

**Epping Elementary School
Grade Three Curriculum Overview
September 30, 2009**



Math-

We are excited to implement the second edition of our math program *Everyday Mathematics*. It offers you and your children a broad background and rich experiences in mathematics. Third Grade *Everyday Mathematics* content emphasizes the following content strands, skills and concepts:

Numeration- counting patterns; place value; reading and writing whole numbers through 1,000,000; fractions, decimals and integers.

Operations and Computation- Multiplication and division facts extended to multi-digit problems; working with properties; operations with fractions and money.

Data and Chance- Collecting, organizing and displaying data using tables, charts, and graphs; exploring concepts of chance.

Geometry- Exploring 2-and 3-dimensional shapes and other geometric concepts.

Measurement and Reference Frames- Recording equivalent units of length; recognizing appropriate units of measure for various items; finding the areas of rectangles; using multiplication arrays, coordinate grids, thermometers, and map scales to estimate distances.

Patterns, Functions, and Algebra- Finding patterns on the number grid; solving Frames and Arrows puzzles having two rules; completing variations of "What's My Rule?" activities; exploring the relationship between multiplication and division; using parentheses in writing number models; naming missing parts of number models.

Within the content of *Everyday Mathematics*, emphasis is placed on a problem solving approach based on everyday situations that develops critical thinking. Real life projects are presented such as the Length of Day project. This project instructs the children to record the sun-rise and sun-set times one day a week and create a graph of the data. This provides a visual of how our day light hours lessen as winter approaches and then increases in the spring.

The Math units are:

Unit 1 Routines, Review and Assessment

Unit 2 Adding and Subtracting Whole numbers

Unit 3 Linear Measures and Area

Unit 4 Multiplication and Division

Unit 5 Place Value in Whole Numbers and Decimals

Unit 6 Geometry

Unit 7 Multiplication and Division

Unit 8 Fractions

Unit 9 Multiplication and Division

Unit 10 Measurement and Data

Unit 11 Probability

Science

Third grade students will use the MacMillan/McGraw-Hill Science curriculum to investigate the following units of study:

***Living Things Grow and Change**

Students will understand the concepts of how living things develop, reproduce and respond to their environment. Students will identify basic needs of all living things. Students will develop an awareness of ecological balance and endangered species.

A field trip to the *Audubon Society* in Auburn, NH, will provide authentic hands-on exploration of living things in nature. Students will complete a scavenger hunt.

***Pushes and Pulls**

Students will explore forces such as gravity, friction, push, pull, and inertia. Students will observe examples of simple machines and be able to draw and label them.

***A System in the Sky**

Students will make observations regarding the size and distance of objects. Students will experiment with shadows using flashlights. Students will demonstrate differences between the Earth and the Moon.

*** Earth Beneath our Feet**

Students will examine minerals and explore their origins. Students will understand the concept of the rock cycle. Students will explore changes in the Earth's surfaces

In all units of study, the students will:

- Follow the scientific method of investigation. They will state the problem, make a hypothesis, run experiments, observe and record observations, and draw conclusions.
- Participate in hands-on activities.
- Maintain records of their investigations, share and discuss their findings with other students, and express their knowledge by verbal or written presentation.
- Participate in a field trip to the Science Enrichment Encounter in Manchester, NH, to experiment with a wide and varied array of scientific concepts.

Language Arts

Our Language Arts program includes three major components:

- *Readers' Workshop
- *Writers' Workshop
- * Phonics/Word Study

The third grade is involved with the school wide initiative of improving all students' reading and writing skills by working with the Center for Applied Child Development, Tufts University. The teachers are implementing Readers Workshop and improving instruction.

Readers' Workshop is designed to have three main parts. They are:

Focus Lesson→ During this segment the teacher delivers explicit instruction involving a *reading strategy, literary element or a workshop management routine*.

Independent Reading→ Students practice reading *Just Right* books. Also, the teacher confers with individuals or holds small group instruction.

Group Share→ Readers' Workshop is wrapped up each day with a shared celebration of successes, reinforcing the new skill.

Interactive Read-Aloud -A favorite among many, this important component of Language Arts is vital for strengthening listening skills, making sensory images, making connections, and increasing vocabulary.

Some of the skills taught include: choosing Just Right books; thinking aloud, making connections, creating sensory images, asking questions, making inferences, determining importance, summarizing, and synthesizing.

Reading Assessment: Developmental Reading Assessment—DRA.

Using this assessment tool, the teachers accurately identify the characteristics and behaviors of readers so that they are better able to select books appropriate for their level. This will also help the teachers to identify specific areas where students may need individual guidance in order to improve fluency, decoding, comprehension, and any other miscues that interfere with comprehension and fluency.

Writers' Workshop -In Writers' Workshop students explore writing in a variety of genres; using the conventions of writing.

LRR Phonics - spelling & phonics

Wordly Wise (vocabulary)

Interactive Read-Aloud -A favorite among many, this important component of Language Arts is vital for strengthening listening skills, making sensory images, making connections, and increasing vocabulary.

Social Studies

The main focus of the social studies curriculum for third grade targets *communities*. Our main resource is the Houghton Mifflin social Studies program called Communities. Through this program we are able to integrate social studies into all the curriculum areas and meet the state standards. Along with the student text, there are independent books and leveled readers that:

Support unit content

Reinforce vocabulary and reading skills

Meet the needs of diverse learners

Extend your daily reading instruction

The following units are included in the Houghton Mifflin program:

Big Idea: Living Together

Community and Geography

Big Idea: People Long Ago

America's Early Communities

Big Idea: Change Over Time

People Move from Place to Place

Big Idea: Colonial History

Colonial America

Handwriting

Third grade implements the *Handwriting Without Tears* program. Letter forms are simplified so they are easier to write and easier to identify in writing.

Field Trips

In the fall, the third grade spends a day at the *Audubon Society* Auburn Site where children walk the grounds to view nature first hand. This supports our Living Things science unit. We will visit the *Old York Historical Society* in York, Maine, which enriches our study of Colonial Times with its hands-on activities.

Homework

- Nightly reading is strongly encouraged as well as regularly practicing basic math facts
- Homework provides an opportunity to review class work
- Homework should provide a *positive experience*