.

In addition to meeting the New York State standards as they relate to technology, the Bronx Charter School for Excellence will adopt the technology standards developed by the National Educational Technology Standards Project ["NETS"]. NETS is an ongoing initiative of the International Society for Technology in Education ["ISTE"] and a consortium of distinguished partners and co-sponsors. The following standards describe how the Bronx Charter School for Excellence will assure that all of its students are technologically literate. These standards as well as our detailed Technology learning standards are delineated later in this section.

It is not enough to ensure that our students are technologically literate, but we must also make certain that our teachers will be able to use advanced technology to improve student academic achievement aligned with

challenging state academic content and student academic achievement standards. The Bronx Charter School for Excellence, therefore, will also adopt the technology standards for teachers developed by the NETS. The adopted standards include the following:

- I. **TECHNOLOGY OPERATIONS AND CONCEPTS.** Teachers demonstrate a sound understanding of technology operations and concepts. Teachers:
 - A. demonstrate introductory knowledge, skills, and understanding of concepts related to technology (as described in the ISTE National Education Technology Standards for Students).
 - B. demonstrate continual growth in technology knowledge and skills to stay abreast of current and emerging technologies.

- II. **PLANNING AND DESIGNING LEARNING ENVIRONMENTS AND EXPERIENCES.** Teachers plan and design effective learning environments and experiences supported by technology. Teachers:
 - A. design developmentally appropriate learning opportunities that apply technology-enhanced instructional strategies to support the diverse needs of learners.
 - B. apply current research on teaching and learning with technology when planning learning environments and experiences.
 - C. identify and locate technology resources and evaluate them for accuracy and suitability.
 - D. plan for the management of technology resources within the context of learning activities.
 - E. plan strategies to manage student learning in a technology-enhanced environment.

- III. **TEACHING, LEARNING, AND THE CURRICULUM.** Teachers implement curriculum plans, that include methods and strategies for applying technology to maximize student learning. Teachers:
 - A. facilitate technology-enhanced experiences that address content standards and student technology standards.
 - B. use technology to support learner-centered strategies that address the diverse needs of students.
 - C. apply technology to develop students' higher order skills and creativity.
 - D. manage student learning activities in a technology-enhanced environment.

- IV. **ASSESSMENT AND EVALUATION.** Teachers apply technology to facilitate a variety of effective assessment and evaluation strategies. Teachers:
 - A. apply technology in assessing student learning of subject matter using a variety of assessment techniques.
 - B. use technology resources to collect and analyze data, interpret results, and communicate findings to improve instructional practice and maximize student learning.
 - C. apply multiple methods of evaluation to determine students' appropriate use of technology resources for learning, communication, and productivity.

- V. **PRODUCTIVITY AND PROFESSIONAL PRACTICE.** Teachers use technology to enhance their productivity and professional practice. Teachers:
 - A. use technology resources to engage in ongoing professional development and lifelong learning.
 - B. continually evaluate and reflect on professional practice to make informed decisions regarding the use of technology in support of student learning.
 - C. apply technology to increase productivity.
 - D. use technology to communicate and collaborate with peers, parents, and the larger community in order to nurture student learning.

- VI. **SOCIAL, ETHICAL, LEGAL, AND HUMAN ISSUES.** Teachers understand the social, ethical, legal, and human issues surrounding the use of technology in PK-12 schools and apply those principles in practice. Teachers:
 - A. model and teach legal and ethical practice related to technology use.

- B. apply technology resources to enable and empower learners with diverse backgrounds, characteristics, and abilities.
- C. identify and use technology resources that affirm diversity
- D. promote safe and healthy use of technology resources.
- E. facilitate equitable access to technology resources for all students.

New York State Mathematics, Science & Technology Standards

The State learning standards for technology are integrated with standards for science and mathematics. When a particular standard is predominately that of science or mathematics, that standard will be addressed in the indicated section.

- Standard 1 Students will use mathematical analysis, scientific inquiry and engineering design, as appropriate, to pose questions, seek answers and develop solutions. (This standard is addressed in the Mathematics section)
- Standard 2 Students will access, generate, process, and transfer information using appropriate technologies.
- 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, data analysis, probability and trigonometry. (This standard is addressed in the Mathematics section)
- Standard 4 Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science. (This standard will be addressed in the Science section)
- Standard 5 Students will apply technological knowledge and skills to designing, construct, use and evaluate products and systems to satisfy human and environmental needs. (This standard will be addressed in the Science section).
- Standard 6 Students will understand relationships and common themes that connect mathematics, science and technology and apply the themes to these and other areas of learning.
- Standard 7 Students will apply the knowledge and thinking skills of mathematics, science and technology to address real-life problems and make informed decisions.

The Bronx Charter School for Excellence Technology Standards

In addition to meeting the New York State standards as they relate to technology, the Bronx Charter School for Excellence will adopt the technology standards developed by the National Educational Technology Standards Project ["NETS"]. NETS is an ongoing initiative of the International Society for Technology in Education ["ISTE"] and a consortium of distinguished partners and co-sponsors. The following standards describe how the Bronx Charter School for Excellence will assure that all of its students are technologically literate.

Technology Foundation Standards and Goals for Students

1. **Basic operations and concepts**
 - Students demonstrate a sound understanding of the nature and operation of technology systems.
 - Students are proficient in the use of technology.
2. **Social, ethical, and human issues**
 - Students understand the ethical, cultural, and societal issues related to technology.
 - Students practice responsible use of technology systems, information, and software.
 - Students develop positive attitudes toward technology uses that support lifelong learning, collaboration, personal pursuits, and productivity.
3. **Technology productivity tools**
 - Students use technology tools to enhance learning, increase productivity, and promote creativity.
 - Students use productivity tools to collaborate in constructing technology-enhanced models, prepare publications, and produce other creative works.
4. **Technology communications tools**
 - Students use telecommunications to collaborate, publish, and interact with peers, experts, and other audiences.
 - Students use a variety of media and formats to communicate information and ideas effectively to multiple audiences.
5. **Technology research tools**
 - Students use technology to locate, evaluate, and collect information from a variety of sources.
 - Students use technology tools to process data and report results.
 - Students evaluate and select new information resources and technological innovations based on the appropriateness for specific tasks.
6. **Technology problem-solving and decision-making tools**
 - Students use technology resources for solving problems and making informed decisions.
 - Students employ technology in the development of strategies for solving problems in the real world

	Grade Started	Grade(s) Mastered
Computer Care, Maintenance and Etiquette		
Uses the keyboard and mouse correctly and respectfully	K	K-1
Follows "safety zone" guideline: Keeps liquids, glitter, magnets, food, etc. away from the computers.	K	K-1
Always is careful and thoughtful near equipment	K	K-1
Logs off and cleans up area promptly and quietly. Closes files, exits software, puts away floppy disks and CD-ROMs, cleans up the desk area, covers keyboard and pushes in the chair.	K	K-1
Shares keyboard and mouse when working with a partner	K	K-1
Follows printing policies	K	K-1
Shuts down the computer correctly	2	2
Troubleshoots common hardware and printing problems: paper jams, loose cables, etc.	4	5-8
Runs routine maintenance software and understands the purpose of each tool.	6	8
Identifies by sight and explains the purpose of various computer components: RAM, motherboard, hard drive, CD-ROM, floppy drive, etc.	7	8
Computer Vocabulary		
Monitor, mouse, keyboard, floppy disk, CD-ROM	K	K-1
Cursor, software (application, program), hardware, memory, hard drive, network, menus and Internet	3	4-6
RAM, file server, computer virus, backup, operating system (Windows, Macintosh), files types	4	5-8
Internet language: HTML, Java, links, hypertext, URL (universal resource locator), search engine	4	5-8
File size language: i.e. kilobytes, megabytes, gigabytes	5	5-8
Keyboarding Skills		
Is familiar with position of all keys, including capital letters and punctuation. May use only two fingers and look at keyboard while typing.	3	3-4
Uses two hands on appropriate keys without looking at keyboard while typing	5	6-7
Composes drafts on the computer	5	5-7
Maintains a 25 word-per-minute accuracy with 90% accuracy	7	7
Maintains a 35 word-per-minute typing speed with 90% accuracy.	8	8
Basic Skills and File Management		
Logs onto network and retrieves desired file.	3	3
Can use a CD-ROM	3	3
Renames files when necessary	3	4
Chooses the appropriate software for the job.	4	4-8
Prints file to any printer on the network	4	4
Can use a floppy disk as well as the file server to store files.	4	4
Converts file types (using "save as" features)	5	6
Creates and manages sensible directories and sub-directories	6	7-8
Organizes files	7	7-8
Manages and backs-up old files	7	8
Can assemble a computer system including keyboard, central processing unit and hard drives, mouse, modem, printer, monitor and peripherals	7	8
Word Processing		

Indents paragraphs using the tab key.	3	3
Centers tiles and text using center buttons	3	4
Uses spell check	3	4
Moves cursor using mouse or keyboard	3	4
Selects blocks of text using the mouse	3	4
Formats and reformats the fonts, size and style of text	3	4-5
Inserts or moves text using cut, copy and paste	4	4-6
Inserts footnotes, header and footer information (i.e. page numbers, file paths, date, file name)	5	5-8
Customizes page set-up as needed	5	6-8
Uses paragraph and character style settings to format text	6	8
Inserts and formats tables into word processing documents	5	6-8
Organizes and rearranges documents using the outlining feature	6	8
Links and embeds graphics and spreadsheet files into a word processing file.	8	8
Data Management		
Creates pie, bar and line graphs using spreadsheet templates	5	6-8
Uses spreadsheet language: columns, rows, headings, formulas, calculations, sum, totals, etc.	5	6-8
Constructs simple spreadsheets	5	6-8
Creates multi-sheet data charts	6	7-8
Assigns calculations to spreadsheet cells	6	7-8
Formats individualized cells, rows and columns	5	5-7
Moves data to different positions on a sheet	6	7-8
Selects the appropriate chart or graph for a given project	6	6-7
Can select sub-groups of data to create charts and graphs	6	7-8
Uses the appropriate numeric style for a given cell (currency, decimal point, date, etc.)	6	6-7
Creates simple database	6	7-8
Generates reports from a database	6	7-8
Telecommunications and Internet Research		
Understands and follows Internet policies and practices	4	4-8
Analyzes and evaluates quality and authenticity of information	4	6-8
Understands and follows copyright laws: Outlines and paraphrases information or provides appropriate citations when quoting directly or using images	4	5-8
Creates and organizes URL bookmarks	5	6-8
Searches and refines search.	5	5-8
Uses a variety of search engines	6	6-8
Maintains a school e-mail account	7	7-8
Desktop Publishing, Graphic Design and Web Page Development		
Design original computer art using paint programs	K	3-8
Import digital images into a graphics or word processing program.	4	6
Scans artwork or photos	5	6-8
Designs multi-page documents with linked text blocks, graphics, and images.	5	6-8
Designs simple web pages with multiple pages and links.	7	8
Understands when and how to save digital images in a file format appropriate for a given project (i.e. JPEG, TIFF, EPG, PICT, etc.)	7	8

Fine Arts: Music, Visual Art and Dance

The Bronx Charter School for Excellence is committed to imparting to our students a love of the arts. We believe that our arts curriculum will nurture their innate skills and allow them to discover, pursue and perfect their talents in Music and Visual Art. We feel Drama and Dance are also important disciplines to pursue, however, we did not want to be overly ambitious about what we could accomplish in the fine arts before we could get the Bronx Charter School for Excellence up and running. Therefore, we are reserving the right to institute drama programs if scheduling, space and funding permits. In the absence of formal programs for this discipline, elements of and training in drama will appear in English Language Arts.

Children need to be exposed to and participate in the fine arts. The fine arts provide a powerful vehicle of self-expression, creativity and learning for young children. Through fine arts in the early years, not only do children build and develop practical skills and learn important habits—fine motor skills, locomotor skills, use of voice, listening, observing, dexterity, patience, planning, sharing—but they build self-confidence and self-esteem as they discover their emerging talents and use their growing imaginations to communicate in new and exciting ways. The arts provide teachers with important ways to reach children, who might otherwise withdraw from class and from their peers.

And art is important in and of itself. Art, in all its forms, has expressed the gamut of human emotions and the human experience throughout time. If we want our students to develop as thinkers and true intellectuals then we must expose them to the masterworks of art from all eras and provide them with the tools to interpret the meaning of the work and understand, through a historical perspective of the art, the source for the artist's creativity. We hope that the exposure and training we give to our students in music and the visual arts will move them to pursue their talents through opportunities outside of the Bronx Charter School for Excellence further opening doors at the high school level to schools focusing in the arts.

The Bronx Charter School for Excellence visual arts standards are designed to teach first an active participation in the creation of artwork and then provides the opportunity to learn the other significant attributes of art such as aesthetics and the relationship of art to other learning.

The four standards are laid out in a sequence that suggests an increasing level of difficulty in skill and knowledge. The first standard deals with the use of art tools, materials, and processes. To be successful in an art program, a student must gain a degree of control and a measure of confidence with art materials and techniques. The second standard is concerned with students looking to significant works of art to recognize the elements and principles, and, once having seen how they function in those masterful pieces, the students use complex thinking to apply them in their own art. The third standard brings the students an understanding of the content and aesthetics of artwork as they are led to effectively communicate by expressing meanings, ideas, and stories through art elements and principles and a variety of art materials. The fourth standard stages activities that give the students a personal sense of visual arts heritage and responsible citizenship in the arts as well as using their art skills in a collaborative mode to develop and enhance all learning. As students progress to the middle school grades 7 and 8, the standards are designed to provide an overview of Visual Arts while studying a broad variety of art tools and materials. With an emphasis on studio production, this course is designed to develop higher-level thinking, art-related technology skills, art criticism, art history, and aesthetics.

The Bronx Charter School for Excellence performing arts curriculum focuses on music and dance. Students will be exposed to the elements of music, learn how to read music, learn music theory, identify different types of music and understand the variety of musical settings. The design and content of the curriculum focuses at the center on the joy of creating, making, and experiencing music by involving children in developmentally appropriate and holistic learning experiences in singing, playing, creating, and listening. The content provides grade-appropriate musical works to expose children to, but also gives considerable freedom of choice in selecting materials and teaching strategies. The Grade K-6 curriculum provides the foundation for students' pursuit of either choral or band music course grades 7 and 8.

Students who elect to pursue Band will embark on a two-year course that provides opportunities for students to develop their musical potential and aesthetic understanding through learning to play a woodwind, brass, or percussion instrument. Study includes the care and cultivation of a beautiful tone, the ability to read music, the building of technical skills, team spirit, and responsible rehearsal habits. Students will have opportunities to experience the spontaneity of improvisation and the creative process of composing. Students will strengthen listening skills and their ability to analyze and evaluate music and music performances. Attention will also be given to relating their music experiences to the time and culture of the pieces they study, as well as to contemporary society.

For those students who would like to pursue their vocal talent, the choral course in grade 7 and 8 guides students in developing their musical potential and aesthetic understanding through singing in a choral ensemble. Study includes the care and cultivation of a beautiful tone, aesthetic awareness, the ability to read music, the building of technical skills, team spirit, and responsible rehearsal habits. Students will have opportunities to experience the spontaneity of improvisation and the creative process of composition. Students will strengthen listening skills and their ability to analyze and evaluate music and music performances. Attention will also be given to relating their music experiences to personal development

The Grade 7 and 8 grade chorus and band will be expected to give formal performances to the school community and the neighborhood community.

Dance is a universal language, an expressive and vibrant art with the capacity to unify the physical, mental, social, emotional, aesthetic, and spiritual. From K-6, our standards are included: moving, investigating, creating, and contextualizing. In dance, the emphasis is on actively engaging the child through participation. Critiquing, discussing, and evaluating is also important for processing and at the elementary level, there is opportunity to begin to assess and interpret dance. During Grades 7 and 8, the dance course will be an elective, and will build dance knowledge and skills in technique, improvisation, choreography, artistic expression, performance, history, culture, life skills, and connections to other curricular areas.

Throughout the Music, Visual Arts and Dance curriculum, there are tremendous opportunities to link each fine art area with each other as well as each fine arts area with Math, Science, English Language Arts and Social Studies. These interdisciplinary links will have a tremendously enriching impact on the course of study in all areas.

Since it is located in New York City, the Bronx Charter School for Excellence is in the fortunate position of having the world's best cultural and artistic institutions at our doorstep. The school intends to take advantage of such institutions as the Metropolitan Museum of Art, the Museum of Modern Art, the Museum of African Art, El Museo del Barrio, the Bronx Museum of the Arts, Carnegie Hall, Lincoln Center, City Center and the countless other museums, dance halls and recital halls of our City to link the material covered in the classroom with viewing actual art or attending actual musical or dance performances. In addition, to enriching the classroom art experience, our students will view another component of our culturally rich city which many of them otherwise have no access to.

New York State Visual and Performing Arts Standards

Standard 1 Creating, Performing and Participating in the Arts

Students will actively engage in the processes that constitute the creation and performance in the arts (dance, music, theatre, and visual arts) and participate in various roles in the arts.

Standard 2 Knowing and Using Arts Materials and Resources

Students will be knowledgeable about and make use of the materials and resources available for participation in the arts in various roles.

Standard 3 Responding to and 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 and thought.

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 societies.

The Bronx Charter School for Excellence Standards for Music**Kindergarten**

- I. Students will develop the voice and body as instruments of musical expression.
 - A. Students explore the potential of the human voice to make sounds and sing with a natural voice.
 1. Sing a variety of simple songs in a natural voice, free from strain.
 2. Imitate at least three familiar sounds.
 3. Demonstrate the difference between the speaking and singing voice.
 - B. Students use body movement to internalize sounds.
 1. Demonstrate the beat by using nonlocomotor movements; e.g., pat, tap, or clap the steady beat.
 2. Demonstrate the beat by using locomotor movements; e.g., march or walk to the steady beat.
 - C. Students discover how songs, singing games, and dances relate to one's culture.
 1. Play singing games and enjoy traditional nursery rhymes and musical stories that students relate to as individuals.
 2. Explain what familiar songs, singing games, rhymes, musical stories mean personally.
 - D. Students describe the purpose/function of favorite songs, singing games, rhymes, musical stories.
- II. Students will play instruments as a means of musical expression.
 - A. Students discover and demonstrate sounds on simple percussion instruments from the classroom and various cultures.
 1. Demonstrate and describe various timbres of rhythm instruments.
 2. Demonstrate and describe proper playing and handling techniques on simple rhythm instruments.
 3. Add instrumental sounds to known songs of various cultures.
 - B. Students demonstrate ability to play instruments accurately.
 1. Recognize success in starting and stopping together.
 2. Recognize success in keeping a basic beat.
- III. Students will create music through improvising, arranging, and composing

A. Students improvise together as a class a variety of musical sounds with the body, voice, and instruments.

1. Create simple rhythm and or melody patterns.

a. Improvise patterns by echoing back and forth. Use the body, voice, or percussion instruments for sounds.

2. Improvise expressive and appropriate sound effects for familiar songs, stories, and/or poems.

3. Select a story and create instrumental or vocal sound effects that enhance the telling of it.

4. Explore changes in pitch, tempo, volume, and timbre for a familiar song.

B. Students express ideas, thoughts, and emotions aesthetically through singing, playing, and/or creating.

1. Exhibit through music an appreciation for the subtle beauties inherent in everyday life.

a. Select and express through music an idea, thought, or feeling found in nature, dance, a picture, a movie, a story, real life, etc.

2. Balance reason and emotion in creating, practicing, and performing.

C. Students create and use visual representations of sound.

1. Demonstrate sounds and silences in music through body movement/nonmovement and visual representations.

2. Illustrate changes in pitch through body movement and visual representations.

3. Connect visual representations of pitch to its sound while singing or listening.

4. Indicate the beat through body movement and visual representations.

5. Connect visual representations of the beat to its presence in music while singing or listening.

IV. Students will listen to, analyze, and describe music.

A. Students recognize quality while creating a music performance.

1. Participate and follow directions in a music performance.

2. Recognize when people in other performances participate and follow directions.

3. Plan, practice, self-assess, refine, present, and reflect on a simple performance that demonstrates all of the skills learned in each of the standards.

a. Use this as the culminating activity for the last six weeks of each semester. Create as a class a program which combines and showcases the skills and knowledge gained in music, art, dance, drama, history, etc.

B. Students perceive and respond to the messages in music and the use of music elements.

1. Identify when the class listens quietly or otherwise, as directed.
2. Describe what the music makes one think about or what it is saying personally.
3. Use body movement to show when the music goes higher or lower in pitch, when the volume changes between loud and soft.
4. Identify the violin by sight and by sound.
5. Answer specific, simple questions after listening to music; e.g., how many times did the cymbals crash?
6. Demonstrate familiarity with suggested listening selections.
 - a. Identify the piece on hearing the music by telling a story connected with the writing of the piece and/or naming the title or composer. After being told the composer/title, hum the tune, tap the rhythm, or describe the music in terms of pitch, volume, tempo, or timbre.
 - b. Suggested listening for kindergarten:
 - Four Seasons: Spring, Allegro, 1st movement; Summer, Adagio/Presto, 2nd movement; Autumn, Allegro, 1st movement; Winter, Largo, 2nd movement
 - Kabelevsky: Gallop
 - Brahms: Lullaby
 - Rimsky-Korsakov: Flight of the Bumblebee
 - Saint-Saens: Carnival of the Animals

(These particular masterworks are chosen for their appeal, their potential in demonstrating different timbres, tempi, pitch, and volume changes, and their suitability to this grade level. There are many other selections, which could be substituted and/or added to the list. The Bronx Charter School for Excellence will consider including equally powerful works from the various non-Western cultures.)