

## SCIENCE

### Nature of Science

- explains why scientific investigations should be replicable
- explains the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each
- explains that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered
- recognizes and explains that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory is science is very different than how it is used in everyday life
- recognizes and explains that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws

### Earth and Space Science

- describes and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition
- recognizes that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes, and relate these landforms as they apply to Florida
- describes how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation
- investigates how natural disasters have affected human life in Florida
- describes ways human beings protect themselves from hazardous weather and sun exposure

### Physical Science

- explores the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa
- measures and graphs distance versus time for an object moving at a constant speed
- explores the Law of Gravity by recognizing that every object exerts a gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are
- investigates and describes that an unbalanced force acting on an object changes its speed or direction of motion or both

### Life Science

- investigates and explains the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life
- identifies and investigates the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis

### Content Literacy

- reads closely and cites evidence from science documents to support analysis of what the materials say
- develops a rich vocabulary of scientific words and uses them to speak and write more precisely and coherently



### Ideas for Helping Your Child at Home

- ☺ Use common items (a pebble dropped in water; a marble dropped in sand) to demonstrate that vibrations in materials set up visible disturbances that spread away from a force in all directions
- ☺ Encourage original drawings to express main ideas of things observed or how things work
- ☺ Read and discuss news articles about health and the body's systems

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What Your Child is Expected to Learn in Sixth Grade 2021-22

## What Your Child is Expected to Learn...



## 6<sup>th</sup> Grade

### A Representative Sample of Expectations by Grade Level

For a complete list of the state adopted standards, please go to the keyword search tab at: <http://www.cpalms.org/Standards/FLStandardSearch.aspx>

Dear Parents,

The mission of Brevard Public Schools is "to serve every student with excellence as the standard." Our elementary schools work toward this goal each school day by ensuring that every child has exciting and meaningful learning experiences. We expect all of our students to learn and to demonstrate increasingly complex skills as they progress through the grades toward the goal of becoming responsible and productive adults. Toward this end, I am pleased to share with you a representative sample of the learning expectations for your child this year. These sample learning expectations are stated within the State Standards from the Florida Department of Education.

These standards provide focus and consistency for teachers and students and offer parents and community members a clear view of a school's expectations for student learning. The parent's role in supporting children's educational progress is increasingly important in our rapidly changing world. I urge you to review these expectations and to take advantage of opportunities to provide rewarding learning experiences for your child each day.

I wish your child a successful school year!

Sincerely,

*Tara Harris*

Tara Harris, Director  
Elementary Leading and Learning

For a complete list of standards, go to the subject area links at:  
<https://www.brevardschools.org/Page/14057>

# ENGLISH LANGUAGE ARTS

## Reading

- reads grade-level text fluently and accurately
- makes inferences to support comprehension
- analyzes how the interaction between characters contributes to the development of a plot
- analyzes the development of stated or implied theme(s) throughout a literary text
- explains the influence of multiple narrators and/or shifts of view
- describes the impact of various poetic forms on meaning and style
- explains how individual text sections and/or features convey meaning
- analyzes the implied or stated central idea(s) and its development throughout a text
- analyzes authors' purpose(s) in multiple accounts of the same event or topic
- tracks the development of an argument, identifying the types of reasoning used
- explains how figurative language contributes to tone and meaning
- paraphrases content from grade-level texts
- compares and contrasts how authors from different time periods address the same or different topics
- identifies rhetorical appeals in a text

## Communication

- engages in collaborative discussions
- uses appropriate voice and tone when speaking and writing
- cites evidence to explain and justify reasoning
- presents information orally in a logical sequence with nonverbal cues (ex. posture, tone, expression), appropriate volume, clear pronunciation, and appropriate pacing
- writes detailed narratives, opinions, and expository products
- improves writing by planning, revising, and editing
- follows the rules of standard English grammar, punctuation, capitalization, and spelling appropriate to the grade level (students are expected to use convections from previous years):
  - *uses verbals including gerunds, infinitives, and participial phrases*
  - *uses comparative and superlative forms of adjectives*
  - *uses pronouns correctly with regard to case, number, and person, correcting for vague pronoun reference*
- conducts research to answer a question, drawing on multiple reliable and valid sources, and refocusing the inquiry when appropriate

## Vocabulary

- integrates academic vocabulary appropriately to grade level in speaking and writing
- applies knowledge of Greek and Latin roots and affixes to determine the meanings of words and phrases in grade-level content
- applies knowledge of context clues, figurative language, word relationships, reference materials, and/or background knowledge to determine the connotative and denotative meaning of words and phrases, appropriate to 6th grade



## Ideas for Helping Your Child at Home

- ☺ Read to and with your child using a variety of texts
- ☺ Encourage discussions at mealtimes, in the car, etc.
- ☺ Involve your child in family chores
- ☺ Encourage your child to respond to text through writing, drawing, etc. to convey the understanding of the main idea
- ☺ Take your child to the library
- ☺ Make text available to your child at home

# MATHEMATICS

## Ratios and Proportional Relationships

- understands ratio concepts and uses ratio reasoning to solve problems
- uses ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations

## The Number System

- divides fractions by fractions
- divides multi-digit numbers fluently using the standard algorithm
- adds, subtracts, multiplies, and divides multi-digit decimals fluently using the standard algorithm for each operation
- adds, subtracts, multiplies, and divides integers
- finds the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12
- understands ordering and the absolute value of rational numbers
- solves real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane

## Expressions and Equations

- writes and evaluates numerical expressions involving whole-number exponents
- writes, reads, and evaluates expressions in which letters stand for numbers
- applies the properties of operations to generate equivalent expressions (e.g., apply the distributive property to the expression  $3(2 + x)$  to produce the equivalent expression  $6 + 3x$ )
- reasons about and solves one-variable equations and inequalities
- solves real-world and mathematical problems by writing and solving equations of form  $x + p = q$  and  $px = q$  for cases in which  $p$ ,  $q$ , and  $x$  are all non-negative rational numbers
- uses variables to represent two quantities in a real-world problem that change in relationship to one another; writes an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable

## Geometry

- finds the area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes
- finds the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and shows that the volume is the same as would be found by multiplying the edge lengths of the prism
- applies the formulas  $V = lwh$  and  $V = bh$  to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems
- draws polygons in the coordinate plane given coordinates for the vertices
- represents three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures

## Statistics and Probability

- recognizes a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. (e.g., "How old am I?" is not a statistical question, but "How old are the students in my school?" is a statistical question because one anticipates variability in students' ages)
- understands that a set of data collected to answer a statistical question has a distribution that can be described by its center, spread, and overall shape
- recognizes that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number



## Ideas for Helping Your Child at Home

- ☺ Engage your child in situations that require thinking and problem-solving
- ☺ Ask your child to share the strategies s/he used when solving problems
- ☺ Play games with your child that require using critical thinking skills such as card games, checkers, Connect Four, and so on
- ☺ Ask your child to do some of the hands-on activities s/he is doing in class

- ☺ Collect data such as temperature, rainfall amounts, or miles driven per day over some time. Find the range, mean, median, and mode of the data

# SOCIAL STUDIES

## Geography

- understands how to use maps and other geographic representations, tools, and technology to report information
- understands the physical and cultural characteristics of places
- understands the relationships between the Earth's ecosystems and the populations that dwell within them
- understands how human actions can impact the environment
- understands how to apply geography to interpret the past and present and plan for the future

## Economics

- understands the fundamental concepts relevant to the development of a market economy
- understands the fundamental concepts relevant to institutions, structure, and functions of a national economy
- understands the fundamental concepts and interrelationships of the United States economy in the international marketplace

## World History

- utilizes historical inquiry skills and analytical processes
- describes the emergence of early civilizations
- recognizes significant events, figures, and contributions of ancient civilizations

## Civics and Government

- identifies democratic concepts developed as a foundation for American constitutional democracy
- evaluates the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system
- develops a rich vocabulary of scientific words and uses them to speak and write more precisely and coherently

## Content Literacy

- reads closely and cites evidence from historical and social science documents to support analysis of what the materials say
- develops a rich vocabulary of scientific words and uses them to speak and write more precisely and coherently



## Ideas for Helping Your Child at Home

- ☺ Read a historical fiction book or informational text with your child and discuss the content together
- ☺ Play geography games with your child
- ☺ Talk to your child about how the culture of a society can affect history
- ☺ Discuss current events with your child