

ENGLISH LANGUAGE ARTS

In English Language Arts students will learn to:

Oral Communication

- Express ideas clearly
- Demonstrate correct word usage
- Use active listening skills
- Contribute to discussion topics
- Make oral presentations that consider audience, purpose and information to be conveyed

Reading

- Apply word analysis skills to decode new vocabulary and multi-syllabic words
- Determine the meaning of an unknown word through the context of the sentence
- Use dictionaries, glossaries, and a thesaurus appropriately
- Understand and apply new vocabulary in reading, speaking and writing
- Read independently for understanding in math, science and social studies
- Choose appropriate reading materials and read independently on a regular basis
- Demonstrate literal and inferential comprehension in a variety of genres
- Identify the use of figurative language and literacy devices in poetry and other literature
- Read and understand myths, traditional narratives and tales
- Understand and discuss the elements of plot, setting, mood, point of view, and author's craft with supporting evidence from the text
- Make connections to other texts and subject areas to deepen understanding of what is read
- Identify a theme related to personal experience, a lesson learned or main idea stated or implied and provide support from the text
- Use reading strategies effectively and monitor comprehension
- Discriminate between different forms of literature (fiction, nonfiction, drama, poetry, etc.)

Writing

- Write in a variety of genres, including narrative, descriptive, informative, and persuasive
- Use correct grade level grammar and mechanics:
 - Punctuation; end marks, commas (in a series, dates, compound sentences, introductory words in an address, direct address, opening and closing of a letter, direct quotations), quotation marks, apostrophes in possessives and contractions, abbreviations, underlining book titles
 - Capitalization of proper nouns, book titles, I and its contractions, first word in a direct quotation
 - Grammar; noun, verb, adjective, adverb, pronoun, preposition, conjunction, interjection, subject-verb agreement, appropriate word choice including verb tense and correct degrees of comparison for adjectives and adverbs
- Understand the concept of a paragraph as sentences connected by one main idea
- Develop a good beginning, middle and ending of a story
- Develop strong topic and concluding sentences that are focused and purposeful
- Demonstrate sentence variety including long/short, simple/compound/complex
- Write accurate description of character, mood and story setting
- Use supportive details or evidence
- Write neatly and legibly
- Proofread and revise written work to improve the level of detail and organization
- Use a dictionary and thesaurus to verify spelling and improve word choice
- Write neatly and legibly in cursive
- Identify and apply criteria for determining work quality
- Communicate knowledge of the content areas in writing
- Use research skills effectively

SCIENCE

In Science students learn to:

- Ask questions and make predictions that can be tested
- Select and use appropriate tools and technology (e.g., calculators, computers, balances, scales, meter sticks, graduated cylinders) in order to extend observations
- Keep accurate records while conducting simple investigations or experiments
- Conduct multiple trials to test a prediction. Compare the result of an investigation or experiment with the prediction
- Recognize simple patterns in data and use data to create a reasonable explanation for the results of an investigation or experiment
- Record data and communicate findings to others using graphs, charts, maps, models, and oral and written reports

Earth and Space Science

- Give a simple explanation of what a mineral is and some examples, e.g., quartz, mica.
- Identify the physical properties of minerals (hardness, color, luster, cleavage, and streak), and explain how minerals can be tested for these different physical properties
- Identify the three categories of rocks (metamorphic, igneous, and sedimentary) based on how they are formed, and explain the natural and physical processes that create these rocks
- Explain and give examples of the ways in which soil is formed (the weathering of rock by water and wind and from the decomposition of plant and animal remains)
- Identify that the properties of soil include color, texture, and the abilities to retain water and support the growth of plants
- Describe how water on earth cycles in different forms and locations
- Tell how the earth's surface changes due to slow processes such as erosion and weathering, and rapid processes such as landslides, volcanic eruptions, and earthquakes

Biology

- Identify physical characteristics of plants and invertebrates
- Describe structures in plants that are responsible for food production, support, water transport, reproduction, growth, and protection
- Tell how plants and animals go through predictable life cycles, including birth, growth, development, reproduction, and death
- Explain complete and incomplete metamorphoses
- Describe how observed characteristics of plants and animals can be fully inherited or they can be affected by the climate or environment
- Give examples of how organisms meet their needs by using behaviors in response to information from the environment. Explain that some behaviors are instinctive and others learned

Physical Science

- Identify properties of objects and materials
- Explain that solids, liquids, and gases have distinct properties
- Discuss energy transfer and the five forms of energy (light, sound, heat, electrical, and magnetic)
- Identify atoms/molecules and compounds
- Describe physical and chemical changes

Engineering/Technology

- Use appropriate materials, tools, and machines to extend our ability to solve problems and invent
- Use engineering design which requires creative thinking and use of strategies to solve practical problems generated by needs and wants

MATH

In Mathematics students will learn to:

Number and Operations

- Recognize and generate equivalent representations for the same fraction (including mixed numbers), decimal, and percent and locate them on a number line
- Demonstrate an understanding of positive integer powers of 10
- Demonstrate an understanding of place value and expanded notation to millions and thousandths
- Describe classes of numbers according to characteristics such as the nature of their factors
- Understand the effects of multiplying and dividing whole numbers, multiplying whole numbers by a fraction
- Use parentheses, properties of operations and their inverses to solve problems
- Develop fluency in adding, subtracting, multiplying, and dividing whole numbers
- Add and subtract positive fractions and mixed number
- Multiply positive decimals with whole numbers
- Estimate sums and differences of whole numbers, positive fractions and positive decimals and judge the reasonableness of the results
- Use mental computation, estimation, calculators, and paper and pencil according to the context of the computation

Algebra

- Describe, extend, and make generalizations about geometric and numeric patterns
- Represent and analyze problems, patterns, and functions, using models (including geometric models), words, tables (including input-output), equations and graphs
- Interpret graphs that represent the relationship between two variables
- Use properties to compute and to solve problems with whole numbers (equality property)
- Express mathematical relationships using equations

Geometry

- Identify, compare, and analyze attributes of 2- and 3-dimensional shapes and develop vocabulary to describe the attributes
- Recognize 2-dimensional representations of 3-dimensional figures
- Classify 2- and 3-dimensional shapes according to their properties such as triangles and pyramids, similarity or congruency
- Build and draw geometric objects
- Investigate, describe, and reason about the results of subdividing, combining, and transforming shapes
- Make and test conjectures about geometric properties and relationships and develop logical arguments to justify conclusions
- Locate and identify points, describe paths, find the distance between points along horizontal and vertical lines on a coordinate plane
- Identify and describe line and rotational symmetry in two-dimensional shapes

Measurement

- Understand such attributes as length, area, weight, volume, and size of angle and select the appropriate type of standard unit (metric or customary) for measuring each attribute
- Convert units within a system of measurement and use benchmarks to estimate measurements
- Develop strategies for estimating the perimeters, areas, and volumes of irregular shapes
- Select and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and the size of angles
- Draw and measure angles and triangles and calculate interior angles of triangles
- Develop strategies to determine the surface areas and volumes of rectangular prisms

Data Analysis and Probability

- Design investigations to address a question or further investigate a conclusion or prediction
- Consider how data-collection methods affect the nature of the data set
- Collect data using observations, surveys, and probability experiments
- Represent data using tables and graphs such as line plots, bar graphs, and line graphs
- Recognize the differences in representing categorical and numerical data
- Describe the shape and important features of a set of data and compare related data sets, with an emphasis on how the data are distributed
- Calculate median, mean, mode, max, min and range
- Compare different representations of the same data and evaluate how well each representation shows important aspects of the data

SOCIAL STUDIES

In Social Studies students will learn to:

- Describe the earliest explorations of the New World by the Vikings
- Identify three major (Maya, Aztec, and Inca) pre-Columbian civilizations that existed in Central and South America and describe their political structures, religious practices and use of slaves
- Describe the voyages of at least four explorers of the 15th century and how their discoveries changed the image of the world
- Explain why the Aztec and Inca civilizations declined in the 16th century
- Describe the goals and extent of the Dutch settlement in New York, the French settlements in Canada, and the Spanish settlements in Florida, the Southwest and California
- Understand the early relationship of the English settlers to the people or Indians of North American, including the differing views on ownership/use of land and the conflicts that resulted
- Identify the major leaders/groups responsible for the founding of the original colonies in North American
- Understand how the achievements of the people of early Central American cultures lead to the development of major civilizations
- Describe the factors that led to the diversity in cultures among the Native American tribes of the four regions of the United States
- Explain how the physical environment and geographical factors influenced the development of cultures and civilizations in the Western hemisphere
- Explain how farming, trade and technology influenced the economic development of these cultures and civilizations
- Describe the effects of early exploration on the discovery of North and South America
- Explain how the physical environment and geographic factors influenced human migration and the effect this had on particular cultures and political systems
- Explain why exploration was a reasonable endeavor, from an economic point of view
- Explain why people migrated to the New World
- Explain how the physical environment and geographic features influenced the settlement and growth of the early colonies
- Explain the factors that influenced the development of the economies unique to each region
- Explain what it meant to be a citizen of the early colonies in terms of authority, duties and opportunities
- Explain how the events in the beginning of the 1750's influenced the decision to seek independence from Britain
- Explain factors that led to an American victory
- Explain how the government changed to define the rights and duties of citizens and to ensure equality for all
- Understand the factors that helped to establish a strong national government
- Understand how the features of the Constitution protect the rights of citizens
- Understand the events that occurred between the end of the revolution and the War of 1812 that caused our country to grow, change and improve its standing with the other nations of the world
- Understand how the environment and geographic features influenced the expansion of the United States

WORLD LANGUAGE

In World Language students will learn to:

Communication

- Greet and respond to greetings
- Introduce and respond to introductions
- Follow directions
- Understand some ideas and familiar details
- Describe people, places, and things

Cultures

- Use appropriate words, phrases, expressions, and gestures in interactions such as greetings, farewells, school routines, and other daily activities
- Interact appropriately in group cultural activities such as games, storytelling, celebrations, and dramatizations

Comparisons

- Ask and answer questions regarding similar/different phonetic/writing systems used in the target language
- Give examples of ways in which the target language differs from/is similar to English
- Describe patterns of behavior of the target culture, such as celebrations, and compare/contrast them with those of their own culture

Connections

- Obtain information and knowledge related to other disciplines from sources in the target language such as, obtaining geographical information from printed maps

Communities

- Apply knowledge of the target language and cultures beyond the classroom setting by conversing with speakers of the target language

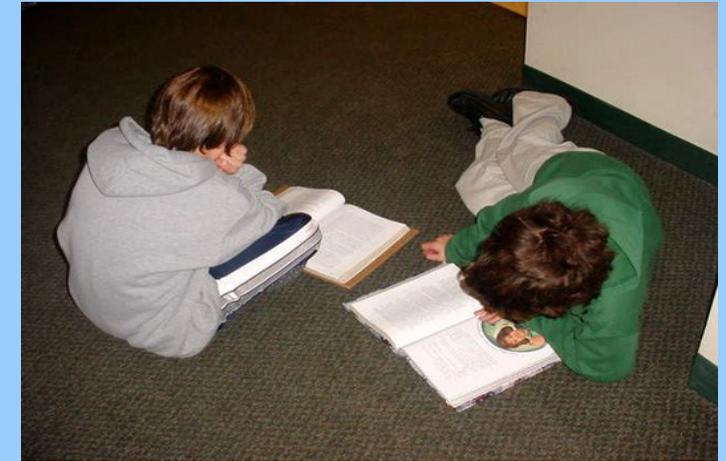
Our Philosophy

Core Values (CARE):

- Challenging and innovative educational experiences promote academic excellence by meeting the needs of students in ways that engage them in their learning.
- A safe, supportive, and collaborative environment fosters positive attitudes among students and school staff.
- Respect for the diversity and dignity of individuals and cultures enriches learning and supports the development of responsible citizenship.
- Ensuring a quality education, cultivated by ongoing communication and shared resources among parents, teachers, town organizations, and residents, is the responsibility of the entire community.

FOXBOROUGH PUBLIC SCHOOLS

Curriculum Benchmarks



GRADE 5

Vision:

The Foxborough Public Schools, in collaboration with the community, will provide students with intellectual, artistic, and character building educational experiences to inspire them to achieve.

COMMITTED TO EXCELLENCE

