

## ENGLISH LANGUAGE ARTS

In English Language Arts and Literacy students will learn to:

### **Read Literature and Informational Text**

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text
- Determine a theme or main idea of a text and explain how it is supported by from details in the text; summarize the text
- Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character’s thoughts, words, or actions)
- Explain events, procedures or concepts in historical or scientific texts, including what happened and why, based on specific information in the text
- Determine the meaning of words and phrases as they are used in a text
- Explain major differences between poems, drama, and prose when writing or speaking about a text
- Describe the overall structure of an informational text (chronological, comparison, compare/contrast, problem solution)
- Interpret information presented visually in text and explain how it contributes to an understanding of the text
- Compare and contrast the point of view, treatment of similar themes, and topics in a text
- Locate and analyze examples of similes and metaphors in stories, poems, folktales, and plays, and explain how these literary devices enrich the text
- Read and comprehend literature (including stories, drama, and poetry) and informational texts (including history/social studies, science, and technical texts)

### **Foundational Reading Skills**

- Know and apply grade-level phonics and word analysis skills in decoding words
- Read with sufficient accuracy and fluency to support comprehension

### **Writing**

- Write opinion pieces on topics or texts, supporting a point of view with reasons
- Write informative/explanatory texts to examine a topic and convey ideas
- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences
- Write stories, poems, and scripts that use similes and/or metaphors
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing
- With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others
- Conduct short research projects that build knowledge through investigation of different aspects of a topic
- Draw evidence from literary or informational texts to support analysis, reflection, and research

### **Speaking and Listening**

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with partners building on others’ ideas and expressing their own clearly
- Paraphrase portions of a text read aloud or information presented visually or orally
- Identify the reasons and evidence a speaker provides to support particular points
- Report on a topic or text, tell a story, or recount an experience in an organized manner

### **Language**

- Produce complete sentences, recognizing and correcting inappropriate fragments & run-ons
- Order adjectives within sentences according to conventional patterns
- Form and use prepositional phrases
- Correctly use frequently confused words (e.g., to, too, two; there, their)
- Write legibly by hand, using either printing or cursive handwriting
- Use correct capitalization
- Use commas and quotation marks to mark direct speech and quotations from a text
- Use a comma before a coordinating conjunction in a compound sentence
- Spell grade-appropriate words correctly, consulting references as needed
- Choose words and phrases to convey ideas precisely
- Choose punctuation for effect
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases
- Demonstrate an understanding of figurative language, word relationships, and nuances in word meanings

## SCIENCE

In Science students will 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**

- Tell how air temperature, moisture, wind speed and direction, and precipitation make up the weather in a particular place and time
- Explain how various forms of precipitation are connected to the weather in a particular place and time
- Give examples of how global patterns influence local weather, which can be measured
- Describe how weather is different from climate
- Explain how water on earth cycles in different forms and locations
- Tell how cycling of water, both in and out of the atmosphere, effects climate
- Identify 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 animals
- Explain that animals go through predictable life cycles, including birth, growth, development, reproduction, and death
- Tell how observed characteristics of animals can be fully inherited or they can be affected by the climate or environment
- Describe how changes in the environment have caused some animals to die or move to new locations
- Give examples of how animals meet their needs by using behaviors in response to information from the environment. Identify that some behaviors are instinctive and others learned
- Explain that inherited characteristics may change over time as adaptations to changes in the environment enable organisms to survive
- Identify that animals can survive harsh environments via seasonal behaviors

### **Physical Science**

- Identify how basic forms of energy cause motion or create change
- Describe how electricity in circuits requires a complete loop for an electrical current and that electricity can produce light, heat, and sound
- Tell how objects and materials can be conductors or insulators of electricity.
- Demonstrate knowledge by making and using electromagnets
- Explain that magnets have poles that repel and attract each other
- Give examples of how magnets attract some objects and materials but not others
- Describe how sound is produced by vibrating objects and travels through a medium.
- Tell how the rate of vibration is related to the pitch of the sound
- Explain that light travels in a straight line until it strikes an object or travels from one medium to another. Describe how light can be reflected, refracted, and absorbed

### **Engineering/Technology**

- Use appropriate materials and tools to construct a prototype safely
- Show different ways a problem can be represented
- Appropriate materials, tools, and machines extend our ability to solve problems and invent
- Engineering design requires creative thinking and strategies to solve practical problems generated by needs and wants

## MATH

In Mathematics students will work to achieve the goals outlined below:

### **Operations and Algebraic Thinking**

- Interpret a multiplication equation as a comparison, e.g., interpret  $35 = 5 \square 7$  as a statement that 35 is 5 times as many as 7 and 7 times as many as 5
- Multiply or divide to solve word problems involving multiplicative comparison
- Solve multi-step word problems posed with whole numbers and having whole-number answers. Assess the reasonableness of answers using mental computation and estimation strategies
- Find all factor pairs for a whole number in the range 1–100
- Recognize that a whole number is a multiple of each of its factors
- Determine whether a given whole number in the range 1–100 is a multiple of a one-digit number
- Determine whether a given whole number in the range 1–100 is prime or composite
- Generate a number or shape pattern that follows a given rule

### **Number and Operations in Base Ten**

- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right
- Read/write multi-digit whole numbers using base-ten numerals, number names, & expanded form
- Compare two multi-digit numbers based on meanings of the digits in each place, using  $>$ ,  $=$ , and  $<$
- Use place value understanding to round multi-digit whole numbers to any place
- Fluently add and subtract multi-digit whole numbers using the standard algorithm
- Multiply up to four digits by a one-digit number, and multiply two two-digit numbers, using strategies. Illustrate and explain by using equations, rectangular arrays, and/or area models
- Know multiplication facts and related division facts through  $12 \times 12$
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies
- Illustrate and explain by using equations, rectangular arrays, and/or area models

### **Number and Operations - Fractions**

- Explain why a fraction is equivalent to a fraction by using visual fraction
- Recognize and generate equivalent fractions
- Compare two fractions with different numerators and different
- Understand addition and subtraction of fractions as joining and separating parts referring to the same whole
- Add and subtract mixed numbers with like denominators
- Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models
- Apply previous understandings of multiplication to multiply a fraction by a whole number
- Express a fraction with denominator 10 as an equivalent fraction with denominator 100
- Use decimal notation for fractions with denominators 10 or 100
- Compare two decimals to hundredths by reasoning about their size with the symbols  $>$ ,  $=$ , or  $<$ , and justify the conclusions, e.g., by using a visual model

### **Measurement and Data**

- Know relative sizes of measurement units within one system of units
- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money
- Apply the area and perimeter formulas for rectangles in real-world and math problems
- Make a line plot to display a data set of measurements in fractions of a unit ( $1/2$ ,  $1/4$ ,  $1/8$ )
- Use line plots to solve problems involving addition & subtraction of fractions
- Recognize angles as shapes formed where two rays share a common endpoint
- Understand concepts of angle measurement
- Measure angles in whole-number degrees using a protractor.
- Sketch angles of specified measure

### **Geometry**

- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures
- Classify two-dimensional figures
- Recognize a line of symmetry for a two-dimensional figure
- Identify and draw lines of symmetry

## SOCIAL STUDIES

In Social Studies students will learn to:

- Use the title, compass rose, scale and legend to interpret a map
- Use latitude and longitude to determine locations of places studied
- Give examples of limited and unlimited resources
- Explain how scarcity compels people and communities to make choices about goods and services
- Give examples of how the interaction of buyers and sellers influences prices
  
- **Northeast**
  - Identify the states, state capitals, and major cities in New England
  - Identify the major physical features, natural resources, and climate of New England
  - Identify the unique features of New England
  - Identify how natural resources and economic activity influence the price of goods and services in the region
  
- **Southeast and Washington D.C.**
  - Identify the states, state capitals, and major cities of the Southeast
  - Identify the major physical features, natural resources, and climate of the Southeast
  - Identify the unique features of the Southeast
  - Identify how natural resources and economic activity influence the price of goods and services in the region
  - Identify major monuments and historic sites in and around Washington D.C.
  
- **Midwest, Northwest and Southwest**
  - Identify the states, state capitals, and major cities in these regions
  - Identify the major physical features, natural resources, and climates of these regions
  - Identify the unique features of these regions
  - Identify how natural resources and economic activity influence the price of goods and services in these regions
  
- **Ancient China**
  - Locate China on a world map
  - Identify the major rivers and mountain ranges of China
  - Describe how the physical features, geography and climate influenced the settlement and growth of the Chinese civilization
  
- **Canada**
  - Locate Canada and its major cities on a map of North America
  - Describe the climate, major natural resources, and explain their relationship to the Canadian economy
  - Identify the language, major religion, and peoples of Canada
  - Identify when Canada became an independent nation and describe how independence was achieved
  - Identify the location of Native American tribes in Canada and describe the social features of these tribes
  
- **Mexico**
  - Locate Mexico and its major cities on a map of North America
  - Describe the climate, major natural resources, and explain their relationship to the Mexican economy
  - Identify the language, major religion, and peoples of Mexico
  - Identify when Mexico became an independent nation and describe how independence was achieved

## WORLD LANGUAGE

In World Language students will learn to:

### Communication

- Express likes/dislikes
- Understand adjective agreement
- Express verbs in first person form
- Describe physical characteristics of people
- Express food/restaurant terms, clothing, family

### Cultures

- Identify distinctive cultural products from the target culture such as toys, clothes, currencies, games, traditional crafts, and musical instruments
- Identify countries of Central America and the Caribbean
- Identify foods of the target culture

### Comparisons

- Identify ways in which the target language differs from/is similar to English
- Ask and answer questions regarding similar/different phonetic/writing systems used in the target language
- Describe patterns of behavior of the target culture, such as celebrations, and compare/contrast them with those of their own culture
- Recognize grammatical structures such as gender, placement of adjective, as well agreement in the target language and English

### Connections

- Obtain information outside of the classroom related to other disciplines such as a map, game, story, or song lyrics in the target language
- Try foods of other countries or order meals at a restaurant using the target language

### 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 4

### **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**

