



A Family Guide
To Mastering The TEKS
The Texas Essential Knowledge and Skills
Fifth Grade

Language Arts

Expectations at School

During Fifth Grade, students will:

- Listen closely in a variety of settings to judge methods of persuasion, and recognize fact and opinion
- Speak in a variety of settings, such as while interviewing, reporting, and giving precise directions
- Read words in material by using knowledge of phonics, context clues, prefixes, suffixes, root words, and syllable analysis
- Read fifth grade material with increasing fluency
- Learn new words by studying word meanings, reading different types of literature, and using vocabulary strategies (context clues, prefixes, suffixes, and root words)
- Understand written material by making predictions, analyzing characters, finding meanings, and summarizing
- Use reading strategies, such as establishing a purpose for reading, creating mental images during reading.
- Determine main idea by noting supporting details .
- Paraphrase and summarize text.
- Draw inferences such as conclusions or generalizations and support them with proof from the text.
- Find similarities and differences across different texts
- Check understanding while reading and make needed changes by rereading, searching for clues, using reference aids, and asking questions
- Read a variety of texts, including stories, historical fiction, newspapers, biographies and informational texts
- Use appropriate penmanship
- Write compositions using correct spelling, punctuation, and grammar
- Spell words correctly in written assignments by applying spelling patterns
- Produce well-developed written compositions in a variety of formats
- Use the writing process, including, prewriting, drafting, revising, editing, and publishing
- Use computers as a tool in the writing process to create pieces for publication
- Research topics using various reference sources, and take notes and formulate questions for further investigation
- Interpret and analyze visual images, messages, and meaning in graphics, video segments, computer presentations, graphic art, illustrations, and news photographs

Language Arts

Support at Home

As parents, provide opportunities for your 5th grader to:

- Attend cultural events and talk about school cultural arts activities
- Read and talk about a variety of materials with your child, asking him or her to explain, describe, compare, summarize, and/or predict
- Read silently for a 45-minute time period
- Increase his or her vocabulary each week by reading and listening to text read aloud
- Read practical materials, such as food labels, catalogs, the newspaper, weather page, sports statistics, recipes, and the phone book
- Practice using the Internet, if available, as a reference for planning vacations, getting information for school projects, and communication by E-mail
- Write by hand or use a computer to compose letters and thank you notes

Mathematics

Expectations at School

During Fifth Grade, students will:

- Read, write, compare and order whole numbers through the billions place
- Read, write, compare, and order decimals through the thousandths place
- Generate equivalent fractions
- Compare fractions
- Relate decimals to fractions that name tenths, hundredths, and thousandths
- Add, subtract multiply (no more than 3-digit by 2-digit), and divide (2-digit divisors and 3-digit dividends) whole numbers to solve meaningful problems
- Identify prime factors and common factors of numbers
- Round whole numbers and decimals through tenths to estimate reasonable results in problem situations
- Use lists, tables, charts, and diagrams to find patterns and make generalizations
- Identify prime and composite numbers
- Represent real-life situations using diagrams and number sentences
- Identify critical attributes including parallel, perpendicular, and congruent parts of geometric shapes and solids
- Generate definitions of geometric shapes and solids using critical attributes
- Model transformations
- Locate and name point on a coordinate grid
- Use appropriate units and procedures to estimate and measure volume

- Apply measurement concepts in problem-solving (length, weight, capacity, time, temperature and area)
- Use fractions to describe and predict the results of a probability experiment
- Solve problems by collecting, organizing, displaying and interpreting sets of data presented in tables and graphs (such as picture and line)
- Use a problem solving model to solve problems related to everyday experiences
- Explain and record observations using objects, words, pictures, and numbers and relates informal language to mathematical language and symbols
- Make generalizations from patterns of sets of examples and nonexamples
- Justify why an answer is reasonable and explain solution process

Mathematics

Support at Home

As parents, provide opportunities for your 5th grader to:

- Look to you as a positive role model in learning math
- See you as a problem solver – someone who questions, investigates, and explores a variety of solutions to problems
- Use flashcards, board games, and calculators to practice addition, subtraction, multiplication, and division facts until they become automatic
- Use measurement skills in real-life situations such as shopping, cooking, charting height, sewing, or carpentry
- Calculate how much time has passed given a starting and ending time, how much time until a particular event will begin, etc. (elapsed time)
- Spend time doing problem-solving activities, such as puzzles, board games, etc.
- Make up word problems using newspapers and other familiar sources.
- Explain problem-solving strategies to you
- See your positive attitude towards mathematics

Science

Expectations at School

In Fifth Grade, your child will:

Safety

- Demonstrate safe practices during field and laboratory investigations
- Use and conserve resources and dispose of or recycle materials

Use of Scientific Tools

- Collect and analyze information using tools including: calculators, safety goggles, microscopes, cameras, sound recorders, computers, hand lenses, rulers, thermometers, meter sticks, timing devices, balances (triple beam and double pan), compasses, magnets, collecting nets, and hotplates

Scientific Inquiry Methods and Critical Thinking

- Demonstrate that repeated investigations increase reliability of results
- Plan and implement descriptive and simple experimental investigations-ask questions, formulate hypotheses, select and use equipment and technology
- Collect information- observe, measure, analyze and interpret to construct explanations from direct and indirect evidence.
- Communicate valid conclusions
- Construct graphs, tables, maps, charts to organize, examine and evaluate information
- Draw inferences based on data related to promotional materials for products and services
- Represent natural world using models and identify their limitations
- Evaluate the impact of research on scientific thought, society, and environment
- Connect science concepts with history and scientists

Life Science

- Identify traits that are inherited from parent to offspring in plants and animals
- Give examples of learned characteristics resulting from the environment
- Compare the adaptive characteristics of species that improve survival and reproduction
- Analyze and describe adaptive characteristics that result in an organism's niche
- Predict adaptive characteristics required for survival and reproduction
- Describe and compare life cycles of plants and animals

Science

Expectations at School (Continued)

In Fifth Grade, your child will:

Earth Science

- Identify and observe actions that require time for changes to be measurable- growth, erosion, dissolving, weathering,
- Identify past events that led to the formation of Earth's resources
- Interpret how land forms result from constructive and destructive forces
- Describe processes responsible for the formation of coal, oil, gas, and minerals
- Identify the physical characteristics of the Earth and compare them to the physical characteristic of the moon
- Identify gravity as the force that keeps planets and moon in orbit

Physical Science

- Differentiate among forms of energy- light, heat, electrical, solar
- Identify and demonstrate examples of reflected and refracted light
- Demonstrate that electricity flows in circuits and produces heat, light, sound and magnetic effects
- Verify that vibrating objects produce sound
- Classify matter based on physical properties such as magnetism, physical state, ability to conduct or insulate heat, electricity and sound
- Demonstrate that some mixtures maintain the physical properties of their ingredients
- Recognize that changes may occur in physical properties of the ingredients of solutions

Science

Support at Home

As parents, provide opportunities for your 5th grader to:

- Observe real objects, events, and organisms in nature
- Describe their observations using words and numbers
- Ask questions about their observations
- Safely engage in investigations to answer their questions
- Justify their conclusions citing evidence
- Challenge and debate ideas
- Predict and explain phenomena
- Apply concepts and skills to new situations
- Watch and discuss science-oriented programs on television such as the Discovery Channel
- Read nonfiction books and magazines on science topics
- Visit museums, zoos, parks, libraries, etc.

Social Studies

Expectations at School

During Fifth Grade, students will:

- Recognize causes and effects of the major events in American history from early colonization through the 20th century (colonization and growth of America through independence, the formation of a democratic government, contributions by significant individuals, civil rights, social changes, and major wars)
- Apply geographic tools, including grid systems, legends, symbols, scales, and compass roses, in constructing and interpreting maps
- Describe a variety of regions in the United States using characteristics such as landforms, climate, vegetation, politics, population, and economy
- Continue to create, color, and label maps accurately
- Describe the characteristics and benefits of the free enterprise system in the United States
- Evaluate the effects of supply and demand on business, industry, and agriculture
- Identify the purposes and explain the importance of the Declaration of Independence and the U.S. Constitution
- Identify and explain basic functions of the three branches of the United States federal government
- Explain how individuals can participate in civic affairs and in political parties at the national level
- Explain the significance of selected United States patriotic symbols and landmarks
- Identify similarities and differences among various racial, ethnic, and religious groups, their contributions, and their effects on our society
- Explain the impact of science and technology on life in the United States, past and present
- Create oral, written, and visual (pictures, maps charts, graphs, time line) presentations using social studies information
- Apply critical thinking skills to locate, organize, and use information from a variety of sources including technology
- Demonstrate effective oral and written communication skills using correct grammar, spelling, sentence structure, and punctuation
- Use problem-solving and decision-making skills, working as an individual and with others, in a variety of settings

Social Studies

Support at Home

As parents, provide opportunities for your 5th grader to:

- Watch the news with you and discuss current issues and events.
- Discuss and share family traditions and customs
- Keep a journal of family travels, trips, and activities
- Reinforce map-reading skills when planning family outings and trips.
- Use resources at home (computer, books, other reference materials) to discuss historical and current events
- Practice good citizenship skills
- Discuss the day at school and explain what has been learned.
- Visit the public library
- See you perform civic duties such as voting, serving on a jury, or working on a civic committee
- Plot hurricanes on latitude and longitude map
- Read and discuss the *Declaration of Independence* and the *Bill of Rights* with you