

FOURTH GRADE CURRICULUM OVERVIEW

GENERAL EXPECTATIONS

The goals for fourth grade students include demonstrating increased responsibility for learning, managing time well, setting appropriate achievement goals, and beginning to understand their own learning styles. Fourth graders, as lifelong learners and problem solvers, are expected to be active and critical thinkers while working cooperatively with their peers.

EFFORT and PERSEVERANCE

Whether learning comes easily or with difficulty for students, achievement is earned through effort and perseverance. For this reason, these important habits of mind are encouraged.

LEARNING STYLE

Fourth grade teachers engage in ongoing assessment of each child's learning needs. They also respond to individuals' unique learning styles and developmental timelines. Teachers will often tailor student or group assignments to match particular strengths and needs of students. Parents/guardians need not be concerned when their child's homework may differ from another child's.

PORTFOLIOS

Fourth graders use portfolio systems in which a variety of their projects and assignments are saved. As they look back through their own work, they are encouraged to reflect on their progress and to set goals for themselves in future tasks. Through this model, students begin to experience ownership and take responsibility for their learning.

COMMUNICATION WITH PARENTS/GUARDIANS

Report cards are sent home two times per year. Conferences will be scheduled twice during the year as well. Teachers are also available whenever clarification is needed on an issue involving a child's education. While phone calls and email messages will be returned as soon as possible, parent/guardians are reminded that teaching duties and other responsibilities make instantaneous communication impossible. Teachers will communicate with families via classroom email, newsletter, or website throughout the year.

HOMEWORK

Homework is designed to be a meaningful and relevant practice of classroom learning. Fourth grade homework should be limited to 40 minutes per night, in addition to 20 minutes of reading from self-selected literature. Time guidelines are approximate. Once a total of 40 minutes of sustained, productive working time has been reached, students are encouraged to stop and discuss any challenges or difficulties with their teachers the following day. Assignments will be recorded in assignment books which students are required to take home each day. During the year several longer term assignments may be given. Fourth graders often need support in getting themselves organized to do their homework. Parents/guardians can help by finding a quiet place and time designated for homework. They should also check to see that the work is completed.

SOCIAL COMPETENCY CURRICULUM

As one component of developing a supportive and nurturing classroom environment, Pine Hill School teachers present lessons from “Open Circle”, The Social Competency Curriculum, created by staff at The Stone Center, Wellesley College, is designed to develop and improve the interpersonal skills of children in order to further their social and academic growth. Research has shown that when children have strong social skills, they are able to develop better relationships, and their learning is enhanced.

- Create a cooperative classroom environment
- Build self-esteem and positive relationships
- Solve people problems

ACADEMIC PROGRAM

Our academic program closely follows the Massachusetts Frameworks, which is aligned to the Common Core Standards and the Next Generation Science Standards. Parents/guardians are encouraged to view these documents online and acquaint themselves with the expectations for student learning and achievement.

ENGLISH LANGUAGE ARTS

Reading

Literature is the foundation of the reading program. The focus of the reading program is to guide students in developing knowledge and understanding of the literary elements. It is vital for students to understand the fundamentals of literature in order to become critical readers and writers. The components of literature – genre, theme, character, setting, plot, point of view, text structure, text features as well as figurative language and literary terms, such as alliteration, simile, metaphor, and personification, will all be taught within the reading workshop.

In reading workshop, students will experience guided literature conversations, whole class minilessons,

book club meetings, and interactive read aloud. In order to meet the needs and interests of every individual, we will provide a balance between shared class reading of texts, small group reading, partner reading, and independent reading of “just right” books. Explicit strategies are taught for processing a variety of fiction and nonfiction texts. Students will not only discuss their thoughts about their reading, but will also write what they think, explaining their ideas with evidence from the text.

Vocabulary

Vocabulary plays a critical role in comprehension and understanding in the language arts, as well as in mathematics, science, and social studies. The focus of vocabulary instruction is on helping students learn how to learn new words. A variety of techniques are used to ensure that students have repeated exposure to words and are presented with numerous opportunities to make connections between words and concepts in the language arts and other content areas. The Wordly Wise vocabulary program is used to enhance vocabulary development in fourth grade.

Spelling

The focus of spelling instruction is to guide fourth graders to become increasingly accurate and resourceful spellers. Students are taught spelling patterns using the Words Their Way Spelling program. Words Their Way is a developmental spelling program, which has students work with level appropriate word sorts in order to improve their understanding of the written language. Word sorts are a set of words which fall into certain spelling, sound, or semantic categories.

Writing

The writing program follows the writing workshop model advocated by Lucy Calkins and her colleagues from the Teachers College Reading and Writing Project. Students will experience different genres of writing within the writing workshop. Writing units of study will focus on narrative, nonfiction, poetry, and opinion writing.

Students will learn about the characteristics of each genre by reading and analyzing mentor texts. Through whole class minilessons, small group instruction, and individual conferences, students will receive explicit instruction on essential writing strategies and skills.

MATHEMATICS

All fourth grade teachers will be using Everyday Mathematics, a program that recognizes and builds on children’s capabilities by expanding the range of mathematical experiences and ideas. That goal is achieved by integrating mathematics instruction into other curriculum areas. Special emphases are placed on the origins and uses of the language of mathematics, on the close relationship between math and the visual arts, and on applications in science.

Everyday Mathematics takes into account and expands upon children’s rich stores of mathematical

understanding, information, and creativity. Everyday Math units include:

1. Place Value; Multidigit Addition and Subtractions
2. Multiplication and Geometry
3. Fractions and Decimals
4. Multidigit Multiplication
5. Fraction and Mixed-Number Computation; Measurement
6. Division; Angles
7. Multiplication of Fractions by a Whole Number; Measurement
8. Fraction Operations; Applications

Fourth grade students are expected to be fluent with the multiplication and division tables through the 12's. Automaticity of facts will be assessed throughout the year. Students will be regularly using an open response journal in which they will record solutions to problems. Students explain their strategies and solutions using pictures, numbers, and words.

Students need to feel confident as problem solvers and to become increasingly able to describe and write about their mathematical reasoning. We want the children to see mathematics as a way of looking at everyday situations and to delight in making mathematical connections. They are asked to be increasingly aware of numbers in their own lives and to engage their families in the search for math in as many day to day experiences as possible.

SOCIAL STUDIES

The fourth grade social studies curriculum helps students expand upon their understanding of the world in which they live. Fourth graders learn about both ancient civilizations and the development of two modern nations. They build upon their third grade study of geography and the United States while they explore the preColumbian civilizations of the Aztec and Maya, and Inca, and the First Nations of Canada, and several influential North American explorers. Five major geographic concepts (location, place, human interaction with the environment, movement and regions) are embedded in the studies from the past to the present. Using these concepts, students learn to examine the ideas, events, people, and works that have shaped their world. Students make comparisons between Mexico and Canada and the United States. In fourth grade students gain the factual knowledge and develop skills to think critically as citizens who will one day lead our nation.

SCIENCE

In fourth grade, students explore a wide variety of exciting and engaging scientific concepts. Through the life, physical, earth/space, and health science studies, fourth graders learn about the world in which they live. In addition to building conceptual understanding of the scientific phenomena that occur in their world, the children learn the skills of observation, collecting, organizing and recording information, predicting, measuring, interpreting charts and graphs, hypothesizing, generalizing, and questioning.

Hands-on explorations lead students to develop habits of mind such as curiosity, open-mindedness balanced with skepticism, respect for evidence, honesty in reporting results, and persistence. By the end of fourth grade, students will be able to make connections between their actions as humans and the wellbeing and sustainability of the Earth.

Plants: The main parts of plants are identified and the life cycle of a plant is explored with an emphasis on adaptations.

Geology: What is the difference between a rock and a mineral? How are sedimentary, igneous, and metamorphic rocks formed? In addition to studying the answers to these questions, students will make connections between the processes of weathering and erosion and how these processes shape the earth.

Energy: The energy unit provides first-hand experiences in physical science focusing on the concepts that energy is present whenever there is motion, electric current, sound, light, or heat, and that energy can transfer from one place to another.

LIBRARY

The Pine Hill Library is open during school hours, and there are many resources available for students and Pine Hill Families to access 24/7 on the Pine Hill Library website. You can find out which books are available in our library, which new books we have and you can learn about our exciting Birthday Book donation program.

One resource that has been created especially for Pine Hill students is Pine Hill Libguides. This website contains enriching, student-friendly videos, web links, and photos that connect directly to our curriculum. You can even watch some informative student-created projects!

The two major focus areas of the Pine Hill Library Program are Information and Media Literacy and Love of Reading.

Information and Media Literacy: A student who is information and media literate:

- Engages in the information literacy process by accessing, evaluating and communicating informational text
- Uses a variety of skills and strategies to comprehend nonfiction and informational text
- Accesses and organizes information and media

Love of Reading: A student who develops a love of reading:

- Has access to exciting and engaging literature in a comfortable and welcoming learning environment
- Reads for a variety of purposes and across content areas
- Independently reads books and texts each year

The teacher librarian works in collaboration with classroom teachers and the technology teacher to create opportunities for students to learn the skills needed to accomplish these goals. In addition to working collaboratively with students and teachers in the classroom, students attend a scheduled library class. In these classes the teacher librarian continues teaching these focus skills and fostering a love of

reading.

Students in grades K 5 check out books from the library as needed and during their scheduled library classes. Parents may also check out books from the Pine Hill Library. Send an email to the teacher librarian at ryanl@doversherborn.org to have an account created. Volunteers are always welcome as well!

MUSIC CURRICULUM

The overarching theme for Grade 4 music is “The Music of America’s Peoples”. Comprised of three separate units, the fourth grade general music units reflect the emphasis on American regions in the Social Studies curriculum. In support of cross disciplinary integration, the music curriculum focuses on a variety of musical periods, styles and cultures of American. The first unit is a celebration of the first Americans, the many native tribes found in and throughout the United States. Native American traditions around the use of music for celebration, work, preserving tribal history, and cultural expression are explored. Students realize that Native American music, traditions and cultures are still practiced today. The second unit is entitled Music of Early America, during which music is examined from the perspective of the first wave of immigrants who settled in the US. Our third unit, Songs of the United States, focuses on work songs from Appalachia, slaves, railroad workers, sailors and cowboys. Students will have the opportunity to compose a lyrics to a sea shanty and a musical ostinato that complements a work song.

In addition to the above overarching theme, fourth grade students will continue their work learning music theory through songs, games and dances. Students will also experience playing the ukulele during class time. Through this instrument, students will learn about chords, chord progressions, the blues, and syncopation. Like the recorder in third grade, the ukulele is used as an engaging tool through which the students can learn about musical concepts.

Enduring understanding for these units include:

- Music is a way to understand the unique qualities of a particular culture.
- Music reflects the needs, desires, values and history of the people who create it.
- Music is used for different purposes within a culture.
- Music can tell a culture’s stories.
- Oral transmission is an ancient way to pass on musical traditions.
- Native Americans inhabited North America from the earliest of times through today.
- Native American cultures place high value on music, dance and instrumental playing.
- Native Americans fashion instruments from materials found in nature.

Essential questions for the fourth grade year are as follows:

1. What makes a culture? 2. How can music, dance and instruments contribute to a culture? 3. What makes Native American music?

The grade four music curriculum is designed to align with both the National and Massachusetts State Standards for Music Education. These content standards serve as a model to our own Massachusetts Arts Curriculum Framework. These content standards are:

- Singing, alone and with others, a varied repertoire of music
- Performing on instruments, alone and with others, a varied repertoire of music
- Improvising melodies, variations, and accompaniments
- Composing and arranging music within specified guidelines
- Reading and notating music
- Critical Response: listening to, analyzing, and describing music
- Evaluating music and music performances
- Understanding relationships between music, the other arts, and disciplines outside the arts
- Understanding music in relation to history and culture

ART CURRICULUM

Overarching Big Idea: Artists as communicators of ideas, knowledge and feelings through visual language. Fourth grade students are motivated to gain understanding of the art process, tools, materials and techniques, in an age appropriate manner.

Curriculum Goals:

- Students recognize that exploration and application of materials, tools, techniques and processes are important components of the visual art process.
- Students demonstrate appropriate use of tools and materials.
- Students create works of art to communicate meaning.

Curriculum Enduring Understandings: Artists find inspiration through personal expression and the world around them. Inspiration can be found through reinterpreting the works and styles of the masters and contemporary artists.

Curriculum Essential Questions:

- How do artist develop their craftsmanship through art making skills and techniques?
- How do artists use what they know, who they are, and what they imagine to communicate through their art?
- Why is it important to use materials and techniques in a safe and responsible manner?

Unit Topics/Big Ideas:

- Artists Explore Abstract and Nonrepresentational Art
- Artists Explore Landscapes and Nature

- Artists Explore Contemporary Art
- Artists Explore Form Through Mixed Media and Sculpture.

Assessment Plan:

- Art Portfolio
- Self Reflection
- Teacher Assessment
- Class/ Peer discussion

TECHNOLOGY CURRICULUM

All fourth grade classes visit the computer lab at least one period a week. In the third grade a major emphasis is on the use of computer application tools. Technology classes in the fourth grade are directly connected with classroom studies in the fields of math, science, social studies, and language arts. The students have a regularly scheduled weekly computer lab time. All classes may also sign up for the wireless lab cart in their room.

Some examples of software used in the fourth grade at Pine Hill School include:

- Microsoft Office
- Google Classroom
- Tinkercad

Students will work on the following technology skills:

- Responsible use of technology
- Using the computer as an assessment tool
- Keyboarding and ergonomics
- Using simulation software
- Using content related software
- Web site navigation
- File and print management
- Collaborative projects
- Effective research techniques
- Citing resources
- Use of peripherals
- Computer science code