

## Ideas for Helping Your Child at Home

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

## 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 in 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 disaster 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 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
- compares and contrasts types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites
- analyzes and describes how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains

### Content Literacy

- reads closely and cites evidence from science documents to support an 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.
- ☺ Go into a dark room with your child with a roll of electric tape. Give your eyes time to adjust to the dark; then watch closely as your child quickly pulls the tape off the roll. You may see small sparks caused by electric energy. Also note how similar activities like clothes being pulled from the dryer can illustrate that energy is everywhere.
- ☺ Encourage original drawings to express main ideas of things observed or how things work.
- ☺ Read and discuss news articles pertaining to health and the body's systems.

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



# 6<sup>th</sup> Grade

A Representative Sample of Expectations by Grade Level

For a complete list of the Next Generation Sunshine State Standards and the Florida Standards, please go to the key word 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 Next Generation Sunshine State Standards (NGSSS) and in the recently-adopted Florida State Standards (FSS) 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 parents' 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:  
<http://elementarypgms.sp.brevardschools.org/Home/default.aspx>

# LANGUAGE ARTS

## Reading

- cites textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text
- determines a theme or central idea of text and how it is conveyed through particular details in the text; summarizes the text objectively
- describes how a particular story's plot unfolds in a series of episodes and how characters respond or change in response to events
- analyzes how a key individual, event or idea is introduced, illustrated, and elaborated in an informational text
- determines the meaning of words or phrases in a text, including figurative or connotative meanings; analyzes the author's word choice
- analyzes how a particular sentence, paragraph, chapter, or section of a text fits into the overall structure and contributes to the development of ideas
- determines the speaker's/author's point of view or purpose in a text and how it is conveyed
- interprets information from visuals in a text to enhance understanding and explain what information is being shared
- traces and evaluates an author's claims and the evidence used to support those claims
- compares, contrasts, and integrates the treatment of similar themes and topics in multiple literature and informational texts
- reads and comprehends grade level stories, dramas, poetry and informational texts (social studies, science and math)

## Writing

- writes arguments to support claims with clear reasons and relevant evidence
- writes informative/explanatory texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content
- writes narratives to develop experiences or events using effective technique, relevant descriptive details, and well-structured event sequences
- produces writing in which style is appropriate to task, purpose, and audience
- strengthens writing through the writing process
- uses technology (keyboarding skills) to produce and publish writing – minimum of three pages
- conducts short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate
- gathers information from multiple print and digital sources; assess the credibility of each source; and quote or paraphrase the data and conclusions of others while avoiding plagiarism and providing basic bibliographic information for sources
- draws evidence from literary or informational texts to support analysis, reflection, and research

## Speaking & Listening

- engages in collaborative discussions
- interprets information presented and explains how it contributes to a topic, text, or issue
- delineates (explains in detail) a speaker's argument and claims, distinguishing claims that are supported with reasons and evidence
- presents claims and findings with proper eye contact, volume, and pacing
- includes multimedia components in presentations to clarify information

## Language

- explains the functions of the eight parts of speech – nouns, pronouns, verbs, adverbs, adjectives, conjunctions, prepositions, interjections
- ensures that pronouns are used correctly – subjective, objective, possessive, intensive
- uses commas, parentheses, dashes
- spells correctly

- varies sentence patterns
- maintains consistency in style and tone
- uses context (overall meaning of a paragraph, a word's position in a sentence) as clue to meaning
- uses word parts, including grade level Greek and Latin roots and affixes, to determine meaning
- interprets figurative language
- uses word relationships to better understand meaning (synonyms, antonyms, homographs)
- interprets figures of speech – verbal irony, puns
- distinguishes among connotations and denotations
- uses grade level vocabulary when speaking and writing about topics or texts

## Ideas for Helping Your Child at Home



- ☺ Read to and with your child using a variety of texts.
- ☺ Provide writing tools: paper, crayons, pens, pencils, chalkboard/ whiteboard.
- ☺ Encourage discussions at meal times, 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 main idea.
- ☺ Take your child to the library.
- ☺ Make text available to your child by creating a home library.

# 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 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 the 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 which 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
- displays numerical data in plots on a number line, including dot plots, histograms, and box plots

## 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 a period of 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 historical and social science 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 an analysis of what the materials say
- develops a rich vocabulary of scientific words and uses them to speak and write more precisely and coherently