Charter Schools Institute
State University of New York

BROOKLYN EXCELSIOR CHARTER SCHOOL

FINAL CHARTERED AGREEMENT

Section 2852(5) Submission to the Board of Regents

Volume 4 of 9

REDACTED APPLICATION

74 North Pearl Street, 4th Floor, Albany, New York 12207
Telephone: (518) 433-8277 Fax: (518) 427-6510 E-mail: charters@sysadm.suny.edu
www.newyorkcharters.org

LANGUAGE ARTS
SECOND GRADE
Writing

Collins Writing Program
Philosophy: The Teaching of Writing
Collins Writing Strategies
Teacher Resources
Assessing Your Current Writing Program

COLLINS WRITING PROGRAM
Philosophy: The Teaching of Writing in NHA Schools

ON THE TEACHING OF WRITERS:

A belief system about how children develop as language users from birth through adulthood and what teachers should do in their classrooms to foster that growth is essential to any writing curriculum. Moreover, to provide integrated and meaningful instruction and accountability, the writing program must be organized around a system for managing the writing process. The following is meant to be a guide to teaching "writers" in the classroom.

1. **Children as language users:**
National Heritage Academies believes that children come to school with an innate curiosity about writing and a desire for meaningful, real-world communication, and that writing is one of the most complex intellectual tasks they will need to accomplish. Further, children develop writing skills in a manner that mirrors the way they learn to talk. Teachers, then, teach "writers" rather than "writing," and children become writers by the very act of writing itself. We believe that teachers help children view and define themselves as thinkers and writers by involving them with the real occurrences of their minds, hearts and world and that writing enhances the learning process of any subject at any level.

2. **Classroom culture of active literacy:**
What teachers *do* in the classroom positively impacts students' development as writers more often than what teachers *say* in the classroom. The conditions that promote the development of writers are the same as those that facilitate learning to talk:
   - *Immersion:* creating a language-rich and print-rich environment
   - *Demonstration:* modeling of writing in the classroom by the teacher
   - *Expectation:* subtly communicating to children that they will learn to write
   - *Responsibility:* giving students opportunities to be responsible for their own learning
   - *Approximation:* encouraging and respecting children's writing efforts
   - *Employment:* making time and opportunities for writing
   - *Feedback:* allowing patience with the growth process

   National Heritage Academies wants its classrooms to be places where children come expecting to write each day with the knowledge that their efforts will be valued, supported and respected.

3. **A skill for thinking across the curriculum:**
National Heritage Academies believes that students should have frequent and varied opportunities to write in *all* content areas. Writing is an aid to thinking and organizing ideas across the curriculum rather than merely a subset of the language arts curriculum. It is a balance of process (how people communicate) and product (what they communicate).

4. **Managing and evaluating a program for writing:**
   Because we understand that writing is a necessary skill for effective communication and expression, and realizing that people learn to write by writing, there must be a workable system of instruction. That system must be coupled with an assessment system to measure levels of achievement in both the student and the teacher.

National Heritage Academies has adopted **The Collins Cumulative Writing Folder Program** to support teachers in building an effective and experiential writing program within their classrooms and the school. The Collins Writing Program provides schools with a writing program— a unified set of techniques and expectations about student writing— that can be developed and reinforced over a period of years, as well as a way to measure levels of achievement in both students and teachers. It involves:

- Integrating writing across the curriculum using Five Types of Writing
- (noted on the following two pages)
- Encouraging a balance of process and product
- Encouraging ownership through a student-centered program of instruction
- Ensuring the development of critical writing and thinking skills
- Making the program student-centered
- Involving frequent writing opportunities
- Affording a practical and manageable program for both teacher and student.

The Cumulative Writing Folder Program consists of four elements: a writing management system and three teaching strategies. The strategies are:

- Oral reading
- Focus correcting
- Using past papers to teach new skills

The Program has been successfully used in special education, with the gifted and talented, and in English as a second-language programs. Each element reinforces the others.

Realizing each teacher's need to understand instructional expectations as well as to be supported in those expectations, a workable "Scope and Sequence for the Teaching of Writers" will be forthcoming.

A list of resources from the Collins Education Associates follows The Collins Writing Strategies.

Collins Writing Strategies

Type One: Writing that has no correct answer – or, if there is a correct answer, it's okay to be wrong

Purpose: To capture ideas, questions, reactions

Evaluation: A check + or -, 10 pts. or 0 pts., a "smiley face" or no "smiley face," a jelly bean or a coffee bean . . . in other words – it's up to you. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a minimum volume
4. Provide a maximum time limit

Advantages:
*Spontaneous, minimal preparation
*Effective thinking stimulus for all
*Takes very little class time
*Promotes writing fluency

Type Two: Writing that makes a point - has a correct answer

Purpose: To show that the writer knows something about the topic or has thought about it

Evaluation: Type Two writing is like a quiz; mistakes in content count. Writing style and mechanics do not count – the content counts. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a maximum time limit
4. Avoid numbering

Advantages:
*Spontaneous, little pre-planning
*Quick assessment
*Promotes writing fluency
*Promotes writing in the content areas

Type Three: Writing that has content and focus correction areas

Purpose: To produce a single draft that meets the standards set by the focus correction areas (FCA). Type Three writing is read out loud by the author to see if it does three things:

- Completes the assignment
- Sounds correct-easy to read
- **Avoids errors in the focus correction areas**

Evaluation: Evaluation is based solely on FCAs. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always place FCAs in the upper left
3. Maximum of three focus areas/paper

Advantages:
*Very efficient
*Ease of evaluation

Type Four:	**Writing that has been read out loud and critiqued by another – two drafts**
Purpose:	To produce the best possible work in two drafts. Writer follows the same steps as Type Three, repeats steps with a peer, and produces the best possible second draft that is placed in **The Cumulative Writing Folder.**
Evaluation:	Evaluation is based on focus correction areas. **"Reasonable best effort"**
Basic Guidelines:	1. Always skip a line 2. Always place FCAs in the upper left 3. Maximum of three focus areas/paper
Advantages:	*Fair, objective evaluations *Provides a systematic, clear, and logical sequence of writing skills

Type Five:	**Writing that can be published and go outside the classroom without explanation or qualification – multiple drafts**
Purpose:	To produce the best writing possible. Writer follows the same steps as Type Four to create a paper void of errors.
Evaluation:	Type Five writing is usually a major project. It must meet all standard conventions.
Basic Guidelines:	1. Always skip a line 2. Always label the type of writing in rough drafts
Advantages:	*Great final product *Real-world standards *Promulgates full range of skills

It has been our experience that many teachers, especially after a full day workshop with opportunities for "hands-on" practice, can effectively implement many of our ideas in their own classrooms.

However, most teacher training has failed miserably because it tends to be "hit and run" in nature. A basic assumption of our work is that writing instruction will be most effective when it is supported by a program— a unified set of teaching techniques and expectations about student writing that are developed and reinforced over a period of years. This kind of program development takes time and commitment. We believe that writing instruction must also be evaluated on a regular basis to provide teachers and students with clear and achievable goals from one year to the next. Therefore we have developed an extensive variety of program development services:

Examples of our teacher support and program development service sessions:

* **demonstration lessons**
* **establishing an in-house evaluation model**
* **individual department/grade level sessions**
* **developing strategies for state assessment tests**
* **practice developing great writing assignments**
* **practice developing appropriate FCAs**

Developed by Mark E. Dressel, Collins Education Associate 616.361.1839

COLLINS WRITING - TEACHER RESOURCES:

Center for Effective Communication-Collins Education Associates LLC:

The following publications may be found on the *AcademyLink Purchase Order form* for **The Network (formerly Collins)** and can be purchased through your building principal (textbook budget). It is recommended that each teacher have the following:

1. **Cumulative Writing Folders** - for each student in grades 1-8 for use in helping to manage the classroom writing program. Teachers of grades 1-3 should order the **Primary Cumulative Writing Folders**. Teachers of kindergarten may want to develop their own "folder system" for writing management.

2. **Developing an Effective Writing Program for the Elementary Grades** by Gary Chadwell.

3. Middle School Teachers: **Developing Writing and Thinking Skills Across the Curriculum** by Gary Chadwell.

Additional Recommended Resources:

1. Frank, Marjorie. **If You're Trying To Teach Kids How To Write...you've gotta have this book!** Incentive Publications, Inc., Nashville, Tennessee. 1979. (ISBN: 0-86530-317-7). Can be purchased through most bookstores. All Grades.

2. Areglado, Nancy and Dill, Mary. **Let's Write: A Practical Guide to Teaching Writing in the Early Grades– K-2**. Scholastic Professional Books, New York. 1997, (ISBN: 0-590-93102-4). Can be purchased through teacher stores or most bookstores. Early Grades.

3. Butler, Andrea and Turbill, Jan. **Towards a Reading-Writing Classroom**. Primary English Teaching Association, NSW, Australia: Heinemann, 1984. (ISBN: 0-435-08461-5).

4. Atwell, Nancie. **Coming to Know: Writing to Learn in the Intermediate Grades**. Portsmouth, NH: Heinemann, 1990. Presents many ways to use writing in content area study, including learning logs and research projects in every subject.

5. Calkins, Lucy. **The Art of Teaching Writing**. Portsmouth, NH: Heinemann, 1994.

6. Lane, Barry. **After 'The End': Teaching and Learning Creative Revision**. Portsmouth, NH: Heinemann, 1993.

Assessing Your Current Writing Program

You already have a writing program in place in your classroom, one shaped by your beliefs and attitudes about writing instruction. It's driven by techniques and strategies you use with your students, and it's organized around a system you use for managing the writing process. The survey that follows will help you assess your current writing program by helping to identify what you emphasize most and least in your own classroom. It will give you a snapshot of your current writing program.

After you complete this survey, your findings will enable you to reaffirm, challenge, or recalibrate some of your assumptions and help you make strategic decisions about ways to improve your writing program.

Writing Program Assessment Survey
For Elementary Grades

Instructions: For each of the activities that follow, give a rating of 0-5 that most accurately describes how often you do the activity during a year. This self-assessment will be most valuable if you are candid in your estimates. Try not to overestimate; rather than rating the items based on how much you like them, rate them on how often you actually do them.

0 – Do not do
1 – Infrequently (one to three times a year)
2 – Occasionally (four to six times a year)
3 – Regularly (once a month)
4 – Frequently (twice a month)
5 – Very frequently (once a week or more)

PROGRAM VALUES

_____ 1. Give students low-risk writing opportunities such as free writing or journal writing.

_____ 2. Take overt steps, such as writing along with your students, to create a classroom culture of active literacy.

_____ 3. Provide frequent opportunities for students to write in all content areas.

PREWRITING ACTIVITIES

_____ 4. Involve students in writing projects based on their personal experiences, reading experiences, or class discussions.

_____ 5. Engage students in discussions and activities that clarify writing projects, generate ideas, and help in planning and organizing writing.

_____ 6. Provide models, including examples of other students' writing, to help guide your students' writing efforts.

DRAFTING ACTIVITIES

_____ 7. Provide opportunities for students to write in many forms (narratives, letters, reports, poems, and so on).

_____ 8. Provide opportunities for students to write for various *purposes* (to inform, entertain, persuade, explain, and so on) and various *audiences* (parents, peers, authors, public officials, and others).

_____ 9.* Provide students with specific criteria that they can use to guide their thinking and writing and that you use to provide feedback on the writing project.

REVISING AND EDITING ACTIVITIES

_____ 10. Model revising strategies (elaborating, sentence combining, eliminating unnecessary words or phrases, checking for sentence variety, and so on) that help students review and improve their writing.

_____ 11. Teach grammar and mechanical skills in relation to students' current writing experiences.

_____ 12. Encourage students to proofread their own work (checking for punctuation, capitalization, and spelling).

_____ 13. Encourage students to peer-edit each other's papers before they are finalized.

_____ 14. Involve students in maintaining a portfolio of their writing that they can review and use to develop new writing skills.

SHARING ACTIVITIES

_____ 15.* Encourage students to read their work out loud – to themselves and others – as part of the writing process.

_____ 16. Display or "publish" examples of high-quality writing.

_____ 17. Give writers positive, specific feedback on their work.

_____ 18. Conduct individual writing conferences with students.

_____ **Total Score**

*One of the Critical Four strategies

Developing a Creative Writing Program for the Elementary Grades. Gary B. Chadwell. Collins Education Associates LLC.

Interpreting Your Score

What does the survey tell me? Even before you total your score, a look at your survey provides some insights into your writing program. Since time is a valuable commodity in the classroom, your responses show you how you are using this scarce resource. The strategies you have rated as 4 or 5 are the "cornerstones" of your writing program because you are giving significant time to them. These are the strategies that drive your writing program.

The survey also shows you areas where you are giving little emphasis. These areas may not be emphasized in your classroom for any number of reasons. You may feel that they are not critical to your students' development as writers or that they are not appropriate for your students. Other low-rated strategies may be ones that you value but have not yet been able to effectively incorporate into your teaching.

What is a good score? Obviously, ss your score approaches 90 it means that you have rated virtually all of the 18 items at 4 or 5. Although these 18 items represent an excellent overview of effective writing practice, you may ask whether it is necessary to use all of them with great frequency to have an effective writing program. Your question is a common one that subsumes other, related questions: Can I do all these things regularly with the number of students I have? With my time constraints? With my curriculum demands?

So, what's the lowest score I could get and still have an effective writing program? A score in the 54-72 range is the basis for an effective writing program. A score higher than 72 would indicate that writing is already a prominent component of your classroom culture. A score lower than 54 (18 items multiplies by an average score of 3) could indicate that writing is not done often enough or that your writing instruction does not provide the kind of consistent focus students need to improve as writers. The strategies on this survey have little impact on improving students' writing when used randomly.

How do I use the survey to improve my writing program? In addition to looking at your overall score, you might want to look at your scores in the five sections of the survey – Program Values, Prewriting Activities, Drafting Activities, Revising and Editing Activities, and Sharing Activities. Do your scores in one or more sections seem noticeably higher or lower than scores in other sections?

In reviewing your scores in the five sections, don't overlook the fact that some of the strategies have benefits in several aspects of the writing process – not only the one in which it is categorized in the survey. A good example is item 15 (*Encourage students to read their work out loud – to themselves and others – as part of the writing process*) which is a strategy appropriate for drafting, revising and editing, as well as sharing. This is a critical strategy for young writers because it focuses attention on the overall quality of the written message rather than on the individual words. Its use is also beneficial in several stages of the writing process.

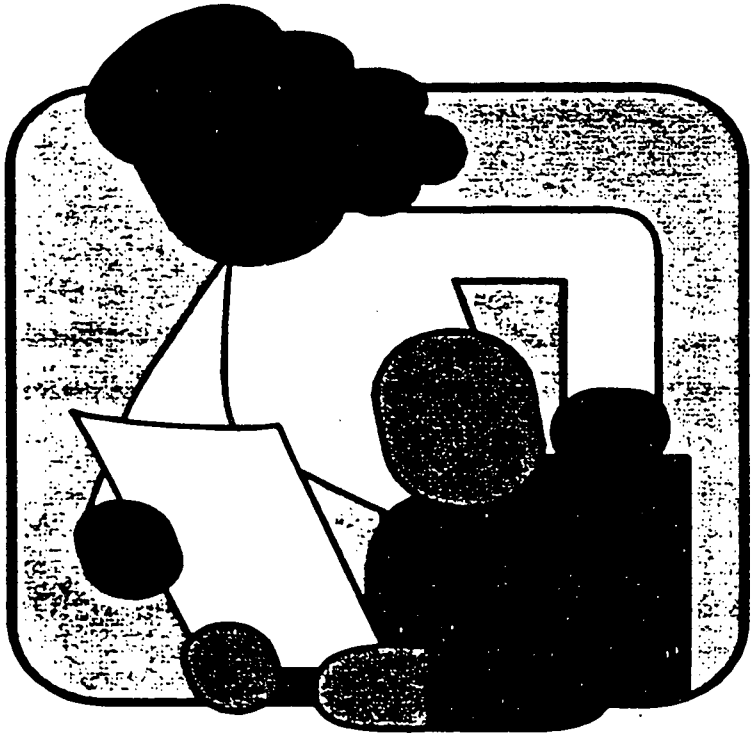
One way to use this survey is to consider carefully your scores on items 3, 9, 14, and 15 – the Critical Four strategies. I have identified these as the Critical Four strategies because high scores in these areas ensure that your writing program is headed in the right direction. It means that students are writing often, you are focusing your writing instruction, and you are showing students ways to be effective resources to themselves and others.

Making changes in any of these areas takes thought and effort, so avoid the temptation to change too many things at once. After reviewing your survey, choose two of the strategies that you feel would have the greatest impact on improving your students' writing and work on improving those. They may be two of the Critical Four or others that you think will benefit your students.

You may want to read more about the 18 strategies before you decide where to begin. Chapters 2-6 of this book focus on the strategies from the survey and Action Steps for each one. The remainder of the book looks at ways to use the Critical Four strategies to create an effective writing program for your young writers and provides some suggestions for communicating about your program to parents.

MATH
SECOND GRADE

Saxon Math
Saxon Math Grades 1-4
Whole Group Pacing
Saxon Grade Level Curriculum



SAXON MATH

Saxon Math grew out of a decade of intense classroom interaction with students in which the goal was for students to learn and remember the foundational skills of mathematics. The term "foundational" is appropriate because mathematics, perhaps more than any other subject, is a cognitive structure that builds upon prior learning. The ultimate height and stability of the mathematical structure within each individual are determined by the strength of the foundation. The text, as well as each book that precedes or follows, provides the student with the time and opportunities necessary to build a rock-solid foundation in beginning mathematics. For this to occur it is essential that all practice problems and all problem sets be completed by the students.

THE SAXON PEDAGOGY

Incremental development, continual review, and frequent, cumulative testing. There are three pillars of Saxon Mathematics.

- Incremental development means that concepts are taught in small, easily understood pieces that are presented in individual lessons over the course of the academic year.
- Once an increment has been taught, it is reviewed daily through worksheets and homework sets-a process called continual review. As concepts grow in complexity, earlier increments are included. Thus, all concepts and skills can be practiced on a daily basis without the homework sets becoming large and unwieldy. Over time, incremental development and continual review foster assimilation, mastery, and complete understanding of concepts and skills.
- Frequent, cumulative testing allows students to prove their mastery of skills before new concepts are introduced. Assessments encompass all concepts and skills that students have practiced.

SUCCESS WITH SAXON MATHEMATICS

There is considerable evidence from the educational community to suggest why Saxon's pedagogy of incremental development, continual review, and frequent, cumulative testing should be successful. What follows-support ranging from experimental studies to anecdotal evidence-suggests that this pedagogy is in fact successful.

Studies indicate that Saxon's Mathematics texts:

- can increase student test scores (Reed 1983; McBee 1984; Sistrunk and Benton 1992); Calvery, Bell, and Wheeler 1993; Rentschler 1994; Mayers 1995; Sanders 1997);
- can benefit students of low and average ability (Klingele and Reed 1984; Johnson and Smith 1987; Calvery, Bell, and Wheeler 1993);
- can lower math anxiety in students (Lafferty 1994);
- may help minority students narrow the math achievement gap (Sistrunk and Benton 1992); and
- are preferred (over traditional texts) by students and faculty (Johnson and Smith 1987 and Nguyen 1994a).

One of the most comprehensive studies of the effectiveness of Saxon textbooks was conducted between 1992 and 1994 by the Planning, Research, and Evaluation Department of the Oklahoma City public school system (Ngyuen 1994b). The study encompassed K-5 students in over three hundred classrooms using non-Saxon programs. Analysis of the 1994 ITBS scores for the Saxon students and a comparison group of the non-Saxon students revealed that:

Overall, the Saxon group scored higher than the comparison group of students in all comparisons. Five of these comparisons were statistically significant ($p<.01$): complete composite, total math, math concepts, problem solving, and reading comprehension. The other four comparisons also favored the Saxon group; however, the differences were not statistically significant: math computation, science, social studies, and total language.

Comments from teachers and administrators:

- *"The first four years (using Saxon) my class had the highest scoring on the state ISTEP test in Muncie, which has twelve elementary schools. Last year we were number one in problem solving in the city."* Mel Botkin, Retired Teacher, Muncie, IN
- *"Students are taking more math classes than ever before in the history of the school. In 1989 (before Saxon), we had about 30% of the student body in the math program. Today, almost the entire student body is involved."* Larry Cone, Teacher, Muskegon, MI
- *"I see improvement in retention of skills using Saxon at all levels. Often young people come into eighth grade believing they 'can't do math' and change their minds (after using) Saxon."* Cylinda Rucker, Teacher, Eagleville, MO
- *"Probably the most exciting thing about using Saxon this year was seeing students develop their ability to apply what they had already learned to new topics. Another tremendous benefit was no longer seeing the blank looks regarding topics covered earlier in the year."* Elizabeth A. Moody, Teacher, Hudson, NH
- *"All seventh-graders were tested before studying Saxon and scored in the range from 8th percentile to 97 percentile. Class average was 44th percentile. After one year of instruction using Saxon Algebra ½, the median score for the same students was 97th percentile."* Frederick H. Maas, Teacher, Santa Fe, NM
- *"Our math scores have dramatically improved. All of my teachers love the Saxon materials."* Mike Hanke, Principal, Green Bay, WI
- *"The special education students are catching up. Many no longer qualify for special education after two years of Saxon."* Marvin Miles, Teacher, Blackfoot, ID

Conclusion

The Saxon pedagogy has its roots in the classroom. It is a method that was developed specifically to improve long-term retention of concepts and skills. For twenty years, and with increasing refinement, the Saxon pedagogy has been applied to a range of subjects and grade levels. Because of its effectiveness and ease of use, tens of thousands of teachers across the United States and abroad have embraced the Saxon methodology, and millions of students have benefited from mathematics instruction based on incremental development, continual review, and cumulative testing.

SAXON MATH
GRADES 1-4

Introduction

Saxon's primary mathematics series is a "hands-on," success-oriented program that emphasizes manipulatives and mental math. The series addresses the multisensory approach to teaching and is designed for hetergeneously grouped children. Its use will enable all children to develop a solid foundation in the language and basic concepts of mathematics.

There are five components to Saxon's primary math program: The Meeting, The Lesson, Written Practice, Facts Practice, and Assessment.

1. The Meeting

Each day the children will participate in a beginning-of-the-day math activity called The Meeting. This is a comfortable and predictable routine that is repeated in every grade (K, 1, 2, 3, 4) at appropriate conceptual levels. It is important that The Meeting take place each day when all the children are present. At different times in different grades during The Meeting, the children practice skills related to time, temperature, money, counting, patterning, and problem solving. The language and activities in The Meeting develop as the year progresses and expand on those from the previous grade level. Initially, the teacher leads The Meeting; the children gradually assume this responsibility.

The focal point of The Meeting is the meeting board. It is not necessary to have a single board as long as all of the components are posted in view and within reach of all of the children. Each grade level has instructions in the teacher's manual describing the meeting board for that program. If possible, construct the meeting board in a place where children can sit in a semicircle in front of it.

At the beginning of the school year The Meeting may take longer than the recommended fifteen to twenty minutes. Both teacher and students will be adapting to this daily procedure, and as everyone becomes more familiar and comfortable with the routine, The Meeting will take less time. **Toward the middle of the year the teacher may choose to omit parts of The Meeting that the students have mastered** (except for once or twice a week as review) **so that the pace remains energetic and the content interesting.**

2. The Lesson

The Lesson usually occurs later in the day. During The Lesson, a new objective (increment) is introduced through a carefully selected group activity. Children use materials, engage in discussions, work in groups, and work together to help each other learn. Teachers should not expect children to perform beyond the difficulty level of the presented problems, nor should they worry if a child does not "catch on" during the first encounter with a concept. It is expected that the child will work on problems at the same level of difficulty for several days or weeks before proceeding to the next level of difficulty. The concept will be extended in subsequent Lessons.

In grades 1-4, four Lessons should be completed each week. The extra day of the week can be used for catching up or for math games or projects. The Meeting should take place on the extra day as well. The teacher can use The Meeting from the previous day (or any day that week) by changing the parts to reflect a new day. In weeks containing an Assessment, four Lessons (including the Assessment) should be completed. The Meeting script for the first day of the month also contains The Lesson for that day.

It is important that the teacher not become discouraged at the length of time it takes to complete a Lesson the first few months of the program.

Teachers who have completed an entire school year will assure you that it does get better. You will soon be able to look at a Lesson and decide whether to attempt it in one day or whether to divide it into two days. Don't forget that an extra day each week is built into the program! When dividing a Lesson, we recommend keeping the Facts Practice with The Lesson and doing the Written Practice the following day.

Notes on Manipulatives

Manipulatives are an integral part of the primary math program. Saxon Publishers sells a kit that supplies many of the manipulatives used in *Math K, Math 1, Math 2, Math 3,* and *Math 4*. You may prefer to shop at your local educational supply store or any educational catalog for math supplies. For a list of manipulatives by grade level, refer to the catalog or contact Saxon Publishers at (800) 284-7019.

Tip!

To keep lesson time to a minimum, always be aware of the time it takes to pass out and to collect manipulatives. You can distribute manipulatives in plastic baggies, baskets shared by two or three students, paper cups, or buckets. Items can be stored in the same containers used for distribution. Analysis of distribution procedures can sometimes help make a big different in the overall length of math time.

3. Written Practice

Individual Written Practice is a short practice of the new objective and includes a continual review of previously presented concepts. Written Practice is a part of every Lesson in grades 1-4. Children complete Side A of the Written Practice in class with the teacher's assistance. Side B, which mirrors the examples completed in class, is done at home. Children are encouraged to ask parents for help, if necessary, and to have them check their work. If children have answered a question incorrectly in class, help them correct their work before marking their papers. Children learn from the experience of correcting their mistakes, and it is important that they have the corrected paper to refer to as they complete their homework. Because the Written Practice is being used as a part of the initial learning experience rather than a reflection of what has already been learned, it is corrected but not graded.

4. Facts Practice

Children are presented with strategies to help them learn the number facts. They are encouraged to recall the facts through the use of pattern recognition. Children practice the facts orally and monitor their progress in grades 2, 3, and 4 with timed drills (Facts Practice sheets). Children do not compete against one another, but rather with their own past performance. It is expected that children will have automatic fact recall by the end of the third grade. Teachers might consider encouraging students to keep their own record of their scores on fact sheets. This recording helps the students track their own individual progress and promotes a sense of accomplishment.

It is important to practice number facts each day. Depending on the class time available, you may want to have the children practice together in pairs or you may want to practice with the class as a whole.

Facts Practice differs from grade to grade. Grade 1 children practice facts on untimed facts sheets. Prior to working on a fact sheet the students are given class time to practice using their fact cards. The students are encouraged to better their score each time they do a fact sheet.

In *Math 2* the fact sheets are timed. To encourage students, give the first Facts Practice in each series without timing or counting it. Remember that the time allotted can vary depending on the difficulty of the facts. Allow two minutes or a minute and a half instead of the prescribed one-minute limit when these assignments are first introduced. If the majority of the students are not very successful on the final round with a set of facts, use some group practice techniques, and then administer the sheet an extra time. The goal at the beginning of the year is for the students to complete at least fifteen problems correctly by the third time the fact sheet is worked.

The time limit for the fact sheets is reduced to 45 seconds in *Math 3*. Again, this time can be lengthened initially to help the students adjust to the exercise. Some of the strategies used in *Math 2* can also be applied in *Math 3* to encourage the students to excel.

5. Assessment

Oral and cumulative written Assessments are built into the program. Each Assessment questions children on skills that have been practiced for at least five Lessons. At grades 1-4, a written Assessment occurs after Lesson 10 and after every five Lessons thereafter. An oral Assessment occurs every ten Lessons. The oral Assessments are short, individual interviews that occur during independent working time and on the extra day that is built into the program. Each oral Assessment may be completed over a period of five days.

GENERAL ASSESSMENT

An available test booklet contains two forms of tests for every five Lessons. The second test form may be used for make-up testing. Tests should be given about five Lessons after the last concept has been taught. Thus Test 1, which covers topics from Lesson 1 through Lesson 5, should be given after Lesson 10. Test 2 should be given after Lesson 15, Test 3 after Lesson 20, and so on. This allows the students time to learn the new topic before being tested on it. Students will make excellent progress if they are able to score 80% or better on the tests. Students who fall below the 80% level should be given remedial attention immediately. Some teachers choose to test every ten Lessons using only the even-numbered or odd-numbered tests. This is an acceptable alternative to testing every five Lessons.

Stephen Hake
Temple City, California

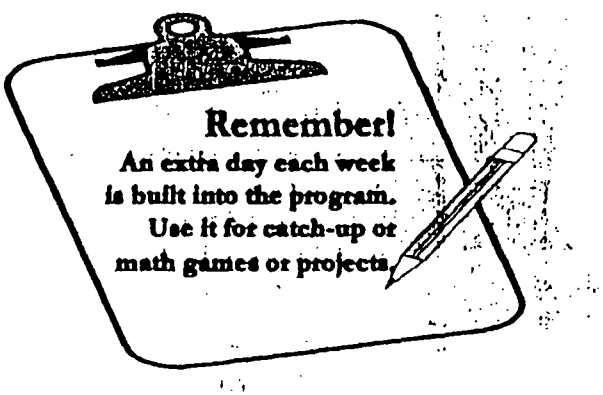
John Saxon
Norman, Oklahoma

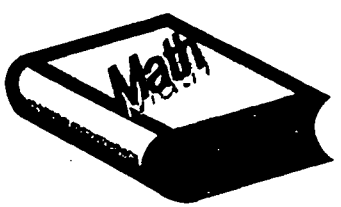
PACING WHOLE-GROUP INSTRUCTION

When teaching the Saxon program through whole-group instruction, pacing is key. It is important that each student have the opportunity to complete the entire textbook during the school year. The chart below offers guidance about the number of lessons that should be completed during each grading period.

SAXON PUBLISHING			SCHOOLS USING QUARTER/SEMESTER SYSTEM			
Edition	**Title**	**Total No.**	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
2nd	Math K*	112	1-28	29-56	57-84	85-112
2nd	Math Grade 1	130	1-32	33-65	66-97	98-130
2nd	Math Grade 2	132	1-35	35-70	71-100	101-132
2nd	Math Grade 3	140	1-35	35-70	71-105	106-140
2nd	Math Grade 4	140	1-35	36-70	71-105	106-140

** Does not include 5 lessons found in Meetings*





Saxon Mathematics Curriculum
Grade: 2

I. Patterns, Relationships, and Functions

Content Standard 1: Students recognize similarities and generalize patterns, use patterns to create models and make predictions, describe the nature of patterns and relationships and construct representations of mathematical relationships. (Patterns)

Objective	*Lessons/Methodology*
1. Recognize, describe and extend numerical and geometric patterns.	M 1-132 L 6, 7, 9, 10, 17, 50, 75, 76, 91, 110
2. Represent and record patterns and relationships in a variety of ways, including tables, charts, and pictures.	M 1-132 L 2, 9, 10, 11, 16, 20, 29, 35, 39, 50, 51, 88, 114, 120, 130
3. Use patterns to describe real-world phenomena.	M 1-132 L 6, 7, 9, 10, 11, 20
4. Explore various types of numeric and geometric patterns (repeating, growing, shrinking).	M 1-132 L 6, 7, 9, 10, 17, 50, 75, 76, 84, 91, 110
5. Apply their experiences with patterns to help solve problems and explore new content.	M 1-132 L 6, 7, 9, 10, 11, 17, 50, 75, 76, 84, 91, 110

Content Standard 2: Students describe the relationships among variables, predict what will happen to one variable as another variable is changed, analyze natural variation and sources of variability, and compare patterns of change. (Variability and Change)

Objective	*Lessons/Methodology*
1. Recognize change and variability when it occurs in a variety of settings.	L 23, 30, 40, 48, 57, 70, 80, 90, 110
2. Recognize that change is often predictable, but variable, and that patterns emerge that help to describe the change.	L 23, 30, 40, 48, 57, 70, 80, 90, 110
3 Explore change, and realize that changes are frequently interdependent.	L 23, 30, 40, 48, 57, 70, 80, 90, 110
4 Use tables, charts, open sentences, and hands-on models to represent change and variability	M 1-132 L 2, 9, 10, 11, 16, 20, 29, 35, 39, 50, 51, 88, 114, 120, 130
5 Begin to describe and differentiate between types of relationships, especially repeating, growing, and shrinking patterns.	M 1-132 L 6, 7, 9, 10, 17, 50, 75, 76, 84, 91, 110
6 Explore variability and change in a variety of contexts, investigations and problems	L 23, 40, 48, 57, 70, 80, 90, 110

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Saxon Mathematics Curriculum
Grade: 2

II. Geometry and Measurement

Content Standard 1: Students develop spatial sense, use shapes as an analytic and descriptive tool, identify characteristics and define shapes, identify properties and describe relationships among shapes. (Shape and Shape Relationships)

Objective	*Lessons/Methodology*
1. Recognize and name familiar shapes in one, two, and three dimensions, such as lines, rectangles and spheres and informally discuss the shape of a graph.	L 16, 18, 30, 32, 39, 40, 51, 52, 55, 57, 60, 70, 74, 80, 103, 105, 113, 115, 122, 125
2. Describe the attributes of familiar shapes.	L 18, 30, 40, 51, 60, 70, 80, 103
3. Compare, sort, and classify familiar shapes.	L 18, 30, 40, 51, 60, 70, 80, 103
4. Draw and build familiar shapes.	L 57, 60, 70, 80
5. Explore ways to combine, dissect, and transform shapes.	L 24, 34, 52, 57, 80, 90, 110
6. Recognize parallel and perpendicular line segments and figures that have similarity and/or congruence.	L 60, 115, 125
7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	L 16, 18, 30, 32, 39, 40, 51, 52, 55, 57, 60, 70, 74, 80, 103, 105, 113, 115, 122, 125

Content Standard 2: Students identify locations of objects, identify location relative to other objects, and describe the effects of transformations (e.g., sliding, flipping, turning, enlarging, reducing) on an object. (Position)

Objective	*Lessons/Methodology*
1. Locate and describe objects in terms of their position, including front, back, inside, outside, right, left, over, under, next to, between and locations on the number line, on a coordinate graph and on a map.	L 2, 55
2. Locate and describe objects in terms of their orientation, direction and relative position, including up, down, front, back, N-S-E-W, flipped, turned, translated; recognize symmetrical objects and identify their lines of symmetry.	L 52
3. Explore what happens to the size, shape, and position of an object after sliding, flipping, turning, enlarging, or reducing it.	L 24, 34, 52, 55, 57, 80, 90, 110
4 Use concepts of position, direction, and orientation to describe the physical world and to solve problems.	L 16, 18, 30, 32, 39, 40, 51, 52, 55, 57, 60, 70, 74, 80, 103, 105, 113, 115, 122, 125

Content Standard 3 : Students compare attributes of tow objects, or of one object with a standard (unit), and analyze situations to determine what measurement(s) should be made and to what level of precision. (Measurement)

Objective	*Lessons/Methodology*
1 Compare attributes of objects; develop standard units of measurement; and select and use standard tools for measurement.	M 4-132 L 22, 37, 40, 46, 55, 56, 57, 69, 84, 94, 100, 105, 112, 113, 117
2 Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time, temperature, and money	M 4-132 L 22, 37, 40, 46, 55, 56, 57, 69, 84, 94, 100, 105, 112, 113, 117
3 Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is a "good estimate."	L 86

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Saxon Mathematics Curriculum
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4. Explain the meaning of measurements and recognize that the number of units it takes to measure an object is related to the size of the unit.	L 37, 46, 56, 69, 84, 94, 100, 105, 112
5. Explore scale drawings, models, and maps and relate them to measurement of real objects.	L 22, 37, 40, 46, 48, 55, 56, 57, 69, 84, 94, 100, 105, 112, 113, 117
6. Apply measurement to describe the real world and to solve problems.	L 22, 37, 40, 46, 48, 55, 56, 57, 69, 84, 94, 100, 105, 112, 113, 117

III. Data Analysis and Statistics

Content Standard 1: Students collect and explore data, organize data into a useful form, and develop skill in representing and reading data displayed in different formats. (Collection, Organization, Presentation of Data)

Objective	*Lessons/Methodology*
1. Collect and explore data through counting, measuring, and conducting surveys and experiments.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
2. Organize data using concrete objects, pictures, tallies, tables, charts, diagrams, and graphs.	M 1-132 L 2, 16, 29, 31, 51, 79, 88, 114, 120, 127, 130
3. Present data using a variety of appropriate representations and explain the meaning of the data.	L 2, 16, 29, 31, 51, 79, 88, 114, 120, 127, 130
4. Identify what data are needed to answer a particular question or solve a given problem, and design and implement strategies to obtain, organize, and present those data.	L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130

Content Standard 2: Students examine data and describe characteristics of a distribution, relate data to the situation from which they arose, and use data to answer questions convincingly and persuasively. (Description and Interpretation)

Objective	*Lessons/Methodology*
1. Read and explain data they have collected and organized themselves and progress to reading data from other sources.	L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130
2 Describe the shape of the data using informal language.	L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130
3 Draw, explain, and justify conclusions, such as trends, based on data.	L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130
4 Raise and answer questions about the source, collection, organization, and presentation of data, as well as the conclusions drawn from the data; explore biases in the data.	M 1-132 L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130
5 Formulate questions and problems and gather and interpret data to answer those questions	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120

Content Standard 3 Students draw defensible inferences about unknown outcomes, make predictions, and identify the degree of confidence they have in their predictions. (Inference and Prediction)

Objective	*Lessons/Methodology*
1 Make and test hypothesis	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120

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2. Conduct surveys, samplings, and experiments to solve problems and answer questions of interest to them.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
3. Formulate and communicate arguments and conclusions based on data and evaluate their arguments and those of others.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
4. Make and explain predictions based on data.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
5. Make predictions to answer questions and solve problems.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120

IV. Number Sense and Numeration

Content Standard 1: Students experience counting and measuring activities to develop intuitive sense about numbers, develop understanding about properties of numbers, understand the need for and existence of different sets of numbers, and investigate properties of special numbers. (Concepts and Properties of Numbers)

Objective	*Lessons/Methodology*
1. Develop an understanding of whole numbers and read, write, and count using whole numbers; investigate basic concepts of fractions and decimals.	L 5, 8, 17, 19, 31, 34, 38, 39, 41, 54, 65, 78, 81
2. Investigate and develop an understanding of the base-10 place-value system.	L 5, 35, 38, 86, 89, 118
3. Develop an understanding of the properties of numbers (e.g., order) and of the properties of the special numbers 0 and 1.	L 5, 8, 9, 13, 17, 19, 31, 34, 38, 39, 41, 49, 54, 65, 78, 81, 99
4. Apply their understanding of number systems to model and solve problems.	L 5, 8, 9, 11, 13, 17, 19, 21, 23, 27, 33, 34, 35, 38, 39, 41, 47, 49, 54, 58, 65, 78, 81, 89, 99, 116, 119, 123, 126

Content Standard 2: Students recognize that numbers are used in different ways such as counting, measuring, ordering and estimating, understand and produce multiple representations of a number, and translate among equivalent representations. (Representation and Uses of Numbers)

Objective	*Lessons/Methodology*
1 Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations.	L 5, 8, 17, 19, 31, 34, 38, 39, 41, 54, 65, 78, 81
2 Explore and recognize different representations for the same number and explain why they are the same.	L 5, 8, 17, 19, 31, 34, 38, 39, 41, 54, 65, 78, 81
3 Investigate ways numbers are used (e.g., counting, ordering, naming, locating, measuring)	L 5, 8, 17, 19, 31, 34, 38, 39, 41, 54, 65, 78, 81
4 Develop strategies for estimating quantity and evaluate the reasonableness of their estimates.	L 86
5 Select appropriate numbers and representations in order to solve problems	L 8, 11, 23, 82, 86, 123, 126

Content Standard 3: Students investigate relationships such as equality, inequality, inverses, factors, and multiples, and represent and compare very large and very small numbers. (Number Relationships)

Objective	*Lessons/Methodology*
1 Compare and order numbers using "equal," "less than," or "greater than"	L 2, 102
2 Use part-whole relationships to explore numbers, develop number concepts, and understand computation	L 19, 34, 41

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3. Classify numbers as even or odd and explore concepts of factors and multiples.	L 96, 97
4. Apply their understanding of number relationships in solving problems.	L 8, 11, 23, 82, 86, 123, 126

V. Numerical and Algebraic Operations and Analytical Thinking

Content Standard 1: Students understand and use various types of operations (e.g. addition, subtraction, multiplication, division) to solve problems. (Operations and their Properties).

Objective	*Lessons/Methodology*
1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to standard symbolic expressions and algorithms.	L 4, 9, 13, 21, 26, 27, 33, 42, 45, 49, 53, 58, 64, 66, 67, 68, 71, 72, 73, 75, 76, 83, 85, 87, 89, 92, 95, 99, 101, 104, 106, 107, 108, 124, 132
2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil, or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation.	L 4, 9, 13, 21, 26, 27, 33, 42, 45, 49, 53, 58, 64, 66, 67, 68, 71, 72, 73, 75, 76, 83, 85, 87, 89, 92, 95, 99, 101, 104, 106, 107, 108, 124, 132
3. Explore properties of operations (e.g. Commutative and distributive properties) and give examples of how they use those properties.	L 4, 9, 13, 21, 26, 27, 33, 42, 45, 49, 53, 58, 64, 66, 67, 68, 71, 72, 73, 75, 76, 83, 85, 87, 89, 92, 95, 99, 101, 104, 106, 107, 108, 124, 132
4. Apply operations efficiently and accurately in solving problems.	L 4, 9, 13, 21, 26, 27, 33, 42, 45, 49, 53, 58, 64, 66, 67, 68, 71, 72, 73, 75, 76, 83, 85, 87, 89, 92, 95, 99, 101, 104, 106, 107, 108, 124, 132

Content Standard 2: Students analyze problems to determine an appropriate process for solution and use algebraic notations to model or represent problems. (Algebraic and Analytic Thinking)

Objective	*Lessons/Methodology*
1. Write and solve open sentences (e.g., + = 5) and write stories to fit the open sentence.	L 33
2. Explore algebraic concepts with manupulatives such as balance scales, tables of input and output, and pictorial representations of problems.	L 33
3 Find replacements for the variable(s) in open sentences.	L 33
4 Use analytic thinking to describe situations and solve problems.	L 2, 16, 29, 31, 46, 51, 56, 59, 62, 69, 74, 79, 88, 94, 100, 105, 112, 114, 120, 127, 130

VI. Probability and Discrete Mathematics

Content Standard 1: Students develop an understanding of the notion of certainty and of probability as a measure of the degree of likelihood that can be assigned to a given event based on the knowledge available , and make critical judgements about claims that are made in probabilistic situations. (Probability)

Objective	*Lessons/Methodology*
1 Explain the difference between chance and certainty and give examples to illustrate their understanding.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
2 Compare events and describe them as "more likely" or "less likely" and use the language of fractions to describe simple probabilities.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120

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3. Conduct experiments with concrete objects to explore concepts and develop an intuitive understanding of how the conditions of the experiment can affect the outcome.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
4. Conduct experiments, record the outcomes, examine thsoe outcomes to determine if they make sense, and search for explanations of the outcomes.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120
5. Conduct probability experiments and simulations to model and solve problems.	L 16, 29, 31, 37, 46, 51, 56, 59, 62, 69, 74, 94, 100, 105, 112, 114, 120

Content Standards 2: Students investigate practical solutions such as scheduling, routing, sequencing, networking, organizing and classifying, and analyze ideas like recurrence relations, induction, iteration, and algorithm design. (Discrete Mathematics)

Objective	***Lessons/Methodology***
1. Use manipulatives and diagrams to explore problems involving counting and arranging objects.	L 5, 7, 8, 11, 14, 81, 91, 93, 117
2. Explore sets and set relationships by sorting and classifying objects.	L 10, 30, 40, 57, 60, 70, 80, 96, 97, 103
3. Explore situations in which they model and trace paths using figures consisting of vertices connected by edges.	L 121, 122, 125
4. Explore now-next patterns.	M 1-132 L 6, 7, 9, 10, 17, 50, 75, 76, 84, 91, 110
5. Explore develop, and invent their own algorithms to accomplish a task or to solve numerical problems.	L 75, 76
6. Use discrete mathematics concepts described above to model situations and solve problems: and look for whether or not there is a solution (existence problems), determine how many solutions there are (counting problems), and decide upon a best solution (optimizing problems)	L 5, 8, 9, 11, 13, 17, 19, 21, 23, 27, 33, 34, 35, 38, 39, 41, 47, 49, 54, 58, 65, 78, 81, 89, 99, 116, 119

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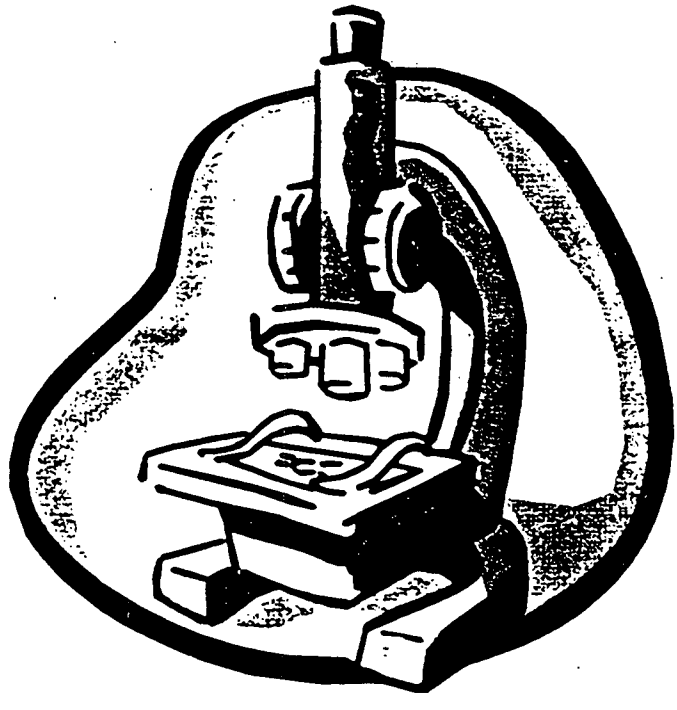
SCIENCE
SECOND GRADE

NHA Science Philosophy
Content Standards and Objectives
Science Objective Summaries/Links
Grade Level Schedule
The Teaching of Origins



NHA SCIENCE PHILOSOPHY

National Heritage Academies believes in excellence in science education. Our curriculum is based on:

NHAGOSE Standards (National Heritage Goals and Objectives for Science Education)
Nhagose standards are the state requirements of what all students need to know and be able to do in the subject of Science. A state standardized assessment tool is used to provide feedback on how well the objectives have been covered. Our curriculum has been carefully aligned so as to cover these objectives and skills consistently throughout all grades.

Core Knowledge (content objectives)
The Core Knowledge Sequence represents a first and ongoing attempt to state specific core knowledge that children should learn. It is designed to encourage steady academic progress as children build their knowledge from one year to the next. Core Knowledge objectives cover much of the same information as the state standards, thus, they are not listed twice. For those objectives/units that are specific to Core Knowledge, they are labeled as such and should be covered when possible. It is National Heritage Academies' goal for the Core Knowledge to account for approximately 50% of the science curriculum.

NHA teachers play significant role in the creation of our science curriculum. Besides the extensive work of our science specialist, Randy Creswell, many teachers have contributed time and effort into writing units and/or committee work where much of our information such as experiment tables were compiled.

Our teachers plan their lessons using the content objectives and lesson ideas presented in the binder. Principals will provide the materials and resources needed to accompany the plans.

SCIENTIFICALLY LITERATE STUDENTS KNOW HOW TO...USE KNOWLEDGE...
TO ENGAGE IN ACTIVITIES...IN REAL-WORLD CONTEXTS.

I. CONSTRUCT NEW SCIENTIFIC AND PERSONAL KNOWLEDGE	
Content Standard 1: All students will ask questions that help them learn about the world; design and conduct investigations using appropriate methodology and technology; learn from books and other sources of information; communicate their findings using appropriate technology; and reconstruct previously learned knowledge. (Constructing New Scientific Knowledge)	
Objective	**Lessons/Methodology**
1. Generate reasonable questions about the world based on observation.	C1
2. Develop solutions to unfamiliar problems through reasoning, observation, and/or experiment.	C2
3. Manipulate simple mechanical devices and explain how they work.	C3
4. Use simple measurement devices to make metric measurement.	C4
5. Develop strategies and skills for information gathering and problem solving.	C5
6. Construct charts and graphs and prepare summaries of observations.	C6
II. REFLECT ON THE NATURE, ADEQUACY AND CONNECTIONS ACROSS SCIENTIFIC KNOWLEDGE	
Content Standard 2: All students will analyze claims for their scientific merit and explain how scientists decide what constitutes scientific knowledge; how science is related to other ways of knowing; how science and technology affect our society; and how people of diverse cultures have contributed to and influenced developments in science. (Reflecting on Scientific Knowledge)	
Objective	**Lessons/Methodology**
1. Develop an awareness of the need for evidence in making decisions scientifically.	R1
2. Show how science concepts can be interpreted through creative expression such as language arts and fine arts.	R2
III. USING SCIENTIFIC KNOWLEDGE IN LIFE SCIENCE	
Content Standard 1: All students will apply an understanding of cells to the functioning of multicellular organisms; and explain how cells grow, develop, and reproduce.	
Objective	**Lessons/Methodology**
1. Describe cells as living systems.	LC 1
Content Standard 2: All students will use classification systems to describe groups of living things; compare and contrast differences in the life cycles of living things; investigate and explain how living things obtain and use energy; and analyze how parts of living things are adapted to carry out specific functions.	
Objective	**Lessons/Methodology**
1. Compare and classify familiar organisms on the basis of observable physical characteristics.	LO 1

ELEMENTARY SCIENCE CONTENT STANDARDS

2. Describe vertebrates in terms of observable body parts and characteristics.	LO 2
3. Describe life cycles of familiar organisms.	LO 3
4. Compare and contrast food, energy, and environmental needs of similar organisms.	LO 4
5. Explain how physical and / behavioral characteristics of organisms help them to survive in their environment.	LE 2
6. Describe functions of selected seed plant parts.	LO 5
Content Standard 3: All students will investigate and explain how characteristics of living things are passed on through generations; explain why organisms within a species are different from one another; and explain how new traits can be established by changing or manipulating genes.	
Objective	**Lessons/Methodology**
1. Give evidence that characteristics are passed from parents to young.	LH 1
Content Standard 4: All students will explain how scientists construct and scientifically test theories concerning the origin of life and evolution of species; compare ways that living organisms are adapted (suited) to survive and reproduce in their environments; and analyze how species changes through time.	
Objective	**Lessons/Methodology**
1. Explain how fossils provide evidence about the nature of ancient life.	LE 1
2. Explain how physical and / or behavioral characteristics of organisms help them to survive in their environments	LE 2
Content Standard 5: All students will explain how parts of an ecosystem are related and how they interact; explain how energy is distributed to living things in an ecosystem; investigate and explain how communities of living things change over a period of time; describe how materials cycle through an ecosystem and get reused in the environment; and analyze how humans and the environment interact.	
Objectives	**Lessons/Methodology**
1. Identify familiar organisms as part of a food chain or food web and describe their feeding relationships within the web	LEC 1
2. Explain common patterns of interdependence and interrelationships of living things.	LEC 2
3. Describe the basic requirements for all living things to maintain their existence.	LEC 3
4. Describe systems that encourage growing of particular plants and animals.	LEC 4
5. Describe positive and negative effects of humans on the environment.	LEC 5

IV. USING SCIENTIFIC KNOWLEDGE IN PHYSICAL SCIENCE	
Content Standard 1: All students will measure and describe the things around us; explain what the world around us is made of; identify and describe forms of energy; and explain how electricity and magnetism interact with matter.	
Objective	**Lessons/Methodology**
1. Classify common objects according to observable attributes.	PME 1
2. Measure weight, dimensions, and temperature of appropriate objects and materials.	PME 2
3. Identify properties of materials that make them useful.	PME 3
4. Identify forms of energy associated with common phenomena.	PME 4
5. Describe the interaction of magnetic materials with other magnetic materials and non-magnetic materials.	PME 5
6. Describe the interaction of charged materials with other charged or uncharged materials.	PME 6
7. Describe possible electrical hazards to be avoided at home and at school.	PME 7
Content Standard 2: All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules; and how changes in matter are related to changes in energy.	
Objective	**Lessons/Methodology**
1. Describe common physical changes in matter (size, shape, melting, freezing, dissolving).	PCM 1
2. Prepare mixtures and separate them into their component parts.	PMC 2
3. Construct simple objects that fulfill a technological purpose.	PMC 3
Content Standard 3: All students will describe how things around us move and explain why things move as they do; demonstrate and explain how we control the motions of objects; and relate motion to energy and energy conversions.	
Objects	**Lessons/Methodology**
1. Describe or compare motions of common objects in terms of speed and direction.	PMO 1
2. Describe how forces (pushes or pulls) speed up, slow down, stop, or change the direction of a moving object.	PMO 2
3. Use simple machines to make work easier.	PMO 3
Content Standard 4: All students will describe sounds and sound waves; explain shadows, color, and other light phenomena; measure and describe vibrations and waves; and explain how waves and vibrations transfer energy.	
Objectives	**Lessons/Methodology**
1. Describe sound in terms of its properties.	PWV 1
2. Explain how sounds are made.	PWV 2
3. Describe light from a source in terms of its properties.	PWV 3

ELEMENTARY SCIENCE CONTENT STANDARDS

4. Explain how light illuminates objects.	PWV 4
5. Explain how shadows are made.	PWV 5
V. USING SCIENTIFIC KNOWLEDGE IN EARTH SCIENCE	
Content Standard 1: The Geosphere. All students will describe the earth's surface; describe and explain how the earth's features change over time; and analyze effects of technology on the earth's surface and resources.	
Objective	**Lessons/Methodology**
1. Describe major features of the earth's surface.	EG 1
2. Recognize and describe different types of earth materials.	EG 2
3. Explain how rocks and fossils are used to understand the history of the earth.	EG 3
4. Describe the natural changes in the earth's history.	EG 4
5. Describe uses of materials taken from the earth.	EG 5
6. Demonstrate means to recycle manufactured materials and a disposition towards recycling.	EG 6
Content Standard 2: The Hydrosphere. All students will demonstrate where water is found on earth; describe the characteristics of water and how water moves; and analyze the interaction of human activities with the hydrosphere.	
Objective	**Lessons/Methodology**
1. Describe how water exists on the earth in three states.	EH 1
2. Describe various forms that water takes on the earth's surface and conditions under which they could exist.	EH 2
3. Trace the path that rain water travels after it falls.	EH 3
4. Describe how rainwater in Michigan reaches the ocean.	EH 4
5. Identify sources of drinking water.	EH 5
6. Identify uses for water.	EH 6
7. Describe the origins of pollution in the hydrosphere.	EH 7
Content Standard 3: The atmosphere and weather. All students will investigate and describe what makes up weather and how it changes from day to day, from season to season and over long periods of time; explain what causes different kinds of weather; and analyze the relationships between human activities and the atmosphere.	
Objective	**Lessons/Methodology**
1. Describe the atmosphere.	EAW 1
2. Describe weather conditions and climate.	EAW 2
3. Describe seasonal changes in weather.	EAW 3
4. Explain appropriate safety precautions during severe weather	EAW 4

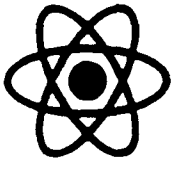
Content Standard 4: The Solar System, Galaxy, and Universe. All students will compare and contrast our planet and sun to other planets and star systems; describe and explain how objects in the solar system move; explain scientific theories as to the origin of the solar system; and explain how we learn about the universe.	
Objective	**Lesson/Methodology**
1. Describe the sun, moon, and earth.	ES 1
2. Describe the motions of the earth and moon around the sun.	ES 2

Science Objective Summaries and their Links:

EAW	Earth Science	Atmosphere and Weather
EG	Earth Science	Geosphere
EH	Earth Science	Hydrosphere
ES	Earth Science	Space

LC	Life Science	Cells
LE	Life Science	Evolution
LEC	Life Science	Ecosystems
LH	Life Science	Heredity
LO	Life Science	Living Organisms

PCM	Physical Science	Changes in Matter
PME	Physical Science	Matter and Energy
PMO	Physical Science	Motion of Objects
PWV	Physical Science	Waves (Sound, Light, Pendulae)



RECOMMENDED SCIENCE SCHEDULE
GRADE TWO

SEP		
Sep 4	PCM 3	Scientific Method and small projects
Sep 10	LO 1	Classifying Organisms
Sep 17	LO 1	Classifying Organisms
Sep 24	LO 2	Vertebrates
OCT		
Oct 1	LO 3	Life Cycles
Oct 8	LO 4	Needs of Organisms
Oct 15	LO 5	Plants
Oct 22	LO 5	Plants
Oct 29	LEC 1	Foodweb/foodchain
NOV		
Nov 5	PT Conf.	Catch-up
Nov 12	LEC 2	Ecological Relationships (Predator prey/symbiotic)
Nov 19	Holiday	Catch-up
Nov 26	LEC 4	Succession
DEC		
Dec 3	LH 1	Heredity
Dec 10	LC 1	Cells
Dec 17	Holiday	Catch-up
JAN		
Jan 3	PME 1	Classifying Matter
Jan 7	PME 1	Classifying Matter
Jan 14	PME 4	Energy
Jan 21	PME 4	Energy
Jan 28	PCM 1	Physical Changes
FEB		
Feb 4	PCM 2	Separating Mixtures
Feb 14		Catch-up
Feb 18	PWV 1 PWV 2	Sound
Feb 25	PWV1 PWV2	Sound
MAR		
Mar 4	PWV 3 PWV 4 PWV5	Light
Mar 11	PWV 3 PWV 4 PWV5	Light
Mar 18	PWV 3 PWV 4 PWV5	Light
Mar 25	Holiday	Catch-up
APRIL		
April 8	EAW 1	Atmosphere
April 15	EAW 1	Atmosphere
April 22	EAW 2	Weather and Climate
April 29	EAW 2	Weather and Climate
MAY		
May 6	EAW 3 EAW 4	Seasonal Changes. Earth's Tilt
May 13	PMO 1	Motion
May 20	PMO 2	Force
May 27	PMO 3	Work and machines
JUNE		
June 5	Science Project	Build a machine

The Teaching of Origins
National Heritage Academies

National Heritage Academies recognizes that the teaching of origins is a topic that generates passionate debate because it touches deeply at the core of many people's strongly held beliefs. In no way does NHA seek to undermine the beliefs held by each family unit within our schools. Rather, we support the parents' rights to instruct their children on these topics.

At the same time, National Heritage Academies is required to teach according to state standards. NHA is committed to teaching the state's educational objectives in each state in which we are granted a charter. To that end, NHA has a system of objectives called NHAGOSE Standards (National Heritage Academies Goals of Science Education) that are based on Michigan state standards and have been expanded to include those of other states as well as the Core Knowledge Sequence. These NHAGOSE Standards have been approved state by state with our charters as meeting or exceeding state standards.

In teaching science at the elementary and middle school levels, NHA is committed to four teaching strategies. These are:

1. teaching basic facts;
2. teaching science skills (making graphs and tables, measuring, etc.);
3. teaching science models and their limitations;
4. teaching thinking skills to combine all the above into a coherent view of the universe.

The Core Knowledge Sequence focuses on points one and two above. Different state standards are blends of the four areas. Our NHAGOSE Standards have been written to implement these ideas in a way that covers all domains of science in age-appropriate ways.

Objective Standards

The attached appendices are a complete description of the three objectives related to evolution. The summarized objectives are:

- LE 1 - Explain how fossils provide evidence about the nature of ancient life.
- LE 2 - Explain how physical and/or behavioral characteristics of organisms help them to survive in their environments.
- LE 3 - Describe how biologists might trace possible evolutionary relationships among present and past life forms.

Note: LE 1 and LE 2 are elementary objectives and LE 3 is a middle school objective.

Philosophies, Ideology and Religion

It is required that all National Heritage Academies' schools teach science. The teaching of science necessitates teaching to objectives. In the process of teaching these objectives, we:

- teach basic facts;
- teach science skills (make graphs and tables, measurement...);
- teach science models and their limitations;
- teach thinking skills to combine all the above into a coherent view of the universe.

We do not teach any particular philosophy, ideology and/or religion that are not stated in our objectives.

We do not teach ideology or naturalistic religion. To the extent that evolution is concerned with fossils (and deductions from them), adaptations of plants and animals to environments, we teach these as testable, observable domains in which we legitimately practice scientific inquiry. In LE 3 we recognize evolution to be a working tool of the life sciences, which all students, regardless of their belief structures, should understand. Note that this objective does not insist that all biologists are evolutionists, mandate that evolutionary relationships are facts and laws like Newtonian Mechanics, or require that anyone believe the evolutionary relationships. The objective does require that we teach all students to understand how some biologists have reached certain conclusions.

Each of the listed objectives is tied in our curriculum to a related body of knowledge. LE 1 is tied to geology and is integrated with geology units. LE 2 is tied to the study of living organisms, their character and diversity. LE 3 is taught with units on cell biology and heredity. The result is that we are teaching science, of which these objectives are a part.

We do not teach creationism or scientific creationism. We do not have any labeled objectives for creationism. There are matters on which some scientific creationists will focus such as erosion (dealt with in EG 4, EG 10, EH 2 and EH 6) or density (PME 8). These topics are taught, but as issues of science, not as issues of creationism.

In all of our teaching, we are helping students both develop and critique models of the universe, recognizing that models have value in helping us to think, plan, and make conclusions. We also seek to help students recognize that models are simplifications of reality and are thus always subject to the limitations of our finite minds.

HISTORY/GEOGRAPHY
SECOND GRADE

Grade Level Schedule

Core Knowledge Objectives

The Core Democratic Values Grades K-4

The Core Democratic Values Grades 5-8

General Resources for Classroom Kits
(Perma-Bound Publications)

Geography Resources for Classroom Kits
(Debby and Company)

History/Geography Recommended Schedule
Grade 2
***Economics should be taught in conjunction with listed units**

Month	Unit
August/September	**Geography** (Spatial Sense; Geographical Terms & Features)
Week 1	
Week 2	**Geography of the Americas** (North America; South America)
Week 3	
Week 4	
October	
Week 5	**American Government: The Constitution**
Week 6	**The War of 1812**
Week 7	
Week 8	**Westward Expansion** (Pioneers Head West; Native Americans)
November	
Week 9	
Week 10	
Week 11	
Week 12	
December	
Week 13	**Early Civilizations: Asia** (Geography of Asia; India)
Week 14	
Week 15	
January	
Week 16	(China)
Week 17	
Week 18	**Modern Civilization and Culture Japan** (Geography; Culture)
Week 19	
February	
Week 20	**Westward Expansion** (Civil War)
Week 21	
Week 22	
Week 23	
March	
Week 24	**Immigration and Citizenship**
Week 25	
Week 26	**Symbols and Figures**
Week 27	
April	
Week 28	**Civil Rights**
Week 29	
Week 30	
May	
Week 31	**Ancient Greece**
Week 32	
Week 33	
Week 34	
June	

History and Geography: Grade 2

WORLD HISTORY AND GEOGRAPHY

I. Geography

A. SPATIAL SENSE (working with maps, globes, and other geographic tools)

- Name your continent, country, state, and community
- Understand that maps have keys or legends with symbols and their uses
- Find directions on a map: east, west, north, south
- Identify major oceans: Pacific, Atlantic, Indian, Arctic
- The seven continents: Asia, Europe, Africa, North America, South America, Antarctica, Australia
- Locate: Canada, United States, Mexico, Central America
- Locate: the Equator, Northern Hemisphere and Southern Hemisphere, North and South Poles

B. GEOGRAPHICAL TERMS AND FEATURES

- Coast, valley, prairie, desert, oasis

II. Early Civilizations: Asia

A. GEOGRAPHY OF ASIA

- The largest continent, with the most populous countries in the world
- Locate: China, India, Japan

B. INDIA

- Indus River and Ganges River
- Hinduism
  - Brahma, Vishnu, Shiva
  - Many holy books, including the Rig Veda
- Buddhism
  - Prince Siddhartha becomes Buddha, "the Enlightened One"
  - Buddhism begins as an outgrowth of Hinduism in India, and then spreads through many countries in Asia
  - King Asoka (also spelled Ashoka)

C. CHINA

- Yellow (Huang He) and Yangtze (Chang Jiang) Rivers
- Teachings of Confucius (for example, honor your ancestors)
- Great Wall of China
- Invention of paper
- Importance of silk
- Chinese New Year

III. Modern Civilization and Culture: Japan

A. GEOGRAPHY

- Locate relative to continental Asia: "land of the rising sun"
- A country made up of islands; four major islands
- Pacific Ocean, Sea of Japan
- Mt. Fuji
- Tokyo

B. CULTURE

- Japanese flag
- Big modern cities, centers of industry and business
- Traditional craft: origami
- Traditional costume: kimono

IV. Ancient Greece

- Geography: Mediterranean Sea and Aegean Sea, Crete
- Sparta
- Persian Wars: Marathon and Thermopylae
- Athens as a city-state: the beginnings of democracy
- Olympic games
- Worship of gods and goddesses
- Great thinkers: Socrates, Plato, and Aristotle
- Alexander the Great

AMERICAN HISTORY AND GEOGRAPHY

I. American Government: The Constitution

- American government is based on the Constitution, the highest law of our land
- James Madison, the "Father of the Constitution"
- Government by the consent of the governed: "We the people"

II. The War of 1812

- President James Madison and Dolley Madison
- British impressment of American sailors
- Old Ironsides
- British burn the White House
- Fort McHenry, Francis Scott Key, and "The Star-Spangled Banner"
- Battle of New Orleans, Andrew Jackson

III. Westward Expansion

A. PIONEERS HEAD WEST

- New means of travel
  - Robert Fulton, invention of the steamboat
  - Erie Canal
  - Railroads: the Transcontinental Railroad
- Routes west: wagon trains on the Oregon Trail
- The Pony Express

B. NATIVE AMERICANS

- Sequoyah and the Cherokee alphabet
- Forced removal to reservations: the "Trail of Tears"
- Some Native Americans displaced from their homes and ways of life by railroads (the "iron horse")
- Effect of near extermination of buffalo on Plains Indians

IV. The Civil War

- Controversy over slavery
- Harriet Tubman, the "underground railroad"
- Northern v. Southern states: Yankees and Rebels
- Ulysses S. Grant and Robert E. Lee
- Clara Barton, "Angel of the Battlefield," founder of the American Red Cross
- President Abraham Lincoln: keeping the Union together
- Emancipation Proclamation and the end of slavery

V. Immigration and Citizenship

- America perceived as a "land of opportunity"
- The meaning of "e pluribus unum" (a national motto you can see on the back of coins)
- Ellis Island and the significance of the Statue of Liberty
- Millions of newcomers to America
  - Large populations of immigrants settle in major cities (such as New York, Chicago, Philadelphia, Detroit, Cleveland, Boston, San Francisco)
- The idea of citizenship
  - What it means to be a citizen of a nation
  - American citizens have certain rights and responsibilities (for example, voting, eligible to hold public office, paying taxes)
  - Becoming an American citizen (by birth, naturalization)

VI. Civil Rights

- Susan B. Anthony and the right to vote
- Eleanor Roosevelt and civil rights and human rights
- Mary McLeod Bethune and educational opportunity
- Jackie Robinson and the integration of major league baseball
- Rose Parks and the bus boycott in Montgomery, Alabama
- Martin Luther King, Jr. and the dream of equal rights for all
- Cesar Chavez and the rights of migrant workers

VII. Geography of the Americas

A. NORTH AMERICA

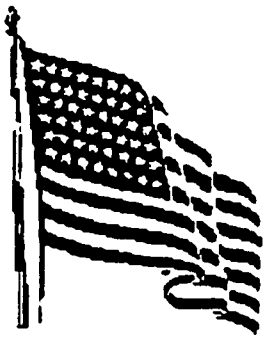
- North America: Canada, United States, Mexico
- The United States
  - Fifty states: 48 contiguous states, plus Alaska and Hawaii
  - Territories
  - Mississippi River
  - Appalachian and Rocky Mountains
  - Great Lakes
- Atlantic and Pacific Oceans, Gulf of Mexico, Caribbean Sea, West Indies
- Central America

B. South America

- Brazil: largest country in South America, Amazon River, rain forests
- Peru and Chile: Andes Mountains
- Locate: Venezuela, Columbia, Ecuador
- Bolivia: named after Simon Bolivar, "The Liberator"
- Argentina: the Pampas
- Main languages: Spanish and (in Brazil) Portuguese

VIII. Symbols and Figures

- Recognize and become familiar with the significance of:
  - U.S. flag: current and earlier versions
  - Statue of Liberty
  - Lincoln Memoral



The Core Democratic Values (Kindergarten – Grade 4)

The core democratic values are the ideas in which Americans believe. We do not look the same. We like different things. We each think differently. There are some ways that we are the same. We believe in telling the truth. We believe in treating people fairly. To be good citizens we must practice these values each day at home and school.

Our Core Democratic Values: Elementary Definitions

Teaching our core democratic values in kindergarten through grade 4 can be fun for students and easily integrated into your daily interactions with students. These simpler definitions are appropriate for younger students, *but please check your understanding of them by reading the definitions used in grades 5 through 8 (see next page).* Your complete understanding will assure that your teaching will assist the teachers in the upper grades and eliminate misunderstandings by your students.

Common good: Help others at home and school

Justice: Take turns and be fair to others

Liberty: Follow your beliefs and let others follow theirs

Popular sovereignty: Majority rules

Life: Rules keep you safe, follow them

Equality: Give everyone an equal chance

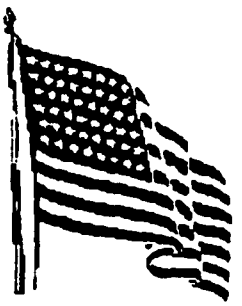
Diversity: Work and play with everyone

Pursuit of happiness: Have fun but follow the rules at home and school

Truth: Tell the truth

Patriotism: Use the core democratic values and home and school

Rule of law: Rules are made for everyone to follow



The Core Democratic Values (Grades 5-8)

Core democratic values are the fundamental beliefs and constitutional principles of American society which unite all Americans. These values are expressed in the Declaration of Independence, the United States Constitution and other significant documents, speeches, and writings of the nation. Below are brief definitions of some core democratic values.

Common good: People should work together for the good of all. The government should make laws that are good for everyone.

Justice: All people should be treated fairly in getting the advantages and disadvantages of our country. No group or person should be favored.

Liberty: Liberty includes the freedom to believe what you want, freedom to choose your own friends, and to have your own ideas and opinions, to express your ideas in public, the right for people to meet in groups, and the right to have any lawful job or business.

Popular sovereignty: The power of the government comes from the people.

Life: Each person has the right to the protection of their life.

Equality: Everyone should get the same treatment regardless of where your parents or grandparents were born, your race or religion, or how much money you have. All people have political, social and economic equality.

Diversity: Differences in language, dress, food, where parents or grandparents were born, race, and religion are not only allowed but accepted as important.

Pursuit of happiness: Each person can find happiness in their own way, so long as they do not step on the rights of others.

Truth: The government and citizens should not lie.

Patriotism: A devotion to our country and the core democratic values in word and deed.

Rule of law: Both the government and the people must obey the law.

GENERAL RESOURCES FOR CLASSROOM KITS

Perma-Bound Books

*Denotes suitability for ordering for students in classroom sets... at student readability levels

GRADE 2

WORLD HISTORY & GEOGRAPHY: Geography Of The Americas

2	213280	New Puffin Children's World Atlas: An Introductory Atlas for Young People	$12.64
2	217674	*North America (Original Publisher's Binding)	$21.00
2	278943	*South America (Original Publisher's Binding)	$21.00

WORLD HISTORY & GEOGRAPHY: India

2	154820	India: The Culture (Rev. Ed.)	$13.60

WORLD HISTORY & GEOGRAPHY: Hinduism and Buddhism

2	47251	Cat Who Went To Heaven	$10.64

WORLD HISTORY & GEOGRAPHY: Ancient China

2	13231	*Ancient China	$17.60
2	88965	Empty Pot	$12.60
2	126450	Great Wall Of China	$11.60
2	128255	Growing Up In Ancient China	$10.60
2	266815	Seven Chinese Brothers	$11.64

WORLD HISTORY & GEOGRAPHY: Japan

2	29247	Bicycle Man	$11.60
2	142413	How My Parents Learned To Eat	$11.60

WORLD HISTORY & GEOGRAPHY: Ancient Greece

2	13255	Ancient Greece	$17.60
2	13253	Ancient Greece	$19.90
2	126959	Greeks	$26.78
2	128258	*Growing Up In Ancient Greece	$10.60

AMERICAN HISTORY & GEOGRAPHY: War of 1812

2	9853	*American Army Of Two	$25.22
2	42446	By The Dawn's Early Light: The Story Of The Star-Spangled Banner	$11.64
2	282463	Star-Spangled Banner	$16.60

AMERICAN HISTORY & GEOGRAPHY: Westward Expansion

2	91[illegible]	Amazing Impossible Erie Canal	$11.64
2	41255	*Buffalo Bill And The Pony Express	$9.60
2	41152	Buffalo Woman	$11.64
2	46957	Cassie's Journey	$12.60
2	52812	Cherokee (Original Publisher's Binding)	$21.50
2	123232	First Strawberries: A Cherokee Story	$12.64
2	125962	Floating House	$11.64
2	117634	Girl Who Loved Wild Horses	$11.64
2	164620	*Josefina Story Quilt	$9.60
2	317745	*Wagon Wheels	$9.60
2	319525	Warm As Wool	$11.64

AMERICAN HISTORY & GEOGRAPHY: Civil War - An Introduction

2	82200	*Drinking Gourd	$9.60
2	106373	Follow The Drinking Gourd	$13.64
2	131377	Harriet And The Promised Land	$11.64
2	165236	Journey To Freedom: A Story Of The Underground Railroad	$20.90
2	167105	*Just A Few Words, Mr. Lincoln	$9.60
2	194170	Meet Abraham Lincoln	$9.64
2	211774	Nettie's Trip South	$11.64
2	234779	Picture Book Of Harriet Tubman	$20.90
2	290790	Sweet Clara And The Freedom Quilt	$12.64
2	301110	Thunder At Gettysburg	$9.15

AMERICAN HISTORY & GEOGRAPHY: Immigration & Citizenship

2	14205	Angel Child, Dragon Child	$10.64
2	57899	Coming To America: The Story Of Immigration	$19.90
2	142403	How Many Days To America? A Thanksgiving Story	$11.60
2	180979	*Long Way To A New Land	$9.60
2	183305	Lotus Seed	$12.65
2	200245	Molly's Pilgrim	$9.60
2	231891	Peppe The Lamplighter	$10.60
2	286580	Story Of The Statue Of Liberty	$12.60
2	315353	Very Important Day	$19.95
2	320178	Watch The Stars Come Out	$11.64

AMERICAN HISTORY & GEOGRAPHY: Civil Rights

2	33870	Bloomers!	$11.60
2	130674	Happy Birthday, Martin Luther King	$19.90
2	130677	Happy Birthday, Martin Luther King (Paper Big Book)	$19.95
2	234776	Picture Book Of Eleanor Roosevelt	$20.90
2	234786	Picture Book Of Rosa Parks	$20.90
2	285533	Story Of Ruby Bridges	$19.90
2	337728	*Young Martin's Promise	$10.60

GENERAL RESOURCES: WORLD HISTORY & GEOGRAPHY

GR	272985	16th Century Mosque	$22.90
GR	13223	Ancient China (Original Publisher's Binding)	$19.99
GR	13235	Ancient Egypt (Original Hardcover Binding)	$19.99
GR	13254	Ancient Greece (Original Hardcover Binding)	$19.99
GR	13462	Ancient Rome (Original Hardcover Binding)	$19.99
GR	22942	Aztecs (Original Publisher's Binding)	$19.99
GR	51987	*Children's Atlas Of Civilizations	$20.60
GR	87225	Egyptian Pyramid	$16.60
GR	111319	Frontier Fort On The Oregon Trail	$16.60
GR	114862	*Geography From A To Z: A Picture Glossary	$12.60
GR	126935	Greek Temple	$22.90
GR	153663	Incas (Original Publisher's Binding)	$16.99
GR	171644	Kingfisher Book Of The Ancient World	$19.90
GR	192553	Maps And Globes	$12.60
GR	193892	Medieval Castle	$16.60
GR	193900	Medieval Knights (Original Publisher's Binding)	$17.99
GR	196285	Middle Ages (Original Hardcover Binding)	$19.99
GR	213282	New Puffin Children's World Atlas: An Introductory Atlas For Young People	$12.64
GR	251555	Renaissance (Original Publisher's Binding)	$19.99
GR	256966	Roman Fort	$22.90
GR	268538	Shakespeare's Theater	$22.90

GR 289266	Submarines & Ships (Original Publisher's Binding)	$17.99

GENERAL RESOURCES: WORLD HISTORY & GEOGRAPHY, continued

GR 316698	*Visual Dictionary Of The Earth	$22.90
GR 334440	Wonders Of The World	$13.60
GR 335636	World War Two Submarine	$22.90
GR 337740	Young People's Atlas Of The United States	$25.90

GENERAL RESOURCES: AMERICAN HISTORY & GEOGRAPHY

GR 12092	American Reader: Words That Moved A Nation	$25.65
GR 40916	Buck Stops Here: The Presidents Of The United States	$15.65
GR 050816	Cherokees: A First Americans Book	$20.90
GR 050869	Cheyennes: A First Americans Book	$19.90
GR 57029	Colony Of Fear	$14.15
GR 71200	Debt	$14.15
GR 89522	*Encyclopedia Of Native America	$28.95
GR 107462	Fortune In Men's Eyes	$14.15
GR 111279	From Sea To Shining Sea	$33.90
GR 130356	Hand In Hand: An American History Through Poetry	$23.95
GR 139335	Hopis: A First Americans Book	$20.90
GR 157907	Iroquois: A First Americans Book	$20.90
GR 192852	Matter Of Pride	$14.60
GR 210852	Navajos	$20.90
GR 272368	Sioux	$20.90
GR 281069	Splendid Little War	$13.60
GR 295635	Test Of Loyalty	$13.60
GR 309205	Two Kinds Of Patriots	$14.15

GEOGRAPHY RESOURCES FOR CLASSROOM KITS

Debby & Company

SECOND GRADE (All supplies, except (#), should be ordered for <u>each classroom</u> at this grade level. (#) Denotes a resource which may be shared by all teachers at this grade level.)

Order #	Description	Price
IF8554	(#) Blank Map Outlines	$9.99
IF5189	(#) Map Skills (Basic Skills Series) Grade 2	$5.99
CD-3092	World Map - Labeled (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3093	World Map - Blank (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3090	U.S. Map - Labeled (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3091	U.S. Map - Blank (Jumbo Map Pads... 1 pkg. of 30)	$4.99
T-1088	World Map (Wipe-Off Map)	$2.99
T-1087	United States Map (Wipe-Off Map)	$2.99
T-591	Jumbo Wipe-Off Crayons (8 colors)	$2.99
FS-37033	The Continents Charts	$7.95
EI-3310	Jumbo Picture World Atlas (Giant Atlases)	$9.95
EI-3311	U.S. Discovery Atlas (Giant Atlases)	$9.95
UM-251	(#) 50 Laminated U.S. Maps	$39.50
UM-253	(#) 50 Laminated World Maps	$39.50
FS-ATA3193	Inflatable Globe	$9.99
JO46003	Continents Wood Puzzle	$19.99

SPECIAL EDUCATION

The Policy
The Individual Education Plan (IEP)
Role of the Special Education Building Coordinator
The Child Study Team
Evaluations
Inclusion of Students with Disabilities
Parent Participation
Individuals with Disabilities Education Act (IDEA)

Special Education

The Policy

It is the policy of the National Heritage Academies to provide special education services within each academy. All students with special needs have the right to a quality education appropriate to their needs, abilities and interest. It is the goal of the special education staff to act as a resource to the classroom teacher in the development and implementation of appropriate instructional and socialization strategies. Implementation of these strategies will occur within the general education setting and through one-on-one and small-group remediation.

The Individual Education Plan (IEP)

All National Heritage Academies campuses comply with all federal and state legal requirements that every student identified as having a disability be provided an Individual Educational Program (IEP) specifying goals, level of service, ancillary services and the least restrictive placement. Prior to the opening of school, registration forms are scanned to identify current IEPs from previous schools attended. The parents are fully informed of their rights, procedures and responsibilities under special education law.

Role of the Special Education Building Coordinator

- Form a partnership with the classroom teacher to develop appropriate instructional practices to meet student needs
- Act as a resource to the classroom teacher in the development, implementation and monitoring of specialized or modified programs
- Provide direct instruction to individuals or groups of students in the classroom as well as in the Resource Room setting
- Administer formal and informal educational assessments
- Interpret the results of assessments, observations and consultations to develop appropriate programming strategies
- Facilitate effective communication with students, parents, teachers, administration, special education support staff and community based agencies
- Share up-to-date professional information regarding special education
- Receive referrals directed to the Child Study Team
- Coordinate and lead Child Study Team meetings

Special Education Personnel

All special education teachers have the proper certification. Our ancillary staff consists of speech and language pathologists, social workers, psychologists, and occupational therapists.

The Child Study Team

The Child Study Team (CST) is a committee of school personnel set up by the principal to ensure ongoing and effective support for classroom teachers and students. The special education teacher co-chairs the school's team in cooperation with the building administrator. The team provides a forum to discuss students' academic and behavior needs and to generate, initiate and monitor solutions that marshal the resources of the school, the family and the community. This process creates an awareness and understanding of the issues affecting the student. The team acts as a pre-referral intervention-planning group for those "unidentified" students whose difficulties may suggest the presence of a disability. As appropriate, the team may refer a student for a formal assessment for special education. Parents should be informed if their child is being considered by the Child Study Team, and parental permission must be obtained prior to any formal assessment of that student.

Evaluations

Special education students are subject to an annual review and a three-year reevaluation. At their annual reviews and three-year reevaluations, parents and teachers go over the protocols appropriate to the given student, and make clear decisions as to the programming for this student. Parents are informed of student progress a minimum of four times per year at quarterly marking periods. Progress is also shared through telephone calls, written information/feedback, and personal contacts.

Inclusion of Students with Disabilities

National Heritage Academies is committed to the fullest level of inclusion deemed possible and appropriate by our professional team of general and special educators, administrators, and ancillary-support staff. Our goal is to educate each student in the least restrictive environment possible based on a student's individual needs.

Parent Participation

Parents/legal guardians have the *expressed right* to participate in all meetings dealing with the evaluation, identification, and educational placement of their child. Information concerning a child will be requested of his/her parents/guardians during the child study process and the parent's/guardian's presence will be requested for all subsequent meetings. Parents/legal guardians are considered members of both the Multi-Disciplinary Evaluation Team (MET) and the Individual Education Programming Team (IEPT).

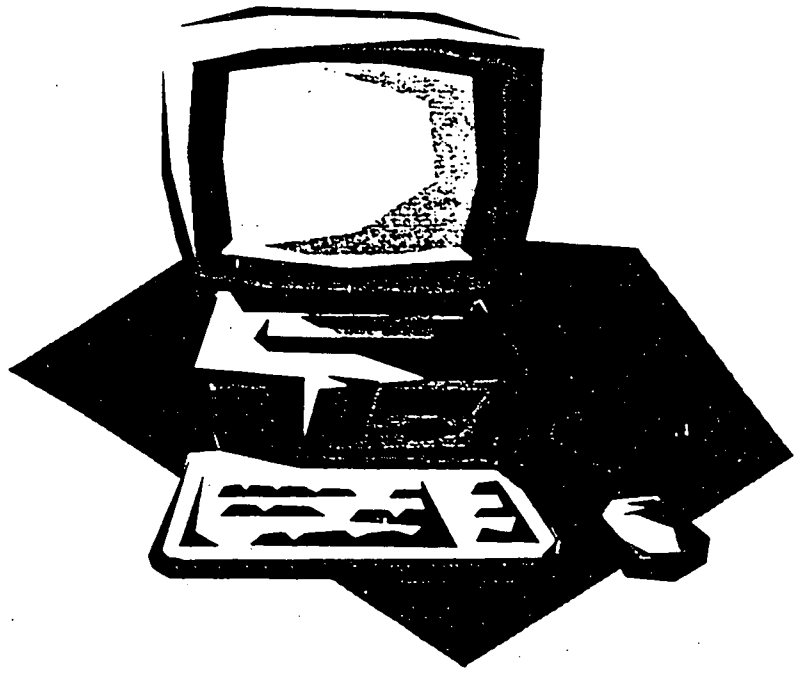
Individuals with Disabilities Education Act (IDEA)

National Heritage Academies are in step with the major changes in special education. The six principles of the new laws are:

- Free appropriate public education
- Appropriate evaluation
- Individualized education program (IEP)
- Least restrictive environment (LRE)
- Parent and student participation in decision making
- Procedural safeguards

TECHNOLOGY
SECOND GRADE

Technology—Educational Philosophy



Educational Technology Philosophy

The National Assessment of Educational Progress (NAEP) has tracked student achievement for nearly three decades. In 1996, the results of the NAEP indicated a link between certain kinds of technology use, higher scores on the NAEP, and an improved school climate.[1] It is important to note that not all types of technology use produced these results. In fact, the results indicated that the use of computers for "drill and practice" may result in decreased student scores. The technology use that proved most beneficial centered on using the computer for simulation, problem solving and analysis. "The computer's most powerful uses are for making things visual," says James Kaput, a math professor at the University of Massachusetts-Dartmouth. "It can make visual abstract processes that that are otherwise ineffable."

As an organization, NHA focuses on delivering a "back to basics" approach to education based on research to generate student performance results. NHA's philosophy is grounded in the premise that the primary educational focus in elementary school should be mastering the core academic subjects of English, reading, mathematics, history, and science. Use of technology within the framework of the core academic curriculum must be age appropriate and must enhance the learning process. Just as writing relies on penmanship as a requisite skill, students and teachers must develop requisite skills in the use of technology in order to maximize its curricular impact. Students will develop these skills in the context of using technology for academic pursuits. Teachers will develop technology skills through training, practice, and ongoing assessment.

Developing Technology Skills

NHA's core academic curriculum is extremely rigorous and focuses on developing the fundamental skills, attitudes, and background knowledge that will allow students to be successful in all future pursuits. Specific technology skills are most effectively learned in the context of the core curriculum. Just as science teachers have taught their students to use a microscope in order to view cells, basic technology skills, such as using a scanner, are best taught in the context of developing a Web page or creating a portfolio. However, NHA will develop a specific technology curriculum to ensure the acquisition of computer skills.

NHA's approach to the curriculum is built upon the premise that a child's long-term academic success is directly related to the strength of the foundation upon which it is built. This belief provides a central core for the entire NHA curriculum. With this in mind, the school calendar and schedule focuses primarily on the development of this foundation in the core academic subjects. Once this foundation is laid, the learner benefits in all curricular areas.

In alignment with this core belief, NHA approaches the formal computer training very deliberately. While computers can be used in grades K-2 to enhance the delivery/experience of the student in the academic areas, no formal computer training is addressed during these formative years. A student's time in school is so valuable that computer training at these early ages would supersede a more fundamental element of the child's education. Students in grades K-2 may acquire technology skills as a by-product of the technology use within the curriculum. Formalized computer training will begin to be addressed by the classroom teacher beginning in grade 3. During the upper elementary years (grades 3-5), time is carved out of the school day to help students develop specific skills as they align with state and national standards. In most NHA affiliated schools, a computer elective course is offered in grades 6-8. During this set of courses, more advanced computer skills are taught and students are asked to apply these skills in increasingly unique and meaningful ways. Teachers in grades 6-8 will continue to include the development of computer skills into the classroom and students will be expected to apply these skills appropriately to enhance their learning.

---

[1] "The Link to Higher Scores", Andrew Trotter, Education Week, October 1, 1998.

This technology curriculum is based on both state and national standards. Specific lessons and assessments related to computer skill acquisition will be developed through a cooperative effort between the NHA Educational Technology team and the NHA Curriculum team.

Integrating Technology with the Curriculum

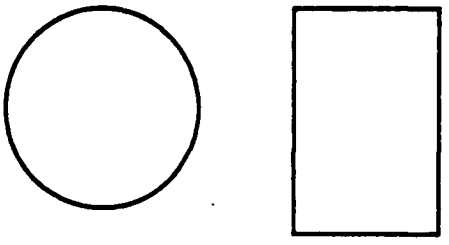
Although the time dedicated to acquire computer-specific skills is not equally distributed throughout the various grade levels, the underlying philosophy regarding technology use to enhance instruction is constant. In addition to developing materials that address both content standards and technology competencies, NHA is committed to the electronic delivery of content and supporting materials that aide in the delivery of curricula.

To achieve this goal of integration, NHA will develop a comprehensive curriculum map that includes specific teacher and student resources that tie technology with the core content areas in meaningful and substantive ways. A library of technology projects will be developed that connect specific curriculum objectives with technology skills. As a result, each teacher will be able to develop the tools necessary to integrate the acquisition of these skills into the academic curricula.

Over the course of the 2000-2001 school year, the Educational Technology Team, in conjunction with NHA teachers, has developed over 300 lessons, units and projects that integrate the technology curriculum into other curricular areas. These resources span all subject areas and grade levels and are made available to all NHA teachers in electronic form. Through the implementation of this technology plan, it is NHA's vision that this development will continue and lessons, units, projects, and other resources will continue to be made available to all NHA teachers that tie the technology curriculum into other curricular areas. The following is an example of a lesson that integrates technology objectives within other curricular areas.

A class is about to begin a unit on fractions within the fourth grade math curriculum. The teacher works with the Educational Technology Specialist to develop a lesson where students are to divide certain shapes into sections and then color the sections to depict a given fraction. The lesson will be done using a paint/draw program on the computer. See the example below:

1. Use the paint tools to divide the following shapes into fourths.
2. Use the paint tools to color the sections of each object to show the following:
    a. Circle: ¾
    b. Rectangle: ¼

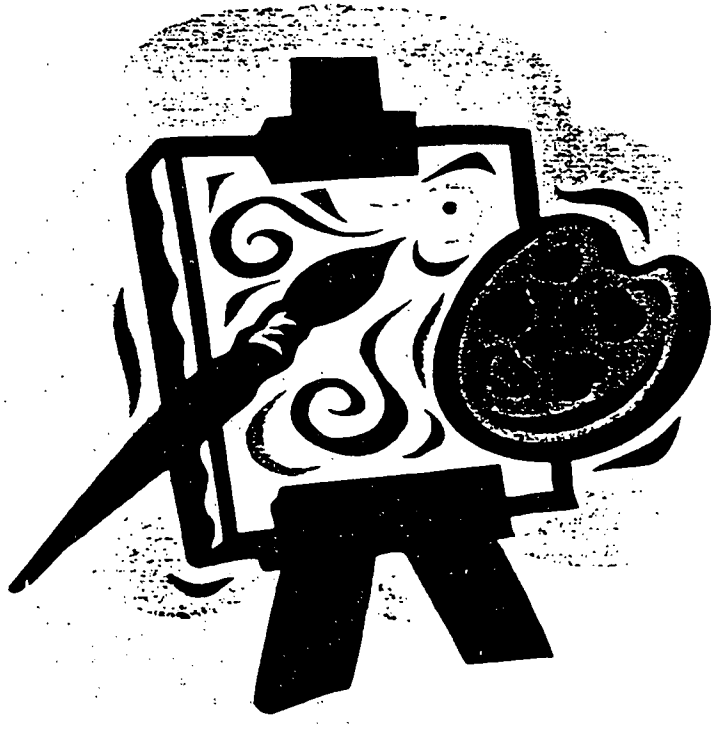


The teacher will spend a small amount of time at the beginning of the lesson to explain how to use the paint/draw program, but the primary focus of the lesson will be focused on getting a better understanding of fractions. This lesson ties together many of the technology curriculum's paint/draw program objectives as well as many of the fraction objectives found in the mathematics curriculum.

Grade Levels	Computer Skill Acquisition	Technology-Infused Delivery of Instruction
K - 2	No instructional time is devoted to computer skill development. **Resources:** None	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. **Resources:** LCD projectors, Internet connectivity
3 - 5	Instructional time is devoted to developing specific technology skills such as: 1. Computer operations 2. File management 3. Word processing 4. Keyboarding 5. Presentation tools 6. Spreadsheet use 7. Database basics 8. Internet use & responsibilities **Resources:** Some significant student access to computer required. Classroom teacher will be responsible for the delivery of this instruction. Curriculum to be developed and supplied by NHA.	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. Students use computers to develop materials, complete assessments, or engage in simulations. Work can be individual, in pairs, or in small groups. **Resources:** LCD projectors, Internet connectivity Some significant student access to computers required.
6 - 8	Instructional time in the middle school "Media / Technology" elective course is devoted to developing specific technology skills such as: 1. Digital imaging 2. Digital audio 3. Desktop publishing 4. Presentation 5. Basics of good design 6. Web page authoring 7. Application integration 8. Internet use **Resources:** Some significant student access to computer required. Classroom teacher will be responsible for the delivery of this instruction. Curriculum to be developed and supplied by NHA. It is desirable to place some computers permanently in each middle school classroom to achieve a fully integrated environment	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. Students use computers to develop materials, complete assessments, or engage in simulations. Work can be individual, in pairs, or in small groups. Students utilize computers independently to accomplish tasks appropriate to the use of the computer as a tool. Computers become seamlessly integrated tools in the middle school classroom, mimicking their place in the adult work environment. **Resources:** LCD projectors, Internet connectivity Some significant student access to computers required. Permanently placed PCs in middle school classroom are desirable.

VISUAL ARTS
SECOND GRADE

Mission Statement
NHA Visual Arts Education
Grade Level Content Standards
And Objectives

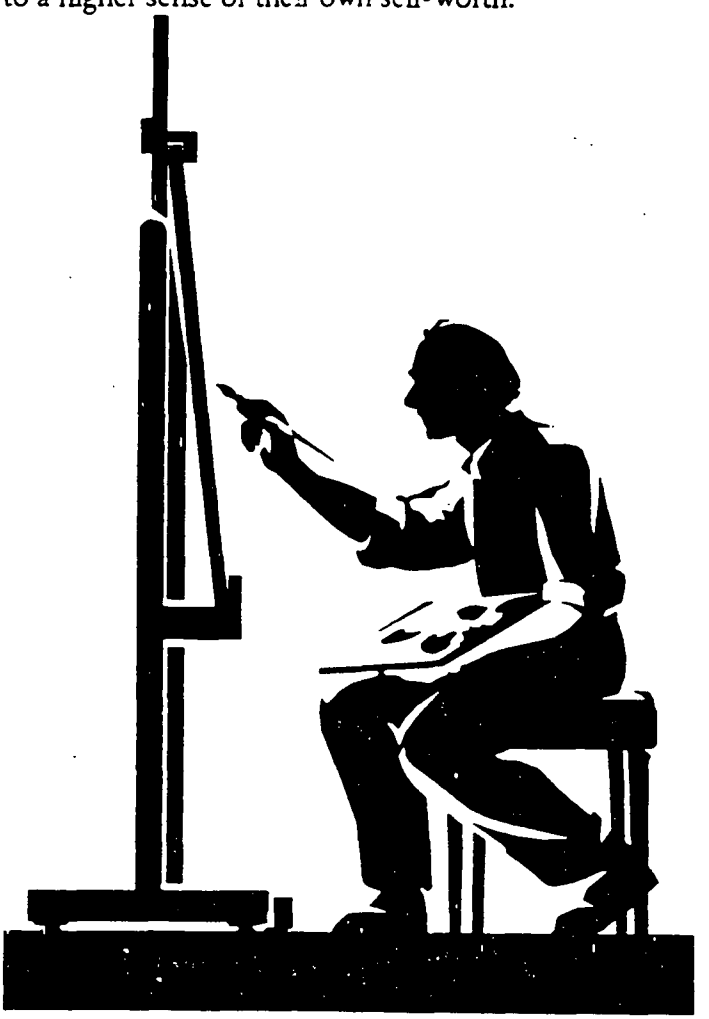


Visual Arts Mission Statement
National Heritage Academies

In teaching the visual arts, we seek to provide the student with the tools to understand the significant role the visual arts play in our lives with their power to express ideas throughout history. The visual arts are an essential means of communication in our society and we seek to enable the child to use the visual arts to express his or her own unique ideas.

The visual arts curriculum will equip the learner with a philosophical, intellectual, physical, emotional, and moral foundation in the visual arts. From this foundation, we seek to enhance the critical thinking and problem-solving skills of the student through creativity and self-expression.

We believe the visual arts are essential to a child's education and provide an opportunity for each child to become a valuable and contributing member of our society, ultimately leading to a higher sense of their own self-worth.



NATIONAL HERITAGE ACADEMIES
VISUAL ARTS EDUCATION

Art History

The study of art history will enable students to appreciate and understand artworks and artists from various cultures past and present.

Aesthetics

Aesthetics in art education helps form the foundation of a student's understanding of the arts as a unique and important human experience. The study of aesthetics will enable the student to view, appreciate, interpret and evaluate works of art.

Art Production

Students will use various mediums and techniques to produce works of art that express personal thoughts, feelings, and perceptions.

Art Criticism

Art criticism is an effort to fully understand works of art by precisely describing them, analyzing their components, interpreting them and making judgments about the content or form according to established standards.

Integration

Integrating art into the classroom curriculum helps the student understand the correlation between the two areas of study.

Visual Arts: Grade 2

Content Standards
Second Grade students will:
1. Explain the meaning in works of art
2. Distinguish formal qualities in works of art
3. Connect works of art with historical/cultural context
4. Create expressive artwork in varied media, alone and in groups
5. Discuss own artwork using art vocabulary

I. Elements of Art

- Recognize lines as horizontal, vertical, or diagonal
- Observe the use of line in
  Pablo Picasso, *Mother and Child*
  Katsushika Hokusai, *The Great Wave at Kanagawa Nami-Uri* from *Thirty-Six Views of Mt. Fuji*

II. Sculpture

- Observe shape, mass, and line in sculptures, including
  The Discus Thrower
  Flying Horse (from Wu-Wei, China)
  Auguste Rodin, *The Thinker*

Core Knowledge Preschool Content Guidelines for grades K-8. Core Knowledge Foundation, Charlottesville, VA.

III. Kinds of Pictures: Landscapes

- Recognize as landscapes and discuss
  - Thomas Cole, *The Oxbow* (also known as *View from Mount Holyoke, Northampton, Massachusetts, after a Thunderstorm*)
  - El Greco, View of Toledo (also known as *Toledo in a Storm*)
  - Henri Rousseau, *Virgin Forest*
  - Vincent van Gogh, *The Starry Night*

IV. Abstract Art

- Compare lifelike and abstract animals, including
  - Paintings of birds by John James Aubudon
  - Albrecht Dürer, *Young Hare*
  - Paul Klee, *Cat and Bird*
  - Pablo Picasso, *Bull's Head* (made from bicycle seat handlebars)
  - Henri Matisse, *The Snail* (also known as *Chromatic Composition*)
- Observe and discuss examples of abstract painting and sculptures, including
  - Marc Chagall, *I and the Village*
  - Constantin Brancusi, *Bird in Space*

V. Architecture

- Understand architecture as the art of designing buildings
- Understand symmetry and a line of symmetry, and observe symmetry in the design of some buildings (such as the Parthenon)
- Noting line, shape, and special features (such as columns and domes), look at
  - The Parthenon
  - Great Stupa (Buddhist temple in Sanchi, India)
  - Himeji Castle (also known as "White Heron Castle," Japan)
  - The Guggenheim Museum (New York City)

MUSIC
SECOND GRADE

NHA Music Philosophy
Grade Level Content Standards
Supplies and Curriculum
Component Chart Grade 2-2000

NHA Music Philosophy

Music is an integral part of life in our cultures, communications, and creativity and expressive abilities. An innate part of our natural being, our musical intelligence needs to be developed and enhanced through formal music education to complete a balanced education for our charter school students.

Music education is especially beneficial for students with lower verbal abilities and has been shown to increase verbal SAT scores by as much as 34-38 points. Music students have been proven to be ahead of other students in writing, communication and analytical skills, and have outperformed non-music students on achievement tests in reading and math. The study of music enhances self-discipline, self-confidence, team skills, and self-motivation.

Second Grade Content Standards

The Student Will:
A. Recognize a steady beat, accents, and the downbeat; playing a steady beat
B. Move responsively to music
C. Recognize short and long sounds
D. Discriminate between fast and slow; gradually slowing down and getting faster
E. Discriminate between differences in pitch: high and low
F. Discriminate between loud and quiet; gradually increasing and decreasing volume
G. Understand that melody can move up and down
H. Hum the melody while listening to music
I. Echo short rhythms and melodic patterns
J. Play simple rhythms and melodies
K. Recognize like and unlike phrases
L. Recognize timbre (one tone)
M. Sing unaccompanied, accompanied, and in unison
N. Recognize verse and refrain.
O. Recognize that musical notes have names
P. Recognize a scale as a series of notes
Q. Sing the pentatonic scale using do, re, mi, fa, sol
R. Understand the following notation; repeat signs, staff, bar lines, double bar lines measure, meter, quarter note, paired eighth notes, half notes, quarter rest, and dynamic levels of piano (soft) and forte (loud)
S. Develop an awareness of different sounds that occur together through simple canons
T. Notate simple rhythms and beat patterns
U. Develop listening skills and appreciation in accordance with grade level objectives
V. Develop an understanding of music in historical, social, and cultural context as well as its connection to other disciplines

Supplies and Curriculum for Start-up Charter Schools

Essential Items: All to be ordered by school principal and music teacher

Music Room:

60' X 30' soundproofed room for any school expected to house K-8 music program with storage cupboards for equipment, supplies, stereo, and instruments

Large industrial basin sink with running water

4' X 8' white board

Standard teacher's desk, 2 drawer file, 4 drawer file (for music storage)

30 stackable chairs, 25 music stands (13 stands for elementary program start-up)

Keyboard and Stereo:

Clavinova Keyboard (approx. $3,000 1998 prices)
C.D./Cassette player with split trax capabilities

Curriculum:

Core Knowledge materials and NHA content standards
K-6 teacher's edition, C.D.'s, and 24 student books of "Share the Music" curriculum (see attached)

Rhythm Instruments for Elementary Program:

(current contact: John Gillette@Marshall Music Company Grand Rapids office, will give 40-50% school discount) **Ordered in School Speciality Starting Kit for new schools**

24 rhythm sticks
2 pair maracas
3 triangles (small, medium, and large with strikers)
2 tambourines
2 sets wood blocks
2 pair claves
1 guiro
2 pair sand blocks
2 hand drums (one each, large and small)
1 small set of cymbals
1 set bongos
1 set of handle bells
4 sets wrists bells
1 each of alto xylophone and glockenspiel

Recorders:

(Recorders are part of the 4th grade curriculum standards)

25 alto recorders

13 "Hal Leonard" recorder books

Bowmar Orchestral Library:

(Music listening and appreciation are required as content standards and this set of C.D.'s would fulfill these requirements)

Series 1, 2, & 3 West Music Supply Company page # 89
CDBM5111; CDBM5112, CDBM5113

Games:

Instrument Bingo - page 14, Music in Motion Catalogue # 6107 $29.95

Meet the Instruments Posters:

25, full-color 14" X 22" posters - page 22 Music in Motion Catalogue 35904, $77.00

McGraw Hill Companies Component Chart - Grade 2 – 2000

The items listed below are suggestions. To place an order: 1-800-442-9685, The McGraw Hill Companies, 220 East Danieldale Road, Desoto, Texas 75115, www.mhschool.com

*** Music Teachers are able to place orders with other vendors due to availability**

0-02-295385-X	Big Book	498.00	____	____
0-02-295368-X	Pupil Edition	40.65	____	____
0-02-295388-4	Teacher's Edition (with Piano Accompaniment)	123.00	____	____
0-02-295377-9	Teacher's Edition	78.00	____	____
0-02-295414-5	Teacher's Resource Package	96.00	____	____
0-02-295415-5	Teacher's Resource Masters	17.25	____	____
0-02-295431-7	Signing for Primary Grades, Gr. K-2	12.00	____	____
0-02-295408-2	Orchestrations for Orff Instruments	9.00	____	____
0-02-295496-1	Listening Map Transparencies	45.00	____	____
0-02-295437-6	Compact Discs	435.00	____	____

ADDITIONAL COMPONENTS

0-02-295444-9	Musica para todos for Primary Grades, Gr. K-2	5.22	____	____
0-02-295364-7	Share World Music: Songs from Asia and Oceania, Gr. K-6	5.22	____	____
0-02-295365-5	Share World Music: Songs from Asia and Oceania Compact Discs, Gr. K-6	48.00	____	____

VIDEOTAPE PACKAGES

0-02-295479-1	Signing Videotape for Primary Grades, Gr. K-2	36.99	____	____
0-02-295481-3	Instrument Sounds Videotape, Gr. K-3	36.99	____	____
0-02-295481-3	Music and Movement Videotape, Gr. K-3	36.99	____	____
0-02-295488-0	The Mariachi Tradition Videotape, Gr. 1-8	38.49	____	____

TECHNOLOGY

MUSIC WITH MIDI

0-02-295458-9	Standard Package	88.08	____	____
0-02-295464-3	Site License Package	333.00	____	____
0-02-295470-8	District License Package	828.00	____	____

MIDISAURUS CD-ROM

0-02-295528-3	MiDisaurus CD-ROM (Hybrid Mac/Win), Gr. 1-3	79.95	____	____

PHYSICAL EDUCATION
Kindergarten-Eighth Grade

Refer to Specials Handbook for complete Curriculum

Including:

Physical Education Program Objectives and Grade-Related Benchmarks

Appendix A - Claims Made Resulting from Curriculum Revision Process

Appendix B - Physical Education Content Matrix

Appendix C - Final Rankings and Lifelong Activities

Appendix D - Final Rankings of General Program Objectives

Appendix E - Grade-Related Benchmark Matrices

Third Grade

Curriculum Handbook 2001-2002

National Heritage Academies

National Heritage Academies™

MISSION

Challenging children to achieve their greatest potential.

VISION

Our shared vision is to build a national organization of over 200 charter schools that become the finest K-8 schools in the country. Using a partnership with parents as our foundation, we will achieve this by combining rigorous, "back-to-basics" academics, strong moral development, and a universal commitment to all children.

PHILOSOPHY

National Heritage is guided by a few key principles that guide us in all our program decisions. First, we believe that a school environment with high academic and social expectations is necessary for students to thrive. Second, the company believes that parents have the ultimate responsibility for their children's education and, thus, will choose what is best for their children. Third, we believe that a school should support and reinforce the moral guidance a child receives at home. And, finally, we believe that a child's self-esteem is developed through diligence and achievement.

The NHA Curriculum Handbooks are dedicated to the 2001-2002 Teacher Presenter Team

Teacher Presenter	School
Laura Bartlett	Greensboro
Michelle Bauman	Paramount
Jane Beal	Vista
James Robert Brown	Greensboro
Linda Chaffee	Walker
Kim Chapin	Eagle Crest
Melissa Flickinger	Chandler Woods
Daphne Franklin	South Arbor
Mary Claire Fu	Eagle Crest
Erin Greenop	Walker
Heather Guerra	Knapp
Tuwanda Hairston	Research Triangle
Casey Helmreich	North Saginaw
Sarah Huddleston	Forsyth
Emilie Johnson	Forsyth
Jeff Johnston	Greensboro
Diane Kennedy	Greensboro
Kimberly Kobylik	Linden
Kevin Kooiker	Vista
Johann Linna	Ridge Park
Mandy Lohman	Cross Creek
Angela Newton	Paramount
Nicole Pachulski	Walker
Kaylin Rhoades	Endeavor
Cynthia Ruble	Forsyth
Mary Scheidel	Cross Creek
Elizabeth Sinclair	Endeavor
Lois Smith	Cross Creek
Angie Spears	Excel
Kirt Stevens	Vista
Rudy Swofford	Greensboro
Krista Tolchin	Endeavor
Dawn Tubbs	Linden
Marsha VanderSloot	Vanguard
Kathy Watson	North Saginaw
Rebecca Weliver	South Arbor
Kathy White	Greensboro
Cathy Wygmans	Eagle Crest
Ellen Zainea	Knapp

Corporate Education Team
1-616-222-1700

Team Member	Title/Email Address
Todd Avis	Director of Curriculum and Development tavis@heritageacademies.com
Judy Welch	Educational Services Manager jwelch@heritageacademies.com
David Baas	Director of Special Education dbaas@heritageacademies.com
Cindy Covell	Curriculum Specialist ccovell@heritageacademies.com
Randy Creswell	Science Specialist rcreswell@heritageacademies.com
Ann Schultheis	Core Knowledge Consultant aschultheis@heritageacademies.com
Amy Lambries	Library Specialist alambries@heritageacademies.com
Tom Stout	Coordinator of Teacher Development tstout@heritageacademies.com
Sallie Borrink	Special Projects Coordinator sallieANN9@aol.com
Mary Elizabeth Lee	Special Education Assistant mlee@heritageacademies.com
Jennifer Maze	Administrative Assistant jmaze@heritageacademies.com

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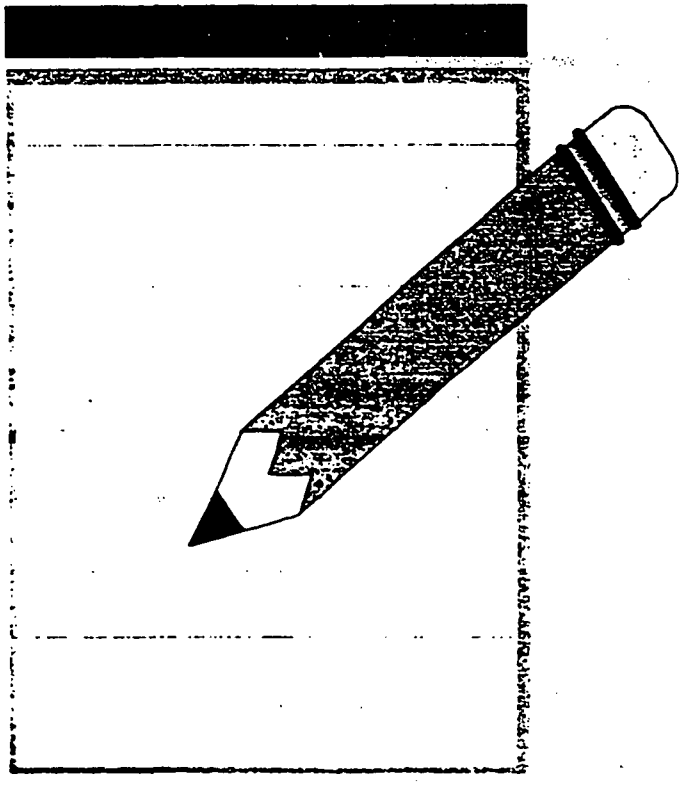
THIRD GRADE

SUPPLY LIST
THIRD GRADE

The supplies are provided by NHA in new classrooms in new and existing schools.

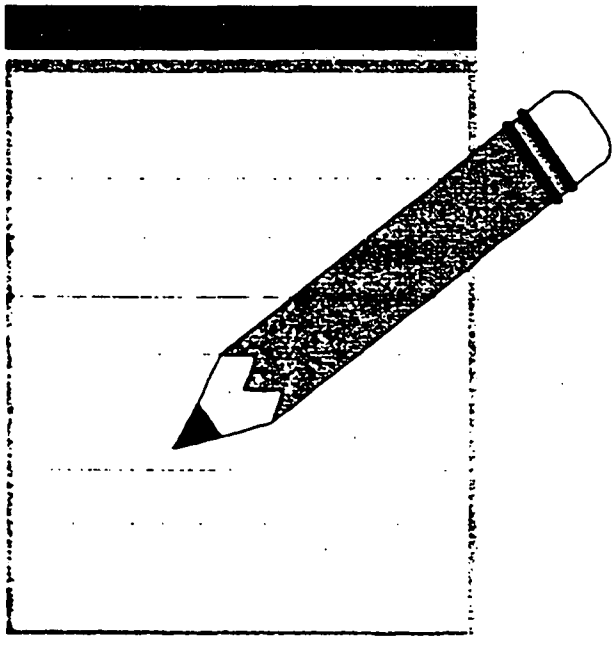


		3RD GRADE - 8TH GRADE: START-UP SUPPLY LIST				
QTY ORD.	UNIT	STOCK #	DESCRIPTION	PAGE	UNIT PRICE	TOTAL PRICE
2	GR	041217	#2 PENCIL BX/144	16	8.12	16.24
1	BX	000783	LARGE BLOCK ERASER BX/40	18	4.93	4.93
2	DZ	027465	BLACK ROUND STIC PEN MED BX/12	19	1.14	2.28
2	DZ	027466	RED ROUND STIC PEN MED BX/12	19	1.14	2.28
2	DZ	027469	BLUE ROUND STIC PEN MED BX/12	19	1.14	2.28
12	EA	038850	CLASS. SEL. HIGHLIGHTER - YELLOW	25	0.14	1.68
1	ST	059178	FINE VIS-A-VIS PEN SET/4	253	2.66	2.66
12	ST	408115	WATERCOLOR MARKER ST/12	26	1.78	21.36
2	EA	023194	EXPO II CLEANER, 8 OZ.	27	1.69	3.38
3	EA	059640	EXPO DRY ERASER	27	1.88	5.64
2	ST	059460	EXPO MARKER SET/4	28	3.40	6.80
24	EA	015348	WOODEN 12" RULER	34	0.25	6.00
12	EA	015363	YARDSTICK W/METAL END	34	1.62	19.44
1	EA	038342	1670 SCHOOL PRO ELEC SHARPENER	37	35.40	35.40
1	EA	025983	3-HOLE PAPER PUNCH	38	4.17	4.17
2	EA	039423	HAND HELD PAPER PUNCH 1-HOLE	38	0.59	1.18
1	EA	061131	SWINGLINE 711 BLACK STAPLER	40	6.66	6.66
1	EA	061149	SWINGLINE 747 BLACK STAPLER	40	10.61	10.61
2	BX	061059	STANDARD STAPLES	41	0.52	1.04
2	EA	000354	9" TEACHER SHEARS	43	4.50	9.00
1	EA	371774	8" BENT TRIMMER SHEARS	43	1.52	1.52
24	EA	000327	5" CLIP QUALITY SCISSORS	45	0.63	15.12
12	RL	040722	1/2"X36YD PERMANENT MEND TAPE	46	0.60	7.20
12	RL	040587	3/4" UTILITY MASKING TAPE	47	0.70	8.40
1	EA	023127	C-38 BLACK TAPE DISPENSER	48	2.09	2.09
25	EA	023135	SMALL WASHABLE GLUESTICK	50	0.38	9.50
4	EA	035334	TAC'N STIK REUSEABLE ADHESIVE	53	1.09	4.36
5	BX	000057	PAPER CLIPS,STANDARD	54	0.12	0.60
5	BX	000072	PAPER CLIPS,JUMBO	54	0.31	1.55
1	BX	036981	2" BOOK RINGS, BOX/50	54	4.70	4.70
2	BX	059964	3/8" THUMB TACKS	55	0.24	0.48
1	BX	012291	CLEAR REPORT COVER BX/50	58	9.60	9.60
3	BX	023254	ASSORTED PORTFOLIO BX/25	59	4.85	14.55
10	PK	048267	3"X5" BLANK INDEX CARDS	62	0.43	4.30
10	PK	048270	3"X5" RULED INDEX CARDS	62	0.43	4.30
1	BX	070311	1/5CUT LET HANGING FILE FOLDER	64	4.88	4.88
1	BX	015741	1/3 CUT FILE FOLDERS	65	5.63	5.63
1	EA	038946	14 MO.DESK PAD CALENDAR 2001/2002	70	1.64	1.64
1	EA	206771	SWIVEL DESKMATE ORGANIZER	72	7.27	7.27
3	EA	021354	DESK TRAY, BLACK	73	1.76	5.28
24	EA	043530	LEGAL CLIPBOARD	76	0.80	19.20
1	EA	038434	TI-34 SCIENTIFIC CALCULATOR	79	23.76	23.76
12	EA	040269	#79 INTERMEDIATE DICTIONARY	95	10.66	127.92
12	EA	040266	#78 STUDENTS THESAURUS	97	10.66	127.92
25	EA	522155	11X7 ASSIGNMENT BOOK	108	1.27	31.75
5	RM	000513	8.5"X11" FILLER PAPER W/MARG	118	3.12	15.60
2	RL	006483	3"X200' MANILA SENTENCE ROLL	126	2.99	5.98
1	PK	204686	18"X24" 125# MANILA TAGBOARD	130	7.56	7.56
1	PK	314478	18"X24" 125# WHITE TAGBOARD	130	7.56	7.56
1	PK	215982	12"X18" TAG BOARD -ASST COLOR PK/100	130	8.49	8.49
2	PK	053958	TRU 9"x12" MAGENTA CONST. PPR.	133	1.09	2.18

			3RD - 8TH GRADE: START-UP PAGE-2			
QTY ORD.	UNIT	STOCK #	DESCRIPTION	PAGE	UNIT PRICE	TOTAL PRICE
2	PK	053970	TRU 9"x12" YELLOW CONST. PPR.	133	1.05	2.10
2	PK	053979	TRU 9"x12" TURQ CONST. PPR.	133	1.20	2.40
2	PK	054027	TRU 9"x12" BLUE CONST. PPR.	133	1.09	2.18
2	PK	054039	TRU 9"x12" WHITE CONST. PPR.	133	0.80	1.60
2	PK	054048	TRU 9"x12" BLACK CONST. PPR.	133	1.05	2.10
2	PK	054051	TRU 9"x12" RED CONST. PPR.	133	1.05	2.10
2	PK	054063	TRU 12"X18" ORANGE CONST. PPR.	133	2.18	4.36
2	PK	054090	TRU 12"X18" SALMON CONST. PPR.	133	1.98	3.96
2	PK	054096	TRU 12"x18" PINK CONST. PPR.	133	2.11	4.22
2	PK	054105	TRU 12"x18" LT. GRN CONST. PPR	133	1.98	3.96
2	PK	054108	TRU 12"X18" SKY-BLUE CONST PPR	133	1.98	3.96
2	PK	054114	TRU 12"x18" LILAC CONST. PPR.	133	1.98	3.96
2	PK	054126	TRU 12"x18" DK-GRN CONST. PPR.	133	2.41	4.82
2	PK	054132	TRU 12"x18" TAN CONST. PPR.	133	1.98	3.96
2	PK	054138	TRU 12"x18" WM. BRN CONST. PPR	133	1.98	3.96
2	PK	054147	TRU 12"x18" SLATE CONST. PPR.	133	1.98	3.96
2	PK	054918	TRU 18"x24" WHITE CONST. PPR.	133	5.43	10.86
2	PK	054921	TRU 18"x24" YELLOW CONST. PPR.	133	5.43	10.86
2	PK	054924	TRU 18"x24" GREEN CONST. PPR.	133	6.62	13.24
2	PK	054927	TRU 18"x24" BLUE CONST. PPR.	133	5.77	11.54
2	PK	054939	TRU 18"x24" BLACK CONST. PPR.	133	5.43	10.86
2	PK	054942	TRU 18"x24" RED CONST. PPR.	133	5.43	10.86
1	PK	216777	TRU 9"X12" HOL GREEN CONST PPR	133	1.24	1.24
24	EA	001287	DIXON CRAYONS. BOX/8	157	0.32	7.68
12	ST	021897	4-1/2" COLOR PENCILS. SET/8	164	0.62	7.44
12	ST	026106	COLORAY PENCIL SET - THICK	165	2.29	27.48
1	BX	036837	3M 901 TRANSPARENCY FILM	252	10.49	10.49
1	PK	631839	0471 5 MIL WRITE-ON CLEAR FILM	252	5.87	5.87
1	EA	016791	24"X36" US FLAG W/ STAFF	464	7.15	7.15
1	EA	016794	ALUMINUM FLAG BRACKET	465	1.12	1.12
				SUBTOTAL		844.21

SUPPLY LIST
THIRD GRADE

This is a comprehensive list of materials needed to teach National Heritage Academies' curriculum.
Each teacher must have access to these supplies and materials.
Please see your principal for access.



Vendor	Grade	Description	Quantity	Individual Price	Total
AIMS Education	Third	16" Globe	1	$7.95	$7.95
AIMS Education	Third	AIMS Magnet Lab	1	$39.95	$39.95
AIMS Education	Third	AIMS Out of This World	1	$16.95	$16.95
AIMS Education	Third	Critters	1	$16.95	$16.95
Center for Civic Ed	Third	Foundations of Democracy Primary Set	1	$270.00	$270.00
George F Cram Co	Third	U S /World Discovery Map w/ Landscape	1	$229.50	$229.50
Debby & Co.	Third	Consumer Math	1	$10.95	$10.95
Debby & Co	Third	Earth, Sun and Moon	1	$5.95	$5.95
Debby & Co.	Third	Elementary Economics	1	$5.99	$5.99
Debby & Co.	Third	Explorer's Cooperative Learning	1	$15.95	$15.95
Debby & Co.	Third	Exploring Sound	1	$6.95	$6.95
Debby & Co.	Third	Five Senses	1	$9.95	$9.95
Debby & Co.	Third	Habitats	1	$2.95	$2.95
Debby & Co.	Third	Light and Color	1	$6.95	$6.95
Debby & Co.	Third	Matter	1	$5.95	$5.95
Debby & Co.	Third	Native American Customs/Costumes	1	$11.99	$11.99
Debby & Co.	Third	Native American Photo Fun Book	1	$6.95	$6.95
Debby & Co.	Third	Native Americans	1	$9.95	$9.95
Debby & Co.	Third	Rome Time Line Poster	1	$2.50	$2.50
Debby & Co.	Third	Science Enrichment	1	$10.95	$10.95
Debby & Co.	Third	Simple Machines	1	$4.95	$4.95
Debby & Co.	Third	Space	1	$11.95	$11.95
Debby & Co.	Third	Various Science Books **See AcademyLink Purchase Order form**			
Educ. Consult. Svc.	Third	Teaching Gifted Kids in the Regular Classroom	1	$25.00	$25.00
Educator's Pub.	Third	Spellwell B (1p/s)	1	$3.60	$3.60
Educator's Pub.	Third	Spellwell BB (1p/s)	1	$3.60	$3.60
Educator's Pub.	Third	Spellwell B & BB, Teacher's Guide	1	$2.00	$2.00
Flinn	Third	Various Science Equipment **See AcademyLink Purchase Order form**			
Frey	Third	Various Science Consumable Supplies **See AcademyLink Purchase Order form**			
Great Source	Third	Daily Geography	1	$21.95	$21.95
Great Source	Third	Daily Geography Student Book (10pk)	1	$21.95	$21.95
Great Source	Third	Daily Oral Language	1	$21.95	$21.95
Great Source	Third	Daily Oral Language Student Book (10pk)	1	$21.95	$21.95
Hirsch	Third	Books To Build On	1	$10.95	$10.95
Hirsch	Third	Core Knowledge Sequence Content Guidelines	1	$22.50	$22.50
Hirsch	Third	Listen, My Children (Poem/Anthology Book) (1p/s)	1	$4.95	$4.95

Hirsch	Third	The Schools We Need and Why We Don't Have Them	1	$24.95	$24.95
Hirsch	Third	What Your Third Grader Needs to Know	1	$12.95	$12.95
Learning Express	Third	30 in 1 Electronic Kits	1	$19.95	$19.95
Network	Third	Developing an Effective Writing Program	1	$10.00	$10.00
Network	Third	Primary Cumulative Writing Folder (25 w/ TE)	1	$20.00	$20.00
Network	Third	Strategies For Young Writers	1	$6.00	$6.00
Saxon	Third	**24-Student Kit (including Teacher's Manual)	1	$575.00	$575.00
Saxon	Third	**32 Student Kit (including Teacher's Manual)	1	$710.00	$710.00
Saxon	Third	**Manipulative Kit	1	$360.00	$360.00
Saxon	Third	For REFILL ITEMS **See AcademyLink Purchase Order form**			
Shurley Method	Third	Level 3 Kit 2nd Edition	1	$345.00	$345.00
Shurley Method	Third	Level 3 Poster Set	1	$30.00	$30.00
Shurley Method	Third	Level 3 Student Workbook (1p/s)	1	$11.00	$11.00
Shurley Method	Third	Level 3 Transparency Set	1	$50.00	$50.00
SRA/McGraw Hill	Third	Math Explorations and Applications Kit	1	343.95	$343.95
SRA/McGraw Hill	Third	Collections For Young Scholars, Vol. 3, Book 1 (1p/s)	1	$31.32	$31.32
SRA/McGraw Hill	Third	Collections For Young Scholars, Vol. 3, Book 2 (1p/s)	1	$31.32	$31.32
SRA/McGraw Hill	Third	Comprehension Checkpoints	1	$10.80	$10.80
SRA/McGraw Hill	Third	Explorer's Notebook (1p/s)	1	$9.18	$9.18
SRA/McGraw Hill	Third	Explorer's Notebook, Response Guide	1	$9.75	$9.75
SRA/McGraw Hill	Third	Framework for Effective Teaching, Teacher's Guide, Gr. 3, Book 1	1	$82.98	$82.98
SRA/McGraw Hill	Third	Framework for Effective Teaching, Teacher's Guide, Gr. 3, Book 2	1	$82.98	$82.98
SRA/McGraw Hill	Third	Literature Collection (18 titles)	1	$102.72	$102.72
SRA/McGraw Hill	Third	Overview Planner	1	$14.04	$14.04
SRA/McGraw Hill	Third	Reading/Writing Skills Practice (1p/s)	1	$9.75	$9.75
SRA/McGraw Hill	Third	Reading/Writing Skills Practice, Teacher's Edition	1	$14.61	$14.61
SRA/McGraw Hill	Third	Skills Assessment (3p/s x # of students in class)	1	$9.75	$9.75
SRA/McGraw Hill	Third	Skills Assessment, Teacher's Edition	1	$14.61	$14.61
SRA/McGraw Hill	Third	Student Toolbox	1	$219.54	$219.54
SRA/McGraw Hill	Third	Teacher Toolbox	1	$439.11	$439.11
SRA/McGraw Hill	Third	Reading Labs - OPTIONAL **See AcademyLink Purchase Order form**			
Zaner Bloser	Third	Desk Strips	1	$20.99	$20.99
Zaner Bloser	Third	Handwriting Helper Kit CURSIVE	1	$119.99	$119.99
Zaner Bloser	Third	Handwriting Paper Ream	3	$5.99	$17.97
Zaner Bloser	Third	Student Book (1p/s)	1	$8.49	$8.49
Zaner Bloser	Third	Wall Strip	1	$20.99	$20.99
Zaner Bloser	Third	Teacher's Edition, Practice Masters, and Poster Super Pak	1	N/C	

SUPPLY LIST
FURNITURE
THIRD GRADE

2000-2001 FURNITURE TABLES PER ROOM
24 Students Per Classroom

Second, Third and Fourth Grades

Ref. #	Item	Description	Amt.	Ordered By
1	Teacher Desk	HON34961 Double Ped	1	NHA
2	Teacher Chair	HON 7901 Task Chair	1	NHA
3	4-Drawer File	Hon 524 4 Drawer File	1	NHA
5	Tackboard 2x4	Best Rite 311AC	1	Bouma
6	Tackboard 4x8	Best Rite 311AH	2	Bouma
7	Markerboard 5x10	Best Rite 202AL	1	Bouma
	Tack Strip 2x10	532K	1	Bouma
14	Student Desks	Artco Bell 9503 Open Front	24	NHA
19	Kidney Table	Artco Bell 1275 48x72	1	NHA
21	Computer Table	Artco Bell CD60	1	NHA
11	Medium Chair	Artco Bell 7105 15 ½"	29	NHA
12	Large Chair	Artco Bell 7107 17 ½"	1	NHA
8B	3 shelf Bookshelf	Lee Metal 42"	2	NHA
	Flag Bracket		1	Bouma
	Computer		1	NHA Tech
	Waste Basket	Large & Small	1 ea	Foremost
	Pencil Sharpener		1	Bouma
	Clock		1	Bouma
	Telephone		1	Moss

REPORT CARD
THIRD GRADE

Template for 2001-2002
All teachers will use the
AcademyLink report module
for Fall 2001

Third Grade Report Card

	Marking Period			
	1	2	3	4
Reading				
Comprehends and applies vocabulary				
Reads aloud fluently				
Reads independently				
Applies decoding skills				
Completes workbook assignments accurately				
Comprehension assessments				
Comments:				
Writing				
Uses correct sentence structure				
Uses correct paragraph structure				
Completes book reports				
Comments:				
Penmanship				
Manuscript – uses correct size, form and space				
Manuscript – writes neatly in daily work				
Cursive – uses correct size, form, and space				
Cursive – writes neatly in daily work				
Comments:				
Spelling				
Learns assigned weekly word list				
Uses correct spelling in daily work				
Comments:				

Student Name: _____ Teacher: _____

Grammar and Usage				
Daily Oral Language				
Dictionary Skills				
Identifies basic parts of speech				
Research skills				
Uses capitalization correctly				
Uses punctuation correctly				
Verbally expresses ideas clearly				

Comments:

Mathematics				
Diligently submits homework on time				
Performs basic addition facts with speed and accuracy				
Adds multi-digit numbers				
Performs basic subtraction facts with speed and accuracy				
Subtracts multi-digit numbers				
Performs basic multiplication facts with speed and accuracy				
Multiplys multi-digit numbers				
Performs basic division facts with speed and accuracy				
Divides multi-digit numbers				
Calculates area				
Calculates perimeter				
Counts combinations of money				
Determines and record temperature				
Measures length				
Solves word problems correctly				
Tells time				
Understands decimals				
Understands fractions				
Understands geometric concepts				
Understands place value				
Assessments				

Comments:

History/Geography/Government				
World Geography-spatial sense, terms, features, Canada, rivers of the world, land bridge				
Native Americans				
Vikings				
Colonies				
Economics				
Core Democratic Values				
Local Family History				
Rome				
Projects/Assessments				

Comments:

Student Name: _____ Teacher: _____

Science				
Life Science				
Ecology				
Sound/Ear				
Light/Eye				
Earth Science/Astronomy				
Simple Machines				
Matter and Energy				
Magnets and Electricity				
Human Body				
Projects /Assessments				
Comments:				

Moral Focus				
Justice-*the principle of just dealing or right action*				
Accepts responsibility for own actions				
Demonstrates compassion and kindness				
Temperance-*moderation in thought, action or feeling*				
Completes in class assignments				
Submits homework on time				
Uses time wisely				
Works without disturbing others				
Prudence-*the ability to govern and discipline oneself*				
Displays good manners				
Displays self-control				
Respectful of property, other students, and adults				
Works cooperatively				
Fortitude-*the strength of mind to endure with courage*				
Follows directions				
Listens attentively				
Works independently				
Comments:				

Art				
Uses time wisely				
Demonstrates good conduct				
Demonstrates grade level art skills				
Graded work				
Comments:				

Student Name: _____ Teacher: _____

Music				
'eneral music				
)emonstrates appropriate attitude toward subject				
)emonstrates basic music concepts				
.istens and participates				
Music Theory				
)emonstrates ability to play melody and accompaniment				
)emonstrates ability to notate music				
)emonstrates compositional skills and understanding				
)emonstrates keyboarding/instrumental skills				
)emonstrates reading notated music				
Jnderstands basic music terminology and symbols				
Music history/listening				
Demonstrates knowledge of composers studied				
Demonstrates music listening skills				
Identifies compositions studied				
Identifies families of instruments				
Identifies instruments by sight and sound				
Recorders				
Comes prepared to class				
Demonstrates fingering/playing skills				
Demonstrates reading music notation				
Participates in group/ensemble				
Turns in homework and graded project work				
Instrumental/choral music				
Comes prepared to class				
Completes homework and graded projects				
Concert performance and attendance				
Demonstrates appropriate playing/singing skills				
Demonstrates appropriate reading skills				
Participates in group/ensemble				
Understands music terminology and symbols				

Comments:

Physical Education				
Participates in class activities				
Demonstrates appropriate skill development				
Demonstrates appropriate cognitive skills through testing				
Demonstrates positive attitude toward subject				
Demonstrates teamwork				
Demonstrates sportsmanship				
Overall performance				

Comments:

Student Name: _____ Teacher: _____

Final Comments:

Report Card Legend

Letter Grade	Remarks
A	Excellent
B	Good
C	Satisfactory
D	Needs Improvement
F	Does not meet requirements

Skill Scale	Remarks
4	Student shows accuracy, appropriateness, quality, and originality.
3	Can apply the skill or concept correctly and independently.
2	Shows some understanding. Errors or misunderstandings occur Teacher reminders, hints, and suggestions are necessary.
1	Cannot complete the task or skill independently. Shows little understanding of the concept. Quality is lacking.

Assigned to : _____ Grade

Student Name: _____ Teacher: _____

BLOOM'S TAXONOMY
THIRD GRADE

Based on *Bloom's Taxonomy*—Developed by Linda G. Barton, M.S. Ed. EDUPRESS EP 504

QUICK QUESTIONS FOR CRITICAL THINKING

Bloom's Taxonomy Quick Questions for Critical Thinking

Introduction

Bloom's Taxonomy divides the way people learn into three domains. One of these is the *cognitive* domain which emphasizes intellectual outcomes. This domain further divides into categories which are arranged progressively from the lowest level of thinking, simple recall, to the highest, evaluating information.

Quick Questions for Critical Thinking can be used in the home, classroom or workplace to develop all levels of thinking within the cognitive domain. The results will be improved attention to detail, increased comprehension and expanded problem solving skills. Find the box containing the level you wish to challenge. Use the **Key Words** as guides to structuring questions and tasks. Finish the **Questions** with content appropriate to the learner.

Level I

Knowledge: Exhibit memory of previously-learned material by recalling facts, terms, basic concepts and answers.

Key Words:

who	what	why	when	omit	where	which
choose	find	how	define	label	show	spell
list	match	name	relate	tell	recall	select

Questions:

* What is ... ?
* Where is ... ?
* How did _____ happen?
* Why did ... ?
* When did ... ?
* How would you show ... ?
* Who were the main ... ?
* Which one ... ?
* How is ... ?
* When did _____ happen?
* How would you explain ... ?
* How would you describe ... ?
* Can you recall ... ?
* Can you select ... ?
* Can you list the three ... ?
* Who was ... ?

Level I - Knowledge

Level II

Comprehension: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.

Key Words:

compare	contrast	demonstrate	interpret	explain
extend	illustrate	infer	outline	relate
rephrase	translate	summarize	show	classify

Questions:

* How would you classify the type of ... ?
* How would you compare ... ? contrast ... ?
* Will you state or interpret in your own words ... ?
* How would you rephrase the meaning ... ?
* What facts or ideas show ... ?
* What is the main idea of ... ?
* Which statements support ... ?
* Can you explain what is happening ... ? what is meant ... ?
* What can you say about ... ?
* Which is the best answer ... ?
* How would you summarize ... ?

Level II - Comprehension

Level III

Application: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.

Key Words:

apply	build	choose
construct	develop	interview
make use of	organize	experiment with
plan	select	solve
utilize	model	identify

Questions:

* How would you use ... ?
* What examples can you find to ... ?
* How would you solve _____ using what you've learned ... ?
* How would you organize _____ to show ... ?
* How would you show your understanding of ... ?
* What approach would you use to ... ?
* How would you apply what you learned to develop ... ?
* What other way would you plan to ... ?
* What would result if ... ?
* Can you make use of the facts to ... ?
* What elements would you choose to change ... ?
* What facts would you select to show ... ?
* What questions would you ask in an interview with ... ?

Level III - Application

Level IV

Analysis: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.

Key Words:

analyze	categorize	classify
compare	contrast	discover
dissect	divide	examine
inspect	simplify	survey
take part in	test for	distinguish
list	distinction	theme
relationships	function	motive
inference	assumption	conclusion

Questions:

* What are the parts or features of ... ?
* How is _____ related to ... ?
* Why do you think ... ?
* What is the theme ... ?
* What motive is there ... ?
* Can you list the parts ... ?
* What inference can you make ... ?
* What conclusions can you draw ... ?
* How would you classify ... ?
* How would you categorize ... ?
* Can you identify the different parts ... ?
* What evidence can you find ... ?
* What is the relationship between ... ?
* Can you make a distinction between ... ?
* What is the function of ... ?
* What ideas justify ... ?

Level IV - Analysis

Level V

Synthesis: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.

Key Words:

build	choose	combine
compile	compose	construct
create	design	develop
estimate	formulate	imagine
invent	make up	originate
plan	predict	propose
solve	solution	suppose
discuss	modify	change
original	improve	adapt
minimize	maximize	delete
theorize	elaborate	test
improve	happen	change

Questions:

* What changes would you make to solve ... ?
* How would you improve ... ?
* What would happen if ... ?
* Can you elaborate on the reason ... ?
* Can you propose an alternative ... ?
* Can you invent ... ?
* How would you adapt _____ to create a different ... ?
* How could you change (modify) the plot (plan) ... ?
* What could be done to minimize (maximize) ... ?
* What way would you design ... ?
* What could be combined to improve (change) ... ?
* Suppose you could _____ what would you do ... ?
* How would you test ... ?
* Can you formulate a theory for ... ?
* Can you predict the outcome if ... ?
* How would you estimate the results for ... ?
* What facts can you compile ... ?
* Can you construct a model that would change ... ?
* Can you think of an original way for the ... ?

Level V - Synthesis

Level VI

Evaluation: Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.

Key Words:

award	choose	conclude
criticize	decide	defend
determine	dispute	evalute
judge	justify	measure
compare	mark	rate
recommend	rule on	select
agree	appraise	prioritize
opinion	interpret	explain
support	importance	criteria
prove	disprove	assess
influence	perceive	value
estimate	influence	deduct

Questions:

* Do you agree with the action ... ? with the outcome ... ?
* What is your opinion of ... ?
* How would you prove ... ? disprove ... ?
* Can you assess the value or importance of ... ?
* Would it be better if ... ?
* Why did they (the character) choose ... ?
* What would you recommend ... ?
* How would you rate the ... ?
* What would you cite to defend the actions ... ?
* How would you evaluate ... ?
* How could you determine ... ?
* What choice would you have made ... ?
* What would you select ... ?
* How would you prioritize ... ?
* What judgment would you make about ... ?
* Based on what you know, how would you explain ... ?
* What information would you use to support the view ... ?
* How would you justify ... ?
* What data was used to make the conclusion ... ?
* Why was it better that ... ?
* How would you prioritize the facts ... ?
* How would you compare the ideas ... ? people ... ?

Level VI - Evaluation

LANGUAGE ARTS
THIRD GRADE

Reading and Grammar

Content Standards and Objectives

Scheduled Suggestions for
Open Court Reading

Open Court Assessment Overview

Open Court Assessment/Monitoring

Instructional Collection

NHA Library Media Centers

The Shurley Method

Why The Shurley Method?

The Shurley Method Assessment

Early Elementary Language Arts Standards and Grade Level Benchmarks

I. MEANING AND COMMUNICATION

Content Standard 1: All students will read and comprehend general and technical material.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Use reading for multiple purposes, such as enjoyment, gathering information, and learning new procedures.	X	X	
2. Read with developing fluency a variety of texts, such as stories, poems, messages, menus, and directions.	X	X	
3. Employ multiple strategies to construct meaning, including word recognition skills, context clues, retelling, predicting, and generating questions.	X	X	
4. Employ multiple strategies to decode words as they construct meaning, including the use of phonemic awareness, letter-sound associations, picture cues, context clues, and other work recognition aids.	X		
5. Respond to the ideas and feelings generated by oral, visual, written, and electronic texts, and share with peers.	X	X	X

Content Standard 2: All students will demonstrate the ability to write clear and grammatically correct sentences, paragraphs, and compositions.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Write with developing fluency for multiple purposes to produce a variety of texts, such as stories, journals, learning logs, directions, and letters.	X		X
2. Recognize that authors make choices as they write to convey meaning and influence an audience. Examples include work selection, sentence variety, and genre.	X	X	X
3. Begin to plan and draft texts, and revise and edit in response to the feelings and ideas expressed by others.	X	X	X
4. Begin to edit text and discuss language conventions using appropriate terms. Examples include action words, naming words, capital letters, and periods.	X	X	X

Content Standard 3: All students will focus on meaning and communication as they listen, speak, view, read, and write in personal, social, occupational, and civic contexts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1 Integrate listening, speaking, viewing, reading, and writing skills for multiple purposes and in varied contexts. Examples include using more than one of the language arts to create a story, write a poem or letter, or to prepare and present a unit project on their community.	X	X	
2 Explore the relationships among various components of the communication process such as sender, message, and receiver. An example is understanding how the source of the message affects the receiver's response.	X	X	X
3. Read and write with developing fluency, speak confidently, listen and interact appropriately, view strategically, and represent creatively. Examples include sharing text in groups and using an author's/reader's chair.	X	X	

4. Describe and use effective listening and speaking behaviors that enhance verbal communication and facilitate the construction of meaning. Examples include use of gestures and appropriate group behavior.	X		
5. Employ strategies to construct meaning while reading, listening to, viewing, or creating texts. Examples include retelling, prediction, generating questions, examining picture cues, discussing with peers, usihg context clues, and creating mental pictures.	X	X	
6. Determine the meaning of unfamiliar words and concepts in oral, visual, and written texts by using a variety of resources, such as prior knowledge, context, other people, dictionaries, pictures, and electronic sources.	X	X	
7. Recognize that creators of texts make choices when constructing text to convey meaning, express feelings, and influence an audience. Examples include word selection, sentence length, and use of illustrations.	X	X	
8. Respond to the ideas or feelings generated by texts and listen to the responses of others.	X	X	

II. LANGUAGE

Content Standard 4: All students will use the English language effectively.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Demonstrate awareness of differences in language patterns used in their spoken, written, and visual communication contexts, such as the home, playground, classroom, and storybooks.	X	X	X
2. Explore and discuss how languages and language patterns vary from place to place and how these languages and dialects are used to convey ideas and feelings. An example is comparing a television toy ad to a print toy ad.	X	X	X
3. Demonstrate awareness of words that have entered the English language from many cultures.	X	X	X
4. Become aware of and begin to experiment with different ways to express the same idea.	X	X	X
5. Explore and begin to use language appropriate for different contexts and purposes. Examples include community building, story discussions, casual conversations, writing workshops, science lessons, playground games, thank-you letters, and daily conversations.	X	X	X

III. LITERATURE

Content Standard 5: All students will read and analyze a wide variety of classic and contemporary literature and other texts to seek information, ideas, enjoyment, and understanding of their individuality, our common heritage and common humanity, and the rich diversity in our society.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1 Select, read, listen to, view, and respond thoughtfully to both classic and contemporary texts recognized for quality and literary ment.	X	X	

2. Describe and discuss the similarities of plot and character in literature and other texts from around the world.	X	X	
3. Describe how characters in literature and other texts can represent members of several different communities.	X	X	
4. Recognize the representation of various cultures as well as our common heritage in literature and other texts.	X	X	
5. Explain how characters in literature and other texts express attitudes about one another.	X	X	

IV. VOICE

Content Standard 6: All students will learn to communicate information accurately and effectively and demonstrate their expressive abilities by creating oral, written, and visual texts that enlighten and engage an audience.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Identify elements of effective communication that influence the quality of their interactions with others. Examples include use of facial expression, word choice, and articulation.	X		
2. Experiment with the various voices they use when they speak and write for different purposes and audiences.	X		X
3. Explore works of different authors, speakers, and illustrators to determine how they present ideas and feelings to evoke different responses.	X	X	
4. Develop a sense of personal voice by explaining their selection of materials for different purposes and audiences. Examples include portfolios, displays, and literacy interviews.	X		

V. SKILLS AND PROCESSES

Content Standard 7: All students will demonstrate, analyze, and reflect upon the skills and processes used to communicate through listening, speaking, viewing, reading, and writing.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Use a combination of strategies when encountering unfamiliar texts while constructing meaning. Examples include retelling, predicting, generating questions, examining pictures cues, analyzing phonetically, discussing with peers, and using text cues	X	X	
2 Monitor their progress while beginning to use a vanety of strategies to overcome drfficulties when constructing and conveying meaning.	X		
3 Reflect on their emerging literacy, set goals, and make appropriate choices throughout the learning process as they develop the ability to regulate their learning.	X		
4 Begin to develop and use strategies for planning, drafting, revising, and editing a vanety of text forms. Examples include identifying characteristics of their audience, mapping, and proofreading.	X		X

Early Elementary Language Arts Standards and Grade Level Benchmarks

VI. GENRE AND CRAFT OF LANGUAGE

Content Standard 8: All students will explore and use the characteristics of different types of texts, aesthetic elements, and mechanics -- including text structure, figurative and descriptive language, spelling, punctuation, and grammar -- to construct and convey meaning.

Objective	Lessons		
	Open Court	Core Kndg	Shurley Method
1. Identify and use mechanics that enhance and clarify understanding. Examples include using conventional punctuation, capitalization, and spelling, as well as approximations of conventional spelling, and restating key ideas in oral messages.	X		X
2. Explore how the characteristics of various narrative genre and story elements can be used to convey ideas and perspectives. Examples include character, setting, and problem in poetry, drama, and folk tales.	X	X	
3. Explore how the characteristics of various informational genre (e.g., show-and-tell, trade books, textbooks, and dictionaries) and elements of expository text structure (e.g., organizational patterns, major ideas, and details) can be used to convey ideas.	X	X	X
4. Identify and use aspects of the craft of the speaker, writer, and illustrator to formulate and express their ideas artistically. Examples include dialogue, characterization, conflict, organization, diction, color, and shape.	X	X	
5. Explore how the characteristics of various oral, visual, and written texts (e.g., videos, CD-ROM stories, books on tape, and trade books) and the textual aids they employ (e.g., illustrations, tables of contents, and headings/titles) are used to convey meaning.	X		

VII. DEPTH OF UNDERSTANDING

Content Standard 9: All students will demonstrate understanding of the complexity of enduring issues and recurring problems by making connections and generating themes within and across texts.

Objective	Lessons		
	Open Court	Core Kndg	Shurley Method
1. Explore and reflect on universal themes and substantive issues from oral, visual, and written texts Examples include new friendships and life in the neighborhood.	X	X	
2 Identify and categorize key ideas, concepts, and perspectives found in texts.	X	X	
3 Draw conclusions based on their understanding of differing views presented in text	X	X	

VII. IDEAS IN ACTION

Content Standard 10: All students will apply knowledge , ideas, and issues drawn from texts to their lives and the lives of others.

Objective	Lessons		
	Open Court	Core Kndg	Shurley Method
1 Make connections between key ideas in literature and other texts and their own lives	X	X	
2 Demonstrate their developing literacy by using text to enhance their daily lives. Examples include reading with a parent, discussing a favorite text, writing to a friend or relative about an experience, and creating a visual representation of an important idea	X	X	

3. Use oral, written, and visual texts to identify and explore school and community issues and problems, and discuss how one individual or group can make a difference. Examples include responding orally, artistically, or in writing about an issue or problem they have studied and/or experienced.	X	X	

VIII. INQUIRY AND RESEARCH

Content Standard 11: All students will define and investigate important issues and problems using a variety of resources, including technology, to explore and create texts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Generate questions about important issues that affect them or topics about which they are curious, and use discussion to narrow questions for further exploration.	X	X	
2. Identify and use resources that are most appropriate and readily available for investigating a particular question or topic. Examples include knowledgeable people, field trips, library classification systems, encyclopedias, atlases, word processing programs, and electronic media.	X	X	
3. Organize and interpret information to draw conclusions based on the investigation of an issue or problem.	X		
4. Develop and present conclusions based on the investigation of an issue or problem. Examples include skits, plays, songs, and personal or creative stories.	X	X	

IX. CRITICAL STANDARDS

Content Standard 12: All students will develop and apply personal, shared, and academic criteria for the enjoyment, appreciation, and evaluation of their own and other's oral, written, and visual texts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Identify the qualities of their own oral, visual, and written texts that help them communicate effectively for different purposes. Examples include content, styles, and organizational devices, such as the use of a chronological sequence in the telling of a story.	X	X	
2 Discuss individual and shared standards used for different purposes.	X	X	
3 Discuss choices in reading, writing, speaking, listening, viewing, and representing that reflect aesthetic qualities, such as rhyme, rhythm of the language, or repetition.	X	X	
4 Create a collection of personal work selected according to both individual and shared criteria, reflecting on the merit of each selection	X	X	
5 Recognize that the style and substance of a message reflect the values of a communicator	X	X	

SCHEDULING SUGGESTIONS
FOR
OPEN COURT READING (2000 Edition)

- **Do at least one activity from Part One/Green Section and at least one activity from Part Three/Blue Section each day**
- **Also do the Part Two/Red Section as follows:**

DAYS 1 & 2 (DAY 1 only if 3-day lesson plan):

- Word Study (not part of K, 1, 2:1, or 3:1)
- Clues & Problems and include in this six of the Vocabulary words, pronouncing them only and not using transparency
- Reading the Selection, Teaching Comprehension Strategies and doing end-of-story Discussion
- Literary Elements and Skills Sheet
- Pre-Writing from the Process Writing
- Meeting Individual Needs and Independent Work Time

DAYS 3 & 4 (DAY 2 only if 3-day lesson plan):

- Second Reading of the Selection
- Vocabulary – from the transparency first, then using context clues
- Teaching Comprehension Skills during the Second Reading
- Teach Literary Elements by having students include new technique as they write their Draft from the Process Writing - or - students find places in writing they have already done to Revise and use the new technique
- Meeting Individual Needs and Independent Work Time

DAY 5 (DAY 3 if 3-day lesson plan):

- Silent Reading of Selection and/or discussion with Theme Connections
- Inquiry Notebooks
- Comprehension Assessment
  - Grammar Skill - do worksheet **or**
  - use this skill in your Process Writing **or**
  - do Skills Assessment Sheet
- Meeting Individual Needs and Independent Work Time

FIRST READING

g Activate Prior Knowledge
Browse
Set Reading Goals and Expectations
Vocabulary
r Oral Reading (Modeling Strategies)
Discussion (using information from browsing and setting reading goals and expectations)
b Writing (Literary Element)
Writing Process
Independent Work Time (not necessarily every group this day)

SECOND READING

g Vocabulary
r Theme Connections
Record Ideas
Skills Reading
Skills Sheet
b Writing Process
Independent Work Time

THIRD READING

p 20 minutes for the project
r Partner or Silent Reading
Inquiry Notebook
Comprehension Assessment and/or Skills Assessment
b Grammar Skill (pulled in with the Writing Process)
The teacher will select either:
1) the worksheet on the skill
2) go back to the student's writing and proof-read for the skill/if not there "How can we make our piece better by adding the skill?"
3) skills assessment page

Writing
Independent Work Time

UNIT_____: LESSON_____

Part One (may take 2 days)

GREEN

- ☐ Word Knowledge p._____
- ☐ Build Background p._____
- ☐ Preview and Prepare p._____ Transparency p._____
- ☐ Selection Vocabulary p._____

RED

Class Reading Story p._____

Story Title:_____

➡Left side of the Manual Questions (Strategies)

- ☐ Discussion (Did we answer our purpose for reading?)

BLUE

- ☐ Writing: Literary Elements p._____
  - Concepts:_____
  - RW WB p._____
- ☐ Writing Process p._____
  - Concepts:_____
- ☐ Independent Work Time

☺ WORKSHOP ☺

Handwriting p._____

Spelling p._____

Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

UNIT_____: LESSON_____

Part Two (1 day)

GREEN

☐ Vocabulary p._____ Transparency p._____

RED

☐ Theme Connections (end of story) p._____

☐ Relook at Story p._____

Story Title:_____

➡Right side of the Manual Questions (Skills)

☐ Skills Sheet p._____ RW WB p._____

p._____ RW WB p._____

BLUE

☐ Writing Process p._____

Concepts:_____

RW WB p._____

☐ Independent Work Time

☺ WORKSHOP ☺

☐ Handwriting p._____

☐ Spelling p._____

☐ Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

UNIT_____: LESSON_____

Part Three (may take 2 days)

PROJECT

☐ 20 Minutes for Project Work Time (PURPLE p._____)

_____

RED

☐ Partner or Silent Reading p._____

Story Title:_____

➡Uninterrupted reading time

☐ Inquiry Journal p._____

⇨ Recording Concept Information IJ p._____

⇨ Other Pages p._____ Concept:_____ IJ p._____

p._____ Concept:_____ IJ p._____

PURPLE

☐ Comprehension Assessment p._____ CW A p._____

☐ Skills Assessment p._____ S A p._____

BLUE

☐ Grammar Skills p._____

Concept:_____

➡Choose one or more

1. Worksheet on the skill p._____
2. Proof/edit student work
3. Skill Assessment p._____ (PURPLE)

Writing Process p._____

Concept:_____

Independent Work Time

☺ WORKSHOP ☺

Handwriting p._____

Spelling p _____

Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

Extra skills to work on:

OPEN COURT ASSESSMENT OVERVIEW

"True assessment is a tool for learning
rather than a mere measure of achievement."
SRA/Open Court Reading Author, Joe Campione

The goal of true assessment is to inform instruction. It helps determine what students know and how to change the instruction to help students learn what they need to know.
The assessment components of SRA/Open Court Reading reflect the balanced nature of the series itself. The following are principles that guided the development of the assessment components.

Ease of Use for the Teacher

The assessments are easily administered and scored, feature the same language that is used in the instructional components of the series, and correspond to the sequence of instruction in the series. The assessments are typically short enough to prevent fatigue from affecting student performance yet long enough to provide a dependable measure of student skills and abilities.

Assessment of Critical Skills

The skills that are featured prominently in the series-the skills that are critical to the reading process-are the focus of assessment. These same skills are typically included on standardized tests and in state standards, so the assessments will help teachers respond to the accountability system under which they work.

Variety in Assessment

In addition to the formal and informal assessments,
SRA/Open Court Reading includes:
Pre-and Post-tests
Unit Tests
Comprehension Assessment
Self-Assessment
Portfolio Assessment
Family Evaluation

OPEN COURT ASSESSMENT AND MONITORING

ASSESSMENT TO INFORM INSTRUCTION

Variety of Assessment Tools

- **Pre-and Post-Tests**
- **Unit Tests**
- **Comprehension Assessment (Previously Comprehension Checkpoints)**
- **Self-Assessment**
- **Portfolio Assessment**
- **Family Evaluation**

PURPOSE: Detect children's strengths and weaknesses through informal monitoring.

PROCEDURES: Observation Logs
(Reproducible masters)

Monitoring Written Work
(Reproducible masters)

Individual Conferences

CONTINUOUS ASSESSMENT

Materials

* Assessment Guide
* Assessment Masters

Monitoring

(Teacher's Observation Logs)

Reading Performance Assessment

(Using Phonics Minibooks)

Writing Performance Assessment

(3 or 4 during the year)

Portfolios

Written Tests

Third Grade - Instructional Collection

POETRY — *Core Knowledge*

Adventures of Isabel (Ogden Nash)
The Bee (Isaac Watts)
By Myself (Eloise Greenfield)
Catch a Little Rhyme (Eve Merriam)
The Crocodile (Lewis Carroll)
Dream Variation (Langston Hughes)
Eletelephony (Laura Richards)
Father William (Lewis Carroll)
First thanksgiving of All (Nancy Byrd Turner)
For want of a nail, the shoe was lost. . . (traditional)
Jimmy Jet and His TV Set (Shel Silverstein)
Knoxville, Tennessee (KikkiGiovanni)
Trees (Sergeant Joyce Kilmer)

READ ALOUD STORIES: — *Core Knowledge*

from *The Arabian Nights*:
- Aladdin and the Wonderful Lamp
- Ali Baba and the Forty Thieves

The Hunting of the Great Bear (an Iroquois legend)
The Husband Who Was to Mind the House (Norse/English folk tale)
The Little Match Girl (Hans Christian Andersen)
The People Who Could Fly (an African American folk tale)
Three Words of Wisdom (Mexican folk tale)
William Tell
selections from *The Wind in the Willows* (Kenneth Grahame):
- "The River Bank"
- "The Open Road"

(What Every 3 grader Should Know Hirsch)

NOVEL UNITS: (Select two)

Charlotte's Web	
William Tell	*Core Knowledge*
Stone Fox	*(O. C.)*
Courage of Sarah Noble	*(O. C.)*

Notes/Comments:
The above selections can all be found in **Listen, My Children.**

National Heritage Academies Library Media Centers

The mission of the library media program at National Heritage Academies is to provide the students and educators with equitable access to information, ideas, and learning/teaching tools. The library media centers at National Heritage Academies are a growing resource of information for the staff and students. Resources include books, videos, periodicals, online reference resources, traveling projection systems and various teacher workbooks and posters. Many schools include video cameras, digital cameras and other technology for circulation. Our collections are developed to support the curriculum and provide students with literature. An OPAC system (online card catalog) is available at each computer terminal in each school building. Searching for materials can be done from the classroom as well as the library media center.

In order to support the curriculum and the activities taking place at each individual school, students may use the Library Media Center for research, study, reading, browsing, fact-finding and any other educational purpose. Students are encouraged to visit the library media center during school hours--either individually or as a class. Each building will prepare a schedule for weekly class visits and/or individually arranged class visits.

Materials are checked out to students for one week. If a student wishes to renew a book, he/she may do so at any time. It is important for the books to be returned on time and in good condition.

If a book is lost or damaged, the student is held responsible for that book. The student will be notified of the cost of the book and be expected to reimburse the school for the damaged or unreturned property. The amount charged will be the original purchase price of the book. If books are not returned or paid for, report cards may be held.

Accelerated Reader (AR) is a motivational reading program that is networked throughout National Heritage Academies. The program deals with individual reading levels, reading comprehension, and assessment. It involves reading books, taking quizzes on the computer and the earning of points. Many of our schools have an established school wide-program that is run by the teachers and/or library staff. In other schools, teachers use AR individually with their classes. The staff and/or administration at each school determine how this program is facilitated.

Teachers and staff are welcome at any time in the library media center to browse, search, and check out materials. They are encouraged to contact the librarian with any special requests for materials. Librarians are available to meet with teachers for planning purposes or curriculum needs.

The library media center at a National Heritage Academies school strives to be a fountain of information for growing, learning, and fun. Welcome!

SHURLEY GRAMMAR METHOD

The approach used by The Shurley Method is active learning, with students physically and cognitively engaged in the learning process. Success in learning Shurley English is predicated on the reinforcement of language skills. Students memorize rhyming jingles for each of the parts of speech. In unison, they chant these jingles in a kind of language symphony until they have internalized the concepts of nouns and verbs. A Shurley classroom is one of energized learning, where students teach as well as learn. They move back and forth from group activities to independent learning exercises, from a mastery of grammar skills to creative writing exercise. In fact, students, almost without exception, beg for more class time to write.

Despite the fact that memorization and repetition have not been in vogue in recent years in American schools, they are fundamental to the success of the Shurley Method. Rarely does a Shurley student return to classes at the start of a new school year needing to be retaught concepts he/she mastered during the previous school year. The retention is permanent.

The Shurley Program provides students with two important ingredients for success: a love of the English language and the ability to use the English language correctly with ease and confidence.

WHY THE SHURLEY METHOD?

- *The Shurley Method* is the end result of twenty-five years of research. Actual classroom situations and the learning needs of students were used to develop this exciting English program.
- *The Shurley Method* never teaches concepts in isolation. A concrete set of questions about each word in a sentence is used to teach students how all the parts of a sentence fit together. Students always have a clear picture of how to write complete sentences.
- Students are constantly exposed to "see it, hear it, say it, do it," activities that meet the visual, auditory, and kinesthetic learning types of students.
- *The Shurley Method* successfully teaches language skills to students with different learning abilities and to students who learn English as a second language.
- *The Shurley Method* uses repetition, fun and student-teacher interaction to help students learn difficult English skills. The teacher models each new step in *The Shurley Method* for the students. Then the students actively participate with the teacher as the steps are practiced.
- *The Shurley Method* provides enough repetition to master each concept taught. Lessons include daily practice of old skills while new skills are being added.
- The students are taught how to merge a strong skill foundation with the writing process. As a result, teachers can spend less time going over beginning grammar and editing skills and more time introducing and enhancing advanced grammar and writing skills.
- Students' grammar and writing skills are used automatically with dependable results. This leads to higher level thinking skills because the students are stimulated to learn and use their own thought processes to solve difficult language problems.
- The most important effect of *The Shurley Method* on students may not be their increased grasp of language and improved grammar and writing skills. Instead, the greatest impact may be the students' heightened self-confidence and self-esteem. Not only do the students gain confidence in English, but they carry this improved attitude into other subject areas as well.

THE SHURLEY METHOD ASSESSMENT

3-Day Rotation Schedule Assessment

Day 1 – Teach

(No test will be given to students on Day 1.)

1. Vocabulary and Definition Time
2. Introduce the new grammar concept and classify sentences orally.
3. Leave classified sentences on the board or transparency for Oral Skill Builder Check.
4. Write a Practice Sentence and an Improved Sentence with your class.

Day 2 – Review, Teach, and Test

(Tests will be given to students. You will use one test sheet every 3 days.)

1. Vocabulary and Definition Time.
2. Classify same sentences orally (again).
3. Teach the other English concepts that will be tested.
4. Erase the board or remove the transparency and give the student worksheet as a test.

Students are tested on the same sentences that they have classified orally together. This helps students gain the confidence to work with many skills independently and helps weak readers concentrate on learning English skills without struggling with reading vocabulary.

Day 3 – Teach and Check

(Hand the tests back)

1. Vocabulary and Definition Time.
2. Classify same sentences orally (again).
3. Leave classified sentences on the board or transparency as a visual aid when checking student tests.
4. Discuss mistakes and how to improve.

2-Day Rotation Schedule (Skip Day 1 – Oral Day)

Day 2 – Review, Teach, and Test

(Tests will be given to students. You will use one test sheet every 3 days.)

1. Review grammar by classifying sentences.
2. Teach the other English concepts that will be tested.
3. Give students the worksheet as a test.

Day 3 – Review and Check

1. Review grammar by classifying sentences.
2. Hand test back. Discuss mistakes and how to improve.

Checking Options

Teacher Graded: Select one or two sentences from the top section and several items from the bottom section to check for a grade. Then have students check the rest of the sheet with you as a practice exercise. Use a teacher-directed word-by-word check. Students focus not only on mistakes but also on correct responses. This will show them the mistakes they made, and they can use this knowledge to do better on the next test.

Student Graded: Train double checkers to help weak checkers and to grade absent students' papers.

LANGUAGE ARTS
THIRD GRADE
Writing

Collins Writing Program
Philosophy: The Teaching of Writing
Collins Writing Strategies
Teacher Resources
Assessing Your Current Writing Program

COLLINS WRITING PROGRAM
Philosophy: The Teaching of Writing in NHA Schools

ON THE TEACHING OF WRITERS:

A belief system about how children develop as language users from birth through adulthood and what teachers should do in their classrooms to foster that growth is essential to any writing curriculum. Moreover, to provide integrated and meaningful instruction and accountability, the writing program must be organized around a system for managing the writing process. The following is meant to be a guide to teaching "writers" in the classroom.

1. **Children as language users:**
National Heritage Academies believes that children come to school with an innate curiosity about writing and a desire for meaningful, real-world communication, and that writing is one of the most complex intellectual tasks they will need to accomplish. Further, children develop writing skills in a manner that mirrors the way they learn to talk. Teachers, then, teach "writers" rather than "writing," and children become writers by the very act of writing itself. We believe that teachers help children view and define themselves as thinkers and writers by involving them with the real occurrences of their minds, hearts and world and that writing enhances the learning process of any subject at any level.

2. **Classroom culture of active literacy:**
What teachers *do* in the classroom positively impacts students' development as writers more often than what teachers *say* in the classroom. The conditions that promote the development of writers are the same as those that facilitate learning to talk:
   - *Immersion:* creating a language-rich and print-rich environment
   - *Demonstration:* modeling of writing in the classroom by the teacher
   - *Expectation:* subtly communicating to children that they will learn to write
   - *Responsibility:* giving students opportunities to be responsible for their own learning
   - *Approximation:* encouraging and respecting children's writing efforts
   - *Employment:* making time and opportunities for writing
   - *Feedback:* allowing patience with the growth process

   National Heritage Academies wants its classrooms to be places where children come expecting to write each day with the knowledge that their efforts will be valued, supported and respected.

3. **A skill for thinking across the curriculum:**
National Heritage Academies believes that students should have frequent and varied opportunities to write in *all* content areas. Writing is an aid to thinking and organizing ideas across the curriculum rather than merely a subset of the language arts curriculum. It is a balance of process (how people communicate) and product (what they communicate).

4. **Managing and evaluating a program for writing:**
   Because we understand that writing is a necessary skill for effective communication and expression, and realizing that people learn to write by writing, there must be a workable system of instruction. That system must be coupled with an assessment system to measure levels of achievement in both the student and the teacher.

National Heritage Academies has adopted **The Collins Cumulative Writing Folder Program** to support teachers in building an effective and experiential writing program within their classrooms and the school. The Collins Writing Program provides schools with a writing program— a unified set of techniques and expectations about student writing— that can be developed and reinforced over a period of years, as well as a way to measure levels of achievement in both students and teachers. It involves:

- Integrating writing across the curriculum using Five Types of Writing
- (noted on the following two pages)
- Encouraging a balance of process and product
- Encouraging ownership through a student-centered program of instruction
- Ensuring the development of critical writing and thinking skills
- Making the program student-centered
- Involving frequent writing opportunities
- Affording a practical and manageable program for both teacher and student.

The Cumulative Writing Folder Program consists of four elements: a writing management system and three teaching strategies. The strategies are:

- Oral reading
- Focus correcting
- Using past papers to teach new skills

The Program has been successfully used in special education, with the gifted and talented, and in English as a second language programs. Each element reinforces the others.

Realizing each teacher's need to understand instructional expectations as well as to be supported in those expectations, a workable "Scope and Sequence for the Teaching of Writers" will be forthcoming.

A list of resources from the Collins Education Associates follows The Collins Writing Strategies.

Collins Writing Strategies

Type One: Writing that has no correct answer – or, if there is a correct answer, it's okay to be wrong

Purpose: To capture ideas, questions, reactions

Evaluation: A check + or -, 10 pts. or 0 pts., a "smiley face" or no "smiley face," a jelly bean or a coffee bean . . . in other words – it's up to you. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a minimum volume
4. Provide a maximum time limit

Advantages:
*Spontaneous, minimal preparation
*Effective thinking stimulus for all
*Takes very little class time
*Promotes writing fluency

Type Two: Writing that makes a point - has a correct answer

Purpose: To show that the writer knows something about the topic or has thought about it

Evaluation: Type Two writing is like a quiz; mistakes in content count. Writing style and mechanics do not count – the content counts. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a maximum time limit
4. Avoid numbering

Advantages:
*Spontaneous, little pre-planning
*Quick assessment
*Promotes writing fluency
*Promotes writing in the content areas

Type Three: Writing that has content and focus correction areas

Purpose: To produce a single draft that meets the standards set by the focus correction areas (FCA). Type Three writing is read out loud by the author to see if it does three things:

- Completes the assignment
- Sounds correct-easy to read
- **Avoids errors in the focus correction areas**

Evaluation: Evaluation is based solely on FCAs. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always place FCAs in the upper left
3. Maximum of three focus areas/paper

Advantages:
*Very efficient
*Ease of evaluation

Type Four:	**Writing that has been read out loud and critiqued by another – two drafts**
Purpose:	To produce the best possible work in two drafts. Writer follows the same steps as Type Three, repeats steps with a peer, and produces the best possible second draft that is placed in **The Cumulative Writing Folder.**
Evaluation:	Evaluation is based on focus correction areas. **"Reasonable best effort"**
Basic Guidelines:	1. Always skip a line 2. Always place FCAs in the upper left 3. Maximum of three focus areas/paper
Advantages:	*Fair, objective evaluations *Provides a systematic, clear, and logical sequence of writing skills

Type Five:	**Writing that can be published and go outside the classroom without explanation or qualification – multiple drafts**
Purpose:	To produce the best writing possible. Writer follows the same steps as Type Four to create a paper void of errors.
Evaluation:	Type Five writing is usually a major project. It must meet all standard conventions.
Basic Guidelines:	1. Always skip a line 2. Always label the type of writing in rough drafts
Advantages:	*Great final product *Real-world standards *Promulgates full range of skills

It has been our experience that many teachers, especially after a full day workshop with opportunities for "hands-on" practice, can effectively implement many of our ideas in their own classrooms.

However, most teacher training has failed miserably because it tends to be "hit and run" in nature. A basic assumption of our work is that writing instruction will be most effective when it is supported by a program— a unified set of teaching techniques and expectations about student writing that are developed and reinforced over a period of years. This kind of program development takes time and commitment. We believe that writing instruction must also be evaluated on a regular basis to provide teachers and students with clear and achievable goals from one year to the next. Therefore we have developed an extensive variety of program development services:

Examples of our teacher support and program development service sessions:

* **demonstration lessons**
* **establishing an in-house evaluation model**
* **individual department/grade level sessions**
* **developing strategies for state assessment tests**
* **practice developing great writing assignments**
* **practice developing appropriate FCAs**

Developed by Mark E. Dressel, Collins Education Associate 616.361.1839

COLLINS WRITING - TEACHER RESOURCES:

Center for Effective Communication-Collins Education Associates LLC:

The following publications may be found on the *AcademyLink Purchase Order form* for **The Network (formerly Collins)** and can be purchased through your building principal (textbook budget). It is recommended that each teacher have the following:

1. **Cumulative Writing Folders** - for each student in grades 1-8 for use in helping to manage the classroom writing program. Teachers of grades 1-3 should order the **Primary Cumulative Writing Folders**. Teachers of kindergarten may want to develop their own "folder system" for writing management.

2. **Developing an Effective Writing Program for the Elementary Grades** by Gary Chadwell.

3. Middle School Teachers: **Developing Writing and Thinking Skills Across the Curriculum** by Gary Chadwell.

Additional Recommended Resources:

1. Frank, Marjorie. **If You're Trying To Teach Kids How To Write...you've gotta have this book!** Incentive Publications, Inc., Nashville, Tennessee. 1979. (ISBN: 0-86530-317-7). Can be purchased through most bookstores. All Grades.

2. Areglado, Nancy and Dill, Mary. **Let's Write: A Practical Guide to Teaching Writing in the Early Grades– K-2**. Scholastic Professional Books, New York. 1997, (ISBN: 0-590-93102-4). Can be purchased through teacher stores or most bookstores. Early Grades.

3. Butler, Andrea and Turbill, Jan. **Towards a Reading-Writing Classroom**. Primary English Teaching Association, NSW, Australia: Heinemann, 1984. (ISBN: 0-435-08461-5).

4. Atwell, Nancie. **Coming to Know: Writing to Learn in the Intermediate Grades**. Portsmouth, NH: Heinemann, 1990. Presents many ways to use writing in content area study, including learning logs and research projects in every subject.

5. Calkins, Lucy. **The Art of Teaching Writing**. Portsmouth, NH: Heinemann, 1994.

6. Lane, Barry. **After 'The End': Teaching and Learning Creative Revision**. Portsmouth, NH: Heinemann, 1993.

Assessing Your Current Writing Program

You already have a writing program in place in your classroom, one shaped by your beliefs and attitudes about writing instruction. It's driven by techniques and strategies you use with your students, and it's organized around a system you use for managing the writing process. The survey that follows will help you assess your current writing program by helping to identify what you emphasize most and least in your own classroom. It will give you a snapshot of your current writing program.

After you complete this survey, your findings will enable you to reaffirm, challenge, or recalibrate some of your assumptions and help you make strategic decisions about ways to improve your writing program.

Writing Program Assessment Survey
For Elementary Grades

Instructions: For each of the activities that follow, give a rating of 0-5 that most accurately describes how often you do the activity during a year. This self-assessment will be most valuable if you are candid in your estimates. Try not to overestimate; rather than rating the items based on how much you like them, rate them on how often you actually do them.

0 – Do not do
1 – Infrequently (one to three times a year)
2 – Occasionally (four to six times a year)
3 – Regularly (once a month)
4 – Frequently (twice a month)
5 – Very frequently (once a week or more)

PROGRAM VALUES

_____ 1. Give students low-risk writing opportunities such as free writing or journal writing.

_____ 2. Take overt steps, such as writing along with your students, to create a classroom culture of active literacy.

_____ 3. Provide frequent opportunities for students to write in all content areas.

PREWRITING ACTIVITIES

_____ 4. Involve students in writing projects based on their personal experiences, reading experiences, or class discussions.

_____ 5. Engage students in discussions and activities that clarify writing projects, generate ideas, and help in planning and organizing writing.

_____ 6. Provide models, including examples of other students' writing, to help guide your students' writing efforts.

DRAFTING ACTIVITIES

_____ 7. Provide opportunities for students to write in many forms (narratives, letters, reports, poems, and so on).

_____ 8. Provide opportunities for students to write for various *purposes* (to inform, entertain, persuade, explain, and so on) and various *audiences* (parents, peers, authors, public officials, and others).

_____ 9.* Provide students with specific criteria that they can use to guide their thinking and writing and that you use to provide feedback on the writing project.

REVISING AND EDITING ACTIVITIES

_____ 10. Model revising strategies (elaborating, sentence combining, eliminating unnecessary words or phrases, checking for sentence variety, and so on) that help students review and improve their writing.

_____ 11. Teach grammar and mechanical skills in relation to students' current writing experiences.

_____ 12. Encourage students to proofread their own work (checking for punctuation, capitalization, and spelling).

_____ 13. Encourage students to peer-edit each other's papers before they are finalized.

_____ 14. Involve students in maintaining a portfolio of their writing that they can review and use to develop new writing skills.

SHARING ACTIVITIES

_____ 15.* Encourage students to read their work out loud – to themselves and others – as part of the writing process.

_____ 16. Display or "publish" examples of high-quality writing.

_____ 17. Give writers positive, specific feedback on their work.

_____ 18. Conduct individual writing conferences with students.

_____ **Total Score**

*One of the Critical Four strategies

Interpreting Your Score

What does the survey tell me? Even before you total your score, a look at your survey provides some insights into your writing program. Since time is a valuable commodity in the classroom, your responses show you how you are using this scarce resource. The strategies you have rated as 4 or 5 are the "cornerstones" of your writing program because you are giving significant time to them. These are the strategies that drive your writing program.

The survey also shows you areas where you are giving little emphasis. These areas may not be emphasized in your classroom for any number of reasons. You may feel that they are not critical to your students' development as writers or that they are not appropriate for your students. Other low-rated strategies may be ones that you value but have not yet been able to effectively incorporate into your teaching.

What is a good score? Obviously, ss your score approaches 90 it means that you have rated virtually all of the 18 items at 4 or 5. Although these 18 items represent an excellent overview of effective writing practice, you may ask whether it is necessary to use all of them with great frequency to have an effective writing program. Your question is a common one that subsumes other, related questions: Can I do all these things regularly with the number of students I have? With my time constraints? With my curriculum demands?

So, what's the lowest score I could get and still have an effective writing program? A score in the 54-72 range is the basis for an effective writing program. A score higher than 72 would indicate that writing is already a prominent component of your classroom culture. A score lower than 54 (18 items multiplies by an average score of 3) could indicate that writing is not done often enough or that your writing instruction does not provide the kind of consistent focus students need to improve as writers. The strategies on this survey have little impact on improving students' writing when used randomly.

How do I use the survey to improve my writing program? In addition to looking at your overall score, you might want to look at your scores in the five sections of the survey – Program Values, Prewriting Activities, Drafting Activities, Revising and Editing Activities, and Sharing Activities. Do your scores in one or more sections seem noticeably higher or lower than scores in other sections?

In reviewing your scores in the five sections, don't overlook the fact that some of the strategies have benefits in several aspects of the writing process – not only the one in which it is categorized in the survey. A good example is item 15 (*Encourage students to read their work out loud – to themselves and others – as part of the writing process)* which is a strategy appropriate for drafting, revising and editing, as well as sharing. This is a critical strategy for young writers because it focuses attention on the overall quality of the written message rather than on the individual words. Its use is also beneficial in several stages of the writing process.

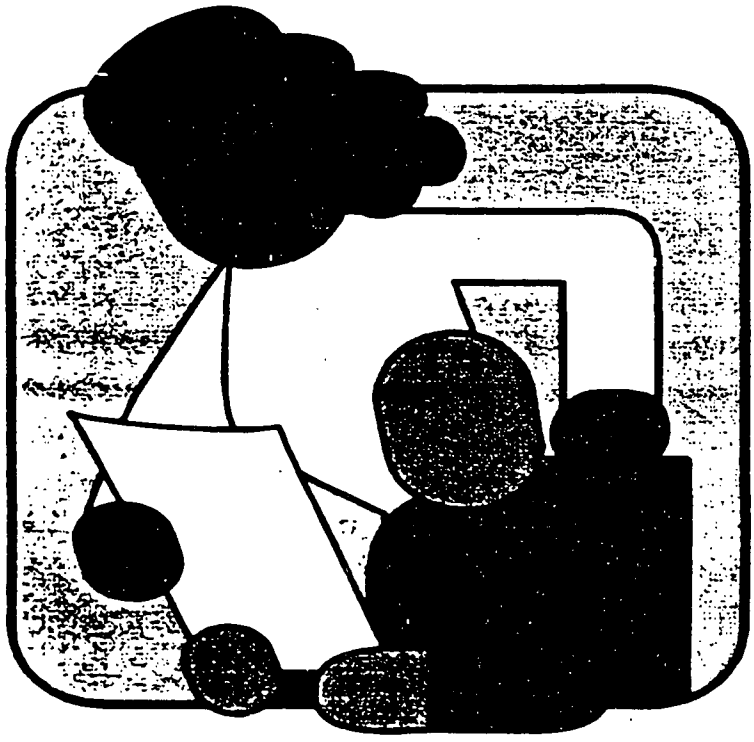
One way to use this survey is to consider carefully your scores on items 3, 9, 14, and 15 – the Critical Four strategies. I have identified these as the Critical Four strategies because high scores in these areas ensure that your writing program is headed in the right direction. It means that students are writing often, you are focusing your writing instruction, and you are showing students ways to be effective resources to themselves and others.

Making changes in any of these areas takes thought and effort, so avoid the temptation to change too many things at once. After reviewing your survey, choose two of the strategies that you feel would have the greatest impact on improving your students' writing and work on improving those. They may be two of the Critical Four or others that you think will benefit your students.

You may want to read more about the 18 strategies before you decide where to begin. Chapters 2-6 of this book focus on the strategies from the survey and Action Steps for each one. The remainder of the book looks at ways to use the Critical Four strategies to create an effective writing program for your young writers and provides some suggestions for communicating about your program to parents.

MATH
THIRD GRADE

Saxon Math
Saxon Math Grades 1-4
Whole Group Pacing
Saxon Grade Level Curriculum



SAXON MATH

Saxon Math grew out of a decade of intense classroom interaction with students in which the goal was for students to learn and remember the foundational skills of mathematics. The term "foundational" is appropriate because mathematics, perhaps more than any other subject, is a cognitive structure that builds upon prior learning. The ultimate height and stability of the mathematical structure within each individual are determined by the strength of the foundation. The text, as well as each book that precedes or follows, provides the student with the time and opportunities necessary to build a rock-solid foundation in beginning mathematics. For this to occur it is essential that all practice problems and all problem sets be completed by the students.

THE SAXON PEDAGOGY

Incremental development, continual review, and frequent, cumulative testing. There are three pillars of Saxon Mathematics.

- Incremental development means that concepts are taught in small, easily understood pieces that are presented in individual lessons over the course of the academic year.
- Once an increment has been taught, it is reviewed daily through worksheets and homework sets-a process called continual review. As concepts grow in complexity, earlier increments are included. Thus, all concepts and skills can be practiced on a daily basis without the homework sets becoming large and unwieldy. Over time, incremental development and continual review foster assimilation, mastery, and complete understanding of concepts and skills.
- Frequent, cumulative testing allows students to prove their mastery of skills before new concepts are introduced. Assessments encompass all concepts and skills that students have practiced.

SUCCESS WITH SAXON MATHEMATICS

There is considerable evidence from the educational community to suggest why Saxon's pedagogy of incremental development, continual review, and frequent, cumulative testing should be successful. What follows-support ranging from experimental studies to anecdotal evidence-suggests that this pedagogy is in fact successful.

Studies indicate that Saxon's Mathematics texts:

- can increase student test scores (Reed 1983; McBee 1984; Sistrunk and Benton 1992); Calvery, Bell, and Wheeler 1993; Rentschler 1994; Mayers 1995; Sanders 1997);
- can benefit students of low and average ability (Klingele and Reed 1984; Johnson and Smith 1987; Calvery, Bell, and Wheeler 1993);
- can lower math anxiety in students (Lafferty 1994);
- may help minority students narrow the math achievement gap (Sistrunk and Benton 1992); and
- are preferred (over traditional texts) by students and faculty (Johnson and Smith 1987 and Nguyen 1994a).

One of the most comprehensive studies of the effectiveness of Saxon textbooks was conducted between 1992 and 1994 by the Planning, Research, and Evaluation Department of the Oklahoma City public school system (Ngyuen 1994b). The study encompassed K-5 students in over three hundred classrooms using non-Saxon programs. Analysis of the 1994 ITBS scores for the Saxon students and a comparison group of the non-Saxon students revealed that:

Overall, the Saxon group scored higher than the comparison group of students in all comparisons. Five of these comparisons were statistically significant ($p<.01$): complete composite, total math, math concepts, problem solving, and reading comprehension. The other four comparisons also favored the Saxon group; however, the differences were not statistically significant: math computation, science, social studies, and total language.

Comments from teachers and administrators:

- *"The first four years (using Saxon) my class had the highest scoring on the state ISTEP test in Muncie, which has twelve elementary schools. Last year we were number one in problem solving in the city."* Mel Botkin, Retired Teacher, Muncie, IN
- *"Students are taking more math classes than ever before in the history of the school. In 1989 (before Saxon), we had about 30% of the student body in the math program. Today, almost the entire student body is involved."* Larry Cone, Teacher, Muskegon, MI
- *"I see improvement in retention of skills using Saxon at all levels. Often young people come into eighth grade believing they 'can't do math' and change their minds (after using) Saxon."* Cylinda Rucker, Teacher, Eagleville, MO
- *"Probably the most exciting thing about using Saxon this year was seeing students develop their ability to apply what they had already learned to new topics. Another tremendous benefit was no longer seeing the blank looks regarding topics covered earlier in the year."* Elizabeth A. Moody, Teacher, Hudson, NH
- *"All seventh-graders were tested before studying Saxon and scored in the range from 8th percentile to 97 percentile. Class average was 44th percentile. After one year of instruction using Saxon Algebra ½, the median score for the same students was 97th percentile."* Frederick H. Maas, Teacher, Santa Fe, NM
- *"Our math scores have dramatically improved. All of my teachers love the Saxon materials."* Mike Hanke, Principal, Green Bay, WI
- *"The special education students are catching up. Many no longer qualify for special education after two years of Saxon."* Marvin Miles, Teacher, Blackfoot, ID

Conclusion

The Saxon pedagogy has its roots in the classroom. It is a method that was developed specifically to improve long-term retention of concepts and skills. For twenty years, and with increasing refinement, the Saxon pedagogy has been applied to a range of subjects and grade levels. Because of its effectiveness and ease of use, tens of thousands of teachers across the United States and abroad have embraced the Saxon methodology, and millions of students have benefited from mathematics instruction based on incremental development, continual review, and cumulative testing.

SAXON MATH
GRADES 1-4

Introduction

Saxon's primary mathematics series is a "hands-on," success-oriented program that emphasizes manipulatives and mental math. The series addresses the multisensory approach to teaching and is designed for hetergeneously grouped children. Its use will enable all children to develop a solid foundation in the language and basic concepts of mathematics.

There are five components to Saxon's primary math program: The Meeting, The Lesson, Written Practice, Facts Practice, and Assessment.

1. The Meeting

Each day the children will participate in a beginning-of-the-day math activity called The Meeting. This is a comfortable and predictable routine that is repeated in every grade (K, 1, 2, 3, 4) at appropriate conceptual levels. It is important that The Meeting take place each day when all the children are present. At different times in different grades during The Meeting, the children practice skills related to time, temperature, money, counting, patterning, and problem solving. The language and activities in The Meeting develop as the year progresses and expand on those from the previous grade level. Initially, the teacher leads The Meeting; the children gradually assume this responsibility.

The focal point of The Meeting is the meeting board. It is not necessary to have a single board as long as all of the components are posted in view and within reach of all of the children. Each grade level has instructions in the teacher's manual describing the meeting board for that program. If possible, construct the meeting board in a place where children can sit in a semicircle in front of it.

At the beginning of the school year The Meeting may take longer than the recommended fifteen to twenty minutes. Both teacher and students will be adapting to this daily procedure, and as everyone becomes more familiar and comfortable with the routine, The Meeting will take less time. **Toward the middle of the year the teacher may choose to omit parts of The Meeting that the students have mastered** (except for once or twice a week as review) **so that the pace remains energetic and the content interesting.**

2. The Lesson

The Lesson usually occurs later in the day. During The Lesson, a new objective (increment) is introduced through a carefully selected group activity. Children use materials, engage in discussions, work in groups, and work together to help each other learn. Teachers should not expect children to perform beyond the difficulty level of the presented problems, nor should they worry if a child does not "catch on" during the first encounter with a concept. It is expected that the child will work on problems at the same level of difficulty for several days or weeks before proceeding to the next level of difficulty. The concept will be extended in subsequent Lessons.

In grades 1-4, four Lessons should be completed each week. The extra day of the week can be used for catching up or for math games or projects. The Meeting should take place on the extra day as well. The teacher can use The Meeting from the previous day (or any day that week) by changing the parts to reflect a new day. In weeks containing an Assessment, four Lessons (including the Assessment) should be completed. The Meeting script for the first day of the month also contains The Lesson for that day.

It is important that the teacher not become discouraged at the length of time it takes to complete a Lesson the first few months of the program.

Teachers who have completed an entire school year will assure you that it does get better. You will soon be able to look at a Lesson and decide whether to attempt it in one day or whether to divide it into two days. Don't forget that an extra day each week is built into the program! When dividing a Lesson, we recommend keeping the Facts Practice with The Lesson and doing the Written Practice the following day.

Notes on Manipulatives

Manipulatives are an integral part of the primary math program. Saxon Publishers sells a kit that supplies many of the manipulatives used in *Math K, Math 1, Math 2, Math 3,* and *Math 4.* You may prefer to shop at your local educational supply store or any educational catalog for math supplies. For a list of manipulatives by grade level, refer to the catalog or contact Saxon Publishers at (800) 284-7019.

Tip!

To keep lesson time to a minimum, always be aware of the time it takes to pass out and to collect manipulatives. You can distribute manipulatives in plastic baggies, baskets shared by two or three students, paper cups, or buckets. Items can be stored in the same containers used for distribution. Analysis of distribution procedures can sometimes help make a big different in the overall length of math time.

3. Written Practice

Individual Written Practice is a short practice of the new objective and includes a continual review of previously presented concepts. Written Practice is a part of every Lesson in grades 1-4. Children complete Side A of the Written Practice in class with the teacher's assistance. Side B, which mirrors the examples completed in class, is done at home. Children are encouraged to ask parents for help, if necessary, and to have them check their work. If children have answered a question incorrectly in class, help them correct their work before marking their papers. Children learn from the experience of correcting their mistakes, and it is important that they have the corrected paper to refer to as they complete their homework. Because the Written Practice is being used as a part of the initial learning experience rather than a reflection of what has already been learned, it is corrected but not graded.

4. Facts Practice

Children are presented with strategies to help them learn the number facts. They are encouraged to recall the facts through the use of pattern recognition. Children practice the facts orally and monitor their progress in grades 2, 3, and 4 with timed drills (Facts Practice sheets). Children do not compete against one another, but rather with their own past performance. It is expected that children will have automatic fact recall by the end of the third grade. Teachers might consider encouraging students to keep their own record of their scores on fact sheets. This recording helps the students track their own individual progress and promotes a sense of accomplishment.

It is important to practice number facts each day. Depending on the class time available, you may want to have the children practice together in pairs or you may want to practice with the class as a whole.

Facts Practice differs from grade to grade. Grade 1 children practice facts on untimed facts sheets. Prior to working on a fact sheet the students are given class time to practice using their fact cards. The students are encouraged to better their score each time they do a fact sheet.

In *Math 2* the fact sheets are timed. To encourage students, give the first Facts Practice in each series without timing or counting it. Remember that the time allotted can vary depending on the difficulty of the facts. Allow two minutes or a minute and a half instead of the prescribed one-minute limit when these assignments are first introduced. If the majority of the students are not very successful on the final round with a set of facts, use some group practice techniques, and then administer the sheet an extra time. The goal at the beginning of the year is for the students to complete at least fifteen problems correctly by the third time the fact sheet is worked.

The time limit for the fact sheets is reduced to 45 seconds in *Math 3*. Again, this time can be lengthened initially to help the students adjust to the exercise. Some of the strategies used in *Math 2* can also be applied in *Math 3* to encourage the students to excel.

5. Assessment

Oral and cumulative written Assessments are built into the program. Each Assessment questions children on skills that have been practiced for at least five Lessons. At grades 1-4, a written Assessment occurs after Lesson 10 and after every five Lessons thereafter. An oral Assessment occurs every ten Lessons. The oral Assessments are short, individual interviews that occur during independent working time and on the extra day that is built into the program. Each oral Assessment may be completed over a period of five days.

GENERAL ASSESSMENT

An available test booklet contains two forms of tests for every five Lessons. The second test form may be used for make-up testing. Tests should be given about five Lessons after the last concept has been taught. Thus Test 1, which covers topics from Lesson 1 through Lesson 5, should be given after Lesson 10. Test 2 should be given after Lesson 15, Test 3 after Lesson 20, and so on. This allows the students time to learn the new topic before being tested on it. Students will make excellent progress if they are able to score 80% or better on the tests. Students who fall below the 80% level should be given remedial attention immediately. Some teachers choose to test every ten Lessons using only the even-numbered or odd-numbered tests. This is an acceptable alternative to testing every five Lessons.

Stephen Hake
Temple City, California

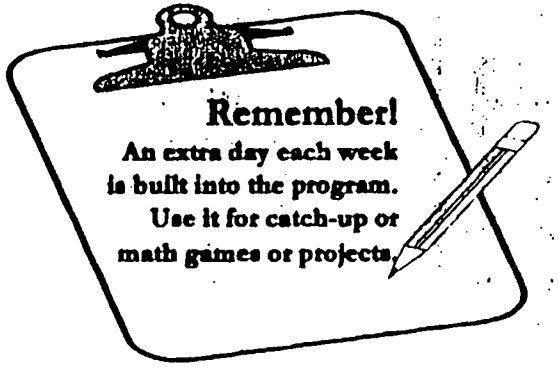
John Saxon
Norman, Oklahoma

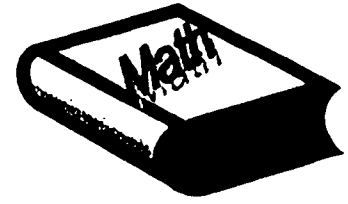
PACING WHOLE-GROUP INSTRUCTION

When teaching the Saxon program through whole-group instruction, pacing is key. It is important that each student have the opportunity to complete the entire textbook doing the school year. The chart below offers guidance about the number of lessons that should be completed during each grading period.

SAXON PUBLISHING			SCHOOLS USING QUARTER/SEMESTER SYSTEM			
Edition	**Title**	**Total No.**	**1st Quarter**	**2nd Quarter**	**3rd Quarter**	**4th Quarter**
2nd	Math K*	112	1-28	29-56	57-84	85-112
2nd	Math Grade 1	130	1-32	33-65	66-97	98-130
2nd	Math Grade 2	132	1-35	35-70	71-100	101-132
2nd	Math Grade 3	140	1-35	35-70	71-105	106-140
2nd	Math Grade 4	140	1-35	36-70	71-105	106-140

** Does not include 5 lessons found in Meetings*





Saxon Mathematics Curriculm
Grade: 3

I. Patterns, Relationships, and Functions

Content Standard 1: Students recognize similarities and generalize patterns, use patterns to create models and make predictions, describe the nature of patterns and relationships and construct representations of mathematical relationships. (Patterns)

Objective	*Lessons/Methodology*
1. Recognize, describe and extend numerical and geometric patterns.	M 7-119 L 10, 20, 24, 30, 47, 67, 110, 117, 118
2. Represent and record patterns and relationships in a variety of ways, including tables, charts, and pictures.	L 59, 85
3. Use patterns to describe real-world phenomena.	M 7-119 L 10, 20, 24, 30
4. Explore various types of numeric and geometric patterns (repeating, growing, shrinking).	M 7-119 L 10, 20, 24, 30, 47, 67, 110, 117, 118
5. Apply their experiences with patterns to help solve problems and explore new content.	M 1-140 L 24, 80, 89, 118, 119, 135

Content Standard 2: Students describe the relationships among variables, predict what will happen to one variable as another variable is changed, analyze natural variation and sources of variability, and compare patterns of change. (Variability and Change)

Objective	*Lessons/Methodology*
1. Recognize change and variability when it occurs in a variety of settings.	L 24, 80, 89, 118, 119, 135
2. Recognize that change is often predictable, but variable, and that patterns emerge that help to describe the change.	L 80, 100
3. Explore change, and realize that changes are frequently interdependent.	M 7-119 L 41, 47, 67, 110, 117, 119
4. Use tables, charts, open sentences, and hands-on models to represent change and variability.	L 47, 59, 70, 85
5 Begin to describe and differentiate between types of relationships, especially repeating, growing, and shrinking patterns	M 7-119 L 10, 20, 24, 30, 47, 59, 67, 110, 117, 118
6 Explore variability and change in a variety of contexts, investigations and problems.	M 1-140 L 24, 80, 89, 118, 119, 135

M=Meetings
L=Lessons

Saxon Mathematics Curriculm

Grade: 3

II. Geometry and Measurement

Content Standard 1: Students develop spatial sense, use shapes as an analytic and descriptive tool, identify characteristics and define shapes, identify properties and describe relationships among shapes. (Shape and Shape Relationships)

Objective	*Lessons/Methodology*
1. Recognize and name familiar shapes in one, two, and three dimensions, such as lines, rectangles and spheres and informally discuss the shape of a graph.	L 22, 43, 51, 57, 67, 70, 76, 108, 114, 118, 127, 133
2. Describe the attributes of familiar shapes.	L 22, 43, 67, 108, 118, 127, 133
3. Compare, sort, and classify familiar shapes.	L 22, 43, 67, 108, 118, 127, 133
4. Draw and build familiar shapes.	L 22, 43, 67, 108, 118, 127, 133
5. Explore ways to combine, dissect, and transform shapes.	L 133
6. Recognize parallel and perpendicular line segments and figures that have similarity and/or congruence.	L 11, 19, 35, 118, 127, 133
7. Use shape, shape properties and shape relationships to describe the physical world and to solve problems.	L 22, 43, 67, 108, 118, 127, 133

Content Standard 2: Students identify locations of objects, identify location relative to other objects, and describe the effects of transformations (e.g., sliding, flipping, turning, enlarging, reducing) on an object. (Position)

Objective	*Lessons/Methodology*
1. Locate and describe objects in terms of their position, including front, back, inside, outside, right, left, over, under, next to, between and locations on the number line, on a coordinate graph and on a map.	L 32, 46, 51, 55, 60, 92, 100, 112, 117, 130, 133, 136, 139, 140
2. Locate and describe objects in terms of their orientation, direction and relative position, including up, down, front, back, N-S-E-W, flipped, turned, translated; recognize symmetrical objects and identify their lines of symmetry.	L 32, 46, 51, 55, 60, 92, 100, 112, 117, 130, 133, 136, 139, 140
3 Explore what happens to the size, shape, and position of an object after sliding, flipping, turning, enlarging, or reducing it.	L 11, 19, 35, 133
4 Use concepts of position, direction, and orientation to describe the physical world and to solve problems.	L 11, 19, 35, 133

Content Standard 3 : Students compare attributes of tow objects, or of one object with a standard (unit), and analyze situations to determine what measurement(s) should be made and to what level of precision. (Measurement)

Objective	*Lessons/Methodology*
1 Compare attributes of objects; develop standard units of measurement, and select and use standard tools for measurement	L 5, 6, 34, 35, 55, 74, 92, 96, 100, 130
2 Identify the attribute to be measured and select the appropriate unit of measurement for length, mass (weight), area, perimeter, capacity, time temperature, and money.	M 3-140 L 5, 6, 12, 23, 27, 28, 34, 39, 52, 53, 62, 74, 77, 84, 86, 92, 96, 102, 107
3 Develop strategies for estimating measures and compare the estimates to the results of the measurement; decide if an estimate is a "good estimate."	L 52, 96, 124, 130

M=Meetings
L=Lessons

Saxon Mathematics Curriculm
Grade: 3

4. Explain the meaning of measurements and recognize that the number of units it takes to measure an object is related to the size of the unit.	L 5, 6, 34, 52, 53, 74, 92, 96
5. Explore scale drawings, models, and maps and relate them to measurement of real objects.	M 108 L 60, 90, 130, 133
6. Apply measurement to describe the real world and to solve problems.	L 5, 6, 34, 35, 55, 74, 92, 96, 100, 130
III. Data Analysis and Statistics	
Content Standard 1: Students collect and explore data, organize data into a useful form, and develop skill in representing and reading data displayed in different formats. (Collection, Organization, Presentation of Data)	
Objective	***Lessons/Methodology***
1. Collect and explore data through counting, measuring, and conducting surveys and experiments.	L 2, 40, 51, 57, 70, 80, 100
2. Organize data using concrete objects, pictures, tallies, tables, charts, diagrams, and graphs.	L 2, 3, 40, 51, 57, 70
3. Present data using a variety of appropriate representations and explain the meaning of the data.	L 2, 40, 51, 57, 70
4. Identify what data are needed to answer a particular question or solve a given problem, and design and implement strategies to obtain, organize, and present those data.	L 2, 40, 51, 57, 70
Content Standard 2: Students examine data and describe characteristics of a distribution, relate data to the situation from which they arose, and use data to answer questions convincingly and persuasively. (Description and Interpretation)	
Objective	***Lessons/Methodology***
1. Read and explain data they have collected and organized themselves and progress to reading data from other sources.	L 2, 40, 51, 57, 70
2. Describe the shape of the data using informal language.	L 2, 40, 51, 57, 70
3 Draw, explain, and justify conclusions, such as trends, based on data.	L 2, 40, 51, 57, 70
4 Raise and answer questions about the source, collection, organization, and presentation of data, as well as the conclusions drawn from the data, explore biases in the data.	L 2, 40, 51, 57, 70
5 Formulate questions and problems and gather and interpret data to answer those questions.	L 2, 40, 51, 57, 70
Content Standard 3 Students draw defensible inferences about unknown outcomes, make predictions, and identify the degree of confidence they have in their predictions (Inference and Prediction)	
Objective	***Lessons/Methodology***
1 Make and test hypothesis.	L 40, 51, 70, 80, 100
2 Conduct surveys, samplings, and experiments to solve problems and answer questions of interest to them.	L 40, 51, 70, 80, 100
3 Formulate and communicate arguments and conclusions based on data and evaluate their arguments and those of others.	L 40, 51, 70, 80, 100
4 Make and explain predictions based on data.	L 80, 100
5 Make predictions to answer questions and solve problems.	L 80, 100
IV. Number Sense and Numeration	

M=Meetings
L=Lessons

Saxon Mathematics Curriculm
Grade: 3

Content Standard 1: Students experience counting and measuring activities to develop intuitive sense about numbers, develop understanding about properties of numbers, understand the need for and existence of different sets of numbers, and investigate properties of special numbers. (Concepts and Properties of Numbers)

Objective	*Lessons/Methodology*
1. Develop an understanding of whole numbers and read, write, and count using whole numbers; investigate basic concepts of fractions and decimals.	M 93, 121 L 11, 17, 22, 23, 26, 33, 56, 61, 62, 63, 68, 71, 73, 89, 92, 99, 101, 137
2. Investigate and develop an understanding of the base-10 place-value system.	L 7, 21, 23, 36, 44, 56, 58, 62, 71, 73, 81, 82, 99, 101, 102, 104, 107
3. Develop an understanding of the properties of numbers (e.g., order) and of the properties of the special numbers 0 and 1.	L 30, 39, 48, 87, 104, 121
4. Apply their understanding of number systems to model and solve problems.	L 30, 39, 87, 104

Content Standard 2: Students recognize that numbers are used in different ways such as counting, measuring, ordering and estimating, understand and produce multiple representations of a number, and translate among equivalent representations. (Representation and Uses of Numbers)

Objective	*Lessons/Methodology*
1. Represent whole numbers, fractions and decimals using concrete, pictorial and symbolic representations.	M 93, 121 L 11, 17, 22, 23, 26, 33, 56, 61, 62, 63, 68, 71, 73, 89, 92, 99, 101, 137
2. Explore and recognize different representations for the same number and explain why they are the same.	M 121 L 23, 56, 62, 71, 73, 99, 101
3. Investigate ways numbers are used (e.g., counting, ordering, naming, locating, measuring).	L 7, 9, 10, 20, 23, 58, 62, 64, 71, 72, 73, 82, 89, 101, 103
4. Develop strategies for estimating quantity and evaluate the reasonableness of their estimates.	L 19, 21, 52, 70, 96, 124
5. Select appropriate numbers and representations in order to solve problems.	M 1-140 L 14, 15, 16, 37, 40, 47, 65, 66, 109, 115

Content Standard 3: Students investigate relationships such as equality, inequality, inverses, factors, and multiples, and represent and compare very large and very small numbers. (Number Relationships)

Objective	*Lessons/Methodology*
1. Compare and order numbers using "equal," "less than," or "greater than."	M 77 L 7, 58, 72
2 Use part-whole relationships to explore numbers, develop number concepts, and understand computation.	L 3, 9, 10, 14, 15, 16, 24, 37, 43, 47, 59, 63, 65, 78, 80, 123, 130
3 Classify numbers as even or odd and explore concepts of factors and multiples.	M 108 L 9, 44, 64, 110, 111, 120
4 Apply their understanding of number relationships in solving problems	L 14, 15, 16, 37, 40, 47, 65, 66, 109, 115

M=Meetings
L=Lessons

Saxon Mathematics Curriculm
Grade: 3

V. Numerical and Algebraic Operations and Analytical Thinking

Content Standard 1: Students understand and use various types of operations (e.g. addition, subtraction, multiplication, division) to solve problems. (Operations and their Properties).

Objective	*Lessons/Methodology*
1. Use manipulatives to model operations with numbers; develop their own methods of recording operations; and relate their models and recordings to standard symbolic expressions and algorithms.	M 1-140 L 3, 4, 8, 9, 113, 14, 15, 16, 18, 21, 24, 25, 27, 31, 34, 36, 38, 39, 42, 44, 45, 48, 59, 64, 67, 69, 72, 75, 78, 79, 81, 82, 85, 86, 87, 91, 94, 95, 97, 98, 102, 104, 106, 107, 109, 110, 115, 116, 117, 122, 125, 126, 128, 129, 134, 135, 136, 138
2. Develop and apply the appropriate method of computation from among mental computation, estimation, paper-and-pencil, or calculators; explain why they are choosing a method and how they know which operations to perform in a given situation.	M 1-140 L 3, 4, 8, 9, 113, 14, 15, 16, 18, 21, 24, 25, 27, 31, 34, 36, 38, 39, 42, 44, 45, 46, 48, 59, 64, 67, 69, 72, 75, 78, 79, 81, 82, 85, 86, 87, 91, 94, 95, 97, 98, 100, 102, 104, 106, 107, 109, 110, 111, 113, 115, 116, 117, 119, 120, 121, 122, 125, 126, 128, 129, 132, 134, 135, 136, 138
3. Explore properties of operations (e.g. Commutative and distributive properties) and give examples of how they use those properties.	M 1-140 L 39, 48, 87, 104, 116, 121
4. Apply operations efficiently and accurately in solving problems.	M 1-140 L 3, 4, 8, 9, 113, 14, 15, 16, 18, 21, 24, 25, 27, 31, 34, 36, 38, 39, 42, 44, 45, 46, 48, 59, 64, 67, 69, 72, 75, 78, 79, 81, 82, 85, 86, 87, 91, 94, 95, 97, 98, 100, 102, 104, 106, 107, 109, 110, 111, 113, 115, 116, 117, 119, 120, 121, 122, 125, 126, 128, 129, 132, 134, 135, 136, 138

Content Standard 2: Students analyze problems to determine an appropriate process for solution and use algebraic notations to model or represent problems. (Algebraic and Analytic Thinking)

Objective	*Lessons/Methodology*
1. Write and solve open sentences (e.g., + = 5) and write stories to fit the open sentence.	M 108 L 9, 24, 47, 80, 106, 123, 130
2. Explore algebraic concepts with manupulatives such as balance scales, tables of input and output, and pictorial representations of problems.	L 119
3. Find replacements for the variable(s) in open sentences	M 108 L 9, 24, 47, 80, 106, 123, 130
4. Use analytic thinking to describe situations and solve problems.	M 108 L 9, 24, 47, 65, 80, 106, 123, 130

VI. Probability and Discrete Mathematics

Content Standard 1: Students develop an understanding of the notion of certainty and of probability as a measure of the degree of likelihood that can be assigned to a given event based on the knowledge available , and make critical judgements about claims that are made in probabilistic situations. (Probability)

Objective	*Lessons/Methodology*
1. Explain the difference between chance and certainty and give examples to illustrate their understanding.	L 80
2. Compare events and describe them as "more likely" or "less likely" and use the language of fractions to describe simple probabilities	L 80, 100

M=Meetings
L=Lessons

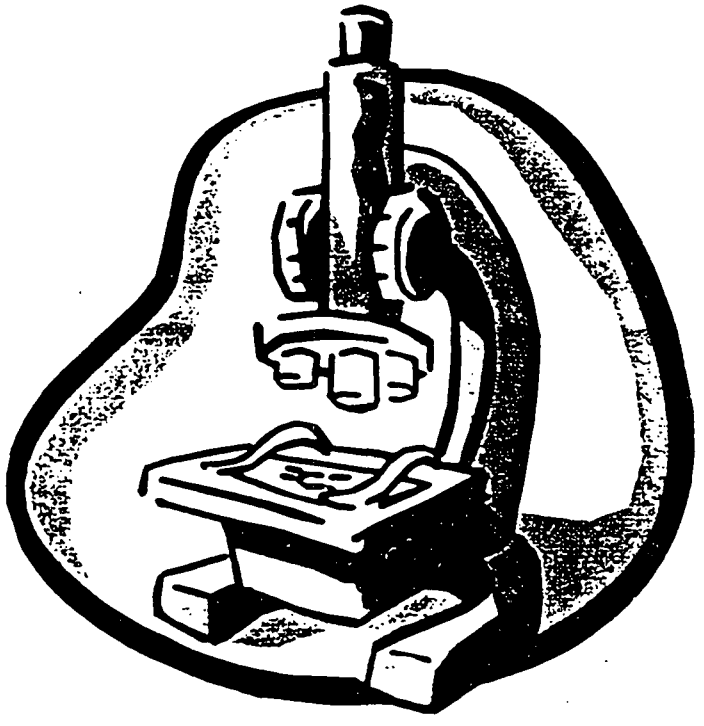
Saxon Mathematics Curriculm
Grade: 3

3. Conduct experiments with concrete objects to explore concepts and develop an intuitive understanding of how the conditions of the experiment can affect the outcome.	L 80, 100
4. Conduct experiments, record the outcomes, examine thsoe outcomes to determine if they make sense, and search for explanations of the outcomes.	L 80, 100
5. Conduct probability experiments and simulations to model and solve problems.	L 80
Content Standards 2: Students investigate practical solutions such as scheduling, routing, sequencing, networking, organizing and classifying, and analyze ideas like recurrence relations, induction, iteration, and algorithm design. (Discrete Mathematics)	
Objective	***Lessons/Methodology***
1. Use manipulatives and diagrams to explore problems involving counting and arranging objects.	L 40, 51, 70, 80, 100
2. Explore sets and set relationships by sorting and classifying objects.	L 2, 21, 23, 36, 44, 56, 58, 62, 71, 73, 81, 82, 99, 101, 102, 104, 107
3. Explore situations in which they model and trace paths using figures consisting of vertices connected by edges.	L 22, 43, 67, 108, 118, 127, 133
4. Explore now-next patterns.	M 7-119 L 24, 41, 47, 59, 67, 80, 85, 89, 110, 117, 118, 119, 135
5. Explore develop, and invent their own algorithms to accomplish a task or to solve numerical problems.	M 1-140 L 9, 10, 16, 23, 37, 40, 41, 50, 109
6. Use discrete mathematics concepts described above to model situations and solve problems; and look for whether or not there is a solution (existence problems), determine how many solutions there are (counting problems), and decide upon a best solution (optimizing problems).	L 10, 48, 80, 89, 96, 119, 124, 138

M=Meetings
L=Lessons

SCIENCE
THIRD GRADE

NHA Science Philosophy
Content Standards and Objectives
Science Objective Summaries/Links
Grade Level Schedule
The Teaching of Origins



NHA SCIENCE PHILOSOPHY

National Heritage Academies believes in excellence in science education. Our curriculum is based on:

NHAGOSE Standards (National Heritage Goals and Objectives for Science Education)
Nhagose standards are the state requirements of what all students need to know and be able to do in the subject of Science. A state standardized assessment tool is used to provide feedback on how well the objectives have been covered. Our curriculum has been carefully aligned so as to cover these objectives and skills consistently throughout all grades.

Core Knowledge (content objectives)
The Core Knowledge Sequence represents a first and ongoing attempt to state specific core knowledge that children should learn. It is designed to encourage steady academic progress as children build their knowledge from one year to the next. Core Knowledge objectives cover much of the same information as the state standards, thus, they are not listed twice. For those objectives/units that are specific to Core Knowledge, they are labeled as such and should be covered when possible. It is National Heritage Academies' goal for the Core Knowledge to account for approximately 50% of the science curriculum.

NHA teachers play significant role in the creation of our science curriculum. Besides the extensive work of our science specialist, Randy Creswell, many teachers have contributed time and effort into writing units and/or committee work where much of our information such as experiment tables were compiled.

Our teachers plan their lessons using the content objectives and lesson ideas presented in the binder. Principals will provide the materials and resources needed to accompany the plans.

SCIENTIFICALLY LITERATE STUDENTS KNOW HOW TO... USE KNOWLEDGE... TO ENGAGE IN ACTIVITIES... IN REAL-WORLD CONTEXTS

I. CONSTRUCT NEW SCIENTIFIC AND PERSONAL KNOWLEDGE	
Content Standard 1: All students will ask questions that help them learn about the world; design and conduct investigations using appropriate methodology and technology; learn from books and other sources of information; communicate their findings using appropriate technology; and reconstruct previously learned knowledge. (Constructing New Scientific Knowledge)	
Objective	**Lessons/Methodology**
1. Generate reasonable questions about the world based on observation.	C1
2. Develop solutions to unfamiliar problems through reasoning, observation, and/or experiment.	C2
3. Manipulate simple mechanical devices and explain how they work.	C3
4. Use simple measurement devices to make metric measurement.	C4
5. Develop strategies and skills for information gathering and problem solving.	C5
6. Construct charts and graphs and prepare summaries of observations.	C6
II. REFLECT ON THE NATURE, ADEQUACY AND CONNECTIONS ACROSS SCIENTIFIC KNOWLEDGE	
Content Standard 2: All students will analyze claims for their scientific merit and explain how scientists decide what constitutes scientific knowledge; how science is related to other ways of knowing; how science and technology affect our society; and how people of diverse cultures have contributed to and influenced developments in science. (Reflecting on Scientific Knowledge)	
Objective	**Lessons/Methodology**
1. Develop an awareness of the need for evidence in making decisions scientifically.	R1
2. Show how science concepts can be interpreted through creative expression such as language arts and fine arts.	R2
III. USING SCIENTIFIC KNOWLEDGE IN LIFE SCIENCE	
Content Standard 1: All students will apply an understanding of cells to the functioning of multicellular organisms; and explain how cells grow, develop, and reproduce.	
Objective	**Lessons/Methodology**
1. Describe cells as living systems.	LC 1
Content Standard 2: All students will use classification systems to describe groups of living things; compare and contrast differences in the life cycles of living things; investigate and explain how living things obtain and use energy; and analyze how parts of living things are adapted to carry out specific functions.	
Objective	**Lessons/Methodology**
1. Compare and classify familiar organisms on the basis of observable physical characteristics.	LO 1

2. Describe vertebrates in terms of observable body parts and characteristics.	LO 2
3. Describe life cycles of familiar organisms.	LO 3
4. Compare and contrast food, energy, and environmental needs of similar organisms.	LO 4
5. Explain how physical and / behavioral characteristics of organisms help them to survive in their environment.	LE 2
6. Describe functions of selected seed plant parts.	LO 5
Content Standard 3: All students will investigate and explain how characteristics of living things are passed on through generations; explain why organisms within a species are different from one another; and explain how new traits can be established by changing or manipulating genes.	
Objective	**Lessons/Methodology**
1. Give evidence that characteristics are passed from parents to young.	LH 1
Content Standard 4: All students will explain how scientists construct and scientifically test theories concerning the origin of life and evolution of species; compare ways that living organisms are adapted (suited) to survive and reproduce in their environments; and analyze how species changes through time.	
Objective	**Lessons/Methodology**
1. Explain how fossils provide evidence about the nature of ancient life.	LE 1
2. Explain how physical and / or behavioral characteristics of organisms help them to survive in their environments	LE 2
Content Standard 5: All students will explain how parts of an ecosystem are related and how they interact; explain how energy is distributed to living things in an ecosystem; investigate and explain how communities of living things change over a period of time; describe how materials cycle through an ecosystem and get reused in the environment; and analyze how humans and the environment interact.	
Objectives	**Lessons/Methodology**
1. Identify familiar organisms as part of a food chain or food web and describe their feeding relationships within the web.	LEC 1
2. Explain common patterns of interdependence and interrelationships of living things.	LEC 2
3. Describe the basic requirements for all living things to maintain their existence.	LEC 3
4. Describe systems that encourage growing of particular plants and animals.	LEC 4
5. Describe positive and negative effects of humans on the environment.	LEC 5

IV. USING SCIENTIFIC KNOWLEDGE IN PHYSICAL SCIENCE	
Content Standard 1: All students will measure and describe the things around us; explain what the world around us is made of; identify and describe forms of energy; and explain how electricity and magnetism interact with matter.	
Objective	**Lessons/Methodology**
1. Classify common objects according to observable attributes.	PME 1
2. Measure weight, dimensions, and temperature of appropriate objects and materials.	PME 2
3. Identify properties of materials that make them useful.	PME 3
4. Identify forms of energy associated with common phenomena.	PME 4
5. Describe the interaction of magnetic materials with other magnetic materials and non-magnetic materials.	PME 5
6. Describe the interaction of charged materials with other charged or uncharged materials.	PME 6
7. Describe possible electrical hazards to be avoided at home and at school.	PME 7
Content Standard 2: All students will investigate, describe and analyze ways in which matter changes; describe how living things and human technology change matter and transform energy; explain how visible changes in matter are related to atoms and molecules; and how changes in matter are related to changes in energy.	
Objective	**Lessons/Methodology**
1. Describe common physical changes in matter (size, shape, melting, freezing, dissolving).	PCM 1
2. Prepare mixtures and separate them into their component parts.	PMC 2
3. Construct simple objects that fulfill a technological purpose.	PMC 3
Content Standard 3: All students will describe how things around us move and explain why things move as they do; demonstrate and explain how we control the motions of objects; and relate motion to energy and energy conversions.	
Objects	**Lessons/Methodology**
1. Describe or compare motions of common objects in terms of speed and direction.	PMO 1
2. Describe how forces (pushes or pulls) speed up, slow down, stop, or change the direction of a moving object.	PMO 2
3. Use simple machines to make work easier.	PMO 3

Content Standard 4: All students will describe sounds and sound waves; explain shadows, color, and other light phenomena; measure and describe vibrations and waves; and explain how waves and vibrations transfer energy.	
Objectives	**Lessons/Methodology**
1. Describe sound in terms of its properties.	PWV 1
2. Explain how sounds are made.	PWV 2
3. Describe light from a source in terms of its properties.	PWV 3
4. Explain how light illuminates objects.	PWV 4
5. Explain how shadows are made.	PWV 5
V. USING SCIENTIFIC KNOWLEDGE IN EARTH SCIENCE	
Content Standard 1: The Geosphere. All students will describe the earth's surface; describe and explain how the earth's features change over time; and analyze effects of technology on the earth's surface and resources.	
Objective	**Lessons/Methodology**
1. Describe major features of the earth's surface.	EG 1
2. Recognize and describe different types of earth materials.	EG 2
3. Explain how rocks and fossils are used to understand the history of the earth.	EG 3
4. Describe the natural changes in the earth's history.	EG 4
5. Describe uses of materials taken from the earth.	EG 5
6. Demonstrate means to recycle manufactured materials and a disposition towards recycling.	EG 6
Content Standard 2: The Hydrosphere. All students will demonstrate where water is found on earth; describe the characteristics of water and how water moves; and analyze the interaction of human activities with the hydrosphere.	
Objective	**Lessons/Methodology**
1. Describe how water exists on the earth in three states.	EH 1
2. Describe various forms that water takes on the earth's surface and conditions under which they could exist.	EH 2
3. Trace the path that rain water travels after it falls.	EH 3
4. Describe how rainwater in Michigan reaches the ocean.	EH 4
5. Identify sources of drinking water.	EH 5
6. Identify uses for water.	EH 6
7. Describe the origins of pollution in the hydrosphere.	EH 7
Content Standard 3: The atmosphere and weather. All students will investigate and describe what makes up weather and how it changes from day to day, from season to season and over long periods of time; explain what causes different kinds of weather; and analyze the relationships between human activities and the atmosphere.	
Objective	**Lessons/Methodology**
1. Describe the atmosphere.	EAW 1
2. Describe weather conditions and climate.	EAW 2
3. Describe seasonal changes in weather.	EAW 3
4. Explain appropriate safety precautions during severe weather	EAW 4

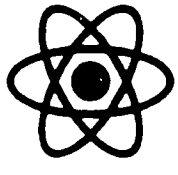
Content Standard 4: The Solar System, Galaxy, and Universe. All students will compare and contrast our planet and sun to other planets and star systems; describe and explain how objects in the solar system move; explain scientific theories as to the origin of the solar system; and explain how we learn about the universe.	
Objective	**Lesson/Methodology**
1. Describe the sun, moon, and earth.	ES 1
2. Describe the motions of the earth and moon around the sun.	ES 2

Science Objective Summaries and their Links:

EAW	Earth Science	Atmosphere and Weather
EG	Earth Science	Geosphere
EH	Earth Science	Hydrosphere
ES	Earth Science	Space

LC	Life Science	Cells
LE	Life Science	Evolution
LEC	Life Science	Ecosystems
LH	Life Science	Heredity
LO	Life Science	Living Organisms

PCM	Physical Science	Changes in Matter
PME	Physical Science	Matter and Energy
PMO	Physical Science	Motion of Objects
PWV	Physical Science	Waves (Sound, Light, Pendulae)



RECOMMENDED SCIENCE SCHEDULE
GRADE THREE

SEP		
Sep 4	PCM3	Scientific Method and small projects
Sep 10	LO 1	Animal Classification
Sep 17	LO 2	Vertebrates
Sep 24	LO 3	Life Cycles
OCT		
Oct 1	LO 4	Needs of Organisms
Oct 8	LE 2	Special Adaptations
Oct 15	LO 5	Plants
Oct 22	LO 5	Plants
Oct 29	LEC 1	Food Chains/ Food web
NOV		
Nov 5		Science Reading and Writing for Content
Nov 12	LEC 2	Ecological relationships
Nov 19		Science Reading and Writing for Content
Nov 26	LEC 3	Needs of living things
DEC		
Dec 3	LEC 4	Succession
Dec 10	PME 3	Properties of Materials
Dec 17		Science Reading and Writing for Content
JAN		
Jan 3	PME 3	Properties of Materials
Jan 7	PME 4	Energy
Jan 14	PME 4	Energy
Jan 21	PME 5	Magnetism
Jan 28	PME 6	Electricity
FEB		
Feb 4	PME 6/7	Electricity
Feb 11		Science reading and Writing for Content
Feb 18	PMO 3	Simple Machines
Feb 25	PMO 3	Simple Machines: Work Equation, W=F*D
MAR		
Mar 4	PWV 1 PWV 2	Sound
Mar 11	PWV 1 PWV 2	Sound
Mar 18	PWV 1 PWV 2	Sound
Mar 25		Science Reading and Writing for Content
APRIL		
April 8	PWV 3 PWV 4 PWV 5	Light
April 15	PWV 3 PWV 4 PWV 5	Light
April 22	PWV 3 PWV 4 PWV 5	Light
April 29	ES 1	Earth, Moon, Sun
MAY		
May 6	ES 2	Day/Night, Seasons, Moon Phases, Eclipses
May 13	ES 2	Day/Night, Seasons, Moon Phases, Eclipses
May 20	PMO 1	Motion
May 28	PMO 2	Forces
JUNE		
June 5		Science Project: Build Rockets

The Teaching of Origins
National Heritage Academies

National Heritage Academies recognizes that the teaching of origins is a topic that generates passionate debate because it touches deeply at the core of many people's strongly held beliefs. In no way does NHA seek to undermine the beliefs held by each family unit within our schools. Rather, we support the parents' rights to instruct their children on these topics.

At the same time, National Heritage Academies is required to teach according to state standards. NHA is committed to teaching the state's educational objectives in each state in which we are granted a charter. To that end, NHA has a system of objectives called NHAGOSE Standards (National Heritage Academies Goals of Science Education) that are based on Michigan state standards and have been expanded to include those of other states as well as the Core Knowledge Sequence. These NHAGOSE Standards have been approved state by state with our charters as meeting or exceeding state standards.

In teaching science at the elementary and middle school levels, NHA is committed to four teaching strategies. These are:

1. teaching basic facts;
2. teaching science skills (making graphs and tables, measuring, etc.);
3. teaching science models and their limitations;
4. teaching thinking skills to combine all the above into a coherent view of the universe.

The Core Knowledge Sequence focuses on points one and two above. Different state standards are blends of the four areas. Our NHAGOSE Standards have been written to implement these ideas in a way that covers all domains of science in age-appropriate ways.

Objective Standards

The attached appendices are a complete description of the three objectives related to evolution. The summarized objectives are:

- LE 1 - Explain how fossils provide evidence about the nature of ancient life.
- LE 2 - Explain how physical and/or behavioral characteristics of organisms help them to survive in their environments.
- LE 3 - Describe how biologists might trace possible evolutionary relationships among present and past life forms.

Note: LE 1 and LE 2 are elementary objectives and LE 3 is a middle school objective.

Philosophies, Ideology and Religion

It is required that all National Heritage Academies' schools teach science. The teaching of science necessitates teaching to objectives. In the process of teaching these objectives, we:

- teach basic facts;
- teach science skills (make graphs and tables, measurement...);
- teach science models and their limitations;
- teach thinking skills to combine all the above into a coherent view of the universe.

We do not teach any particular philosophy, ideology and/or religion that are not stated in our objectives.

We do not teach ideology or naturalistic religion. To the extent that evolution is concerned with fossils (and deductions from them), adaptations of plants and animals to environments, we teach these as testable, observable domains in which we legitimately practice scientific inquiry. In LE 3 we recognize evolution to be a working tool of the life sciences, which all students, regardless of their belief structures, should understand. Note that this objective does not insist that all biologists are evolutionists, mandate that evolutionary relationships are facts and laws like Newtonian Mechanics, or require that anyone believe the evolutionary relationships. The objective does require that we teach all students to understand how some biologists have reached certain conclusions.

Each of the listed objectives is tied in our curriculum to a related body of knowledge. LE 1 is tied to geology and is integrated with geology units. LE 2 is tied to the study of living organisms, their character and diversity. LE 3 is taught with units on cell biology and heredity. The result is that we are teaching science, of which these objectives are a part.

We do not teach creationism or scientific creationism. We do not have any labeled objectives for creationism. There are matters on which some scientific creationists will focus such as erosion (dealt with in EG 4, EG 10, EH 2 and EH 6) or density (PME 8). These topics are taught, but as issues of science, not as issues of creationism.

In all of our teaching, we are helping students both develop and critique models of the universe, recognizing that models have value in helping us to think, plan, and make conclusions. We also seek to help students recognize that models are simplifications of reality and are thus always subject to the limitations of our finite minds.

HISTORY/GEOGRAPHY
THIRD GRADE

Grade Level Schedule

Core Knowledge Objectives

The Core Democratic Values Grades K-4

The Core Democratic Values Grades 5-8

General Resources for Classroom Kits
(Perma-Bound Publications)

Geography Resources for Classroom Kits
(Debby and Company)

History/Geography Recommended Schedule
Grade 3
Economics is to be taught in conjunction with listed units

Month	Unit
August/September	**World Geography** (Spatial Sense; Geographical Terms and Features; Canada; Important Rivers of the World)
Week 1	
Week 2	
Week 3	**The Earliest Americans** (Crossing the Land Bridge)
Week 4	
October	(Native Americans)
Week 5	
Week 6	**Early Exploration of North America** (Early Spanish Exploration and Settlement; Exploration and Settlement of the American Southwest; the Search for the Northwest Passage)
Week 7	
Week 8	
November	
Week 9	**The Vikings**
Week 10	
Week 11	
Week 12	**The Thirteen Colonies: Life & Times Before the Revolution:** (Geography)
December	
Week 13	(Southern Colonies)
Week 14	**Holidays Around the World**
Week 15	
January	
Week 16	(Northeast Colonies)
Week 17	(Middle Atlantic Colonies)
Week 18	
Week 19	
February	
Week 20	**Regions**
Week 21	
Week 22	
Week 23	**Economics**
March	
Week 24	
Week 25	
Week 26	**Core Democratic Values/National Pride**
Week 27	
April	
Week 28	
Week 29	**Local Family History**
Week 30	
May/June	
Week 31	
Week 32	**Rome** (Geography of the Mediterranean Region; Background; The Empire: The "Decline and Fall" of Rome; The Eastern Roman Empire: Byzantine Civilization)
Week 33	
Week 34	
Week 35/36	

History and Geography: Grade 3

WORLD HISTORY AND GEOGRAPHY

I. World Geography

A. SPATIAL SENSE (working with maps, globes, and other geographic tools)

- Name your continent, country, state, and community
- Understand that maps have keys or legends with symbols and their uses
- Find directions on a map: east, west, north, south
- Identify major oceans: Pacific, Atlantic, Indian, Arctic
- The seven continents: Asia, Europe, Africa, North America, South America, Antarctica, Australia
- Locate: Canada, United States, Mexico, Central America
- Locate: the Equator, Northern Hemisphere and Southern Hemisphere, North and South Poles
- Measure straight-line distances using a bar scale
- Use an atlas and, if available, on-line sources to find geographic information

B. GEOGRAPHICAL TERMS AND FEATURES

- Boundary, channel, delta, isthmus, plateau, reservoir, strait

C. CANADA

- Locate in relation to United States
- French and British heritage, French-speaking Quebec
- Rocky Mountains
- Hudson Bay, St. Lawrence River, Yukon River
- Divided into provinces
- Major cities, including Montreal, Quebec, Toronto

D. IMPORTANT RIVERS OF THE WORLD

- Terms: source, mouth, tributary, drainage basin
- Asia: Ob, Yellow (Huang He), Yangtze (Chang Jiang), Ganges, Indus
- Africa: Nile, Niger, Congo
- South America: Amazon, Parana, Orinoco
- North America: Mississippi and major tributaries, Mackenzie, Yukon
- Australia: Murray-Darling
- Europe: Volga, Danuge, Rhine

II. Ancient Rome

A. GEOGRAPHY OF THE MEDITERRANEAN REGION

- Mediterranean Sea, Aegean Sea, Adriatic Sea
- Greece, Italy (peninsula), France, Spain
- Strait of Gibraltar, Atlantic Ocean
- North Africa, Asia Minor (peninsula), Turkey
- Bosporus (strait), Black Sea, Istanbul (Constantinople)
- Red Sea, Persian Gulf, Indian Ocean

B. BACKGROUND

- Define B.C. / A.D. and B.C.E. / C.E.
- The legend of Romulus and Remus
- Latin as the language of Rome
- Worship of gods and goddesses, largely based on Greek religion
- The Republic: Senate, Patricians, Plebeians
- Punic Wars: Carthage, Hannibal

C. THE EMPIRE

- Julius Caesar
  - Defeats Pompey in civil war, becomes dictator
  - "Veni, vidi, vici" ("I came, I saw, I conquered")
  - Cleopatra of Egypt
  - Caesar assassinated in the Senate, Brutus
- Augustus Caesar
- Life in the Roman Empire
  - The Forum: temples, marketplaces, etc.
  - The Colosseum: circuses, gladiator combat, chariot races
  - Roads, bridges, and aqueducts
- Eruption of Mt. Vesuvius, destruction of Pompeii
- Persecution of Christians

D. THE "DECLINE AND FALL" OF ROME

- Weak and corrupt emperors, legend of Nero fiddling as Rome burns
- Civil wars
- City of Rome sacked

E. THE EASTERN ROMAN EMPIRE: BYZANTINE CIVILIZATION

- The rise of the Eastern Roman Empire, known as the Byzantine Empire
- Constantine, first Christian emperor
- Constantinople (now called Istanbul) merges diverse influences and cultures
- Justinian, Justinian's Code

III. The Vikings

- From area now called Scandinavia (Sweden, Denmark, Norway)
- Also called Norsemen, they were skilled sailors and shipbuilders
- Traders, and sometimes raiders of the European coast
- Eric the Red and Leif Ericson (Leif "the Lucky")
- Earliest Europeans (long before Columbus) we know of to come to North America
  Locate: Greenland, Canada, Newfoundland

AMERICAN HISTORY AND GEOGRAPHY

I. The Earliest Americans

A. CROSSING THE LAND BRIDGE

- During the Ice Age, nomadic hunters cross what was a land bridge from Asia to North America (now the Bering Strait). Different peoples, with different languages and ways of life, eventually spread out over the North and South American continents. These early peoples include:
  Innuits (Eskimos)
  Anasazi, pueblo builders and cliff dwellers
  Mound builders

B. NATIVE AMERICANS

- In the Southwest
  Pueblos (Hopi, Zuni)
  Dine (Navajo)
  Apaches
- Eastern "Woodland" Indians
  Woodland culture: wigwams, longhouses, farming, peace pipe, Shaman and Sachem
  Major tribes and nations (such as Cherokee Confederacy, Seminole, Powhatan, Delaware, Susquehanna, Mohican, Massachusett, Iroquois Confederacy)

II. Early Exploration of North America

A. EARLY SPANISH EXPLORATION AND SETTLEMENT

- Settlement of Florida
- Ponce de Leon, legend of the Fountain of Youth
- Hernando de Soto
- Founding of St. Augustine (oldest continuous European settlement in what is now the U.S.)
- Geography: Caribbean Sea, West Indies, Puerto Rico, Cuba, Gulf of Mexico, Mississippi River

B. EXPLORATION AND SETTLEMENT OF THE AMERICAN SOUTHWEST

- Early Spanish explorers in the lands that are now the states of Texas, New Mexico, Arizona, and California; missionary settlements (missions), especially in Texas and California
- Coronado and the legend of the "Seven Cities of Cibola" (of Gold)
- Geography: Grand Canyon and Rio Grande
- Conflicts with Pueblo Indians

C. THE SEARCH FOR THE NORTHWEST PASSAGE

- Many explorers undertook the perilous, sometimes fatal, voyage to find a short cut across North America to Asia, including:
  - John Cabot: Newfoundland
  - Champlain: "New France" and Quebec
  - Henry Hudson: the Hudson River
- Geography
  - "New France" and Quebec
  - Canada, St. Lawrence River
  - The Great Lakes: Superior, Michigan, Huron, Erie, Ontario

III. The Thirteen Colonies: Life and Times Before the Revolution

A. GEOGRAPHY

- The thirteen colonies by region: New England, Middle Atlantic, Southern
- Differences in climate from north to south: corresponding differences in agriculture (subsistence farming in New England, gradual development of large plantations in the South)
- Important cities in the development of trade and government: Philadelphia, Boston, New York, Charleston

B. SOUTHERN COLONIES

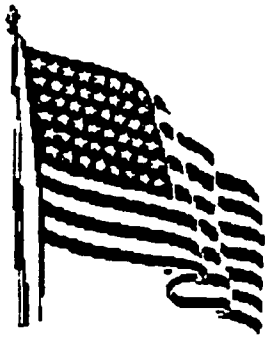
- Southern colonies: Virginia, Maryland, North Carolina, South Carolina, Georgia
- Virginia
  - Chesapeake Bay, James River
  - 1607: three ships of the London Company (later called the Virginia Company) arrive in Virginia, seeking gold and other riches
  - Establishment of Jamestown, first continuous English colony in the New World
  - Trade with Powhatan Indians (see also Eastern "Woodland" Indians, above)
  - John Smith
  - Pocahantas, marriage to John Rolfe
  - Diseases kill many people, both colonists and Indians
  - The Starving Time
  - Clashes between American Indians and English colonists
  - Development of tobacco as a cash crop, development of plantations
  - 1619: slaves brought to Virginia
- Maryland
  - A colony established mainly for Catholics
  - Lord Baltimore
- South Carolina
  - Charleston
  - Plantations (rice, indigo) and slave labor
- Georgia
  - James Oglethorpe's plan to establish a colony for English debtors
- Slavery in the Southern colonies
  - Economic reasons that the Southern colonies came to rely on slavery (for example, slave labor on large plantations)
  - The difference between indentured servant and slaves: slaves as property
  - The Middle Passage

C. NEW ENGLAND COLONIES

- New England colonies: Massachusetts, New Hampshire, Connecticut, Rhode Island
- Gradual development of maritime economy: fishing and shipbuilding
- Massachusetts
  - Colonists seeking religious freedom: in England, an official "established" church (the Church of England), which did not allow people to worship as they chose
  - The Pilgrims
    - From England to Holland to Massachusetts
    - 1620: Voyage of the Mayflower
    - Significance of the Mayflower Compact
    - Plymouth, William Bradford
    - Helped by Wampanoag Indians: Massasoit, Tisquantum (Squanto)
  - The Puritans
    - Massachusetts Bay Colony, Governor John Winthrop: "We shall be as a city upon a hill."
    - Emphasis on reading and education, the *New England Primer*
- Rhode Island
  - Roger Williams: belief in religious toleration
  - Anne Hutchinson

D. MIDDLE ATLANTIC COLONIES

- Middle Atlantic colonies: New York, New Jersey, Delaware, Pennsylvania
- New York
  - Dutch settlements and trading posts in "New Netherland"
  - Dutch West India Company acquires Manhattan Island and Long Island through a (probably misunderstood) purchase from the Indians; Dutch establish New Amsterdam (today, New York City)
  - English take over from the Dutch, and rename the colony New York
- Pennsylvania
  - William Penn
  - Society of Friends, "Quakers"
  - Philadelphia



The Core Democratic Values (Kindergarten – Grade 4)

The core democratic values are the ideas in which Americans believe. We do not look the same. We like different things. We each think differently. There are some ways that we are the same. We believe in telling the truth. We believe in treating people fairly. To be good citizens we must practice these values each day at home and school.

Our Core Democratic Values: Elementary Definitions

Teaching our core democratic values in kindergarten through grade 4 can be fun for students and easily integrated into your daily interactions with students. These simpler definitions are appropriate for younger students, *but please check your understanding of them by reading the definitions used in grades 5 through 8 (see next page).* Your complete understanding will assure that your teaching will assist the teachers in the upper grades and eliminate misunderstandings by your students.

Common good: Help others at home and school

Justice: Take turns and be fair to others

Liberty: Follow your beliefs and let others follow theirs

Popular sovereignty: Majority rules

Life: Rules keep you safe, follow them

Equality: Give everyone an equal chance

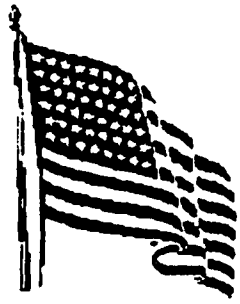
Diversity: Work and play with everyone

Pursuit of happiness: Have fun but follow the rules at home and school

Truth: Tell the truth

Patriotism: Use the core democratic values and home and school

Rule of law: Rules are made for everyone to follow



The Core Democratic Values (Grades 5-8)

Core democratic values are the fundamental beliefs and constitutional principles of American society which unite all Americans. These values are expressed in the Declaration of Independence, the United States Constitution and other significant documents, speeches, and writings of the nation. Below are brief definitions of some core democratic values.

Common good: People should work together for the good of all. The government should make laws that are good for everyone.

Justice: All people should be treated fairly in getting the advantages and disadvantages of our country. No group or person should be favored.

Liberty: Liberty includes the freedom to believe what you want, freedom to choose your own friends, and to have your own ideas and opinions, to express your ideas in public, the right for people to meet in groups, and the right to have any lawful job or business.

Popular sovereignty: The power of the government comes from the people.

Life: Each person has the right to the protection of their life.

Equality: Everyone should get the same treatment regardless of where your parents or grandparents were born, your race or religion, or how much money you have. All people have political, social and economic equality.

Diversity: Differences in language, dress, food, where parents or grandparents were born, race, and religion are not only allowed but accepted as important.

Pursuit of happiness: Each person can find happiness in their own way, so long as they do not step on the rights of others.

Truth: The government and citizens should not lie.

Patriotism: A devotion to our country and the core democratic values in word and deed.

Rule of law: Both the government and the people must obey the law.

GENERAL RESOURCES FOR CLASSROOM KITS

Perma-Bound Books

*Denotes suitability for ordering for students in classroom sets... at student readability levels

GRADE 3

WORLD HISTORY & GEOGRAPHY: Topics In Geography

3	44123	Canada (Original Publisher's Binding)	$21.50
3	197801	Minn Of The Mississippi	$17.60

WORLD HISTORY & GEOGRAPHY: Ancient Rome

3	128259	*Growing Up In Ancient Rome	$10.60
3	238507	*Pompeii...Buried Alive!	$9.64
3	256972	Roman Villa	$22.90
3	256998	Romans	$17.60
3	323232	What Do We Know About The Romans?	$20.90

AMERICAN HISTORY & GEOGRAPHY: Earliest Americans

3	101438	First Americans (2nd Edition)	$19.60
3	231650	People Of The Breaking Day	$11.64
3	257814	Rough-Face Girl	$12.64
3	277690	Sootface: An Ojibway Cinderella Story	$12.64

AMERICAN HISTORY & GEOGRAPHY: Early Exploration Of North American

3	77685	*Discovery Of The Americas	$12.60
3	89180	Encounter	$11.65
3	93182	*Exploration And Conquest: The Americas After Columbus	$11.60

AMERICAN HISTORY & GEOGRAPHY: Thirteen Colonies - Life & Times Before The Revolution

3	62650	*Courage Of Sarah Noble	$10.64
3	103040	First Thanksgiving	$12.64
3	151133	*If You Lived In Colonial Times	$11.64
3	151177	*If You Sailed On The Mayflower	$11.64
3	187242	Making Thirteen Colonies (2nd Edition)	$19.60
3	209616	N.C. Wyeth's Pilgrims	$12.60
3	235102	Pilgrims Of Plimoth	$11.64
3	270606	*Sign Of The Beaver	$11.00
3	281993	Squanto And The First Thanksgiving	$10.60
3	323155	Whaling Days	$12.60

GENERAL RESOURCES: WORLD HISTORY & GEOGRAPHY

GR	272985	16th Century Mosque	$22.90
GR	13223	Ancient China (Original Publisher's Binding)	$19.99
GR	13235	Ancient Egypt (Original Hardcover Binding)	$19.99
GR	13254	Ancient Greece (Original Hardcover Binding)	$19.99
GR	13462	Ancient Rome (Original Hardcover Binding)	$19.99
GR	22942	Aztecs (Original Publisher's Binding)	$19.99
GR	51987	*Children's Atlas Of Civilizations	$20.60
GR	87025	Egyptian Pyramid	$16.60
GR	111319	Frontier Fort On The Oregon Trail	$16.60
GR	114862	*Geography From A To Z: A Picture Glossary	$12.60
GR	126935	Greek Temple	$22.90
GR	153663	Incas (Original Publisher's Binding)	$16.99
GR	171644	Kingfisher Book Of The Ancient World	$19.90
GR	192553	Maps And Globes	$12.60

GR 193890	Medieval Castle	$16.60

GENERAL RESOURCES: WORLD HISTORY & GEOGRAPHY, continued

GR 193900	Medieval Knights (Original Publisher's Binding)	$17.99
GR 196285	Middle Ages (Original Hardcover Binding)	$19.99
GR 213280	New Puffin Children's World Atlas: An Introductory Atlas For Young People	$12.64
GR 251555	Renaissance (Original Publisher's Binding)	$19.99
GR 256966	Roman Fort	$22.90
GR 268538	Shakespeare's Theater	$22.90
GR 289266	Submarines & Ships (Original Publisher's Binding)	$17.99
GR 316698	*Visual Dictionary Of The Earth	$22.90
GR 334440	Wonders Of The World	$13.60
GR 335636	World War Two Submarine	$22.90
GR 337740	Young People's Atlas Of The United States	$25.90

GENERAL RESOURCES: AMERICAN HISTORY & GEOGRAPHY

GR 12092	American Reader: Words That Moved A Nation	$25.65
GR 40916	Buck Stops Here: The Presidents Of The United States	$15.65
GR 050816	Cherokees: A First Americans Book	$20.90
GR 050869	Cheyennes: A First Americans Book	$19.90
GR 57029	Colony Of Fear	$14.15
GR 71200	Debt	$14.15
GR 89522	*Encyclopedia Of Native America	$28.95
GR 107462	Fortune In Men's Eyes	$14.15
GR 111279	From Sea To Shining Sea	$33.90
GR 130356	Hand In Hand: An American History Through Poetry	$23.95
GR 139335	Hopis: A First Americans Book	$20.90
GR 157907	Iroquois: A First Americans Book	$20.90
GR 192852	Matter Of Pride	$14.60
GR 210852	Navajos	$20.90
GR 272368	Sioux	$20.90
GR 281069	Splendid Little War	$13.60
GR 295635	Test Of Loyalty	$13.60
GR 309205	Two Kinds Of Patriots	$14.15

GEOGRAPHY RESOURCES FOR CLASSROOM KITS

Debby & Company

GRADE THREE (All supplies, except (#), should be ordered for <u>each classroom</u> at this grade level.
(#) Denotes a resource which may be shared by all teachers at this grade level.)
(* Denotes suitability for ordering for students in classroom sets...at student readability levels.)

Order #	Description	Price
MCG-153-3	*Communities (Grade 3) McGraw-Hill/Spectrum Series... Geography	$7.95
IF8554	(#) Blank Map Outlines	$9.99
IF5190	(#) Map Skills (Basic Skills Series) Grade 3	$5.99
CD-3092	World Map - Labeled (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3093	World Map - Blank (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3090	U.S. Map - Labeled (Jumbo Map Pads... 1 pkg. of 30)	$4.99
CD-3091	U.S. Map - Blank (Jumbo Map Pads... 1 pkg. of 30)	$4.99
T-1088	World Map (Wipe-Off Map)	$2.99
T-1087	United States Map (Wipe-Off Map)	$2.99
T-593	Regular Wipe-Off Crayons (8 colors)	$1.79
FS-37033	The Continents Charts	$7.95
EI-3310	*Jumbo Picture World Atlas (Giant Atlases)	$9.95
EI-3311	*U.S. Discovery Atlas (Giant Atlases)	$9.95
UM-251	(#) 50 Laminated U.S. Maps	$39.50
UM-253	(#) 50 Laminated World Maps	$39.50
BH-95222	U.S. Geography (Geography Flip-Overs)	$6.75
BH-95223	World Geography (Geography Flip-Overs)	$6.75
EMC350	Using Maps & Globes Activity Cards	$12.95

SPECIAL EDUCATION

The Policy
The Individual Education Plan (IEP)
Role of the Special Education Building Coordinator
The Child Study Team
Evaluations
Inclusion of Students with Disabilities
Parent Participation
Individuals with Disabilities Education Act (IDEA)

Special Education

The Policy

It is the policy of the National Heritage Academies to provide special education services within each academy. All students with special needs have the right to a quality education appropriate to their needs, abilities and interest. It is the goal of the special education staff to act as a resource to the classroom teacher in the development and implementation of appropriate instructional and socialization strategies. Implementation of these strategies will occur within the general education setting and through one-on-one and small-group remediation.

The Individual Education Plan (IEP)

All National Heritage Academies campuses comply with all federal and state legal requirements that every student identified as having a disability be provided an Individual Educational Program (IEP) specifying goals, level of service, ancillary services and the least restrictive placement. Prior to the opening of school, registration forms are scanned to identify current IEPs from previous schools attended. The parents are fully informed of their rights, procedures and responsibilities under special education law.

Role of the Special Education Building Coordinator

- Form a partnership with the classroom teacher to develop appropriate instructional practices to meet student needs
- Act as a resource to the classroom teacher in the development, implementation and monitoring of specialized or modified programs
- Provide direct instruction to individuals or groups of students in the classroom as well as in the Resource Room setting
- Administer formal and informal educational assessments
- Interpret the results of assessments, observations and consultations to develop appropriate programming strategies
- Facilitate effective communication with students, parents, teachers, administration, special education support staff and community based agencies
- Share up-to-date professional information regarding special education
- Receive referrals directed to the Child Study Team
- Coordinate and lead Child Study Team meetings

Special Education Personnel

All special education teachers have the proper certification. Our ancillary staff consists of speech and language pathologists, social workers, psychologists, and occupational therapists.

The Child Study Team

The Child Study Team (CST) is a committee of school personnel set up by the principal to ensure ongoing and effective support for classroom teachers and students. The special education teacher co-chairs the school's team in cooperation with the building administrator. The team provides a forum to discuss students' academic and behavior needs and to generate, initiate and monitor solutions that marshal the resources of the school, the family and the community. This process creates an awareness and understanding of the issues affecting the student. The team acts as a pre-referral intervention-planning group for those "unidentified" students whose difficulties may suggest the presence of a disability. As appropriate, the team may refer a student for a formal assessment for special education. Parents should be informed if their child is being considered by the Child Study Team, and parental permission must be obtained prior to any formal assessment of that student.

Evaluations

Special education students are subject to an annual review and a three-year reevaluation. At their annual reviews and three-year reevaluations, parents and teachers go over the protocols appropriate to the given student, and make clear decisions as to the programming for this student. Parents are informed of student progress a minimum of four times per year at quarterly marking periods. Progress is also shared through telephone calls, written information/feedback, and personal contacts.

Inclusion of Students with Disabilities

National Heritage Academies is committed to the fullest level of inclusion deemed possible and appropriate by our professional team of general and special educators, administrators, and ancillary-support staff. Our goal is to educate each student in the least restrictive environment possible based on a student's individual needs.

Parent Participation

Parents/legal guardians have the *expressed right* to participate in all meetings dealing with the evaluation, identification, and educational placement of their child. Information concerning a child will be requested of his/her parents/guardians during the child study process and the parent's/guardian's presence will be requested for all subsequent meetings. Parents/legal guardians are considered members of both the Multi-Disciplinary Evaluation Team (MET) and the Individual Education Programming Team (IEPT).

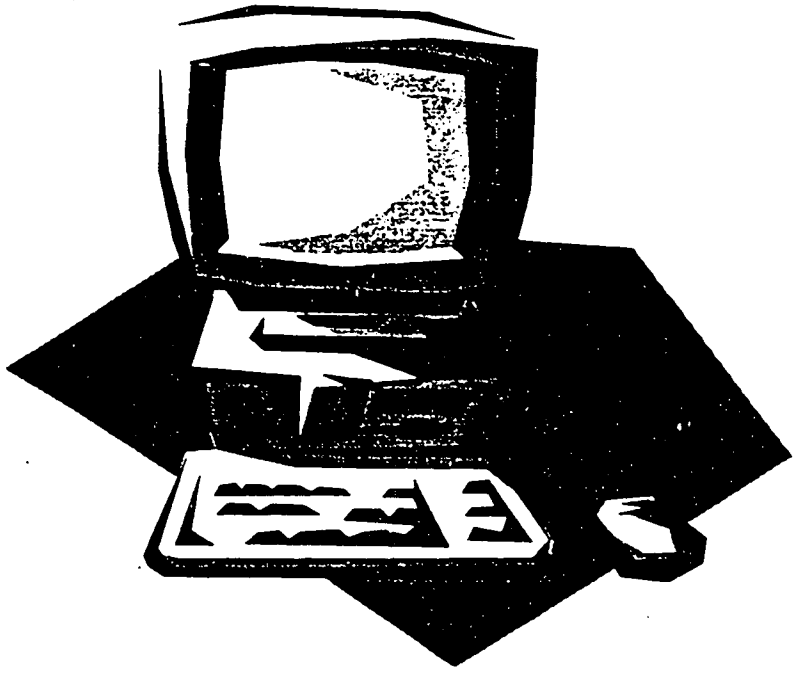
Individuals with Disabilities Education Act (IDEA)

National Heritage Academies are in step with the major changes in special education. The six principles of the new laws are:

- Free appropriate public education
- Appropriate evaluation
- Individualized education program (IEP)
- Least restrictive environment (LRE)
- Parent and student participation in decision making
- Procedural safeguards

TECHNOLOGY
THIRD GRADE

Technology—Educational Philosophy
Content Standards Grade 3
Scope and Sequence of
Content Standards Grades 3-8



Educational Technology Philosophy

The National Assessment of Educational Progress (NAEP) has tracked student achievement for nearly three decades. In 1996, the results of the NAEP indicated a link between certain kinds of technology use, higher scores on the NAEP, and an improved school climate.[1] It is important to note that not all types of technology use produced these results. In fact, the results indicated that the use of computers for "drill and practice" may result in decreased student scores. The technology use that proved most beneficial centered on using the computer for simulation, problem solving and analysis. "The computer's most powerful uses are for making things visual," says James Kaput, a math professor at the University of Massachusetts-Dartmouth. "It can make visual abstract processes that that are otherwise ineffable."

As an organization, NHA focuses on delivering a "back to basics" approach to education based on research to generate student performance results. NHA's philosophy is grounded in the premise that the primary educational focus in elementary school should be mastering the core academic subjects of English, reading, mathematics, history, and science. Use of technology within the framework of the core academic curriculum must be age appropriate and must enhance the learning process. Just as writing relies on penmanship as a requisite skill, students and teachers must develop requisite skills in the use of technology in order to maximize its curricular impact. Students will develop these skills in the context of using technology for academic pursuits. Teachers will develop technology skills through training, practice, and ongoing assessment.

Developing Technology Skills

NHA's core academic curriculum is extremely rigorous and focuses on developing the fundamental skills, attitudes, and background knowledge that will allow students to be successful in all future pursuits. Specific technology skills are most effectively learned in the context of the core curriculum. Just as science teachers have taught their students to use a microscope in order to view cells, basic technology skills, such as using a scanner, are best taught in the context of developing a Web page or creating a portfolio. However, NHA will develop a specific technology curriculum to ensure the acquisition of computer skills.

NHA's approach to the curriculum is built upon the premise that a child's long-term academic success is directly related to the strength of the foundation upon which it is built. This belief provides a central core for the entire NHA curriculum. With this in mind, the school calendar and schedule focuses primarily on the development of this foundation in the core academic subjects. Once this foundation is laid, the learner benefits in all curricular areas.

In alignment with this core belief, NHA approaches the formal computer training very deliberately. While computers can be used in grades K-2 to enhance the delivery/experience of the student in the academic areas, no formal computer training is addressed during these formative years. A student's time in school is so valuable that computer training at these early ages would supersede a more fundamental element of the child's education. Students in grades K-2 may acquire technology skills as a by-product of the technology use within the curriculum. Formalized computer training will begin to be addressed by the classroom teacher beginning in grade 3. During the upper elementary years (grades 3-5), time is carved out of the school day to help students develop specific skills as they align with state and national standards. In most NHA affiliated schools, a computer elective course is offered in grades 6-8. During this set of courses, more advanced computer skills are taught and students are asked to apply these skills in increasingly unique and meaningful ways. Teachers in grades 6-8 will continue to include the development of computer skills into the classroom and students will be expected to apply these skills appropriately to enhance their learning.

[1] "The Link to Higher Scores", Andrew Trotter, Education Week, October 1, 1998.

This technology curriculum is based on both state and national standards. Specific lessons and assessments related to computer skill acquisition will be developed through a cooperative effort between the NHA Educational Technology team and the NHA Curriculum team.

Integrating Technology with the Curriculum

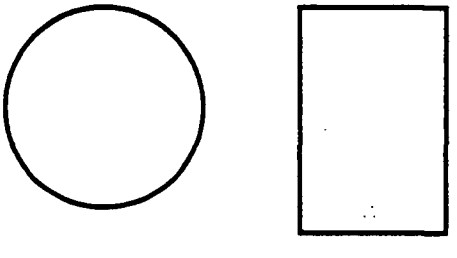
Although the time dedicated to acquire computer-specific skills is not equally distributed throughout the various grade levels, the underlying philosophy regarding technology use to enhance instruction is constant. In addition to developing materials that address both content standards and technology competencies, NHA is committed to the electronic delivery of content and supporting materials that aide in the delivery of curricula.

To achieve this goal of integration, NHA will develop a comprehensive curriculum map that includes specific teacher and student resources that tie technology with the core content areas in meaningful and substantive ways. A library of technology projects will be developed that connect specific curriculum objectives with technology skills. As a result, each teacher will be able to develop the tools necessary to integrate the acquisition of these skills into the academic curricula.

Over the course of the 2000-2001 school year, the Educational Technology Team, in conjunction with NHA teachers, has developed over 300 lessons, units and projects that integrate the technology curriculum into other curricular areas. These resources span all subject areas and grade levels and are made available to all NHA teachers in electronic form. Through the implementation of this technology plan, it is NHA's vision that this development will continue and lessons, units, projects, and other resources will continue to be made available to all NHA teachers that tie the technology curriculum into other curricular areas. The following is an example of a lesson that integrates technology objectives within other curricular areas.

A class is about to begin a unit on fractions within the fourth grade math curriculum. The teacher works with the Educational Technology Specialist to develop a lesson where students are to divide certain shapes into sections and then color the sections to depict a given fraction. The lesson will be done using a paint/draw program on the computer. See the example below:

1. Use the paint tools to divide the following shapes into fourths.
2. Use the paint tools to color the sections of each object to show the following:
    a. Circle: ¾
    b. Rectangle: ¼



The teacher will spend a small amount of time at the beginning of the lesson to explain how to use the paint/draw program, but the primary focus of the lesson will be focused on getting a better understanding of fractions. This lesson ties together many of the technology curriculum's paint/draw program objectives as well as many of the fraction objectives found in the mathematics curriculum.

Grade Levels	Computer Skill Acquisition	Technology-Infused Delivery of Instruction
K - 2	No instructional time is devoted to computer skill development. **Resources:** None	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. **Resources:** LCD projectors, Internet connectivity
3 - 5	Instructional time is devoted to developing specific technology skills such as: 1. Computer operations 2. File management 3. Word processing 4. Keyboarding 5. Presentation tools 6. Spreadsheet use 7. Database basics 8. Internet use & responsibilities **Resources:** Some significant student access to computer required. Classroom teacher will be responsible for the delivery of this instruction. Curriculum to be developed and supplied by NHA.	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. Students use computers to develop materials, complete assessments, or engage in simulations. Work can be individual, in pairs, or in small groups. **Resources:** LCD projectors, Internet connectivity Some significant student access to computers required.
6 - 8	Instructional time in the middle school "Media / Technology" elective course is devoted to developing specific technology skills such as: 1. Digital imaging 2. Digital audio 3. Desktop publishing 4. Presentation 5. Basics of good design 6. Web page authoring 7. Application integration 8. Internet use **Resources:** Some significant student access to computer required. Classroom teacher will be responsible for the delivery of this instruction. Curriculum to be developed and supplied by NHA. It is desirable to place some computers permanently in each middle school classroom to achieve a fully integrated environment	Teachers use LCD projectors to model the use of technology, present information in engaging ways, and utilize the Internet in whole-group settings. Students use computers to develop materials, complete assessments, or engage in simulations. Work can be individual, in pairs, or in small groups. Students utilize computers independently to accomplish tasks appropriate to the use of the computer as a tool. Computers become seamlessly integrated tools in the middle school classroom, mimicking their place in the adult work environment. **Resources:** LCD projectors, Internet connectivity Some significant student access to computers required. Permanently placed PCs in middle school classroom are desirable.

Technology Content Standards Grade 3

Introduce: Direct Instruction of the technology objectives.

Develop: Apply the technology objective with direction.

Independant User: Apply the technology objective without direction.

Content Standard 1: Students will demonstrate awareness, knowledge and appropriate useage of computer hardware components.	
Mouse Skills:	
Mouse Skills: Point and Click/Double Click	Introduce
Mouse Skills: Point and Select from Menu	Introduce
Mouse Skills: Point, Click, and Drag	Introduce
Other:	
Indetify and know the basic functions of computer hardware.	Introduce
Know potential hazards that could damage computer hardware.	Introduce
Learn NHA's student computer useage policies.	Introduce

Content Standard 2: Students will demonstrate awareness, knowledge and useage in file management and basic computer operation.	
File Management:	
File Management: Save (Name, Choose a location)	Introduce
File Management: Retrieve saved documents	Introduce
Computer Operation Skills:	
Computer Operation Skills: Know how to start a computer software program	Introduce

Content Standard 3: Students will demonstrate awareness, knowledge, and usage of a word processor, spreadsheet, and database.	
Word Processing:	
Word Processing: Know how to start a new Word Processing document.	Introduce
Word Processing: Change the font and size of text.	Introduce
Word Processing: Align text with alignment buttons.	Introduce
Word Processing: Highlight text with the mouse.	Introduce
Word Processing: Change the format of text with bold, italics and underline.	Introduce
Word Processing: Know how to print independantly.	Introduce
Spreadsheet:	
Spreadsheet: Use the mouse to select a cell.	Introduce
Spreadsheet: Enter data into a cell.	Introduce

Introduce: Direct Instruction of the technology objectives.
Develop: Apply the technology objective with direction.
Independant User: Apply the technology objective without direction.

Content Standard 4: Students will demonstrate knowledge of creating and using graphics, desktop publishing, and creating presentations.	
Graphics:	
Know how to use basic painting and drawing tools.	Introduce
Able to put shapes together to create a picture.	Introduce

Content Standard 5: Students will demonstrate awareness, knowledge and useage of the World Wide Web and research tools that leverage technology.	
Know how to search for information within a reference-based software program.	Introduce
Learn Internet etiquette; do's and don't's	Introduce
Know basic internet terms.	Introduce

Content Standard 7: Students will demonstrate an understanding of how technology can be used as a tool for problem solving and decision making.	
Know that objects occur in nature; but people can also design and make objects.	Introduce
Know that tools can be used to observe, measure, make things, and do things better and/or more easily.	Introduce
Know that people are always inventing new ways to solve problems and get work done.	Introduce

Scope and Sequence of Content Standards Grades 3-8

Introduce: Direct Instruction of the technology objectives.
Develop: Apply the technology objective with direction.
Independant User: Apply the technology objective without direction.

Content Standard 1: Students will demonstrate awareness, knowledge and appropriate useage of computer hardware components.						
	3	4	5	6	7	8
Mouse Skills:						
Mouse Skills: Point and Click/Double Click	I	D	IU	IU	IU	IU
Mouse Skills: Point and Select from Menu	I	D	IU	IU	IU	IU
Mouse Skills: Point, Click, and Drag	I	D	IU	IU	IU	IU
Mouse Skills: Know the basic functional differences between left and right mouse buttons.			I	D	IU	IU
Keyboarding Skills:						
Keyboarding Skills: Use Typing Tutorial Progarm.		I	D	IU	IU	IU
Keyboarding Skills: Proficiently type, using proper hand position, with all alphanumeric keys.		I	D	IU	IU	IU
Other:						
Indetify and know the basic functions of computer hardware.	I	D	IU	IU	IU	IU
Know potential hazards that could damage computer hardware.	I	D	IU	IU	IU	IU
Learn NHA's student computer useage policies.	I	D	IU	IU	IU	IU
Know basic facts about networked computers.			I	D	IU	IU
Uses a vanety of input and output devices. (Scanner, Digital Camera, etc...)			I	D	IU	IU
Know the diffenng capacities and trade-offs for computer storage media.				I	D	IU

Content Standard 2: Students will demonstrate awareness, knowledge and useage in file management and basic computer operation.						
	3	4	5	6	7	8
File Management:						
File Management Save (Name, Choose a location)	I	D	IU	IU	IU	IU
File Management Retneve saved documents	I	D	IU	IU	IU	IU
File Management Distinguich between *Save* and *Save As*		I	D	IU	IU	IU
File Management Create back-up of documents			I	D	IU	IU
Computer Operation Skills:						
Computer Operation Skills Know how to start a computer software program	I	D	IU	IU	IU	IU
Computer Operation Skills Cut Copy, Paste		I	D	IU	IU	IU
Computer Operation Skills Manipulate Windows (Task Bar, Close Button, Minimize Button, Maximize Button Restore Window Button)		I	D	IU	IU	IU
Computer Operation Skills Trouble-shoots simple problems.				I	D	IU

Introduce: Direct Instruction of the technology objectives.
Develop: Apply the technology objective with direction.
Independant User: Apply the technology objective without direction.

Content Standard 3: Students will demonstrate awareness, knowledge, and usage of a word processor, spreadsheet, and database.

	3	4	5	6	7	8
Word Processing:						
Word Processing: Know how to start a new Word Processing document.	I	D	IU	IU	IU	IU
Word Processing: Change the font and size of text.	I	D	IU	IU	IU	IU
Word Processing: Align text with alignment buttons.	I	D	IU	IU	IU	IU
Word Processing: Highlight text with the mouse.	I	D	IU	IU	IU	IU
Word Processing: Change the format of text with bold, italics and underline.	I	D	IU	IU	IU	IU
Word Processing: Know how to print independantly.	I	D	IU	IU	IU	IU
Word Processing:Use the cut and paste commands.		I	D	IU	IU	IU
Word Processing: Use the menu bar functions.		I	D	IU	IU	IU
Word Processing: Insert Clip Art		I	D	IU	IU	IU
Word Processing: Use Spell Check			I	D	IU	IU
Word Processing: Learn Keyboard short-cuts (Ctrl-V = Paste, etc...)				I	D	IU
Word Processing: Learn to use headers and footers.				I	D	IU
Spreadsheet:						
Spreadsheet: Use the mouse to select a cell	I	D	IU	IU	IU	IU
Spreadsheet: Enter data into a cell.	I	D	IU	IU	IU	IU
Spreadsheet Learn spreadsheet terms		I	D	IU	IU	IU
Spreadsheet: Know how to start a new Spreadsheet document.		I	D	IU	IU	IU
Spreadsheet Learn to graph or chart			I	D	IU	IU
Spreadsheet Learn to add/subtract cell information.			I	D	IU	IU
Spreadsheet Create formula functions					I	D
Database:						
Database Know how to start a new Database document.				I	D	IU
Database Know database terms				I	D	IU
Database Know how to create fields and enter information into records				I	D	IU
Database Learn to sort the database based on one field.				I	D	IU
Database Perform a search based on one or more fields				I	D	IU
Other:						
Know basic distinctions amongcomputer software programs, such as word processors, special purpose programs and games		I	D	IU	IU	IU
Start using multiple applications to complete one document or project. (eg Insert a spreadsheet into a word processing document)				I	D	IU
Know how formats differ among software applications and hardware platforms				I	D	IU

Introduce: Direct Instruction of the technology objectives.
Develop: Apply the technology objective with direction.
Independant User: Apply the technology objective without direction.

Content Standard 4: Students will demonstrate knowledge of creating and using graphics, desktop publishing, and creating presentations.

	3	4	5	6	7	8
Graphics:						
Know how to use basic painting and drawing tools.	I	D	IU	IU	IU	IU
Able to put shapes together to create a picture.	I	D	IU	IU	IU	IU
Know how to use advanced painting and drawing tools.			I	D	IU	IU
Know how to select specific areas of a painting or drawing.			I	D	IU	IU
Know how to use cut, copy, and paste with selected shapes.			I	D	IU	IU
Know the differences between several graphic formats.				I	D	IU
Desktop Publishing/Presentations:						
Know how to insert clip art.		I	D	D	IU	IU
Learn how to select and use a template.			I	D	IU	IU
Know how to Zoom in and out.			I	D	IU	IU
Learn how to create a basic presentation.			I	D	IU	IU
Use special hardware devices for input within a document (scanner, digital camera)			I	D	IU	IU
Learn how to format a Presentation.				I	D	IU
Complete a content area project.				I	D	IU
Complete and present a content area project presentation using Microsoft Powerpoint.				I	D	IU
Use multimedia within a document/presentation. (video, animation, sound, etc...)				I	D	IU

Content Standard 5: Students will demonstrate awareness, knowledge and useage of the World Wide Web and research tools that leverage technology.

	3	4	5	6	7	8
Know how to search for information within a reference-based software program.	I	D	IU	IU	IU	IU
Learn Internet etiquette, do's and don't's	I	D	IU	IU	IU	IU
Know basic internet terms	I	D	IU	IU	IU	IU
Manually entering an Internet Web address (URL)			I	D	IU	IU
Learn how to search and use keywords within a search engine			I	D	IU	IU
Learn Internet Explorer button functions (back, forward, stop, etc..).			I	D	IU	IU
Learn to access, send and reply with e-mail			I	D	IU	IU
Learn how to download graphics			I	D	IU	IU
Research and evaluate the accuracy, relevance, appropriateness, comprehensiveness, and bias of electronic information sources concerning real-world problems				I	D	IU

Introduce: Direct Instruction of the technology objectives.
Develop: Apply the technology objective with direction.
Independant User: Apply the technology objective without direction.

Content Standard 6: Students will demonstrate an understanding of the relationships among science, technology, society, and the individual.

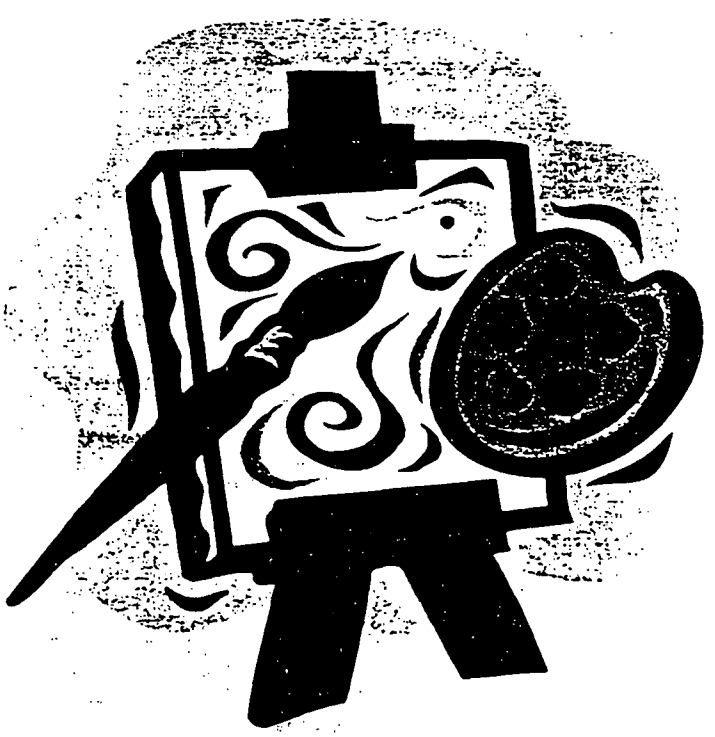
	3	4	5	6	7	8
Know ways that technology is used at home and school.			I	D	IU	IU
Know that new tools and ways of doing things affect all aspects of life, and may have positive or negative effects on other people.			I	D	IU	IU
Understand that when an individual creates something on a computer, the created work is that person's property, and only that person has the right to change it.			I	D	IU	IU
Know that technologies often have costs as well as benefits and can have an enormous effect on people and other living things.			I	D	IU	IU
Know that new inventions often lead to other new inventions and ways of doing things.			I	D	IU	IU
Know areas in which technology has improved human lives.			I	D	IU	IU
Understand the concept of software piracy.			I	D	IU	IU
Know ways in which technology has influenced the course of history.				I	D	IU
Know that science cannot answer all questions and technology cannot solve all human problems nor meet all human needs.					I	D
Know examples of copyright violations and computer fraud and possible penalities.					I	D
Know that technology and science are reciprocal. They both are the driving force behind eachother						I
Know ways in which technology and society influence one another.						I

Content Standard 7: Students will demonstrate an understanding of how technology can be used as a tool for problem solving and decision making.

	3	4	5	6	7	8
Know that objects occur in nature: but people can also design and make objects.	I	D	IU	IU	IU	IU
Know that tools can be used to observe, measure, make things, and do things better and/or more easily	I	D	IU	IU	IU	IU
Know that people are always inventing new ways to solve problems and get work done.	I	D	IU	IU	IU	IU
Identify a simple problem that can be solved using technology.			I	D	IU	IU
Know constraints that must be considered when designing a solution to a problem.			I	D	IU	IU
Select and use appropriate tools and technology resources to accomplish a variety of tasks and solve problems			I	D	IU	IU
Know that people have invented and used tools throughout history to solve problems and improve ways of doing things			I	D	IU	IU
Identify appropriate problems for technological design					I	D
Design a solution or product taking into account needs and constraints.					I	D
Implement a proposed design					I	D

VISUAL ARTS
THIRD GRADE

Mission Statement
NHA Visual Arts Education
Grade Level Content Standards
And Objectives

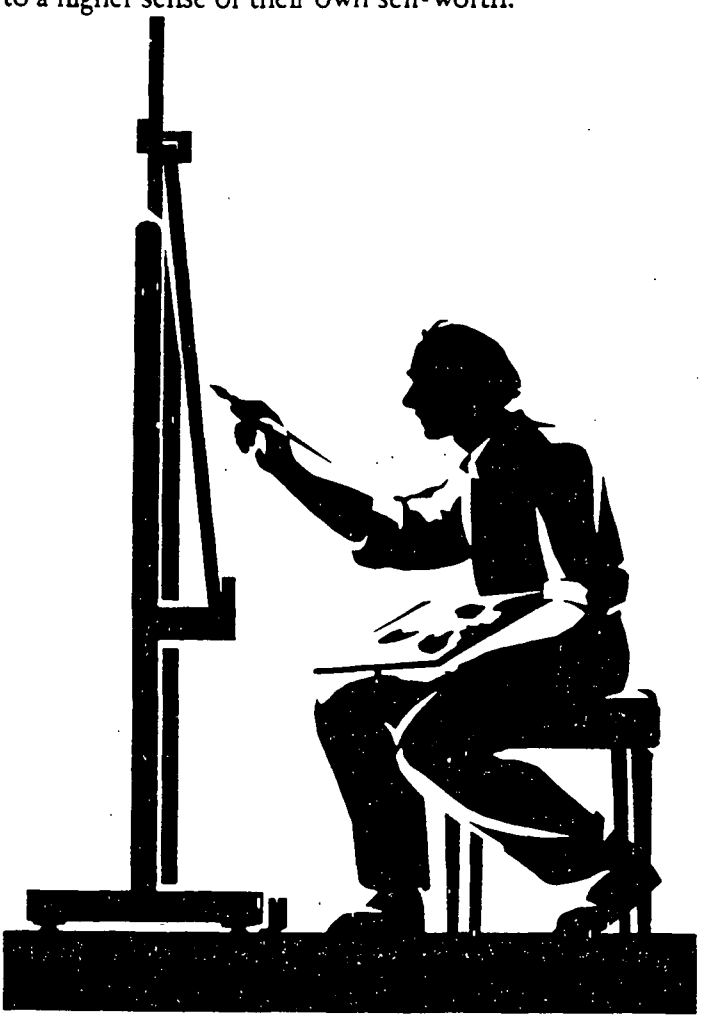


Visual Arts Mission Statement
National Heritage Academies

In teaching the visual arts, we seek to provide the student with the tools to understand the significant role the visual arts play in our lives with their power to express ideas throughout history. The visual arts are an essential means of communication in our society and we seek to enable the child to use the visual arts to express his or her own unique ideas.

The visual arts curriculum will equip the learner with a philosophical, intellectual, physical, emotional, and moral foundation in the visual arts. From this foundation, we seek to enhance the critical thinking and problem-solving skills of the student through creativity and self-expression.

We believe the visual arts are essential to a child's education and provide an opportunity for each child to become a valuable and contributing member of our society, ultimately leading to a higher sense of their own self-worth.



NATIONAL HERITAGE ACADEMIES
VISUAL ARTS EDUCATION

Art History

The study of art history will enable students to appreciate and understand artworks and artists from various cultures past and present.

Aesthetics

Aesthetics in art education helps form the foundation of a student's understanding of the arts as a unique and important human experience. The study of aesthetics will enable the student to view, appreciate, interpret and evaluate works of art.

Art Production

Students will use various mediums and techniques to produce works of art that express personal thoughts, feelings, and perceptions.

Art Criticism

Art criticism is an effort to fully understand works of art by precisely describing them, analyzing their components, interpreting them and making judgments about the content or form according to established standards.

Integration

Integrating art into the classroom curriculum helps the student understand the correlation between the two areas of study.

Visual Arts: Grade 3

Content Standards
Third Grade students will:
1. Draw conclusions regarding meaning in works of art
2. Analyze formal qualities in works of art
3. Examine global works of art in historical/cultural context
4. Create expressive artwork in varied media, independently, and in collaborative groups
5. Explain own artwork using art criticism process and vocabulary

I. Elements of Art

A. LIGHT

- Observe how artists use light and shadow (to focus our attention, affect our emotions, etc.) in
  James Chapin, *Ruby Green Singing*
  Jan Vermeer, *Milkmaid*

B. SPACE IN ARTWORKS

- Understand the following terms: two-dimensional (height, width) and three-dimensional (height, width, depth)
- Observe relationship between two-dimensional and three-dimensional shapes: square to cube, triangle to pyramid, circle to sphere and cylinder
- Observe how artists can make two-dimensional look three-dimensional by creating an illusion of depth, and examine the foreground, middle ground, and background in paintings including
  Jean Millet, *The Gleaners*
  Pieter Brueghel, *Peasant Wedding*

Core Knowledge Sequence: content guidelines for grades K-8. Core Knowledge Foundation, Charlottesville, VA.

C. DESIGN: HOW THE ELEMENTS OF ART WORK TOGETHER

- Become familiar with how these terms are used in discussing works of art
  - Figure and ground
  - Pattern
  - Balance and Symmetry
- Examine design--how the elements of art work together--in
  - Rosa Bonheur, *The Horse Fair*
  - Mary Cassatt, *The Bath*
  - Early American Quilts
  - Edward Hicks, *The Peaceable Kingdom*
  - Henri Matisse, cut-outs: *Icarus*
  - Edvard Munch, *The Scream*
  - Horace Pippin, *Victorian Interior*
  - Faith Ringgold, *Tar Beach*

II. American Indian Art

- Become familiar with American Indian works, including
  - Kachina dolls (Hopi, Zuni)
  - Navajo (Dine) blankets and rugs, sand paintings
  - Masks

III. Art of Ancient and Byzantine Civilization

- Become familiar with artwork of ancient Roman and Byzantine civilization including
  - Le Pont du Gard
  - The Pantheon
  - Byzantine mosaics
  - Hagia Sophia

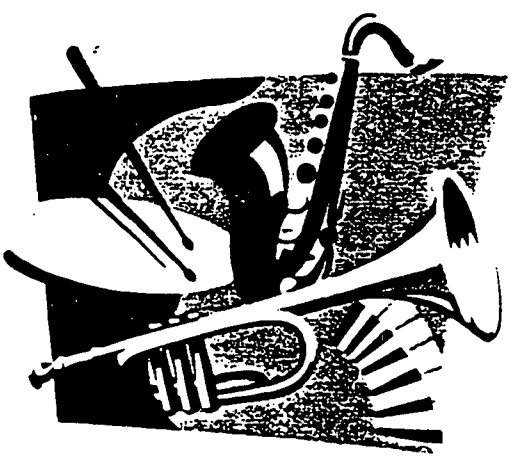
MUSIC
THIRD GRADE

NHA Music Philosophy
Grade Level Content Standards
Supplies and Curriculum
Component Chart Grade 3-2000

NHA Music Philosophy

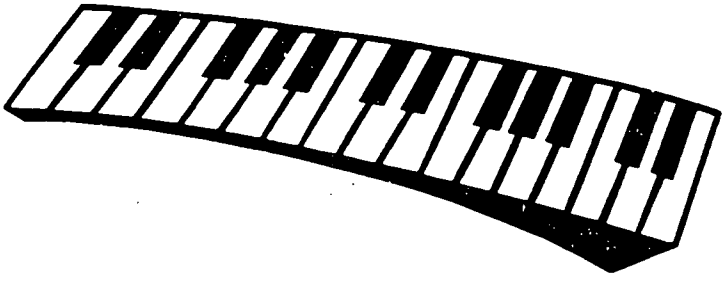
Music is an integral part of life in our cultures, communications, and creativity and expressive abilities. An innate part of our natural being, our musical intelligence needs to be developed and enhanced through formal music education to complete a balanced education for our charter school students.

Music education is especially beneficial for students with lower verbal abilities and has been shown to increase verbal SAT scores by as much as 34-38 points. Music students have been proven to be ahead of other students in writing, communication and analytical skills, and have outperformed non-music students on achievement tests in reading and math. The study of music enhances self-discipline, self-confidence, team skills, and self-motivation.



Third Grade Content Standards

The Student Will:
A. Recognize a steady beat, accents, and the downbeat; playing a steady beat
B. Move responsively to music.
C. Recognize short and long sound
D. Discriminate between fast and slow; gradually slowing down (ritardando) or getting faster (accelerando)
E. Discriminate between differences in pitch; high and low
F. Discriminate between loud and soft; gradually increasing or decreasing volume
G. Understand that melody can move up and down
H. Hum the melody while listening to music.
I. Perform short rhythms and melodic patterns and ostinati
J. Play simple rhythms and melodies
K. Sing unaccompanied, accompanied, and in unison
L. Recognize harmony; sing rounds
M. Recognize verse and refrain, introduction, and coda
N. continue work with timbre and phrasing
O. Recognize theme and variations
P. Review names of musical notes; scale as a series of notes
Q. Understand and use the following notation: names of notes on staff; treble clef sign; bar line, meter and time signature; double bar line; measure; repeat sign; quarter note and rest; eighth note; half note and rest; whole note and rest; dynamics **f** (forte, loud), **mf** (mezzo forte, moderately loud), **p** (piano, soft), **mp** (mezzo piano, moderately soft)
R. Identify major and minor melody lines
S. Develop listening skills and appreciation in accordance with grade level objectives
T. Develop an understanding of music in historical, social, and cultural context as well as its connection to other disciplines
U. Identify all major instruments of the orchestra by their sound
V. Identify soprano, alto, tenor, and bass voices
W. Identify some music selections and the composers
X. Identify which instruments are playing by listening
Y. Identify simple styles of music



Supplies and Curriculum for Start-up Charter Schools

Essential Items: All to be ordered by school principal and music teacher

Music Room:

60' X 30' soundproofed room for any school expected to house K-8 music program with storage cupboards for equipment, supplies, stereo, and instruments

Large industrial basin sink with running water

4' X 8' white board

Standard teacher's desk, 2 drawer file, 4 drawer file (for music storage)

30 stackable chairs, 25 music stands (13 stands for elementary program start-up)

Keyboard and Stereo:

Clavinova Keyboard (approx. $3,000 1998 prices)
C.D./Cassette player with split trax capabilities

Curriculum:

Core Knowledge materials and NHA content standards
K-6 teacher's edition, C.D.'s, and 24 student books of "Share the Music" curriculum (see attached)

Rhythm Instruments for Elementary Program:

(current contact: John Gillette@Marshall Music Company Grand Rapids office, will give 40-50% school discount) **Ordered in School Speciality Starting Kit for new schools**

24 rhythm sticks
2 pair maracas
3 triangles (small, medium, and large with strikers)
2 tambourines
2 sets wood blocks
2 pair claves
1 guiro
2 pair sand blocks
2 hand drums (one each, large and small)
1 small set of cymbals
1 set bongos
1 set of handle bells
4 sets wrists bells
1 each of alto xylophone and glockenspiel

Recorders:

(Recorders are part of the 4th grade curriculum standards)

25 alto recorders

13 "Hal Leonard" recorder books

Bowmar Orchestral Library:

(Music listening and appreciation are required as content standards and this set of C.D.'s would fulfill these requirements)

Series 1, 2, & 3 West Music Supply Company page # 89
CDBM5111; CDBM5112, CDBM5113

Games:

Instrument Bingo - page 14, Music in Motion Catalogue # 6107 $29.95

Meet the Instruments Posters:

25, full-color 14" X 22" posters - page 22 Music in Motion Catalogue 35904, $77.00

McGraw Hill Companies Component Chart - Grade 3 – 2000

The items listed below are suggestions. To place an order: 1-800-442-9685, The McGraw Hill Companies, 220 East Danieldale Road, Desoto, Texas 75115, www.mhschool.com

*** Music Teachers are able to place orders with other vendors due to availability**

0-02-295369-8	Pupil Edition	40.65	____	____
0-02-295389-2	Teacher's Edition (with Piano Accompaniment)	123.00	____	____
0-02-295378-7	Teacher's Edition	78.00	____	____
0-02-295416-3	Teacher's Resource Package	96.00	____	____
0-02-295425-2	Teacher's Resource Masters	17.25	____	____
0-02-295432-5	Signing for Intermediate Grades, Gr. 3-6	12.00	____	____
0-02-295409-0	Orchestrations for Orff Instruments	9.00	____	____
0-02-295402-3	Playing the Recorder	8.28	____	____
0-02-295497-X	Listening Map Transparencies	45.00	____	____
0-02-295438-4	Compact Discs	450.00	____	____

ADDITIONAL COMPONENTS

0-02-295444-9	Musica para todos for Primary Grades, Gr. K-2	5.22	____	____
0-02-295364-7	Share World Music: Songs from Asia and Oceania, Gr. K-6	5.22	____	____
0-02-295365-5	Share World Music: Songs from Asia and Oceania Compact Discs, Gr. K-6	48.00	____	____

VIDEOTAPE PACKAGES

0-02-295480-5	Signing Videotape for Intermediate Grades, Gr. 3-6	36.99	____	____
0-02-295480-5	Instrument Sounds Videotape, Gr. K-3	36.99	____	____
0-02-295482-1	Music and Movement Videotape, Gr. K-3	36.99	____	____
0-02-295483-X	Musical Expression Videotape, Gr. K-3	36.99	____	____
0-02-295484-8	Creating Musical Moods Videotape, Gr. 3-6	36.99	____	____
0-02-295488-0	The Mariachi Tradition Videotape, Gr. 1-8	38.49	____	____
0-02-295492-9	Introduction to the Computer in Music Videotape, Gr. 3-8	36.72	____	____

TECHNOLOGY

MUSIC WITH MIDI

0-02-295460-0	Standard Package	88.08	____	____
0-02-295466-X	Site License Package	333.00	____	____
0-02-295472-4	District License Package	828.00	____	____

MIDISAURUS CD-ROM

0-02-295528-3	MiDisaurus CD-ROM (Hybrid Mac/Win) Gr. 1-3	79.95	____	____

MCGRAW-HILL INTERACTIVE RECORDER CD-ROM

0-02-295529-1	McGraw-Hill Interactive Recorder	79.95	____	____

PHYSICAL EDUCATION
Kindergarten-Eighth Grade

Refer to Specials Handbook for complete Curriculum

Including:

Physical Education Program Objectives and Grade-Related Benchmarks

Appendix A - Claims Made Resulting from Curriculum Revision Process

Appendix B - Physical Education Content Matrix

Appendix C - Final Rankings and Lifelong Activities

Appendix D - Final Rankings of General Program Objectives

Appendix E - Grade-Related Benchmark Matrices

Fourth Grade

Curriculum Handbook 2001-2002

National Heritage Academies

National Heritage Academies™

MISSION

Challenging children to achieve their greatest potential.

VISION

Our shared vision is to build a national organization of over 200 charter schools that become the finest K-8 schools in the country. Using a partnership with parents as our foundation, we will achieve this by combining rigorous, "back-to-basics" academics, strong moral development, and a universal commitment to all children.

PHILOSOPHY

National Heritage is guided by a few key principles that guide us in all our program decisions. First, we believe that a school environment with high academic and social expectations is necessary for students to thrive. Second, the company believes that parents have the ultimate responsibility for their children's education and, thus, will choose what is best for their children. Third, we believe that a school should support and reinforce the moral guidance a child receives at home. And, finally, we believe that a child's self-esteem is developed through diligence and achievement.

The NHA Curriculum Handbooks are dedicated to the 2001-2002 Teacher Presenter Team

Teacher Presenter	School
Laura Bartlett	Greensboro
Michelle Bauman	Paramount
Jane Beal	Vista
James Robert Brown	Greensboro
Linda Chaffee	Walker
Kim Chapin	Eagle Crest
Melissa Flickinger	Chandler Woods
Daphne Franklin	South Arbor
Mary Claire Fu	Eagle Crest
Erin Greenop	Walker
Heather Guerra	Knapp
Tuwanda Hairston	Research Triangle
Casey Helmreich	North Saginaw
Sarah Huddleston	Forsyth
Emilie Johnson	Forsyth
Jeff Johnston	Greensboro
Diane Kennedy	Greensboro
Kimberly Kobylik	Linden
Kevin Kooiker	Vista
Johann Linna	Ridge Park
Mandy Lohman	Cross Creek
Angela Newton	Paramount
Nicole Pachulski	Walker
Kaylin Rhoades	Endeavor
Cynthia Ruble	Forsyth
Mary Scheidel	Cross Creek
Elizabeth Sinclair	Endeavor
Lois Smith	Cross Creek
Angie Spears	Excel
Kirt Stevens	Vista
Rudy Swofford	Greensboro
Krista Tolchin	Endeavor
Dawn Tubbs	Linden
Marsha VanderSloot	Vanguard
Kathy Watson	North Saginaw
Rebecca Weliver	South Arbor
Kathy White	Greensboro
Cathy Wygmans	Eagle Crest
Ellen Zainea	Knapp

Corporate Education Team
1-616-222-1700

Team Member	Title/Email Address
Todd Avis	Director of Curriculum and Development tavis@heritageacademies.com
Judy Welch	Educational Services Manager jwelch@heritageacademies.com
David Baas	Director of Special Education dbaas@heritageacademies.com
Cindy Covell	Curriculum Specialist ccovell@heritageacademies.com
Randy Creswell	Science Specialist rcreswell@heritageacademies.com
Ann Schultheis	Core Knowledge Consultant aschultheis@heritageacademies.com
Amy Lambries	Library Specialist alambries@heritageacademies.com
Tom Stout	Coordinator of Teacher Development tstout@heritageacademies.com
Sallie Borrink	Special Projects Coordinator sallieANN9@aol.com
Mary Elizabeth Lee	Special Education Assistant mlee@heritageacademies.com
Jennifer Maze	Administrative Assistant jmaze@heritageacademies.com

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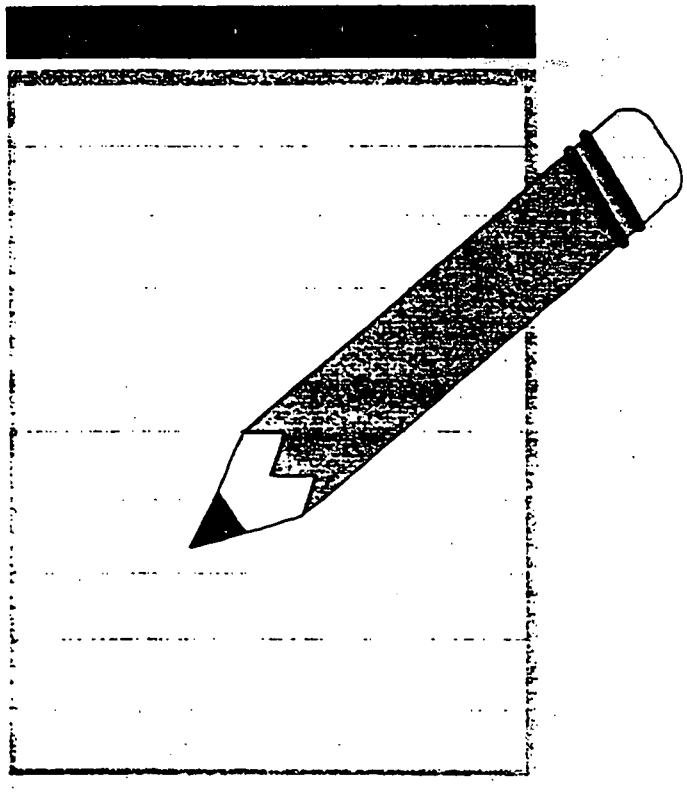
FOURTH GRADE

SUPPLY LIST
FOURTH GRADE

The supplies are provided by NHA in new classrooms in new and existing schools.

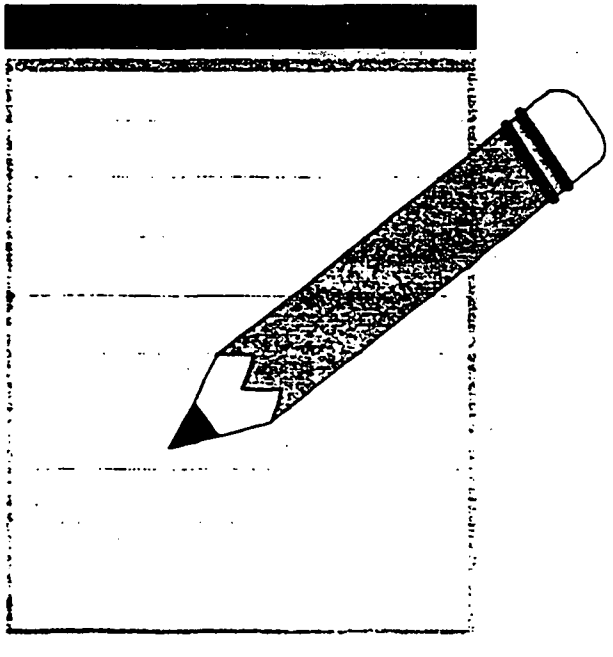


		3RD GRADE - 8TH GRADE: START-UP SUPPLY LIST				
QTY ORD.	UNIT	STOCK #	DESCRIPTION	PAGE	UNIT PRICE	TOTAL PRICE
2	GR	041217	#2 PENCIL BX/144	16	8.12	16.24
1	BX	000783	LARGE BLOCK ERASER BX/40	18	4.93	4.93
2	DZ	027465	BLACK ROUND STIC PEN MED BX/12	19	1.14	2.28
2	DZ	027466	RED ROUND STIC PEN MED BX/12	19	1.14	2.28
2	DZ	027469	BLUE ROUND STIC PEN MED BX/12	19	1.14	2.28
12	EA	038850	CLASS. SEL. HIGHLIGHTER - YELLOW	25	0.14	1.68
1	ST	059178	FINE VIS-A-VIS PEN SET/4	253	2.66	2.66
12	ST	408115	WATERCOLOR MARKER ST/12	26	1.78	21.36
2	EA	023194	EXPO II CLEANER, 8 OZ.	27	1.69	3.38
3	EA	059640	EXPO DRY ERASER	27	1.88	5.64
2	ST	059460	EXPO MARKER SET/4	28	3.40	6.80
24	EA	015348	WOODEN 12" RULER	34	0.25	6.00
12	EA	015363	YARDSTICK W/METAL END	34	1.62	19.44
1	EA	038342	1670 SCHOOL PRO ELEC SHARPENER	37	35.40	35.40
1	EA	025983	3-HOLE PAPER PUNCH	38	4.17	4.17
2	EA	039423	HAND HELD PAPER PUNCH 1-HOLE	38	0.59	1.18
1	EA	061131	SWINGLINE 711 BLACK STAPLER	40	6.66	6.66
1	EA	061149	SWINGLINE 747 BLACK STAPLER	40	10.61	10.61
2	BX	061059	STANDARD STAPLES	41	0.52	1.04
2	EA	000354	9" TEACHER SHEARS	43	4.50	9.00
1	EA	371774	8" BENT TRIMMER SHEARS	43	1.52	1.52
24	EA	000327	5" CLIP QUALITY SCISSORS	45	0.63	15.12
12	RL	040722	1/2"X36YD PERMANENT MEND TAPE	46	0.60	7.20
12	RL	040587	3/4" UTILITY MASKING TAPE	47	0.70	8.40
1	EA	023127	C-38 BLACK TAPE DISPENSER	48	2.09	2.09
25	EA	023135	SMALL WASHABLE GLUESTICK	50	0.38	9.50
4	EA	035334	TAC'N STIK REUSEABLE ADHESIVE	53	1.09	4.36
5	BX	000057	PAPER CLIPS,STANDARD	54	0.12	0.60
5	BX	000072	PAPER CLIPS,JUMBO	54	0.31	1.55
1	BX	036981	2" BOOK RINGS, BOX/50	54	4.70	4.70
2	BX	059964	3/8" THUMB TACKS	55	0.24	0.48
1	BX	012291	CLEAR REPORT COVER BX/50	58	9.60	9.60
3	BX	023254	ASSORTED PORTFOLIO BX/25	59	4.85	14.55
10	PK	048267	3"X5" BLANK INDEX CARDS	62	0.43	4.30
10	PK	048270	3"X5" RULED INDEX CARDS	62	0.43	4.30
1	BX	070311	1/5CUT LET HANGING FILE FOLDER	64	4.88	4.88
1	BX	015741	1/3 CUT FILE FOLDERS	65	5.63	5.63
1	EA	038946	14 MO.DESK PAD CALENDAR 2001/2002	70	1.64	1.64
1	EA	206771	SWIVEL DESKMATE ORGANIZER	72	7.27	7.27
3	EA	021354	DESK TRAY, BLACK	73	1.76	5.28
24	EA	043530	LEGAL CLIPBOARD	76	0.80	19.20
1	EA	038434	TI-34 SCIENTIFIC CALCULATOR	79	23.76	23.76
12	EA	040269	#79 INTERMEDIATE DICTIONARY	95	10.66	127.92
12	EA	040266	#78 STUDENTS THESAURUS	97	10.66	127.92
25	EA	522155	11X7 ASSIGNMENT BOOK	108	1.27	31.75
5	RM	000513	8.5"X11" FILLER PAPER W/MARG	118	3.12	15.60
2	RL	006483	3"X200' MANILA SENTENCE ROLL	126	2.99	5.98
1	PK	204686	18"X24" 125# MANILA TAGBOARD	130	7.56	7.56
1	PK	314478	18"X24" 125# WHITE TAGBOARD	130	7.56	7.56
1	PK	215982	12"X18" TAG BOARD -ASST COLOR PK/100	130	8.49	8.49
2	PK	053958	TRU 9"x12" MAGENTA CONST. PPR.	133	1.09	2.18

			3RD - 8TH GRADE: START-UP PAGE-2			
QTY ORD.	UNIT	STOCK #	DESCRIPTION	PAGE	UNIT PRICE	TOTAL PRICE
2	PK	053970	TRU 9"x12" YELLOW CONST. PPR.	133	1.05	2.10
2	PK	053979	TRU 9"x12" TURQ CONST. PPR.	133	1.20	2.40
2	PK	054027	TRU 9"x12" BLUE CONST. PPR.	133	1.09	2.18
2	PK	054039	TRU 9"x12" WHITE CONST. PPR.	133	0.80	1.60
2	PK	054048	TRU 9"x12" BLACK CONST. PPR.	133	1.05	2.10
2	PK	054051	TRU 9"x12" RED CONST. PPR.	133	1.05	2.10
2	PK	054063	TRU 12"X18" ORANGE CONST. PPR.	133	2.18	4.36
2	PK	054090	TRU 12"X18" SALMON CONST. PPR.	133	1.98	3.96
2	PK	054096	TRU 12"x18" PINK CONST. PPR.	133	2.11	4.22
2	PK	054105	TRU 12"x18" LT. GRN CONST. PPR.	133	1.98	3.96
2	PK	054108	TRU 12"X18" SKY-BLUE CONST PPR	133	1.98	3.96
2	PK	054114	TRU 12"x18" LILAC CONST. PPR.	133	1.98	3.96
2	PK	054126	TRU 12"x18" DK-GRN CONST. PPR.	133	2.41	4.82
2	PK	054132	TRU 12"x18" TAN CONST. PPR.	133	1.98	3.96
2	PK	054138	TRU 12"x18" WM. BRN CONST. PPR	133	1.98	3.96
2	PK	054147	TRU 12"x18" SLATE CONST. PPR.	133	1.98	3.96
2	PK	054918	TRU 18"x24" WHITE CONST. PPR.	133	5.43	10.86
2	PK	054921	TRU 18"x24" YELLOW CONST. PPR.	133	5.43	10.86
2	PK	054924	TRU 18"x24" GREEN CONST. PPR.	133	6.62	13.24
2	PK	054927	TRU 18"x24" BLUE CONST. PPR.	133	5.77	11.54
2	PK	054939	TRU 18"x24" BLACK CONST. PPR.	133	5.43	10.86
2	PK	054942	TRU 18"x24" RED CONST. PPR.	133	5.43	10.86
1	PK	216777	TRU 9"X12" HOL GREEN CONST PPR	133	1.24	1.24
24	EA	001287	DIXON CRAYONS, BOX/8	157	0.32	7.68
12	ST	021897	4-1/2" COLOR PENCILS, SET/8	164	0.62	7.44
12	ST	026106	COLORAY PENCIL SET - THICK	165	2.29	27.48
1	BX	036837	3M 901 TRANSPARENCY FILM	252	10.49	10.49
1	PK	631839	0471 5 MIL WRITE-ON CLEAR FILM	252	5.87	5.87
1	EA	016791	24"X36" US FLAG W/ STAFF	464	7.15	7.15
1	EA	016794	ALUMINUM FLAG BRACKET	465	1.12	1.12
				SUBTOTAL		844.21

SUPPLY LIST
FOURTH GRADE

This is a comprehensive list of materials needed to teach National Heritage Academies' curriculum.
Each teacher must have access to these supplies and materials.
Please see your principal for access.



Vendor	Grade	Description	Quantity	Individual Price	Total
Center for Civic Ed.	Fourth	We The People Level 1 Set	1	$165.00	$165.00
George F. Cram Co.	Fourth	U.S./World Explorer Pol. Combo Map (MI, NY, NC, OH)	1	$242.25	$242.25
Debby & Co.	Fourth	Atlas of Our Country	1	$7.95	$7.95
Debby & Co.	Fourth	Democracy for Young Americans	1	$13.95	$13.95
Debby & Co.	Fourth	Dice	4	$0.20	$0.80
Debby & Co.	Fourth	Earth & Weather	1	$4.95	$4.95
Debby & Co.	Fourth	Easy Chemistry	1	$11.95	$11.95
Debby & Co.	Fourth	Ecology	1	$9.95	$9.95
Debby & Co.	Fourth	Elementary Economics	1	$5.99	$5.99
Debby & Co.	Fourth	Energy	1	$4.95	$4.95
Debby & Co.	Fourth	Geology and Minerals	1	$14.95	$14.95
Debby & Co.	Fourth	Immigration	1	$5.95	$5.95
Debby & Co.	Fourth	Immigration	1	$10.95	$10.95
Debby & Co.	Fourth	Kid's Guide to Social Action, Free Sprit	1	$16.95	$16.95
Debby & Co.	Fourth	Kitchen Chemistry	1	$6.95	$6.95
Debby & Co.	Fourth	Life in a Pond	1	$7.95	$7.95
Debby & Co.	Fourth	Make it Work! Earth	1	$6.95	$6.95
Debby & Co.	Fourth	Map Skills	1	$9.95	$9.95
Debby & Co.	Fourth	Matter	1	$7.98	$7.98
Debby & Co.	Fourth	Medieval Time Activity Book	1	$6.95	$6.95
Debby & Co.	Fourth	Michigan the Wolverine State (Thematic Unit)	1	$5.99	$5.99
Debby & Co.	Fourth	Middle Ages Knights & Castles	1	$6.95	$6.95
Debby & Co.	Fourth	Regions of the USA Maps	1	$11.95	$11.95
Debby & Co.	Fourth	The Amazing Earth Model Book	1	$14.95	$14.95
Debby & Co.	Fourth	The Weather Report	1	$14.99	$14.99
Debby & Co.	Fourth	Water Cycle	1	$3.95	$3.95
Debby & Co.	Fourth	We the People (Duplicating Masters)	1	$9.95	$9.95
Debby & Co.	Fourth	Weather Watch	1	$8.99	$8.99
Debby & Co.	Fourth	World History Simulation	1	$11.95	$11.95
Debby & Co.	Fourth	Various Science Books **See AcademyLink Purchase Order form**			
Educ. Consult.Svc.	Fourth	Teaching Gifted Kids in the Regular Classroom	1	$25.00	$25.00
Educational Design	Fourth	MEAP Coach Math (1p/s)	1	$9.95	$9.95
Educational Design	Fourth	MEAP Coach Reading (1p/s)	1	$9.95	$9.95
Educator's Pub.	Fourth	Spellwell C (1p/s)	1	$3.60	$3.60
Educator's Pub.	Fourth	Spellwell CC (1p/s)	1	$3.60	$3.60
Educator's Pub.	Fourth	Spellwell C & CC, Teacher's Guide	1	$2.00	$2.00

Educator's Pub.	Fourth	Book 1, Vocabulary (1p/s)	1	$4.75	$4.75
Educator's Pub.	Fourth	Teacher's Key	1	$3.65	$3.65
Educator's Pub.	Fourth	Test, Book 1 (Package of 6)	1	$5.35	$5.35
Flinn	Fourth	Various Science Equipment **See AcademyLink Purchase Order form**			
Frey	Fourth	Various Science Consumable Supplies **See AcademyLink Purchase Order form**			
Great Source	Fourth	Daily Geography	1	$21.95	$21.95
Great Source	Fourth	Daily Geography Student Book (10pk)	1	$21.95	$21.95
Great Source	Fourth	Daily Oral Language	1	$21.95	$21.95
Great Source	Fourth	Daily Oral Language Student Book (10pk)	1	$21.95	$21.95
Hirsch	Fourth	Books To Build On	1	$10.95	$10.95
Hirsch	Fourth	Core Knowledge Sequence Content Guidelines	1	$22.50	$22.50
Hirsch	Fourth	Listen, My Children (Poem/Anthology Book) (1p/s)	1	$4.95	$4.95
Hirsch	Fourth	The Schools We Need and Why We Don't Have Them	1	$24.95	$24.95
Hirsch	Fourth	What Your Fourth Grader Needs to Know	1	$12.95	$12.95
Jarrett Publishers	Fourth	Michigan: Its Land & People (1p/s)	1	$18.95	$18.95
Network	Fourth	Cumulative Writing Folder (25 w/ TE)	1	$15.00	$15.00
Network	Fourth	Developing an Effective Writing Program	1	$10.00	$10.00
Network	Fourth	Five Types of Writing Assignments (Poster)	1	$4.00	$4.00
Network	Fourth	Implementing the Cumulative Writing Folder	1	$10.00	$10.00
Network	Fourth	Selecting and Teaching Focus Correction Areas: Plan Guide	1	$6.00	$6.00
Network	Fourth	Strategies for Young Writers	1	$5.00	$5.00
Network	Fourth	Writers Marks (Poster)	1	$4.00	$4.00
Saxon	Fourth	Activity Guide	1	$25.00	$25.00
Saxon	Fourth	Basic Fact Cards (1p/s)	1	$5.00	$5.00
Saxon	Fourth	Student Edition Math 54 (1p/s)	1	$40.00	$40.00
Saxon	Fourth	Teacher's Edition	1	$40.00	$40.00
Saxon	Fourth	Test Masters	1	$45.00	$45.00
Schoolmaster	Fourth	Blue Litmus Paper	1	$7.75	$7.75
Schoolmaster	Fourth	Red Litmus Paper	1	$7.75	$7.75
Schoolmaster	Fourth	Wide Range pH Test Paper	6	$0.95	$5.70
Shurley Method	Fourth	Level 4 Kit 2nd Edition	1	$345.00	$345.00
Shurley Method	Fourth	Level 4 Poster Set	1	$30.00	$30.00
Shurley Method	Fourth	Level 4 Student Workbook (1p/s)	1	$11.00	$11.00
Shurley Method	Fourth	Level 4 Transparency Set	1	$55.00	$55.00
SRA/McGraw Hill	Fourth	Math Explorations and Applications Kit	1	343.95	$343.95
SRA/McGraw Hill	Fourth	Collections For Young Scholars, Vol. 4, Book 1 (1p/s)	1	$31.32	$31.32
SRA/McGraw Hill	Fourth	Collections For Young Scholars, Vol. 4, Book 2 (1p/s)	1	$31.32	$31.32

SRA/McGraw Hill	Fourth	Comprehension Checkpoints	1	$10.23	$10.23
SRA/McGraw Hill	Fourth	Explorer's Notebook (1p/s)	1	$9.18	$9.18
SRA/McGraw Hill	Fourth	Explorer's Notebook Response Guide	1	$9.75	$9.75
SRA/McGraw Hill	Fourth	Framework for Effective Teaching, Teacher's Edition, Gr. 4, Book 1	1	$82.98	$82.98
SRA/McGraw Hill	Fourth	Framework for Effective Teaching, Teacher's Edition, Gr. 4, Book 2	1	$82.98	$82.98
SRA/McGraw Hill	Fourth	Overview Planner	1	$14.04	$14.04
SRA/McGraw Hill	Fourth	Reading/Writing Skills Practice (1p/s)	1	$9.75	$9.75
SRA/McGraw Hill	Fourth	Reading/Writing Skills Practice, Teacher's Edition	1	$14.61	$14.61
SRA/McGraw Hill	Fourth	Skills Assessment (3p/s x # of students in class)	1	$9.75	$9.75
SRA/McGraw Hill	Fourth	Skills Assessment, Teacher's Edition	1	$14.61	$14.61
SRA/McGraw Hill	Fourth	Student Toolbox	1	$219.54	$219.54
SRA/McGraw Hill	Fourth	Teacher Toolbox	1	$439.11	$439.11
SRA/McGraw Hill	Fourth	Reading Labs - OPTIONAL **See AcademyLink Purchase Order form**			
Virginia	Fourth	History	1	$30.00	$30.00
Zaner Bloser	Fourth	Handwriting Helper Kit CURSIVE	1	$119.99	$119.99
Zaner Bloser	Fourth	Handwriting Paper Ream	3	$5.99	$17.97
Zaner Bloser	Fourth	Handwriting Transparencies	1	$82.99	$82.99
Zaner Bloser	Fourth	Wall Strip	1	$20.99	$20.99
Zaner Bloser	Fourth	Teacher's Edition, Practice Masters, and Poster Super Pak	1	N/C	

SUPPLY LIST
FURNITURE
FOURTH GRADE

2000-2001 FURNITURE TABLES PER ROOM
24 Students Per Classroom

Second, Third and Fourth Grades

Ref. #	Item	Description	Amt.	Ordered By
1	Teacher Desk	HON34961 Double Ped	1	NHA
2	Teacher Chair	HON 7901 Task Chair	1	NHA
3	4-Drawer File	Hon 524 4 Drawer File	1	NHA
5	Tackboard 2x4	Best Rite 311AC	1	Bouma
6	Tackboard 4x8	Best Rite 311AH	2	Bouma
7	Markerboard 5x10	Best Rite 202AL	1	Bouma
	Tack Strip 2x10	532K	1	Bouma
14	Student Desks	Artco Bell 9503 Open Front	24	NHA
19	Kidney Table	Artco Bell 1275 48x72	1	NHA
21	Computer Table	Artco Bell CD60	1	NHA
11	Medium Chair	Artco Bell 7105 15 ½"	29	NHA
12	Large Chair	Artco Bell 7107 17 ½"	1	NHA
8B	3 shelf Bookshelf	Lee Metal 42"	2	NHA
	Flag Bracket		1	Bouma
	Computer		1	NHA Tech
	Waste Basket	Large & Small	1 ea	Foremost
	Pencil Sharpener		1	Bouma
	Clock		1	Bouma
	Telephone		1	Moss

REPORT CARD
FOURTH GRADE

Template for 2001-2002
All teachers will use the
AcademyLink report module
for Fall 2001

Fourth Grade Report Card

	Marking Period			
	1	2	3	4
Reading				
Comprehension				
Fluency				
Literary terms (characters, setting, plot, theme)				
Learns vocabulary words				
Completes weekly reading logs				
Completes projects				
Comments:				

Writing				
Composition				
Applies capitalization and punctuation rules				
Applies elements of the writing process				
Expresses ideas clearly				
Uses the correct mechanics of writing				
Writes well-structured and organized paragraphs				
Handwriting				
Cursive – uses correct size, form, and space				
Cursive – writes neatly in daily work				
Manuscript – uses correct size, for, and space				
Manuscript – writes neatly in daily work				
Grammar				
Daily Oral Language				
Identifies and uses parts of speech				
Oral Presentation				
Comments:				

Spelling				
Incorporates spelling into daily work				
Learns assigned words				
Assessments				
Dictionary skills				
Completes homework				
Comments:				

Student Name: _____ Teacher: _____

Mathematics				
Concepts				
Knows basic facts				
Whole number computation and procedures				
• Addition				
• Subtraction				
• Division				
• Multiplication				
Understands fractions, decimals, and percents				
Understands money				
Understands geometry				
Understands measurement				
Understands statistics and probability				
Understands problem solving				
Understands place value				
Understands mental math				
Understands algebraic Concepts				
Understands time				
Naming and constructing geometric figures				
Using numbers and organizing data				
Understands decimals and their uses				
Can measure angles				
Understands fractions				
Understands percents				
Understands, perimeter, area, and volume				
Completes daily assignments				
Assessments				
Comments:				

Science				
Understands scientific concepts				
Meteorology and weather				
Earth science				
Chemistry				
Physical Science				
Biology				
• Animal behavior				
• Human body				
Electricity				
Completes projects and experiments accurately				
Takes accurate notes				
Participates in discussions				
Uses scientific method				
Comments:				

Student Name: _____ Teacher: _____

History/Geography/Government				
American History				
Medieval China				
Early and Medieval Africa				
Medieval Europe				
Spread of Islam				
State Culture				
State Economics				
State Government				
State History				
State Geography				
European Geography				
Asian Geography				
African Geography				
Continents and Oceans				
Map Reading				
State Project				
Participates in discussion				
Takes accurate notes				
Completes projects on time				
Comments:				

Moral Focus				
Justice – ***the principle of just dealing or right action***				
Accepts responsibility for own actions				
Demonstrates compassion and kindness				
Temperance – ***moderation in thought, action, or feeling***				
Completes assignments on time				
Submits homework on time				
Uses time wisely				
Works without disturbing others				
Prudence – ***the ability to govern and discipline oneself***				
Displays good manners				
Displays self-control				
Respectful of property, other students, and adults				
Works cooperatively				
Fortitude – ***the strength of mind to endure with courage***				
Follows directions				
Listens attentively				
Works independently				
Comments:				

Student Name: _____ Teacher: _____

Art				
Uses time wisely				
emonstrates good conduct				
Demonstrates grade level art skills				
Graded work				

Comments:

Music				
General music				
Demonstrates appropriate attitude toward subject				
Demonstrates basic music concepts				
Listens and participates				
Music Theory				
Demonstrates ability to play melody and accompaniment				
Demonstrates ability to notate music				
Demonstrates compositional skills and understanding				
Demonstrates keyboarding/instrumental skills				
Demonstrates reading notated music				
Understands basic music terminology and symbols				
Music history/listening				
Demonstrates knowledge of composers studied				
Demonstrates music listening skills				
Identifies compositions studied				
Identifies families of instruments				
Identifies instruments by sight and sound				
Recorders				
Comes prepared to class				
Demonstrates fingering/playing skills				
Demonstrates reading music notation				
Participates in group/ensemble				
Turns in homework and graded project work				
Instrumental/choral music				
Comes prepared to class				
Completes homework and graded projects				
Concert performance and attendance				
Demonstrates appropriate playing/singing skills				
Demonstrates appropriate reading skills				
Participates in group/ensemble				
Understands music terminology and symbols				

Comments:

Student Name: _____ Teacher: _____

Physical Education				
Participates in class activities				
Demonstrates appropriate skill development				
Demonstrates appropriate cognitive skills through testing				
Demonstrates positive attitude toward subject				
Demonstrates teamwork				
Demonstrates sportsmanship				
Overall performance				
Comments:				

Student Name: _____ Teacher: _____

Final Comments:

Report Card Legend

Letter Grade	Remarks
A	Excellent
B	Good
C	Satisfactory
D	Needs Improvement
F	Does not meet requirements

Skill Scale	Remarks
4	Student shows accuracy, appropriateness, quality, and originality.
3	Can apply the skill or concept correctly and independently.
2	Shows some understanding. Errors or misunderstandings occur. Teacher reminders, hints, and suggestions are necessary.
1	Cannot complete the task or skill independently. Shows little understanding of the concept. Quality is lacking.

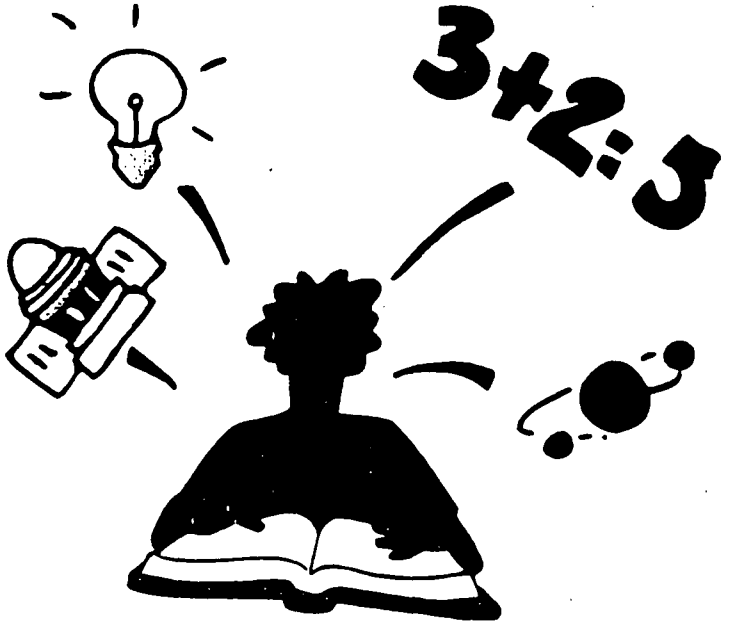
Assigned to : _____ Grade

Student Name: _____ Teacher: _____

BLOOM'S TAXONOMY
FOURTH GRADE

Based on *Bloom's Taxonomy*—Developed by Linda G. Barton, M.S. Ed. EDUPRESS EP 504

QUICK QUESTIONS FOR CRITICAL THINKING



Bloom's Taxonomy Quick Questions for Critical Thinking

Introduction

Bloom's Taxonomy divides the way people learn into three domains. One of these is the *cognitive* domain which emphasizes intellectual outcomes. This domain further divides into categories which are arranged progressively from the lowest level of thinking, simple recall, to the highest, evaluating information.

Quick Questions for Critical Thinking can be used in the home, classroom or workplace to develop all levels of thinking within the cognitive domain. The results will be improved attention to detail, increased comprehension and expanded problem solving skills. Find the box containing the level you wish to challenge. Use the **Key Words** as guides to structuring questions and tasks. Finish the **Questions** with content appropriate to the learner.

Level I

Knowledge: Exhibit memory of previously-learned material by recalling facts, terms, basic concepts and answers.

Key Words:

who	what	why	when	omit	where	which
choose	find	how	define	label	show	spell
list	match	name	relate	tell	recall	select

Questions:

* What is ... ?
* Where is ... ?
* How did _____ happen?
* Why did ... ?
* When did ... ?
* How would you show ... ?
* Who were the main ... ?
* Which one ... ?
* How is ... ?
* When did _____ happen?
* How would you explain ... ?
* How would you describe ... ?
* Can you recall ... ?
* Can you select ... ?
* Can you list the three ... ?
* Who was ... ?

Level I - Knowledge

Level II

Comprehension: Demonstrate understanding of facts and ideas by organizing, comparing, translating, interpreting, giving descriptions and stating main ideas.

Key Words:

compare	contrast	demonstrate	interpret	explain
extend	illustrate	infer	outline	relate
rephrase	translate	summarize	show	classify

Questions:

* How would you classify the type of ... ?
* How would you compare ... ? contrast ... ?
* Will you state or interpret in your own words ... ?
* How would you rephrase the meaning ... ?
* What facts or ideas show ... ?
* What is the main idea of ... ?
* Which statements support ... ?
* Can you explain what is happening ... ? what is meant ... ?
* What can you say about ... ?
* Which is the best answer ... ?
* How would you summarize ... ?

Level II - Comprehension

Level III

Application: Solve problems to new situations by applying acquired knowledge, facts, techniques and rules in a different way.

Key Words:

apply	build	choose
construct	develop	interview
make use of	organize	experiment with
plan	select	solve
utilize	model	identify

Questions:

* How would you use ... ?
* What examples can you find to ... ?
* How would you solve _____ using what you've learned ... ?
* How would you organize _____ to show ... ?
* How would you show your understanding of ... ?
* What approach would you use to ... ?
* How would you apply what you learned to develop ... ?
* What other way would you plan to ... ?
* What would result if ... ?
* Can you make use of the facts to ... ?
* What elements would you choose to change ... ?
* What facts would you select to show ... ?
* What questions would you ask in an interview with ... ?

Level III - Application

Based on *Bloom's Taxonomy*— Developed by Linda G. Barton, M.S. Ed. EDUPRESS EP 504

Level IV

Analysis: Examine and break information into parts by identifying motives or causes. Make inferences and find evidence to support generalizations.

Key Words:

analyze	categorize	classify
compare	contrast	discover
dissect	divide	examine
inspect	simplify	survey
take part in	test for	distinguish
list	distinction	theme
relationships	function	motive
inference	assumption	conclusion

Questions:

* What are the parts or features of ... ?
* How is _____ related to ... ?
* Why do you think ... ?
* What is the theme ... ?
* What motive is there ... ?
* Can you list the parts ... ?
* What inference can you make ... ?
* What conclusions can you draw ... ?
* How would you classify ... ?
* How would you categorize ... ?
* Can you identify the different parts ... ?
* What evidence can you find ... ?
* What is the relationship between ... ?
* Can you make a distinction between ... ?
* What is the function of ... ?
* What ideas justify ... ?

Level IV - Analysis

Level V

Synthesis: Compile information together in a different way by combining elements in a new pattern or proposing alternative solutions.

Key Words:

build	choose	combine
compile	compose	construct
create	design	develop
estimate	formulate	imagine
invent	make up	originate
plan	predict	propose
solve	solution	suppose
discuss	modify	change
original	improve	adapt
minimize	maximize	delete
theorize	elaborate	test
improve	happen	change

Questions:

* What changes would you make to solve ... ?
* How would you improve ... ?
* What would happen if ... ?
* Can you elaborate on the reason ... ?
* Can you propose an alternative ... ?
* Can you invent ... ?
* How would you adapt _____ to create a different ... ?
* How could you change (modify) the plot (plan) ... ?
* What could be done to minimize (maximize) ... ?
* What way would you design ... ?
* What could be combined to improve (change) ... ?
* Suppose you could _____ what would you do ... ?
* How would you test ... ?
* Can you formulate a theory for ... ?
* Can you predict the outcome if ... ?
* How would you estimate the results for ... ?
* What facts can you compile ... ?
* Can you construct a model that would change ... ?
* Can you think of an original way for the ... ?

Level V - Synthesis

Level VI

Evaluation: Present and defend opinions by making judgments about information, validity of ideas or quality of work based on a set of criteria.

Key Words:

award	choose	conclude
criticize	decide	defend
determine	dispute	evalute
judge	justify	measure
compare	mark	rate
recommend	rule on	select
agree	appraise	prioritize
opinion	interpret	explain
support	importance	criteria
prove	disprove	assess
influence	perceive	value
estimate	influence	deduct

Questions:

* Do you agree with the action ... ? with the outcome ... ?
* What is your opinion of ... ?
* How would you prove ... ? disprove ... ?
* Can you assess the value or importance of ... ?
* Would it be better if ... ?
* Why did they (the character) choose ... ?
* What would you recommend ... ?
* How would you rate the ... ?
* What would you cite to defend the actions ... ?
* How would you evaluate ... ?
* How could you determine ... ?
* What choice would you have made ... ?
* What would you select ... ?
* How would you prioritize ... ?
* What judgment would you make about ... ?
* Based on what you know, how would you explain ... ?
* What information would you use to support the view ... ?
* How would you justify ... ?
* What data was used to make the conclusion ... ?
* Why was it better that ... ?
* How would you prioritize the facts ... ?
* How would you compare the ideas ... ? people ... ?

Level VI - Evaluation

LANGUAGE ARTS
FOURTH GRADE
Reading and Grammar

Content Standards and Objectives

Scheduled Suggestions for Open Court Reading

Open Court Assessment Overview

Open Court Assessment/Monitoring

Instructional Collection

NHA Library Media Centers

The Shurley Method

Why The Shurley Method?

The Shurley Method Assessment

I. MEANING AND COMMUNICATION

Content Standard 1: All students will read and comprehend general and technical material.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Use reading for multiple purposes, such as enjoyment, gathering information, learning new procedures, and increasing conceptual understanding.	X	X	
2. Read with developing fluency a variety of texts, such as short stories, novels, poetry, textbooks, menus, periodicals and reference materials.	X	X	
3. Employ multiple strategies to construct meaning, including the use of sentence structure, vocabulary skills, context clues, text structure, mapping, predicting, retelling, and generating questions.	X	X	X
4. Employ multiple strategies to recognize words as they construct meaning, including the use of phonics, syllabication, spelling patterns, and context clues.	X		X
5. Respond to oral, visual, written, and electronic texts, and compare their responses to those of their peers.			

Content Standard 2: All students will demonstrate the ability to write clear and grammatically correct sentences, paragraphs, and compositions.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Write fluently for multiple purposes to produce compositions, such as stories, reports, letters, plays, and explanations of processes.	X		
2. Recognize and use authors' techniques in composing their own texts. Examples include effective introductions and conclusions, different points of view, grammatical structure, and appropriate organization.	X		X
3. Plan and draft texts, and revise and edit in response to suggestions expressed by others about such aspects as ideas, organization, style and word choice.	X		X
4. Identify multiple language conventions and use them when editing text. Examples include recognition of nouns, verbs, and modifiers, capitalization rules, punctuation marks, and spelling.	X		X

Content Standard 3: All students will focus on meaning and communication as they listen, speak, view, read, and write in personal, social, occupational, and civic contexts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Integrate listening, speaking, viewing, reading, and writing skills for multiple purposes and in varied contexts. An example is using all the language arts to prepare and present a unit project on a selected state or country.	X	X	

2. Analyze the impact of variables on components of the communication process. Examples include the impact of background noise on an oral message and the effect of text errors, such as spelling or grammar, on the receiver.	X		X
3. Read and write fluently, speak confidently, listen and interact appropriately, view knowledgeably, and represent creatively. Examples include exploring ideas in a group, interviewing family and friends, and explaining ideas represented in pictures.	X		
4. Distinguish between verbal and nonverbal communication and identify and practice elements of effective listening and speaking. Examples include recognizing the impact of variations of facial expression, posture, and volume on oral communication.	X		
5. Employ multiple strategies to construct meaning while reading, listening to, viewing, or creating texts. Examples include summarizing, predicting, generating questions, mapping, examining picture cues, analyzing word structure and sentence structure, discussing with peers, and using context and text structure.	X		X
6. Determine the meaning of unfamiliar words and concepts in oral, visual, and written texts by using a variety of resources, such as prior knowledge, context, glossaries, and electronic sources.	X		X
7. Recognize and use texts as models and employ varied techniques to construct text, convey meaning, and express feelings to influence an audience. Examples include effective introductions and conclusions, different points of view, and rich descriptions.	X		
8. Express their responses to oral, visual, written, and electronic texts, and compare their responses to those of others.	X		X

II. LANGUAGE

Content Standard 4: All students will use the English language effectively.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Describe language patterns used in their spoken, written, and visual communication contexts, such as school, neighborhood, sports, children's periodicals, and hobbies.	X		X
2. Describe how features of English, such as language patterns and spelling, vary over time and from place to place and how they affect meaning in formal and informal situations. An example is exploring regional language variations in the United States.	X		X
3. Begin to recognize how words and phrases relate to their origin. Examples include surnames and names of bodies of water or landmarks.	X	X	X
4. Explore how words normally considered synonyms can carry different connotations when used in a variety of spoken and written texts.	X		X
5. Recognize and use language appropriate for varied contexts and purposes. Examples include community building, mathematics class, team sports, friendly and formal letters or invitations, requests for information, interviews with adults, and significant discussions.		X	

III. LITERATURE

Content Standard 5: All students will read and analyze a wide variety of classic and contemporary literature and other texts to seek information, ideas, enjoyment, and understanding of their individuality, our common heritage and common humanity, and the rich diversity in our society.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Select, read, listen to, view, and respond thoughtfully to both classic and contemporary texts recognized for quality and literary merit.	X	X	
2. Describe and discuss the shared human experiences depicted in literature and other texts from around the world. Examples include birth, death, heroism, and love.	X	X	
3. Demonstrate awareness that characters and communities in literature and other texts reflect life by portraying both positive and negative images.	X	X	
4. Describe how various cultures and our common heritage are represented in literature and other texts.	X	X	
5. Describe how characters in literature and other texts form opinions about one another in ways that can be fair and unfair.	X	X	

IV. VOICE

Content Standard 6: All students will learn to communicate information accurately and effectively and demonstrate their expressive abilities by creating oral, written, and visual texts that enlighten and engage an audience.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Practice using elements of effective communication to enhance their relationships in their schools and communities. Examples include use of enunciation of terms, use of humor, and use of emphasis.	X	X	X
2. Explain the importance of developing confidence and a unique presence or voice in their own oral and written communication.	X	X	
3. Identify the style and characteristics of individual authors, speakers and illustrators and how they shape text and influence their audiences' expectations.	X	X	
4. Reveal personal voice by explaining growth in learning and accomplishment through their selection of materials for different purposes and audiences. Examples include portfolios, displays, literacy interviews, and submissions for publications.	X		

V. SKILLS AND PROCESSES

Content Standard 7: All students will demonstrate, analyze, and reflect upon the skills and processes used to communicate through listening, speaking, viewing, reading, and writing.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Use a combination of strategies when encountering unfamiliar texts while constructing meaning. Examples include retelling, predicting, generating questions, mapping, examining pictures cues, analyzing word structure, discussing with peers, analyzing phonetically, and using context and text structure.	X		
2. Monitor their progress while using a variety of strategies to overcome difficulties when constructing and conveying meaning.	X	X	

3. Apply new learning by forming questions and setting learning goals that will aid in self-regulation and reflection on their developing literacy.	X		
4. Develop and use a variety of strategies for planning, drafting, revising, and editing different forms of text for specific purposes. Examples include brainstorming, revising with peers, sensitivity to audience, and strategies appropriate for purposes, such as informing, persuading, entertaining and inspiring.	X		

VI. GENRE AND CRAFT OF LANGUAGE

Content Standard 8: All students will explore and use the characteristics of different types of texts, aesthetic elements, and mechanics -- including text structure, figurative and descriptive language, spelling, punctuation, and grammar -- to construct and convey meaning.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Identify and use mechanics that enhance and clarify understanding. Examples include sentence structure, paragraphing, appropriate punctuation, grammatical constructions, conventional spelling, and relating in sequence an account of an oral or visual experience.	X		X
2. Identify and use elements of various narrative genre and story elements to convey ideas and perspectives. Examples include theme, plot, conflict, and characterization in poetry, drama, story telling, historical fiction, mystery and fantasy.	X	X	
3. Identify and use characteristics of various informational genre (e.g., periodicals, public television programs, textbooks, and encyclopedias) and elements of expository text structure (e.g., organizational patterns, supporting details, and major ideas) to convey ideas.	X	X	
4. Identify and use aspects of the craft of the speaker, writer, and illustrator to formulate and express their ideas artistically. Examples include intonation, hues, design, perspective, dialogue, characterization, metaphor, simile, and points of view.	X		
5. Describe and use the characteristics of various oral, visual, and written texts (e.g., films, library databases, atlases, and speeches) and the textual aids they employ (e.g., footnotes, menus, addresses, graphs, and figures) to convey meaning.	X		

VII. DEPTH OF UNDERSTANDING

Content Standard 9: All students will demonstrate understanding of the complexity of enduring issues and recurring problems by making connections and generating themes within and across texts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Explore and reflect on universal themes and substantive issues from oral, visual, and written texts. Examples include exploration, discovery, and formation of personal relationships.	X		

2. Draw parallels and contrasts among key ideas, concepts, and varied perspectives found in multiple texts.	X		
3. Use conclusions based on their understanding of differing views presented in text to support a position.	X		

VII. IDEAS IN ACTION

Content Standard 10: All students will apply knowledge , ideas, and issues drawn from texts to their lives and the lives of others.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Identify how their own experiences influence their understanding of key ideas in literature and other texts.	X	X	
2. Combine skills to reveal their strengthening literacy. Examples include writing and illustrating a text, reading and then orally analyzing a text, and listening to and then summarizing a presentation.	X	X	
3. Use oral, written, and visual texts to research how individuals have had an impact on people in their community and their nation. Examples include creating texts to inform others about school or community issues or problems.	X	X	

VIII. INQUIRY AND RESEARCH

Content Standard 11: All students will define and investigate important issues and problems using a variety of resources, including technology, to explore and create texts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Generate questions about important issues that affect them or topics about which they are curious, and use discussion to narrow questions for further research.	X	X	
2. Identify and use resources that are most useful and most readily available for the particular questions or topics they wish to investigate. Examples include knowledgeable people, field trips, tables of contents, indexes, glossaries, icons/headings, hypertext, storage addresses, CD-ROM/laser disks, electronic mail, and library catalogue databases.			
3. Organize and analyze information to draw conclusions and implications based on their investigation of an issue or problem.	X	X	
4. Using multiple media, develop and present a short presentation to communicate conclusions based on the investigation of an issue or problem. Examples include charts, posters, transparencies, audio tapes, videos, and diagrams.			

IX. CRITICAL STANDARDS

Content Standard 12: All students will develop and apply personal, shared, and academic criteria for the enjoyment, appreciation, and evaluation of their own and other's oral, written, and visual texts.

Objective	Lessons		
	Open Court	Core Knldg	Shurley Method
1. Develop individual standards for effective communication for different purposes and compare them to their own oral, visual, and written texts. An example is evaluating a project report in terms of personal standards for content, style, and organization.	X		
2. Develop and apply both individual and shared standards based on exemplary works creative for varied purposes and contexts.	X	X	
3. Demonstrate preferences in reading, writing, speaking, listening, viewing, and representing based on aesthetic qualities and explain their choices.	X		
4. Create a collection of personal work selected according to both individual and shared criteria, judging the merit of each selection.	X		X
5. Develop standards to analyze how the style and substance of personal messages reflect the values of a communicator.	X	X	

SCHEDULING SUGGESTIONS
FOR
OPEN COURT READING (2000 Edition)

- **Do at least one activity from Part One/Green Section and at least one activity from Part Three/Blue Section each day**
- **Also do the Part Two/Red Section as follows:**

DAYS 1 & 2 (DAY 1 only if 3-day lesson plan):

- Word Study (not part of K, 1, 2:1, or 3:1)
- Clues & Problems and include in this six of the Vocabulary words, pronouncing them only and not using transparency
- Reading the Selection, Teaching Comprehension Strategies and doing end-of-story Discussion
- Literary Elements and Skills Sheet
- Pre-Writing from the Process Writing
- Meeting Individual Needs and Independent Work Time

DAYS 3 & 4 (DAY 2 only if 3-day lesson plan):

- Second Reading of the Selection
- Vocabulary – from the transparency first, then using context clues
- Teaching Comprehension Skills during the Second Reading
- Teach Literary Elements by having students include new technique as they write their Draft from the Process Writing - or - students find places in writing they have already done to Revise and use the new technique
- Meeting Individual Needs and Independent Work Time

DAY 5 (DAY 3 if 3-day lesson plan):

- Silent Reading of Selection and/or discussion with Theme Connections
- Inquiry Notebooks
- Comprehension Assessment
  - Grammar Skill - do worksheet **or**
  - use this skill in your Process Writing **or**
  - do Skills Assessment Sheet
- Meeting Individual Needs and Independent Work Time

FIRST READING

g Activate Prior Knowledge
Browse
Set Reading Goals and Expectations
Vocabulary
r Oral Reading (Modeling Strategies)
Discussion (using information from browsing and setting reading goals and expectations)
b Writing (Literary Element)
Writing Process
Independent Work Time (not necessarily every group this day)

SECOND READING

g Vocabulary
r Theme Connections
Record Ideas
Skills Reading
Skills Sheet
b Writing Process
Independent Work Time

THIRD READING

p 20 minutes for the project
r Partner or Silent Reading
Inquiry Notebook
Comprehension Assessment and/or Skills Assessment
b Grammar Skill (pulled in with the Writing Process)
The teacher will select either:

1) the worksheet on the skill
2) go back to the student's writing and proof-read for the skill/if not there "How can we make our piece better by adding the skill?"
3) skills assessment page

Writing
Independent Work Time

UNIT_____: LESSON_____

Part One (may take 2 days)

GREEN

- ☐ Word Knowledge p._____
- ☐ Build Background p._____
- ☐ Preview and Prepare p._____ Transparency p._____
- ☐ Selection Vocabulary p._____

RED

Class Reading Story p._____

Story Title:_____

➡Left side of the Manual Questions (Strategies)

☐ Discussion (Did we answer our purpose for reading?)

BLUE

☐ Writing: Literary Elements p._____

Concepts:_____

RW WB p._____

☐ Writing Process p._____

Concepts:_____

☐ Independent Work Time

☺ WORKSHOP ☺

Handwriting p._____

Spelling p._____

Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

UNIT_____: LESSON_____

Part Two (1 day)

GREEN

☐ Vocabulary p._____ Transparency p._____

RED

☐ Theme Connections (end of story) p._____

☐ Relook at Story p._____

Story Title:_____

➡Right side of the Manual Questions (Skills)

☐ Skills Sheet p._____ RW WB p._____

p._____ RW WB p._____

BLUE

☐ Writing Process p._____

Concepts:_____

RW WB p._____

☐ Independent Work Time

☺ WORKSHOP ☺

☐ Handwriting p._____

☐ Spelling p._____

☐ Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

UNIT_____: LESSON_____

Part Three (may take 2 days)

PROJECT

☐ 20 Minutes for Project Work Time (PURPLE p._____)

_____

RED

☐ Partner or Silent Reading p._____

Story Title:_____

➡Uninterrupted reading time

☐ Inquiry Journal p._____

⇨ Recording Concept Information IJ p._____

⇨ Other Pages p._____ Concept:_____ IJ p._____

p._____ Concept:_____ IJ p._____

PURPLE

☐ Comprehension Assessment p._____ CW A p._____

☐ Skills Assessment p._____ S A p._____

BLUE

☐ Grammar Skills p._____

Concept:_____

➡Choose one or more

1. Worksheet on the skill p._____
2. Proof/edit student work
3. Skill Assessment p._____ (PURPLE)

☐ Writing Process p._____

Concept:_____

☐ Independent Work Time

☺ WORKSHOP ☺

Handwriting p._____

Spelling p._____

Reading Folders:

Reteach p._____

Skills p._____

Challenge p._____

_____

_____

Extra skills to work on:

OPEN COURT ASSESSMENT OVERVIEW

"True assessment is a tool for learning
rather than a mere measure of achievement."
SRA/Open Court Reading Author, Joe Campione

The goal of true assessment is to inform instruction. It helps determine what students know and how to change the instruction to help students learn what they need to know.
The assessment components of SRA/Open Court Reading reflect the balanced nature of the series itself. The following are principles that guided the development of the assessment components.

Ease of Use for the Teacher

The assessments are easily administered and scored, feature the same language that is used in the instructional components of the series, and correspond to the sequence of instruction in the series. The assessments are typically short enough to prevent fatigue from affecting student performance yet long enough to provide a dependable measure of student skills and abilities.

Assessment of Critical Skills

The skills that are featured prominently in the series-the skills that are critical to the reading process-are the focus of assessment. These same skills are typically included on standardized tests and in state standards, so the assessments will help teachers respond to the accountability system under which they work.

Variety in Assessment

In addition to the formal and informal assessments,
SRA/Open Court Reading includes:
Pre-and Post-tests
Unit Tests
Comprehension Assessment
Self-Assessment
Portfolio Assessment
Family Evaluation

OPEN COURT ASSESSMENT AND MONITORING

ASSESSMENT TO INFORM INSTRUCTION

Variety of Assessment Tools

- **Pre-and Post-Tests**
- **Unit Tests**
- **Comprehension Assessment (Previously Comprehension Checkpoints)**
- **Self-Assessment**
- **Portfolio Assessment**
- **Family Evaluation**

PURPOSE: Detect children's strengths and weaknesses through informal monitoring.

PROCEDURES: Observation Logs
(Reproducible masters)

Monitoring Written Work
(Reproducible masters)

Individual Conferences

CONTINUOUS ASSESSMENT

Materials

* Assessment Guide
* Assessment Masters

Monitoring

(Teacher's Observation Logs)

Reading Performance Assessment

(Using Phonics Minibooks)

Writing Performance Assessment

(3 or 4 during the year)

Portfolios

Written Tests

POETRY: *Core Knowledge*

Afternoon on a Hill (Edna St. Vincent Millay)
Clarence (Shel Silverstein)
Clouds (Christina Rossetti)
Concord Hymn (Ralph Waldo Emerson)
Dreams (Langston Hughes)
The drum (Nikki Giovanni)
The Fog (Carl Sandburg)
George Washington (Rosemary and Stephen Vincent Benet)
Humanity (Elma Stuckey)
Life Doesn't Frighten Me (Maya Angelou)
Monday's Child is Fair of Face (traditional)
The Pobble Who Has No Toes (Edward Lear)
The Rhinoceros (Ogden Nash)
Things (Eloise Greenfield)
A Tragic Story (William Makepeach Thackeray)

SPEECHES:
Patrick Henry: Give me liberty or give me death *Core Knowledge*
Sojourner Truth: Ain't I a Woman *Core Knowledge*

READ ALOUD STORIES: (Select five)

Gulliver's Travels (Jonathan Swift) (adapted-*Core Knowledge*)
The Legend of Sleepy Hollow (adapted-*Core Knowledge*)
Rip Van Winkle (Washington Irving) (adapted-*Core Knowledge*)
Pollyanna (Eleanor Porter) (adapted-*Core Knowledge*)
St. George and the Dragon
Stuart Little
Island of the Blue Dolphins

NOVEL UNITS:

Sarah Plain and Tall
Trumpet of the Swans
Courage of Sarah Noble
Robinson Crusoe (Daniel Defoe) *or* Treasure Island
(both: adapted-*Core Knowledge*)

Notes/Comments:
The above selections can all be found in **Listen, My Children.**

National Heritage Academies Library Media Centers

The mission of the library media program at National Heritage Academies is to provide the students and educators with equitable access to information, ideas, and learning/teaching tools. The library media centers at National Heritage Academies are a growing resource of information for the staff and students. Resources include books, videos, periodicals, online reference resources, traveling projection systems and various teacher workbooks and posters. Many schools include video cameras, digital cameras and other technology for circulation. Our collections are developed to support the curriculum and provide students with literature. An OPAC system (online card catalog) is available at each computer terminal in each school building. Searching for materials can be done from the classroom as well as the library media center.

In order to support the curriculum and the activities taking place at each individual school, students may use the Library Media Center for research, study, reading, browsing, fact-finding and any other educational purpose. Students are encouraged to visit the library media center during school hours--either individually or as a class. Each building will prepare a schedule for weekly class visits and/or individually arranged class visits.

Materials are checked out to students for one week. If a student wishes to renew a book, he/she may do so at any time. It is important for the books to be returned on time and in good condition.

If a book is lost or damaged, the student is held responsible for that book. The student will be notified of the cost of the book and be expected to reimburse the school for the damaged or unreturned property. The amount charged will be the original purchase price of the book. If books are not returned or paid for, report cards may be held.

Accelerated Reader (AR) is a motivational reading program that is networked throughout National Heritage Academies. The program deals with individual reading levels, reading comprehension, and assessment. It involves reading books, taking quizzes on the computer and the earning of points. Many of our schools have an established school wide-program that is run by the teachers and/or library staff. In other schools, teachers use AR individually with their classes. The staff and/or administration at each school determine how this program is facilitated.

Teachers and staff are welcome at any time in the library media center to browse, search, and check out materials. They are encouraged to contact the librarian with any special requests for materials. Librarians are available to meet with teachers for planning purposes or curriculum needs.

The library media center at a National Heritage Academies school strives to be a fountain of information for growing, learning, and fun. Welcome!

WHY THE SHURLEY METHOD?

- *The Shurley Method* is the end result of twenty-five years of research. Actual classroom situations and the learning needs of students were used to develop this exciting English program.
- *The Shurley Method* never teaches concepts in isolation. A concrete set of questions about each word in a sentence is used to teach students how all the parts of a sentence fit together. Students always have a clear picture of how to write complete sentences.
- Students are constantly exposed to "see it, hear it, say it, do it," activities that meet the visual, auditory, and kinesthetic learning types of students.
- *The Shurley Method* successfully teaches language skills to students with different learning abilities and to students who learn English as a second language.
- *The Shurley Method* uses repetition, fun and student-teacher interaction to help students learn difficult English skills. The teacher models each new step in *The Shurley Method* for the students. Then the students actively participate with the teacher as the steps are practiced.
- *The Shurley Method* provides enough repetition to master each concept taught. Lessons include daily practice of old skills while new skills are being added.
- The students are taught how to merge a strong skill foundation with the writing process. As a result, teachers can spend less time going over beginning grammar and editing skills and more time introducing and enhancing advanced grammar and writing skills.
- Students' grammar and writing skills are used automatically with dependable results. This leads to higher level thinking skills because the students are stimulated to learn and use their own thought processes to solve difficult language problems.
- The most important effect of *The Shurley Method* on students may not be their increased grasp of language and improved grammar and writing skills. Instead, the greatest impact may be the students' heightened self-confidence and self-esteem. Not only do the students gain confidence in English, but they carry this improved attitude into other subject areas as well.

SHURLEY GRAMMAR METHOD

The approach used by The Shurley Method is active learning, with students physically and cognitively engaged in the learning process. Success in learning Shurley English is predicated on the reinforcement of language skills. Students memorize rhyming jingles for each of the parts of speech. In unison, they chant these jingles in a kind of language symphony until they have internalized the concepts of nouns and verbs. A Shurley classroom is one of energized learning, where students teach as well as learn. They move back and forth from group activities to independent learning exercises, from a mastery of grammar skills to creative writing exercise. In fact, students, almost without exception, beg for more class time to write.

Despite the fact that memorization and repetition have not been in vogue in recent years in American schools, they are fundamental to the success of the Shurley Method. Rarely does a Shurley student return to classes at the start of a new school year needing to be retaught concepts he/she mastered during the previous school year. The retention is permanent.

The Shurley Program provides students with two important ingredients for success: a love of the English language and the ability to use the English language correctly with ease and confidence.

THE SHURLEY METHOD ASSESSMENT

3-Day Rotation Schedule Assessment

Day 1 – Teach

(No test will be given to students on Day 1.)

1. Vocabulary and Definition Time
2. Introduce the new grammar concept and classify sentences orally.
3. Leave classified sentences on the board or transparency for Oral Skill Builder Check.
4. Write a Practice Sentence and an Improved Sentence with your class.

Day 2 – Review, Teach, and Test

(Tests will be given to students. You will use one test sheet every 3 days.)

1. Vocabulary and Definition Time.
2. Classify same sentences orally (again).
3. Teach the other English concepts that will be tested.
4. Erase the board or remove the transparency and give the student worksheet as a test.

Students are tested on the same sentences that they have classified orally together. This helps students gain the confidence to work with many skills independently and helps weak readers concentrate on learning English skills without struggling with reading vocabulary.

Day 3 – Teach and Check

(Hand the tests back)

1. Vocabulary and Definition Time.
2. Classify same sentences orally (again).
3. Leave classified sentences on the board or transparency as a visual aid when checking student tests.
4. Discuss mistakes and how to improve.

2-Day Rotation Schedule (Skip Day 1 – Oral Day)

Day 2 – Review, Teach, and Test

(Tests will be given to students. You will use one test sheet every 3 days.)

1. Review grammar by classifying sentences.
2. Teach the other English concepts that will be tested.
3. Give students the worksheet as a test.

Day 3 – Review and Check

1. Review grammar by classifying sentences.
2. Hand test back. Discuss mistakes and how to improve.

Checking Options

Teacher Graded: Select one or two sentences from the top section and several items from the bottom section to check for a grade. Then have students check the rest of the sheet with you as a practice exercise. Use a teacher-directed word-by-word check. Students focus not only on mistakes but also on correct responses. This will show them the mistakes they made, and they can use this knowledge to do better on the next test.

Student Graded: Train double checkers to help weak checkers and to grade absent students' papers.

LANGUAGE ARTS
FOURTH GRADE
Writing

Collins Writing Program
Philosophy: The Teaching of Writing
Collins Writing Strategies
Teacher Resources
Assessing Your Current Writing Program

COLLINS WRITING PROGRAM
Philosophy: The Teaching of Writing in NHA Schools

ON THE TEACHING OF WRITERS:

A belief system about how children develop as language users from birth through adulthood and what teachers should do in their classrooms to foster that growth is essential to any writing curriculum. Moreover, to provide integrated and meaningful instruction and accountability, the writing program must be organized around a system for managing the writing process. The following is meant to be a guide to teaching "writers" in the classroom.

1. **Children as language users:**
National Heritage Academies believes that children come to school with an innate curiosity about writing and a desire for meaningful, real-world communication, and that writing is one of the most complex intellectual tasks they will need to accomplish. Further, children develop writing skills in a manner that mirrors the way they learn to talk. Teachers, then, teach "writers" rather than "writing," and children become writers by the very act of writing itself. We believe that teachers help children view and define themselves as thinkers and writers by involving them with the real occurrences of their minds, hearts and world and that writing enhances the learning process of any subject at any level.

2. **Classroom culture of active literacy:**
What teachers *do* in the classroom positively impacts students' development as writers more often than what teachers *say* in the classroom. The conditions that promote the development of writers are the same as those that facilitate learning to talk:
   - *Immersion:* creating a language-rich and print-rich environment
   - *Demonstration:* modeling of writing in the classroom by the teacher
   - *Expectation:* subtly communicating to children that they will learn to write
   - *Responsibility:* giving students opportunities to be responsible for their own learning
   - *Approximation:* encouraging and respecting children's writing efforts
   - *Employment:* making time and opportunities for writing
   - *Feedback:* allowing patience with the growth process

   National Heritage Academies wants its classrooms to be places where children come expecting to write each day with the knowledge that their efforts will be valued, supported and respected.

3. **A skill for thinking across the curriculum:**
National Heritage Academies believes that students should have frequent and varied opportunities to write in *all* content areas. Writing is an aid to thinking and organizing ideas across the curriculum rather than merely a subset of the language arts curriculum. It is a balance of process (how people communicate) and product (what they communicate).

4. **Managing and evaluating a program for writing:**
   Because we understand that writing is a necessary skill for effective communication and expression, and realizing that people learn to write by writing, there must be a workable system of instruction. That system must be coupled with an assessment system to measure levels of achievement in both the student and the teacher.

National Heritage Academies has adopted **The Collins Cumulative Writing Folder Program** to support teachers in building an effective and experiential writing program within their classrooms and the school. The Collins Writing Program provides schools with a writing program— a unified set of techniques and expectations about student writing— that can be developed and reinforced over a period of years, as well as a way to measure levels of achievement in both students and teachers. It involves:

- Integrating writing across the curriculum using Five Types of Writing
- (noted on the following two pages)
- Encouraging a balance of process and product
- Encouraging ownership through a student-centered program of instruction
- Ensuring the development of critical writing and thinking skills
- Making the program student-centered
- Involving frequent writing opportunities
- Affording a practical and manageable program for both teacher and student.

The Cumulative Writing Folder Program consists of four elements: a writing management system and three teaching strategies. The strategies are:

- Oral reading
- Focus correcting
- Using past papers to teach new skills

The Program has been successfully used in special education, with the gifted and talented, and in English as a second language programs. Each element reinforces the others.

Realizing each teacher's need to understand instructional expectations as well as to be supported in those expectations, a workable "Scope and Sequence for the Teaching of Writers" will be forthcoming.

A list of resources from the Collins Education Associates follows The Collins Writing Strategies.

Collins Writing Strategies

Type One: Writing that has no correct answer – or, if there is a correct answer, it's okay to be wrong

Purpose: To capture ideas, questions, reactions

Evaluation: A check + or -, 10 pts. or 0 pts., a "smiley face" or no "smiley face," a jelly bean or a coffee bean . . . in other words – it's up to you. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a minimum volume
4. Provide a maximum time limit

Advantages:
*Spontaneous, minimal preparation
*Effective thinking stimulus for all
*Takes very little class time
*Promotes writing fluency

Type Two: Writing that makes a point - has a correct answer

Purpose: To show that the writer knows something about the topic or has thought about it

Evaluation: Type Two writing is like a quiz; mistakes in content count. Writing style and mechanics do not count – the content counts. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always label the type of writing
3. Provide a maximum time limit
4. Avoid numbering

Advantages:
*Spontaneous, little pre-planning
*Quick assessment
*Promotes writing fluency
*Promotes writing in the content areas

Type Three: Writing that has content and focus correction areas

Purpose: To produce a single draft that meets the standards set by the focus correction areas (FCA). Type Three writing is read out loud by the author to see if it does three things:

- Completes the assignment
- Sounds correct-easy to read
- **Avoids errors in the focus correction areas**

Evaluation: Evaluation is based solely on FCAs. **"Reasonable best effort"**

Basic Guidelines:
1. Always skip a line
2. Always place FCAs in the upper left
3. Maximum of three focus areas/paper

Advantages:
*Very efficient
*Ease of evaluation

Type Four:	**Writing that has been read out loud and critiqued by another – two drafts**
Purpose:	To produce the best possible work in two drafts. Writer follows the same steps as Type Three, repeats steps with a peer, and produces the best possible second draft that is placed in **The Cumulative Writing Folder.**
Evaluation:	Evaluation is based on focus correction areas. **"Reasonable best effort"**
Basic Guidelines:	1. Always skip a line 2. Always place FCAs in the upper left 3. Maximum of three focus areas/paper
Advantages:	*Fair, objective evaluations *Provides a systematic, clear, and logical sequence of writing skills

Type Five:	**Writing that can be published and go outside the classroom without explanation or qualification – multiple drafts**
Purpose:	To produce the best writing possible. Writer follows the same steps as Type Four to create a paper void of errors.
Evaluation:	Type Five writing is usually a major project. It must meet all standard conventions.
Basic Guidelines:	1. Always skip a line 2. Always label the type of writing in rough drafts
Advantages:	*Great final product *Real-world standards *Promulgates full range of skills

It has been our experience that many teachers, especially after a full day workshop with opportunities for "hands-on" practice, can effectively implement many of our ideas in their own classrooms.

However, most teacher training has failed miserably because it tends to be "hit and run" in nature. A basic assumption of our work is that writing instruction will be most effective when it is supported by a program— a unified set of teaching techniques and expectations about student writing that are developed and reinforced over a period of years. This kind of program development takes time and commitment. We believe that writing instruction must also be evaluated on a regular basis to provide teachers and students with clear and achievable goals from one year to the next. Therefore we have developed an extensive variety of program development services:

Examples of our teacher support and program development service sessions:

* **demonstration lessons**
* **establishing an in-house evaluation model**
* **individual department/grade level sessions**
* **developing strategies for state assessment tests**
* **practice developing great writing assignments**
* **practice developing appropriate FCAs**

Developed by Mark E. Dressel, Collins Education Associate 616.361.1839

COLLINS WRITING - TEACHER RESOURCES:

Center for Effective Communication-Collins Education Associates LLC:

The following publications may be found on the *AcademyLink Purchase Order form* for **The Network (formerly Collins)** and can be purchased through your building principal (textbook budget). It is recommended that each teacher have the following:

1. **Cumulative Writing Folders** - for each student in grades 1-8 for use in helping to manage the classroom writing program. Teachers of grades 1-3 should order the **Primary Cumulative Writing Folders**. Teachers of kindergarten may want to develop their own "folder system" for writing management.

2. **Developing an Effective Writing Program for the Elementary Grades** by Gary Chadwell.

3. Middle School Teachers: **Developing Writing and Thinking Skills Across the Curriculum** by Gary Chadwell.

Additional Recommended Resources:

1. Frank, Marjorie. **If You're Trying To Teach Kids How To Write...you've gotta have this book!** Incentive Publications, Inc., Nashville, Tennessee. 1979. (ISBN: 0-86530-317-7). Can be purchased through most bookstores. All Grades.

2. Areglado, Nancy and Dill, Mary. **Let's Write: A Practical Guide to Teaching Writing in the Early Grades– K-2**. Scholastic Professional Books, New York. 1997, (ISBN: 0-590-93102-4). Can be purchased through teacher stores or most bookstores. Early Grades.

3. Butler, Andrea and Turbill, Jan. **Towards a Reading-Writing Classroom**. Primary English Teaching Association, NSW, Australia: Heinemann, 1984. (ISBN: 0-435-08461-5).

4. Atwell, Nancie. **Coming to Know: Writing to Learn in the Intermediate Grades**. Portsmouth, NH: Heinemann, 1990. Presents many ways to use writing in content area study, including learning logs and research projects in every subject.

5. Calkins, Lucy. **The Art of Teaching Writing**. Portsmouth, NH: Heinemann, 1994.

6. Lane, Barry. **After 'The End': Teaching and Learning Creative Revision**. Portsmouth, NH: Heinemann, 1993.

Assessing Your Current Writing Program

You already have a writing program in place in your classroom, one shaped by your beliefs and attitudes about writing instruction. It's driven by techniques and strategies you use with your students, and it's organized around a system you use for managing the writing process. The survey that follows will help you assess your current writing program by helping to identify what you emphasize most and least in your own classroom. It will give you a snapshot of your current writing program.

After you complete this survey, your findings will enable you to reaffirm, challenge, or recalibrate some of your assumptions and help you make strategic decisions about ways to improve your writing program.

Writing Program Assessment Survey
For Elementary Grades

Instructions: For each of the activities that follow, give a rating of 0-5 that most accurately describes how often you do the activity during a year. This self-assessment will be most valuable if you are candid in your estimates. Try not to overestimate; rather than rating the items based on how much you like them, rate them on how often you actually do them.

0 - Do not do
1 - Infrequently (one to three times a year)
2 - Occasionally (four to six times a year)
3 - Regularly (once a month)
4 - Frequently (twice a month)
5 - Very frequently (once a week or more)

PROGRAM VALUES

_____ 1. Give students low-risk writing opportunities such as free writing or journal writing.

_____ 2. Take overt steps, such as writing along with your students, to create a classroom culture of active literacy.

_____ 3. Provide frequent opportunities for students to write in all content areas.

PREWRITING ACTIVITIES

_____ 4. Involve students in writing projects based on their personal experiences, reading experiences, or class discussions.

_____ 5. Engage students in discussions and activities that clarify writing projects, generate ideas, and help in planning and organizing writing.

_____ 6. Provide models, including examples of other students' writing, to help guide your students' writing efforts.

DRAFTING ACTIVITIES

_____ 7. Provide opportunities for students to write in many forms (narratives, letters, reports, poems, and so on).

_____ 8. Provide opportunities for students to write for various *purposes* (to inform, entertain, persuade, explain, and so on) and various *audiences* (parents, peers, authors, public officials, and others).

_____ 9.* Provide students with specific criteria that they can use to guide their thinking and writing and that you use to provide feedback on the writing project.

REVISING AND EDITING ACTIVITIES

_____ 10. Model revising strategies (elaborating, sentence combining, eliminating unnecessary words or phrases, checking for sentence variety, and so on) that help students review and improve their writing.

_____ 11. Teach grammar and mechanical skills in relation to students' current writing experiences.

_____ 12. Encourage students to proofread their own work (checking for punctuation, capitalization, and spelling).

_____ 13. Encourage students to peer-edit each other's papers before they are finalized.

_____ 14. Involve students in maintaining a portfolio of their writing that they can review and use to develop new writing skills.

SHARING ACTIVITIES

_____ 15.* Encourage students to read their work out loud – to themselves and others – as part of the writing process.

_____ 16. Display or "publish" examples of high-quality writing.

_____ 17. Give writers positive, specific feedback on their work.

_____ 18. Conduct individual writing conferences with students.

_____ **Total Score**

*One of the Critical Four strategies

Interpreting Your Score

What does the survey tell me? Even before you total your score, a look at your survey provides some insights into your writing program. Since time is a valuable commodity in the classroom, your responses show you how you are using this scarce resource. The strategies you have rated as 4 or 5 are the "cornerstones" of your writing program because you are giving significant time to them. These are the strategies that drive your writing program.

The survey also shows you areas where you are giving little emphasis. These areas may not be emphasized in your classroom for any number of reasons. You may feel that they are not critical to your students' development as writers or that they are not appropriate for your students. Other low-rated strategies may be ones that you value but have not yet been able to effectively incorporate into your teaching.

What is a good score? Obviously, ss your score approaches 90 it means that you have rated virtually all of the 18 items at 4 or 5. Although these 18 items represent an excellent overview of effective writing practice, you may ask whether it is necessary to use all of them with great frequency to have an effective writing program. Your question is a common one that subsumes other, related questions: Can I do all these things regularly with the number of students I have? With my time constraints? With my curriculum demands?

So, what's the lowest score I could get and still have an effective writing program? A score in the 54-72 range is the basis for an effective writing program. A score higher than 72 would indicate that writing is already a prominent component of your classroom culture. A score lower than 54 (18 items multiplies by an average score of 3) could indicate that writing is not done often enough or that your writing instruction does not provide the kind of consistent focus students need to improve as writers. The strategies on this survey have little impact on improving students' writing when used randomly.

How do I use the survey to improve my writing program? In addition to looking at your overall score, you might want to look at your scores in the five sections of the survey – Program Values, Prewriting Activities, Drafting Activities, Revising and Editing Activities, and Sharing Activities. Do your scores in one or more sections seem noticeably higher or lower than scores in other sections?

In reviewing your scores in the five sections, don't overlook the fact that some of the strategies have benefits in several aspects of the writing process – not only the one in which it is categorized in the survey. A good example is item 15 (*Encourage students to read their work out loud – to themselves and others – as part of the writing process)* which is a strategy appropriate for drafting, revising and editing, as well as sharing. This is a critical strategy for young writers because it focuses attention on the overall quality of the written message rather than on the individual words. Its use is also beneficial in several stages of the writing process.

One way to use this survey is to consider carefully your scores on items 3, 9, 14, and 15 – the Critical Four strategies. I have identified these as the Critical Four strategies because high scores in these areas ensure that your writing program is headed in the right direction. It means that students are writing often, you are focusing your writing instruction, and you are showing students ways to be effective resources to themselves and others.

Making changes in any of these areas takes thought and effort, so avoid the temptation to change too many things at once. After reviewing your survey, choose two of the strategies that you feel would have the greatest impact on improving your students' writing and work on improving those. They may be two of the Critical Four or others that you think will benefit your students.

You may want to read more about the 18 strategies before you decide where to begin. Chapters 2-6 of this book focus on the strategies from the survey and Action Steps for each one. The remainder of the book looks at ways to use the Critical Four strategies to create an effective writing program for your young writers and provides some suggestions for communicating about your program to parents.