SOMERVILLE PUBLIC SCHOOLS

GRADE 4 CURRICULUM OVERVIEW

Parents and Guardians: This guide provides an overview of what your child will be learning in fourth grade. It is based on the Common Core Standards, the Massachusetts Frameworks, and the curricular approaches which have been adopted by the Somerville Public Schools. The detailed Massachusetts Frameworks are available at: http://www.doe.mass.edu/frameworks/current.html.

Academic standards are important because they help ensure that all students, no matter where they start, are prepared for success in the next grade level, college and their careers. By having standards as clearly defined as possible, we aim to help families and teachers work together to ensure that students succeed. There are some students who will need additional support to meet a standard, while others will need more complex work to go beyond the standard. Based on the standards, individual student needs, and the unique characters of their schools and community, teachers craft their day-to-day classroom instruction.

How can I support my child's learning at home?

- Talk to your child about what they are learning in school
- Contact your child's teacher with any questions or concerns and attend Parent Teacher Conferences
- Check your child's folder and/or agenda book every night
- Provide a space and a consistent time for your child to complete their homework

ENGLISH-LANGUAGE ARTS: Somerville Public Schools uses the Balanced Literacy Approach to best address the needs of all students. This approach involves mini-lessons about key reading skills; frequent and in-depth discussions; exposure to high quality literature and non-fiction texts; and the reading of books at each student's own level. See the Somerville Curriculum website for a video and more information.

Reading:

During the year, students in the fourth grade will be working on:

- Reading deeply into a text to learn about a character through a character's thoughts, words, or actions.
- Using specific evidence from a text to develop inferences, opinions, and theories about characters.
- Using multiple strategies, specifically predicting, making connections, visualizing, and asking questions, to carefully read and comprehend a fiction text or poetry.
- Using multiple strategies, specifically setting a purpose for reading, previewing a text, making predictions, and asking questions to carefully read and comprehend nonfiction texts.
- Figuring out the main idea by noticing what key details have in common .
- Summarizing a chunk of text or the entire text.
- Figuring out how the text is structured (chronological, cause and effect, question and answer) .
- Collecting, organizing, and integrating information from multiple texts.
- Interpreting what they've learned from multiple texts and presenting/explaining their learning to their peers.
- Noticing how poets use unique language and play with language to enrich the meaning of the poem (ex. Similes, metaphors, repetition).
- Figuring out why the author wrote the poem or what message s/he wants to communicate to readers.
- Figuring out the theme of a story, drama, or poem from details in the text.
- Comparing books with similar themes by using specific details and quoting accurately from the text.
- Engaging in discussions (one-on-one, in groups, and teacher-led) on topics and texts, building on others' ideas, expressing their own ideas clearly, and using evidence to support claims.

***Writing**:* Somerville's new writing model introduced in the fall of 2013 emphasizes giving students many opportunities to write each day across subject areas. As they write during the year, students in the fourth grade will be working on:

- Organizing ideas on a topic into 5 connected paragraphs.
- Using linking words and phrases to connect ideas with correct punctuation (for instance, in order to, in addition).
- Using effective leads (beginnings) to pull in the reader and endings to tie together my writing.
- Using more effective details (showing instead of telling)
- Choosing adverbs and precise words including specialized vocabulary to communicate ideas.
- Using figurative language (simile) to make comparisons (ex. The diamonds were as bright as the sun).
- Using details and evidence that are relevant to the topic.
- Writing a variety of sentence beginnings with correct punctuation using adverbs and prepositional phrases.
- Correctly spelling grade level words using resources if needed.
- Choosing and using punctuation for effect.
- Correctly using homonyms (their/there/they're, it's, its).

Over the course of the year, students will complete three types of writing: narrative (story), informative, and opinion. Examples of these in fourth grade could include: writing a travel brochure to convince others to come to a place, explaining how the water cycle affects climate, or writing a personal story about a special moment.

How can I support my child's literacy learning at home?

- Encourage your child to read daily and discuss the texts he/she is reading.
- When your child shares an opinion or thought about a book, ask them *why?* and have them use evidence from the book.
- Encourage your child to write by keeping a diary, sending a thank you note, or a letter to family or friends.

MATHEMATICS – Adapted from PTA Common Core Guide and Massachusetts Curriculum Frameworks Critical Areas. Please see the Massachusetts Frameworks for more detailed standards and skills. During the year, students in the fourth grade will be working on:

- Rounding whole numbers to any place.
- Recognizing lines of symmetry, perpendicular lines, parallel lines.
- Adding and subtracting whole numbers quickly and accurately.
- Multiplying and dividing multi-digit numbers in simple cases (e.g., multiplying 1,638 × 7 or 24 × 17, and dividing 6,966 by 6) .
- Knowing multiplication facts and related division facts through 12 × 12.
- Understanding and applying equivalent fractions (e.g., recognizing that 1⁄4 is less than 3⁄8 because 2⁄8 is less than 3⁄8)
- Solving word problems that involve the addition and subtraction of fractions.
- Multiplying a fraction by a whole number (e.g. ½ x 5).
- Understanding how fractions and decimals are related (e.g. .38 = 38/100).
- Solving real world problems that involve area and perimeter.
- Solving multi-step word problems using addition, subtraction, multiplication, and division that involve time, distance, money, weights, and volume.
- Measuring angles and finding unknown angles in a diagram.
- Recognizing lines of symmetry, perpendicular lines, parallel lines.

How can I support my child's math learning at home?

- Point out examples of using math in everyday life such as using fractions while measuring ingredients for a recipe, estimating the cost of items at a store, figuring out a tip at a restaurant.
- Practice newly acquired skills with your child at home to help build confidence (ex. Math facts, addition, subtraction, multiplication, or division).

SOCIAL STUDIES

During the year, students in the fourth grade will be learning to:

- Identify and use latitude and longitude.
- Use maps including scales of miles and legends.
- Identify the countries of North America.
- Identify and describe the regions of the United States including climate, physical features, and natural resources.
- Identify states, capitals and major cities.
- Identify and describe the physical and political features and Canada and Mexico

SCIENCE, TECHNOLOGY, AND ENGINEERING

During the year, students in the fourth grade will be learning to:

- Describe weather in terms of air temperature, moisture, wind speed, and direction.
- Identify forms of precipitation and identify the weather conditions that typically produce each one.
- Differentiate between weather and climate.
- Differentiate between water as a solid, liquid, and gas.
- Explain the water cycle and its effect on climate.
- Explain the key characteristics of the six major animal groups.
- Sequence, explain, and compare the life-cycles of animals.
- Identify animal adaptations.
- Explain natural and human factors that impact climate.
- Define and describe ecosystems.
- Create and explain the path of energy in an electric circuit.
- Identify electric conductors and insulators.
- Identify and explain the properties of light.
- Explain the use of certain tools.
- Identify and discuss the difference between simple and complex machines.
- Compare natural systems with mechanical systems designed for similar purposes (ex. bird's wings compared to airplane's wings; satellite dish design v. ears).

SOCIAL/EMOTIONAL

> ***"The Somerville Public Schools are committed to maintaining a safe and secure learning environment in order to maximize student learning. To this end, the District strives to support students in developing the knowledge, skills, and attitude needed to:***
>
> - ***Effectively communicate their needs, interests, and opinions.***
> - ***Make healthy choices***
> - ***Respect the needs, interests, and opinions of others."***
>
> --Social Competency Vision Statement, approved by the Somerville School Committee on 10/15/2007

Schools guidance counselors and other support personnel assist teachers and students to work towards attaining these goals. The staff at your child's school can give you more detailed information about the sequence of skills taught and how social/emotional skills are taught.

SPECIALISTS*:* The Somerville Public Schools provides each student with 40 minutes per week of instruction in General Music, Library/Media, Art, and Physical Education. The specialists at each school are available to give you more detailed information about specific skills addressed.

ASSESSMENT: We believe that there is more than one way to accurately assess student learning. These include not only standardized measures such as DIBELS (Grades K-3), MCAS (Grades 3-10) and MAP (Gr. 2-8), but also more informal assessments including common end of unit assessments, reading/writing conferences, classroom participation, classroom projects, and writing assignments.

MATH AND ELA YEAR AT A GLANCE FOR FOURTH GRADE: Please note that this calendar is only an approximate guide. Some units might take more or less time depending on the needs of the students and other initiatives happening at individual schools.

<table>
<tr><th>Approximate Time Frame</th><th>ELA Units of Study (Based on Balanced Literacy Curriculum)</th><th>Math Units of Study (Based on the Investigations Curriculum)</th></tr>
<tr><td>Early September</td><td>Launching Readers Workshop</td><td rowspan="2">Place Value

Complex Addition/Subtraction
Up To 10,000</td></tr>
<tr><td>Late September</td><td rowspan="2">Narrative</td></tr>
<tr><td>October</td><td></td></tr>
<tr><td>November</td><td rowspan="3">Nonfiction</td><td>Arrays, Factors, and Multiple</td></tr>
<tr><td>December</td><td>Comparing Fractions
Basic Addition/Subtraction of Fractions</td></tr>
<tr><td>January</td><td rowspan="2">Poetry & Drama</td><td rowspan="2">Multiplication/Division

Mixed-Number Fractions</td></tr>
<tr><td>Early February</td><td></td></tr>
<tr><td>Late February</td><td rowspan="2">On-Demand Reading</td><td>Measurement</td></tr>
<tr><td>March</td><td>Geometry</td></tr>
<tr><td>April</td><td rowspan="2">Nonfiction #2</td><td rowspan="2">Area & Volume

Multiplying Fractions
Intro. To Decimals</td></tr>
<tr><td>Early May</td><td></td></tr>
<tr><td>Late May</td><td rowspan="2">Narrative - Theme</td><td rowspan="2">Measurement/Statistics</td></tr>
<tr><td>June</td><td></td></tr>
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