SCIENCE

Nature of Science

- defines a problem, uses appropriate reference materials to support scientific understanding, plans and carries out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions
- recognizes and explains the need for repeated experimental trials
- identifies a control group and explains its importance in an experiment
- recognizes and explains that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others

Earth and Space Science

- recognizes the major common characteristics of all planets and compare/contrast the properties of inner and outer planets
- distinguishes among the following objects of the Solar System—Sun, planets, moons, asteroids, comets—and identifies Earth's position in it
- creates a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another
- recognizes how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time
- designs a family preparedness plan for natural disasters and identify the reasons for having such a plan

Physical Science

- compares and contrasts the basic properties of solids, liquids, and gases, such as mass, volume, color, texture, and temperature
- investigates and identifies materials that will dissolve in water and those that will not and identifies the conditions that will speed up or slow down the dissolving process
- explores the scientific theory of atoms (also called atomic theory) by recognizing that all matter is composed of parts that are too small to be seen without magnification
- investigates and explains that an electrically charged object can attract an uncharged object and can either attract or repel another charged object without any contract between the objects
- investigates and illustrates the fact that the flow of electricity requires a closed circuit (a complete loop)
- identifies familiar forces that cause objects to move, such as pushes or pulls, including gravity acting or fall objects

Life Science

- identifies the organs in the human body and describe their functions, including the skin, brain, heart, lungs, stomach, liver, intestines, pancreas, muscles and skeleton, reproductive organs, kidneys, bladder, and sensory organs
- describes how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations
- compares and contrasts adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors, and physical characteristics

Ideas for Helping Your Child at Home

☺ Explore Florida together
☺ Talk and discuss how the Florida government is organized.
☺ Read informational text with your child
☺ Discuss current events with your child

What Your Child is Expected to Learn…

5th 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
- analyzes how setting, events, conflict, and characterization contribute to the plot
- explains the development of stated or implied theme(s)
- describes how an author develops a character's perspective
- explains how figurative language and other poetic elements work together in a poem
- explains how text structures and/or features contribute to the meaning
- explains how details support the implied or stated central idea(s)
- analyzes an author's purpose and/or perspective
- tracks the development of an argument, identifying specific claim(s), evidence, and reasoning
- analyzes how figurative language contributes to meaning
- makes inferences to support comprehension
- summarizes a text to enhance comprehension
- compares and contrasts primary and secondary sources related to the same topic

Communication

- demonstrates fluent and legible cursive
- 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 conventions from previous years):
  - *uses principal modals to indicate the mood of a verb*
  - *uses appositives, main clauses, and subordinate clauses*
  - *recognizes and corrects inappropriate shifts in tense and number*
  - *uses conjunctions correctly to join words and phrases in a sentence*
- conducts research to answer a question, organizing information about the topic, using multiple reliable and valid sources

Vocabulary

- applies knowledge of Greek and Latin roots and affixes, recognizing the connection between affixes and parts of speech, to determine the meanings of unfamiliar words in grade-level content
- uses context clues, figurative language, word relationships, reference materials, and/or background knowledge to determine the meaning of multiple-meaning and unknown words and phrases, appropriate to 5th grade
- uses grade-level academic vocabulary appropriately in speaking and writing

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 a variety of text available to your child at home

MATHEMATICS

Operations and Algebraic Thinking

- uses parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols
- writes simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them
- generates two numerical patterns using two given rules

Number and Operations

- recognizes that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and one-tenth of what it represents in the place to its left
- reads, writes and compares decimals to thousandths
- uses place value understanding to round decimals to any place
- multiplies multi-digit whole numbers fluently using the standard algorithm
- finds whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division
- adds, subtracts, multiplies, and divides decimals to hundredths, using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction

Number and Operations – Fractions

- adds and subtracts fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions
- uses benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers
- finds the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths
- multiplies fractional side lengths to find areas of rectangles, and represents fraction products as rectangular areas
- compares the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication
- explains why multiplying a given number by a fraction greater than 1 results in a product greater than the given number and explains why multiplying a given number by a fraction less than 1 results in a product smaller than the given number
- solves real-world problems involving multiplication of fractions and mixed numbers
- divides unit fractions by whole numbers and whole numbers by unit fractions

Measurement and Data

- converts among different-sized standard measurement units (i.e., km, m, cm, kg, g, lb, oz, l, ml, hr, min, sec) within a given measurement system (e.g., convert 5 cm to 0.05 m), and uses these conversions in solving multi-step, real-world problems
- .makes a line plot to display a data set of measurements in fractions of a unit identifies and plot ordered pairs on the first quadrant of the coordinate plane
- recognizes volume as an attribute of solid figures and understand concepts of volume measurement
- measures volumes by counting unit cubes, using cubic cm, cubic in, cubic foot, and improvised units

Geometry

- graphs points on the coordinate plane to solve real-world and mathematical problems
- understands that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category (e.g. all rectangles have four right angles and squares are rectangles, so all squares have four right angles)
- classifies and organizes two-dimensional figures into Venn diagrams based on the attributes of the figures

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
☺ Have your child measure various objects and then order them according to these measurements
☺ Play games with your child that require using critical thinking skills such as card games, checkers, Connect Four, and so on
☺ Discuss various graphs found in newspapers
☺ Ask your child to do some of the hands-on activities s/he is doing in class with you

SOCIAL STUDIES

American History

- uses primary and secondary resources to understand history
- compares cultural aspects of Pre-Columbian North America
- describes the exploration and settlement patterns of North America
- compares characteristics of colonization of North America
- identifies and explains significant events of the American Revolution and the birth of the new nation
- identifies and explains significant events of growth and westward expansion in the United States

Geography

- constructs maps, charts, and graphs to display geographic information
- describes factors that influenced boundary changes within the United States
- describes natural events that impacted human and physical environments in the United States
- uses geographic knowledge and skills in real-life problem solving

Economics

- identifies how trade promoted economic growth in North America
- describes characteristics of a market economy
- recognizes the positive and negative effects of trade among Native Americans, European explorers, and colonists

Civics and Government

- understands the foundations of government, law, and the American Political system
- knows key elements of documents created to support the United States (Declaration of Independence, Articles of Confederation, the Constitution, and Bill of Rights)
- compares forms of political participation in the colonial period to today
- evaluates the importance of civic responsibilities in American democracy
- describes the organizational structure and powers of the federal government as defined in Articles I, II, and III of the U.S. Constitution

Ideas for Helping Your Child at Home

☺ Read a novel based on American history with your child and discuss the story together.
☺ Visit national monuments and historical sites with your child
☺ Read the Constitution to your child and talk about how it organized our national government and its functions
☺ Discuss current events with your child