

A Guide for Parents and Families About What Your **TENTH GRADER** Should Be Learning In School This Year



This guide shares important information about the South Carolina Academic Standards. These standards outline state requirements for your child's learning program and what students across the state should be able to do in certain subjects.

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 **Tenth 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 **Tenth Grade**. The complete South Carolina Academic Standards for each subject area can be found at www.ed.sc.gov.

Sample and release assessment questions for the High School Assessment Program (HSAP) and End-of-Course Tests can be found 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 and end-of-course examinations 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.

WEB RESOURCES

South Carolina Department of Education (SCDE):
www.ed.sc.gov

South Carolina Education Oversight Committee (EOC):
www.eoc.sc.gov

South Carolina Education Television (SCETV):
www.knowitall.org

Sample and Release HSAP and End-of-Course Test Items:
www.eoc.sc.gov/informationforeducators/TestItems.htm

ENGLISH LANGUAGE ARTS

Students enrolled in grade ten are generally enrolled in **English 2**. Those students who took **English 2** in the ninth grade may be enrolled in **English 3** in grade ten.

Students should be able to:

Reading

- Make inferences and draw conclusions by comparing and contrasting information from one or more texts
- Analyze the relationship among character, plot, and theme in stories
- Analyze the impact of author's craft such as figurative language, point of view, foreshadowing, symbolism, and irony on the text
- Write or make presentations in response to reading
- Analyze an author's preference about a subject through his choice of words and unsupported opinions
- Identify propaganda techniques in nonfiction
- Analyze text structures and graphic features used in nonfiction texts
- Read independently
- Use context clues to determine the meaning of unfamiliar words and technical terms
- Analyze the meaning of words by using a knowledge of their Greek or Latin parts

Writing

- Organize writing by creating lists, using graphic organizers, using models, or using outlines
- Use a variety of sentence types and lengths
- Create multi-paragraph writing with an introduction and conclusion, and a clearly supported main idea
- Use correct grammar, punctuation, and spelling in writing
- Use revision strategies to improve the organization, development of ideas, and voice
- Create career-oriented and technical writing (for example, memos, business letters, resumes, technical reports, and information analyses)
- Write essays, memoirs or poems using descriptive language to enhance setting and characterization in a story
- Create persuasive pieces (for example, editorials, essays, speeches, or reports) that support a clearly stated opinion using descriptions, facts, statistics, or first-hand accounts

Research

- Use direct quotations, paraphrases, or summaries to incorporate information from various sources into writing or speaking
- Use a standard method to document sources and properly credit the work of others
- Create written assignments and oral presentations that are designed for a specific audience and purpose
- Select graphics for oral or written presentations from print or electronic sources
- Design and present research projects

Activities

- Read the same book your child is reading and discuss the author's use of figurative language in the book
- Take your child to a play by a foreign playwright to understand character, plot, and theme
- Watch movies or plays and read books from different times in history and from different cultures, then compare and contrast them
- Attend an author's lecture or speech with your child. Help your child analyze the speaker's remarks for bias and persuasive techniques
- Have your child read *Consumer Reports* about a product of interest in order to understand the characteristics of technical reports
- Encourage your child to access books in a library
- Practice completing job applications or résumés with your child
- Have your child create a business letter in order to gather information about a topic of interest
- Encourage your child to read independently
- Share work-related documents with your child, (for example, memos or business letters) in order for him/her to better understand career documents
- Encourage your child to identify words in advertisements with strong connotations

Books

- Carter, Jimmy. *An Hour Before Daylight: Memories of a Rural Boyhood*
- Cheripko, Jan. *Rat*
- Hillenbrand, Laura. *Seabiscuit: An American Legend*
- Kidd, Sue Monk. *The Secret Life of Bees*
- Lee, Harper. *To Kill a Mockingbird*
- McCarthy, Susan Carol. *Lay that Trumpet in Our Hands*
- McCullers, Carson. *The Member of the Wedding*
- Myers, Walter Dean. *Bad Boy: A Memoir*
- Orwell, George. *Animal Farm*
- Wong, Janet S. *Behind the Wheel: Driving Poems*

Web Sites

- United States Department of Education – <http://www2.ed.gov/parents>
- Online Dictionary – <http://www.onelook.com>
- The Write Source – <http://www.thewritesource.com>

MATHEMATICS

The mathematics standards for grades nine through twelve contained in the South Carolina Mathematics Academic Standards 2007 provide the essential content students are expected to learn during their entire high school mathematics career. Academic standards are specified for five high school core areas: elementary algebra, intermediate algebra, geometry, precalculus, and data analysis and probability. Content topics contained in intermediate algebra and geometry. Students in 10th grade are generally enrolled in **Intermediate Algebra, Geometry, or Mathematics for the Technologies 2**. Students are scheduled to take the **Elementary Algebra /Mathematics for the Technologies 2** End-of-Course Examination at the end of **Algebra 1** and **Mathematics for the Technologies 2**. Since mathematics is taught in specific mathematics courses rather than as an integrated system in most high schools, standards for courses are incorporated into course outlines in the document Outlines of High School Mathematics Courses found on the State Department of Education Web site www.ed.sc.gov/. Other mathematics courses may be available as well for students in schools on a semester block schedule.

Intermediate Algebra

The academic standards for the intermediate algebra core area establish the process skills and core content for Algebra 2.

The content of the intermediate algebra standards includes:

- Functions
- Systems of equations
- Systems of linear inequalities
- Quadratic equations
- Complex numbers
- Algebraic expressions
- Nonlinear relationships including exponential, logarithmic, radical, polynomial, and rational
- Conic sections
- Sequences and series

Hand-held calculators are required as part of instruction and assessment. Students should use a variety of representations (concrete, numerical, algorithmic, graphical), tools and technologies to model situations to solve meaningful problems.

Geometry

The academic standards for the geometry core area establish the process skills and core content for Geometry and Mathematics for the Technologies 3.

The content of the geometry standards includes:

- Properties of basic geometric figures
- Properties of triangles
- Properties of quadrilaterals and other polygons
- Properties of circles, lines, and special segments intersecting circles
- Transformations
- Coordinate geometry
- Vectors
- Surface area and volume of three-dimensional objects
- Proofs

Students are expected to use technology throughout the course, particularly interactive, dynamic software.

Activities:

Have your child:

- Use a system of equations to solve a problem involving perimeter. Pretend to plan a rectangular garden. The perimeter of the garden will be 628 meters. The length of the garden must be 6 meters longer than the width. Calculate the dimensions of the rectangle
- Use a non-linear equation to solve the following problem. Airplane 1 travels 2400 miles at a certain speed. Airplane 2 travels 2000 miles, but 50 miles per hour faster than airplane 1 and in 3 hours less time. Calculate the speed of each plane
- Use deductive reasoning to solve the following problem. Draw two parallel lines cut by a transversal. Label all the angles left to right and top to bottom using the numbers 1 through 8. If it is given that $\angle 1 = \angle 4$, prove $\angle 5 = \angle 8$. Give reasons for each step

Books:

- Abbott, Edwin A. *Flatland: A Romance of Many Dimensions*
- Johnson, Art. *Building Geometry: Activities for Polydron Frameworks*
- Smith, Kurt. *Logic Puzzles to Bend Your Brain*

Web Sites:

- <http://mathforum.org/library/problems/geometry.html>
- <http://illuminations.nctm.org>

SCIENCE

Biology

Overview: Students in grade ten are generally enrolled in **Biology or Applied Biology I and II**. The academic standards for biology establish the scientific inquiry skills and core content for all Biology classes in South Carolina schools. The course should provide students with a conceptual understanding of the world around them – a basic knowledge of the biological universe that should serve as the foundation for higher-level high school science courses. The standards should be used to make decisions concerning the structure and content for Biology classes that are taught. All Biology classes must include inquiry-based instruction, allowing students to engage in problem solving, decision-making, critical thinking, and applied learning. In other words, students should spend more of their class time choosing the right method to solve a problem and less time solving problems that merely call for repetitive procedures.

For a complete list of biology standard indicators, go to <http://ed.sc.gov/topics/curriculumstds/subjects> download the 2005 South Carolina Academic Standards and refer to pages 69-75

Biology I

Biology I is an introductory, laboratory-based course designed to familiarize the student with the major concepts of biological science. This course provides numerous opportunities for students to develop science process skills, critical thinking, and an appreciation for the nature of science through inquiry-based learning experiences. Investigative, hands-on lab activities that address the high school inquiry standards are an integral part of this course. The Biology I course is structured so that all of the Biology standards are addressed in a one-year traditional or one-semester block course.

The Standards included in the Biology I course include:

- The structure and function of cells
- The flow of energy within and between living systems
- The molecular basis of heredity
- Biological evolution and the diversity of life
- The interrelationships among organisms and the biotic and abiotic components of their environment

Applied Biology I and II

Applied Biology I and II are laboratory courses that emphasize problem-solving, decision-making, critical thinking, and applied learning. Students explore how the concepts and principles of Biology apply to issues in the workplace, in society, and in personal experiences and explore the career and technology applications of life science. Investigative, hands-on lab activities that address the high school inquiry standards are an integral part of these courses. Applied Biology I and II are designed to be both academically rigorous and realistic for students pursuing technical careers and for students planning to continue their education at the technical or collegiate level. As the Applied Biology courses are structured so that all of the biology standards are addressed in two one-year traditional or two one-semester block courses, students wishing to pursue a career in health and/or industrial fields are encouraged to complete both courses.

The Standards included in the Applied Biology I course include:

- The structure and function of cells
- The flow of energy within and between living systems
- The Interrelationships among organisms and the biotic and abiotic components of their environment

The Standards included in the Applied Biology II course include:

- Biological evolution and the diversity of life
- The molecular basis of heredity

Activities:

Have your child:

- Visit natural history museums, state parks, Riverbanks Zoo, and SC Aquarium and discuss the characteristics and behaviors of the animals and plants you observe
- Read articles in *Scientific American*, *Popular Science*, and *Nature Magazine*
- View television programs such as Nova, Scientific American, and Discovery Channel and discuss how man has impacted the environment
- Investigate the SC Junior Academy of Science and attend workshops and other events with your child - www.scacadscience.org
- Conduct soil or water tests on your property and research the acceptable levels of dissolved materials necessary for various plant and animal needs
- Read labels and discuss the function of ingredients in various substances, such as foods and cleaning products
- Read food labels and plan family menus with nutritional guideline in mind
- Set up a home recycling center and discuss nonrenewable resources
- Go camping or hiking and visit the various ecosystems found in our state
- Set up a backyard bird feeder and start a “birding diary”

Web Sites

- Exploratorium– www.exploratorium.edu
- Frank Potter’s Science Gems–more than 14000 science resources sorted by category and grade level – www.sciencegems.com
- Center for Improved Engineering and Science Education – <http://www.k12science.org/currichome.html>
- The Smithsonian Institution – www.si.edu
- What Should I Look For in the Science Program in My Child’s School: A Guide for Parents – <http://www.scimathmn.org>

SOCIAL STUDIES

Students should be able to:

Global Studies

- Explain the influence of Athenian government and philosophy on other civilizations
- Summarize the essential characteristics of Roman civilization and explain their impact today
- Explain the rise and growth of Christianity during the classical era
- Explain the impact of religion in classical Indian civilization
- Explain the influence of the Byzantine Empire
- Summarize the origins, beliefs, and expansion of Islam
- Summarize the influences of trans-Saharan trade on Africa
- Compare the origins and characteristics of the Mayan, Aztec, and Incan civilizations
- Summarize the functions of feudalism and manorialism in medieval Europe
- Analyze the upheaval and recovery that occurred in Europe during the Middle Ages
- Compare the impact of the Renaissance and the Reformation on life in Europe
- Explain the long-term effects of political changes that occurred in Europe during the sixteenth, seventeenth, and eighteenth centuries
- Summarize the origins and contributions of the scientific revolution
- Explain the ways that Enlightenment ideas spread through Europe and their effect on European society
- Explain the significant changes that took place in China in the nineteenth century
- Explain the impact of European involvement on other continents during the era of European expansion
- Compare the revolutions that took place on the European and American continents in the nineteenth century
- Explain the causes and effects of transformation in Europe in the nineteenth century
- Compare the political actions of European, Asian, and African nations in the era of imperial expansion
- Summarize the causes of World War I
- Summarize the worldwide changes that took place following World War I
- Explain the impact of the Great Depression and political responses in Germany, Britain, and the United States
- Explain the causes, key events, and outcomes of World War II
- Compare the ideologies and global effects of totalitarianism, communism, fascism, Nazism, and democracy in the twentieth century
- Exemplify the lasting impact of World War II
- Summarize the ideologies and global effects of communism and democracy
- Summarize the worldwide effects of the Cold War
- Compare the challenges and successes of the movements toward independence and democratic reform in various regions following World War II
- Summarize the impact of economic and political interdependence on the world

Activities:

Have your child:

- Watch and discuss the nightly news. Look for examples of global interdependence and its effects on the world.
- Create a travel brochure that illustrates daily life in one of the classical civilizations. View historical documentaries on television (for example, on PBS or the History Channel) and discuss how the events shown in the program are related to historical topics being studied at school.
- Read biographies about people from a variety of places and time periods being studied
- Interview family or community members about what it was like to live through World War I, World War II, or the Cold War

Books:

- Adkins, Lesley and Roy Adkins. *Handbook to Life in Ancient Rome*
- Birch, Cyril, ed. *Stories from a Ming Collection*
- Brokow, Tom. *The Greatest Generation*
- Atchity, Kenneth J., ed. *The Classical Greek Reader*
- Bunsen, Matthew. *Encyclopedia of the Middle Ages*
- Dersin, Diane, ed. *What Life Was Like on the Banks of the Nile, Egypt 3050-30 BC*
- Ebry, Patricia. *The Cambridge Illustrated History of China*
- Fischer, Louis. *Gandhi: His Life and Message for the World*
- Hakim, Joy. *The First Americans*
- Hamilton, Edith. *The Greek Way*
- Haugaard, Erik. *Cromwell's Boy*
- Keegan, John. *Illustrated History of the First World War*
- Le Carre, John. *The Spy Who Came in from the Cold*
- Macaulay, David. *Castle*
- Macaulay, David. *Cathedral*
- Macaulay, David. *Pyramid*
- Macaulay, David. *Roman City*
- More, Thomas. *Utopia*. Translated by Paul Turner
- Ross, Frank, Jr. *Oracle Bones, Stars, and Wheelbarrows*
- Saggs, H.W.F. *Babylonians*
- Sosin, Gene. *Sparks of Liberty: An Insider's Memoir of Radio Liberty*
- Statler, Oliver. *Japanese Inn*
- Vail, John. *"Peace, Land, Bread!": A History of the Russian Revolution*
- Wiesel, Elie. *Night, Dawn, The Accident: Three Tales*

Web Sites:

- Electronic Research - Library of Congress - <http://lcweb.loc.gov/>
- National Museum of African Art - www.si.edu/nmafa/
- National Gallery of Art - www.nga.gov
- National Geographic Society - www.nationalgeographic.org



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