

Science Course Purpose

Your child will engage in scientific inquiry using scientific literacy. Students will apply a range of thinking processes, such as recalling facts, applying knowledge, analyzing, evaluating and creating.

Grade Level Expectations

FORCES AND MOTION

Students will learn through experimentation and be able to describe the effects of the strengths of pushes and pulls on the motion of objects. Students will also be able to describe the effect of the mass of an object on its motion.

MATTER AND ENERGY IN ECOSYSTEMS

The big idea in this unit is that all organisms depend on the living and nonliving features of the environment for survival. Students will: give examples of ways living and nonliving things are interdependent; analyze food webs; record interactions among producers, consumers, herbivores, carnivores, omnivores and decomposers in an ecosystem; and make predictions about effects of environmental changes on living things.

ENERGY IN THE EARTH'S SYSTEMS

Students will learn that water circulates through the Earth's crust, oceans and atmospheres and will be able to describe how the sun's energy impacts the water cycle. They will also be able to describe the role of water in erosion and river formation.

SCIENCE AND TECHNOLOGY IN SOCIETY

Fourth grade students will be able to describe how batteries and wires can transfer energy to light a bulb. They will be able to explain how simple electrical circuits can be used to determine which materials conduct electricity. They will also be able to describe the properties of magnets, and

how they can be used to identify and separate mixtures of solid materials.

Social Studies Course Purpose

Your child will discuss information from history and social studies to enhance their understanding of our nation and our world using literacy, inquiry and research skills to analyze, evaluate and present history and social studies information.

Grade Level Expectation

CONTENT KNOWLEDGE

In fourth grade your child will be able to: compare and contrast the cultures and traditions of American Indian peoples; compare and contrast the impact of exploration and colonization on both native peoples' and the colonists. They will be able to describe the importance of significant events and people to local and Connecticut history and their connections to United States history. Students will be able to compare and contrast map types (e.g., political, physical, population) and describe how weather and climate have affected the lives of people in Connecticut. Students will also be able to trace and explain immigration patterns of settlements in Connecticut over time. Students will explain how the structure of state government provides basic services and will analyze how a constitution provides structure for a government. Students will evaluate the impact of specific Connecticut laws on its citizens even as they identify characteristics of an effective and responsible citizen. Students will compare and contrast contributions of different ethnic groups to the community and state.

HISTORY AND SOCIAL STUDIES LITERACY

Fourth grade students will be able to: identify the difference between a primary and a secondary source; distinguish cause and effect and useful and irrelevant information; and write a three-or-four paragraph essay using evidence to describe historical events, people or places.

HISTORICAL APPLICATION

Students will be able to evaluate the accuracy of why there are different sides/points of view of one event. They will be able to predict various points of view of people in a historical situation.

Unified Arts Course Purpose

Music and Visual Arts

Your child will gain an understanding and appreciation of the arts, as well as the ability to participate in creating and performing the arts, as they are essential attributes of an educated person. Your child will understand and use the materials, techniques, forms, language, notation, literature/ repertoire, and diverse cultural and historical contexts of each art form.

Physical Education

Your child will take responsibility for protecting his/her own health. Students will learn about nutrition and physical activity, and apply this knowledge by making healthy choices for themselves. Each child will have opportunities to:

- demonstrate mature motor patterns in simple combinations
- demonstrate control in traveling activities, weight bearing, and balancing on a variety of body parts
- exhibit a physically active life-style and healthy level of fitness
- demonstrate the skills and knowledge necessary to participate in a variety of physical activities;
- make decisions to establish and maintain a healthy lifestyle to promote individual wellness throughout his or her entire life;
- recognize and understand the different effects of physical activity on one's mind and body; and
- develop interpersonal skills and exhibit positive character traits during physical activity.

Grade Four

Curriculum

East Windsor Public Schools



Mission:

Broad Brook Elementary School's mission is to offer our entire community of learners a varied and challenging curriculum, in a safe and nurturing environment that is conducive to teaching and learning. The school community is committed to developing respectful behaviors, personal responsibility and productive citizenship.

Student Profile:

Fourth graders are becoming true independent thinkers and workers, but peer standards are a heavy influence. Fourth graders maintain a high activity level, can show empathy for others in understanding another's point of view, and can verbally express their own emotions easily.

Grade Four/Course Purposes and Expectations

Language Arts Course Purpose

Your child will engage in the workshop instructional model to read, think, analyze, question and converse about books on a daily basis, so that every student will be highly skilled in reading, writing, listening, speaking, viewing and presenting across all content areas.

Grade Level Expectations

WRITING

Students in fourth grade will be exposed to different types of genre writing including descriptive, narrative, expository, persuasive and poetry. They will write in a logically organized progression of unified paragraphs, use a variety of transition words and phrases to make connections between and within paragraphs and adjust voice to suit the audience.

Writing Process

Students will communicate with others by applying English Language Conventions through the writing process of *Plan, Draft, Revise, Edit, Publish, and Reflect*. Students will be able to critique one's own and a peer's writing, using established criteria.

READING

Word Study

Students in fourth grade will be expected to be able to:

- Know sounds for a wide range of suffixes and prefixes including those relevant to specific content areas.
- Know letter patterns such as "ch" as in chemistry, machinery and chip.

Fluency

Students by the end of fourth grade should be able to read aloud while comprehending, unpracticed text with a fluency of 120 - 135+ correct words per minute. They will also adjust reading rate to

match text complexity, type of text and purpose for, e.g., skimming for facts, scanning for key words, and close/careful reading for understanding new or complex ideas.

Vocabulary

Students will be able to: develop a high-frequency word vocabulary list from literary and content area texts, e.g., across content vocabulary notebook; identify specific words or phrases causing comprehension difficulties and apply strategies to support comprehension; explain common homophones, homographs, e.g., *maid/made; to/two/too; pencil lead vs. to lead the way*, words with multiple meanings, and meanings of words specific to various content areas, e.g., *product in math*; infer word meanings from common roots, prefixes, suffixes, e.g., *port: transportation, porter, import, report*; explain that some words have a different meaning in different content areas, e.g., concept of *shade* in science and art.

Reading Comprehension

Students will utilize and perfect, before reading, during reading and after reading strategies to support thinking while reading. These strategies include:

- Evaluating predictions and adjusting them as necessary.
- Summarizing information to maintain focus and provide clarity when reading.
- Applying strategies of a strategic thinker: making connections, predicting, questioning, inferring and visualizing.
- Identifying specific words or phrases that cause comprehension difficulties and self monitor.
- Making inferences based on explicit information in the text, and providing justification for those inferences.
- Drawing conclusions and use evidence from the text to support answers.
- Compare and contrast written works.

Reading Reflection/Behaviors

Students will choose a variety of "just right" books for various genres to read, and/or listen to and explain their appeal, and be able to answer the question, "What did I learn today about myself as a reader?" They will be able to read independently for a variety of purposes and will respond to oral or written questions regarding story elements in fiction, or facts in an informational text. Cite favorite authors and books and support with reasons.

Mathematics Course Purpose

Your fourth grade student will learn mathematical thinking to explain and use problem-solving strategies in the following math areas: Algebraic Reasoning: Patterns and Functions; Numerical and Proportional Reasoning; Geometry and Measurement; and Working with Data.

Grade Level Expectations

Algebraic Reasoning: Patterns and Functions

Students will be able to:

- Classify patterns as repeating or growing.
- Demonstrate the equivalence of both sides of an equation.

Number and Proportional Reasoning

Students will be able to:

- Identify needed and extraneous information in story problems.
- Use place value models, diagrams, pictures, number patterns and number lines to identify, order, round and compare the magnitude of 2-, 3-, and 4-digit whole numbers.
- Solve or estimate a reasonable answer to problems involving whole numbers and money amounts less than \$10.00.
- Maintain mastery of multiplication facts.
- Develop strategies for retrieving division facts.
- Use models and pictures to reveal patterns about equivalent fractions and ratios.

- Use fractions to represent a ratio or a division problem.
- Add and subtract fractions and mixed numbers with like and unlike denominators using models, pictures and number sentences.
- Use number patterns, basic facts, rectangular arrays, place value models and the distributive property to multiply and divide.
- Make comparisons and describe quantitative relationships using ratios.
- Estimate the magnitude of decimals and money amounts.

Geometry and Measurement

Students will be able to:

- Identify, describe and draw 2- and 3-dimensional geometric shapes and figures.
- Identify appropriate metric or customary units of measure for length, weight and capacity.
- Solve problems involving elapsed time.
- Use standard units of measure to communicate measurement in a universal manner.
- Make precise measurements and use benchmarks to estimate measures.
- Recognize that patterns exist between measurements of length, perimeter and area of squares and rectangles.

Working with Data: Probability and Statistics

Students will be able to:

- Create bar graphs, line graphs and pictographs from given data.
- Draw reasonable conclusions from graphs, tables and charts.
- Identify solutions to problems involving probability.