A good educational system provides many tools that help children learn. Academic standards are useful for making sure:

- teachers know what is to be taught;
- children know what is to be learned; and
- parents and the public can determine how well the concepts are being learned.

The following pages provide information about the South Carolina Academic Standards for mathematics, English language arts, science and social studies for Fifth Grade. The information can help you become familiar with what your child is learning at school and may include activities to reinforce and support your child’s learning, selected book titles for additional reading, and Web site addresses for extended learning. Because sites change, please preview before students begin work. This version does not include every standard taught in Fifth Grade. The complete South Carolina Academic Standards for each subject area can be found at www.ed.sc.gov.

The state-developed test, Palmetto Assessment of State Standards (PASS), is based on the South Carolina Academic Standards. Sample PASS Test items can be viewed online at www.eoc.sc.gov/informationforeducators/TestItems.htm.

South Carolina Academic Standards

Here are seven key reasons parents should be in the know about the academic standards:

1. Standards set clear, high expectations for student achievement. Standards tell what students need to do in order to progress through school on grade level.
2. Standards guide efforts to measure student achievement. Results of tests (PASS) on grade-level academic standards show if students have learned and teachers have taught for mastery.
3. Standards promote educational equity for all. Instruction in every school in the state will be based on the same academic standards.
4. Standards help parents determine if children in South Carolina are taught the same subject content as children across the nation. South Carolina Academic Standards have been compared with and matched to national standards as well as standards of other states to make sure that they are challenging.
5. Standards inform parents about the academic expectations for their child. Standards give parents more specific information for helping their child at home. Parents no longer have to guess the type of help their child needs to do better in school.
6. Standards enable parents to participate more actively in parent/teacher conferences. Knowledge of the academic standards helps parents understand more about what their child is learning and what they can do at each grade level. Parents are able to have conversations with teachers about student progress in specific areas and understand more completely the progress of their child.
7. Standards help parents see how the current grade level expectations are related to successive years’ expectations. Parents are able to see how their child’s knowledge is growing from one year to the next.
ENGLISH LANGUAGE ARTS

Students should be able to:

Reading
- Distinguish among first-person, limited-omniscient (third person), and omniscient (third person) points of view in a story
- Understand how an author develops characters
- Understand how authors use figurative language, dialogue, and descriptions to create a desired tone or meaning
- Write, act, draw, and make presentations in response to reading
- Understand the use of stanzas, patterned rhymes, and repetitive words and phrases in poetry
- Understand the characteristics of legends, myths, speeches, and personal essays
- Summarize the evidence that supports the central idea in a nonfiction text in order to draw conclusions and make inferences
- Distinguish opinions that are supported from those that are not supported
- Describe how titles, various headings, print styles, white space, and captions aid in comprehending texts
- Use surrounding words and phrases that provide an example, a definition, or restatement to understand the meaning of an unknown word
- Analyze the meaning of words by using knowledge of their Greek or Latin parts
- Explain the meaning of figurative language and euphemisms

Writing
- Organize writing by using planning strategies such as brainstorming
- Use a variety of sentence types and sentence lengths when writing
- Use irregular adverbs and adjectives (for example good, better, and best) correctly
- Correctly use verbs that are commonly misused
- Capitalize the names of religions, languages, and ethnic and national groups
- Use colons and hyphens correctly
- Use commonly confused words (for example, affect and effect) correctly
- Improve word choice and the development and organization of ideas by editing and revising writing
- Write book reviews and newsletter articles
- Write stories with a plot and a consistent point of view
- Use precise vocabulary and vivid details to write descriptions
- Create picture books, comic books, and graphic novels

Research
- Gather information by using books and magazines
- Find information on a topic of interest and restate the information in your own words
- List the titles, authors, and publication information of books used in research
- Use organizational strategies to prepare information for writing or speaking assignments
- Select graphics, in print or electronic form, to support written or oral presentations

Activities
- Provide a variety of types of reading materials for your child to use, such as books, magazines, newspapers, charts, diagrams, dictionaries, encyclopedias, atlases, almanacs, and nonprint media
- Read books from the local library or bookstore
- Discuss the meaning of and the reasons why an author may have used figurative language or euphemisms
- Help your child add clip art or other pictures to his/her writing
- Have your child discuss a book read or a television show watched with you
- While watching television, point out opinions that are not supported by evidence
- When eating at a restaurant, discuss how the menu uses headings, titles, and white space to organize information
- When reading a story or watching a movie or television show, ask your child what he thinks about a characters’ motives or personality
- Point out publication information in books
- Have your child create a news article about something that happened at home or in the neighborhood
- Re-enact a favorite scene from a movie, television program, or story
- Have your child create comic strips

Books
- Cooper, Susan. The Boggart
- Creech, Sharon. Love That Dog
- Curtis, Christopher Paul. Bud, Not Buddy
- Giff, Patricia Reilly. Lily’s Crossing
- Lowry, Lois. Number the Stars
- Naylor, Phyllis. Beatles Lightly Toasted
- Paterson, Katherine. Jip, His Story
- Paulson, Gary. Hatchet
- Taylor, Mildred. Mississippi Bridge

Web Sites
- Carol Hurst’s Children’s Literature Site – http://www.carolhurst.com
- Surfing the Net With Kids – http://www.surfnetkids.com
- United States Department of Education – http://www2.ed.gov/parents
- The Write Source – http://www.thewritesource.com
MATHEMATICS

Students should be able to:

Numbers and Operations
- Apply an algorithm (method of solving a problem) to divide whole numbers fluently
- Classify numbers as prime (a number that has exactly two positive factors, itself and one), composite (a number that has more than two factors), or neither
- Generate strategies to add and subtract fractions with like and unlike denominators

Algebra
- Analyze situations that show change over time

Geometry
- Classify shapes as congruent (same size and shape)
- Translate between two-dimensional representations and three-dimensional objects
- Analyze shapes to determine line symmetry and/or rotational symmetry (when a shape has line symmetry it can be divided into pieces that are mirror images of each other; when a shape has rotational symmetry it can be turned less than 360 degrees about a point and still fit exactly on itself)

Measurement
- Use a protractor to measure angles from 0 to 180 degrees
- Use equivalences to convert units of measure within the metric system
- Recall equivalencies: 10 millimeters = 1 centimeter, 100 centimeters = 1 meter, 1,000 meters = 1 kilometer, 10 milliliters = 1 centiliter, 100 centiliters = 1 liter, 1,000 liters = 1 kiloliter, 10 milligrams = 1 centigram, 100 centigrams = 1 gram, 1,000 grams = 1 kilogram
- Apply procedures to determine the amount of elapsed time in hours, minutes, and seconds within a 24-hour period

Data Analysis and Probability
- Analyze how data-collection methods affect the nature of the data set
- Represent the probability of a single-stage event in words and as fractions

Activities:

Have your child:
- Play “What’s the Next Prime (or Composite)?” One player gives the first number and the next player names the next prime or composite number. Play continues until one player misses.
- Explain methods that can be used to solve problems that require addition and subtraction of fractions with like and unlike denominators
- Identify situations that change over time and discuss the change in relation to the time required for the change to occur
- Find pictures of two-dimensional geometric shapes in print materials and locate a three-dimensional shape in the environment that has the two-dimensional face and vice versa
- Find or draw pictures that have line and/or rotational symmetry
- Trace angles found in the home (such as the corner of tables, etc.) and then use a protractor to measure the angle
- Compare and make metric conversions such as the amount of soda in a 2.5 liter bottle converted to milliliters
- Talk about the day in terms of time that has elapsed since getting up and doing various activities (within a 24-hour period)

Books:
- Burns, Marilyn. *Spaghetti and Meatballs for All: A Mathematical Story*
- Caron, Lucille. *Fractions and Decimals*
- Ernst, Lisa Campbell and Lee Ernst. *The Tangram Magician*
- Monroe, Eula Ewing. *Math Dictionary for Young People*

Web Sites:
- www.aplusmath.com – Interactive site with games and a homework helper
- www.coolmath4kids.com – Interactive site for students
- www.funbrain.com/index.html – Interactive math activities
Students should be able to:

**Inquiry**
- Identify questions suitable for generating a hypothesis
- Identify independent (manipulated), dependent (responding), and controlled variables in an experiment
- Plan and conduct controlled scientific investigations, manipulating one variable at a time
- Use appropriate tools and instruments (including a timing device and a 10x magnifier) safely and accurately when conducting a controlled scientific investigation
- Construct a line graph from recorded data with correct placement of independent (manipulated) and dependent (responding) variables
- Evaluate results of an investigation to formulate a valid conclusion based on evidence and communicate the findings of the evaluation in oral or written form
- Use a simple technological design process to develop a solution or a product, communicating the design by using descriptions, models, and drawings
- Use appropriate safety procedures when conducting investigations

**Ecosystems: Terrestrial and Aquatic**
- Recall the cell as the smallest unit of life and identify its major structures
- Summarize the composition of an ecosystem, considering both biotic factors and abiotic factors
- Compare the characteristics of different ecosystems
- Identify the roles of organisms as they interact and depend on one another through food chains and food webs in an ecosystem, considering producers and consumers, decomposers, predators and prey, and parasites and hosts
- Explain how limiting factors (including food, water, space, and shelter) affect populations in ecosystems

**Landforms and Oceans**
- Explain how natural processes affect Earth's oceans and land in constructive and destructive ways
- Illustrate the geologic landforms of the ocean floor
- Compare continental and oceanic landforms
- Explain how waves, currents, tides, and storms affect the geologic features of the ocean shore zone
- Compare the movement of water by waves, currents, and tides
- Explain how human activity has affected the land and the oceans of Earth

**Properties of Matter**
- Recall that matter is made up of particles too small to be seen
- Compare the physical properties of the states of matter
- Summarize the characteristics of a mixture, recognizing a solution as a kind of mixture
- Use the processes of filtration, sifting, magnetic attraction, evaporation, chromatography, and floatation to separate mixtures
- Explain how the solute and the solvent in a solution determine the concentration
- Explain how temperature change, particle size, and stirring affect the rate of dissolving
- Illustrate the fact that when some substances are mixed together, they chemically combine to form a new substance that cannot easily be separated
- Explain how the mixing and dissolving of foreign substances is related to the pollution of the water, air, and soil

**Forces and Motion**
- Illustrate the affects of force on motion
- Summarize the motion of an object in terms of position, direction, and speed
- Explain how unbalanced forces affect the rate and direction of motion in objects
- Explain ways to change the effect that friction has on the motion of objects
- Use a graph to illustrate the motion of an object
- Explain how a change of force or a change in mass affects the motion of an object

**Activities:**
- Have your child:
  - Build a terrarium or aquarium, adding the plants and animals needed to sustain the ecosystem
  - Ask your child to think about ways that more birds could be attracted to a backyard feeder
  - Research the impact of human and industrial growth on local ecosystems
  - Using modeling clay, create a model of the ocean's floor labeling the different features
  - Read labels from household products and discuss safety procedures related to the products
  - Design a ramp and determine the speed of a toy car as it travels across the ramp at different heights

**Books:**
- Boudreaux, Gloria. *Ecosystems - Life in a Forest*
- Clifford, Nick. *Incredible Earth*
- Cobb, Vicki. *Science Experiments You Can Eat*
- Gardner, Robert. *Science in Your Backyard*
- Gilbreath, Alice T. *The Continental Shelf: An Underwater Frontier*
- Nankivell-Aston, Sally and Dorothy Jackson. *Science experiments with Forces*
- Southgate, Merrie. *Agnes Pflumm and the Stonecreek Science Fair*
- Southgate, Merrie. *No Place Like Periwinkle*

**Websites**
- AAAS Science Netlink - www.sciencenetlinks.com
- Bill Nye, The Science Guy - www.billnye.com
- Franklin Institute - www.fi.edu
SOCIAL STUDIES

Students should be able to:

United States Studies: 1865 to Present

- Summarize the aims and course of Reconstruction, including the effects of Abraham Lincoln’s assassination, Southern resistance to the rights of freedmen, and the agenda of the Radical Republicans
- Explain the effects of Reconstruction, including new rights under the thirteenth, fourteenth, and fifteenth amendments; the actions of the Freedmen’s Bureau; and the move from a plantation system to sharecropping
- Explain the purpose and motivations of subversive groups during Reconstruction and their rise to power after the withdrawal of federal troops from the South
- Compare the political, economic, and social effects of Reconstruction on different populations in the South and in other regions of the United States
- Analyze the geographic and economic factors that influenced westward expansion and the ways that these factors affected travel and settlement, including physical features of the land; the climate and natural resources; and land ownership and other economic opportunities
- Summarize how technologies (such as railroads, the steel plow and barbed wire), federal policies (such as subsidies for the railroads and the Homestead Act), and access to natural resources affected the development of the West
- Identify examples of conflict and cooperation between occupational and ethnic groups in the West, including miners, farmers, ranchers, cowboys, Mexican and African Americans, and European and Asian immigrants
- Explain the social and economic effects of westward expansion on Native Americans; including opposing views on land ownership, Native American displacement, the impact of the railroad on the culture of the Plains Indians, armed conflict, and changes in federal policy
- Explain how the Industrial Revolution was furthered by new inventions and technologies, including new methods of mass production and transportation and the invention of the light bulb, the telegraph, and the telephone
- Explain the practice of discrimination and the passage of discriminatory laws in the United States and their impact on the rights of African Americans, including the Jim Crow laws and the ruling in Plessy v. Ferguson
- Summarize the significance of large-scale immigration to America, including the countries from which the people came, the opportunities and resistance they faced when they arrived, and the cultural and economic contributions they made to the United States
- Summarize the impact of industrialization, urbanization, and the rise of big business, including the development of monopolies; long hours, low wages, and unsafe working conditions on men, women, and children laborers; and resulting reform movements
- Summarize the reasons for the United States control of new territories as a result of the Spanish American War and the building of the Panama Canal, including the need for raw materials and new markets and competition with other world powers
- Summarize the factors that led to the involvement of the United States in World War I and the role of the United States in fighting the war
- Summarize daily life in the post–World War I period of the 1920s, including improvements in the standard of living, transportation, and entertainment; the impact of the Nineteenth Amendment, the Great Migration, the Harlem Renaissance, and Prohibition; and racial and ethnic conflict
- Summarize the causes of the Great Depression, including overproduction and declining purchasing power, the bursting of the stock market bubble in 1929, and the resulting unemployment, failed economic institutions; and the effects of the Dust Bowl
- Explain the American government’s response to the Great Depression in the New Deal policies of President Franklin Roosevelt, including the Civilian Conservation Corps, the Federal Deposit Insurance Corporation, the Securities and Exchange Commission, and the Social Security Act
- Explain the principal events related to the involvement of the United States in World War II, including campaigns in North Africa and the Mediterranean; major battles of the European theater such as the Battle of Britain, the invasion of the Soviet Union, and the Normandy invasion; and events in the Pacific theater such as Pearl Harbor, the strategy of island-hopping, and the bombing of Hiroshima and Nagasaki
- Analyze the role of key figures during World War II, including Winston Churchill, Franklin D. Roosevelt, Joseph Stalin, Benito Mussolini, and Adolph Hitler.
- Summarize key developments in technology, aviation, weaponry, and communication and their effects on World War II and the United States economy
- Summarize the social and political impact of World War II on the American home front and the world, including opportunities for women and African Americans in the work place, the internment of the Japanese Americans, and the changes in national boundaries and governments

Activities:

Have your child:

- Research specific laws against African Americans following the Civil War (Black Codes) and discuss their effects on the rights and opportunities of African Americans.
- Watch the evening news to see where the United States is involved politically in the world. Map the places mentioned.
- Complete a graphic organizer that illustrates cooperation and conflict between different groups in the early West.
- Review and interpret maps, charts, and graphs that show information about large-scale immigration to the United States in the early 1900s, such as where the immigrants came from or areas in the United States where they settled.
- Look at pictures that illustrate daily life during the Great Depression. Talk about similarities and differences in people’s daily lives then and now.
- Make a list of technological inventions around your house. Research
the people who invented these devices and talk about how their inventions have affected daily life.

- Look at a topographical map of the United States, noting features such as large mountain ranges or bodies of water. Talk about how these geographical features affected travel to and settlement of the West.

Books:

- Bishop, Claire Huchet. *Twenty and Ten*
- Bunting, Eve. *Cheyenne Again*
- Bunting, Eve. *The Blue and the Gray*
- Colman, Penny. *Rosie the Riveter: Women Working on the Home Front in World War II*
- Cousins, Margaret. *The Story of Thomas Alva Edison*
- Davies, Penelope. *Children of the Industrial Revolution*
- Dr. Martin Luther King, Jr. *I Have a Dream: Dr. Martin Luther King Jr.*
- Dr. Seuss. *The Butter Battle Book*
- Hakim, Joy. *The History of US*
- Hesse, Karen. *Letters from Rifka*
- Johnson, Tony. *The Harmonica*
- Kroll, Steven. *Ellis Island: Doorway to Freedom*
- Lowery, Lois. *Number the Stars*
- MacLachlan, Patricia. *Sarah, Plain and Tall*
- McKissack, Patricia. *Mary McLeod Bethune: A Great Teacher*
- Oppenheim, Shulasmith Levey. *The Lily Cupboard*
- Parks, Rosa and Gregory J. Reed. *Dear Mrs. Parks: A Dialogue with Today’s Youth*
- Say, Allen. *Grandfather’s Journey*
- Taylor, Mildred. *Song of the Trees*

Web Sites:

- American Local History Network – www.alhn.org
- Children of WWII – www.bbc.co.uk/history/ww2children/index.shtml
- Civil War Homepage – www.civil-war.net/
- Cold War – www.learningcurve.gov/coldwar
- D Day- www.pbs.org/wgbh/amex/dday/index.html
- Dust bowl Region – www.pbs.org/wgbh/amex/dustbowl/maps/index.html
- Ellis Island – www.ellisland.org
- FDRs First Inaugural Address — historymatters.gmu.edu/d/5057/
- History Place – www.historyplace.com
- Kid Info – www.kidinfo.com
- Map of the Rise and Fall of Communism – http://users.earthlink.net/mwhite28/communis.htm
- Newspapers from 1950s – www.newspaperarchive.com
- Smithsonian National Museum of American History – www.americanhistory.si.edu
- Technology, Communication, and Aviation – http://search.eb.com/dday
- Talking to Kids About Terrorism – http://abcnews.go.com/Technology/Dyehard/Story?id=2046075&page=1
- Wright Brothers – http://firstflight.open.ac.uk
- Rock and Roll – http://www.history-of-rock.com
- Various Topics - memory.loc.gov/learn/lessons/99/fear/intro.html