



2011-2012 Guide for Parents

Fifth Grade Standards

LANGUAGE ARTS

Direct instruction in word study, fluency, comprehension, vocabulary, spelling, handwriting, and written language is included in a comprehensive language arts program. Students in Grade 5 should know and be able to:

- Apply knowledge of letter/sound relationships and word structure to decode unfamiliar words.
- Use knowledge of word parts such as prefixes, suffixes, and root words to figure out word meanings.
- Understand and use new vocabulary.
- Use a variety of strategies to understand what they are reading.
- Read, comprehend, analyze, and evaluate grade-appropriate, print and online literary and informational texts.
- Determine the lesson learned, theme, or moral of a story.
- Use prior knowledge and personal experience to interpret text.
- Summarize and synthesize major points from both fiction and nonfiction.
- Recognize and explain what is not directly stated in the text, draw conclusions, make judgments, and generalizations.
- Evaluate the author's use of techniques to influence readers' attitudes and feelings.
- Identify and explain how figurative language contributes to meaning.
- Write to inform, persuade, and express personal ideas.
- Implement the writing process (prewriting, drafting, revising, editing, and publishing) when composing text.
- Apply knowledge of punctuation, capitalization, grammar, usage, sentence structure, and paragraphing to writing.
- Demonstrate legible manuscript and cursive handwriting: letter formation, size, slant, and spacing.

MATHEMATICS

The elementary mathematics content includes algebra, geometry, measurement, statistics, probability, and number relationships and computation. Students explore these concepts through problem solving, reasoning, communicating ideas about math, and making connections within math and to other subject areas and to the real world. Students in Grade 5 should know and be able to:

- Multiply and divide whole numbers and interpret remainders.
- Read, write, and represent simple fractions, decimals, and percents using symbols, words, and models.
- Compare and order fractions and decimals.
- Add and subtract fractions, mixed numbers, and decimals, and express answers in simplest form.
- Write the rule for a function table and complete a function table.
- Find the unknown in an equation and evaluate expressions.
- Determine start time, end time, and elapsed time.
- Measure length to one-eighth of an inch with a ruler.
- Determine area and perimeter.
- Use a protractor to measure and draw acute, obtuse, and right angles.
- Analyze the properties of solid, geometric figures, such as prisms and pyramids.
- Organize, display, and interpret line graphs, stem-and-leaf plots, line plots, and double bar graphs.
- Determine the probability of a simple event as a fraction.
- Use mathematical vocabulary, pictures, and symbols to describe and explain mathematical thinking used to solve problems.

SCIENCE

The elementary science curriculum includes content in the areas of Earth/Space Science (*Geology Rocks and Weather the Weather*), Life Science (*Wee Beasties*), Physical Science (*Physics is Phun, Pendulums Swing as Pendulums Do*), and Environmental Science (*Greening The Schoolyard and Eco-Trekkers*), and incorporates the skills and processes of science. Students in Grade 5 should know and be able to:

- Recognize and explain the processes that shape and reshape the Earth's surface.
- Recognize and explain that minerals have physical properties.
- Recognize and describe the internal structure of the Earth.
- Recognize and explain that all organisms are made up of one or more cells.
- Recognize and explain that organisms have different structures and systems that serve various functions in growth, reproduction, and survival.
- Recognize and explain that some traits are inherited while behaviors may be inherited or result from interactions with the environment.
- Recognize and describe that organisms cause physical and chemical changes to matter in order to obtain energy.
- Identify and describe motion using changes in position, speed, and time.
- Recognize and explain that a simple electric circuit provides a pathway for electricity to follow from a source through a device.
- Describe and explain that light will travel in a straight line until it strikes an object and is reflected or refracted.
- Access and process information from readings, investigations, and oral communications.
- Analyze and develop a well-designed investigation.
- Identify and demonstrate safe procedures when conducting an investigation.
- Describe and compare similarities and differences among objects and materials and scientific concepts.
- Apply scientific concepts to make decisions about a relevant, science issue.
- Recognize and explain how changes made to models can apply to real objects, events, and situations.
- Recognize and explain that the use of technology extends the ability to do work and solve problems.
- Recognize that people from ancient times to present have investigated the world around us, answered scientific questions, and invented things.

SOCIAL STUDIES

Social studies instruction is intended to provide the knowledge of content and appropriate skills so students can become active, involved citizens of the community. Students in Grade 5 should know and be able to:

- Describe economic activity in the New England, Middle, and Southern colonial regions from 1700-1765.
- Trace the historic events leading to the signing of the Declaration of Independence.
- Identify significant events of the American Revolution.
- Explain the purpose of the Constitution and how and why our government was designed to be "of the people, by the people, and for the people."
- Describe the role and importance of each of the three branches of government.
- Identify their responsibilities as citizens of the United States.

GIFTED AND TALENTED

The *Grade 5 GT Education Reading/Language Arts Scope and Sequence* creates a year-long, balanced literacy framework aligned with the State Curriculum that integrates the GT Concept-Based Literature module with designated Grade 6 *Houghton Mifflin* selections and challenge books. The overarching concept is **authenticity**. Major works include: *Shipwreck at the Bottom of the World*, *The True Confessions of Charlotte Doyle*, *The Door in the Wall*, *The Witch of Blackbird Pond*, *The Tripods Trilogy*, *Lincoln: A Photobiography*, and *The Hobbit*. In mathematics, identified students receive instruction in the Grade 6 mathematics skills and content, utilizing the GT 5 BCPS' curriculum and the *Scott Foresman-Addison Wesley and Investigations* mathematics resources. In science, students independently apply the experimental research design to investigate a problem related to force and motion and are required to participate in their school science fair along with the completion of the STEM Fair-GT Component. In addition, there are recommended online research modules such as *Circulatory Circles* for appropriately challenging enrichment and extension for GT science students. In social studies, students use primary source materials to authenticate historical fiction and complete the online research module, *Maryland Patriots and Loyalists*. Integrated with the social studies units I through IV are the Concept Development Lessons-*Interrelationship of Systems*.

HEALTH

Health instruction is designed to provide the functional knowledge and skills to enhance health and well-being. Students in Grade 5 should know and be able to:

- Recognize the principles associated with stress.
- Identify safe practices for using prescription and over-the-counter (OTC) drugs.
- Develop and apply skills to resist pressure to use tobacco.
- Identify and examine physical, psychological, and social consequences of alcohol use.
- Identify marijuana as a psychoactive drug and illegal drug.
- Identify what makes a healthy family.
- Describe how family members influence the development of adolescents.
- Explain how physical and social-emotional growth and maturity are interrelated.
- Differentiate between communicable and non-communicable diseases.
- Explain HIV/AIDS as a communicable disease.

LIBRARY MEDIA

The library media program focuses on preparing students for success in the 21st Century through inquiry-based learning. Students will apply critical-thinking skills to investigate essential questions, to gather information to solve real-world problems, and to communicate new knowledge and understanding. Also, students learn comprehension skills and literacy strategies to become engaged, purposeful, and strategic readers who choose reading as a lifelong endeavor. Students in Grade 5 should know and be able to:

- Use the Internet digital content and technology tools to efficiently and effectively locate, explore, gather, evaluate, organize, synthesize, and communicate information.
- Communicate conclusions to various audiences by choosing the most effective media format using a variety of technology tools.
- Read, comprehend, analyze, and evaluate literary texts including plays, poems, fantasy, realistic fiction, historic fiction, science fiction, and tall tales.
- Read, comprehend, interpret, summarize, analyze, and evaluate a variety of informational texts including biographies, diaries, articles, textbooks, primary documents, digital content, and Internet resources.
- Discover the pleasure of reading by independently reading, listening, and viewing a variety of printed and digital texts.
- Apply understanding of how information is organized in both print and digital contexts.
- Generate compelling questions and effective search strategies to find answers to academic and personal questions.
- Evaluate information resources by applying criteria, e.g., authority, scope, timeliness, objectivity, and ease of use.
- Use the Web based, Online Public Access Catalog (OPAC) from school and home to locate library and Internet resources to solve problems, answer questions, and select resources that support learning and personal interests.
- Utilize safe practices when working online.
- Exhibit respect for the intellectual property rights by paraphrasing ideas of others and citing sources of text and digital information used to communicate new knowledge.

MUSIC

The elementary music program is a comprehensive program of instruction aligned to the *Maryland State Curriculum*. In addition to classroom instruction, the fifth-grade music program includes chorus, band, and instrumental instruction. Music content and skills are sequentially developed from prekindergarten through Grade 5. Students in Grade 5 should know and be able to:

- Identify and perform more complex rhythmic and melodic notation.
- Transfer information from notation into visual and aural performance.
- Identify how cultural beliefs are communicated through music.
- Perform songs following a conductor's phrasing, attacks, and releases.

PHYSICAL EDUCATION

Physical education focuses on skill development in individual, partner, and group activities; basic skills and games; fundamental and creative movement; tumbling and gymnastics; rhythms and dance; physical fitness; and wellness. By the end of Grade 5, students should know and be able to:

- Refine basic skills to successfully participate in a variety of physical activities.
- Create and perform gymnastics routine, dance sequence, and/or original game.
- Identify health-related and skill-related components of fitness.
- Participate in *Fitnessgram* fitness testing to assess personal Healthy Fitness Zones.
- Develop positive attitudes about physical activity and fitness.
- Evaluate performances, routines, and game rules.
- Participate in kinesthetic activities that encourage language development and reading readiness.

TECHNOLOGY

The instructional technology program helps students develop the skills they need to use the computer as a tool. Students use computers to find and use information, to solve problems, and to create products to communicate ideas. Students learn that technology is important at home, school, and work. Ethical use of computers is also an important part of the program. Students in Grade 5 should know and be able to:

- Create and use folders to organize files.
- Use software to write, edit, save, format, and print documents.
- Find a photo or graphic online and follow the copyright law when using it in a document, for an assignment in a curriculum area.
- Create a multimedia presentation (text, graphics, and sound).
- Organize information in a database.
- Perform simple calculations and graph data in a spreadsheet.
- Use keywords to search in the Internet browser software for information to solve a problem.
- Evaluate information in Web sites.
- Use telecommunications to share information or participate in collaborative projects.

VISUAL ARTS

The fifth-grade visual arts program focuses on the theme: *A Time for Interpreting and Composing*. Students in Grade 5 should know and be able to:

- Identify qualities and relationships of observed and imagined forms in organizing compositions.
- Identify ways in which art elements and design principles may be selected to achieve specific compositional effects.
- Identify ways in which artists create compositions based upon their interpretation of what is seen or imagined.

