

## ENGLISH LANGUAGE ARTS & READING

In fourth grade language arts, your child will learn:

### **LISTENING/SPEAKING.** Students:

- listen to gain information and supporting evidence;
- monitor their understanding of a spoken message and appropriately seek clarification;
- interpret speaker’s messages (both verbal and nonverbal), purposes and perspectives; and
- monitor their own understanding of the spoken message and seek clarification as needed.

### **READING.** Students:

- read and comprehend a variety of fourth-grade level texts;
- adjust reading rate according to the purpose for reading;
- monitor their own comprehension and reread, use reference aids, search for clues, and ask questions when understanding breaks down;
- use multiple reference aids, including software, to clarify and seek information;
- study word meanings across content areas and through current events;
- respond to readings and ideas through journal writing, discussion, and media;
- paraphrase and summarize text;
- represent text information by generating outlines, timelines, and graphics; and
- offer observations, make connections, react, speculate, interpret, and raise questions after reading.

### **WRITING.** Students:

- capitalize, use punctuation, and spell correctly in “published” pieces of writing;
- evaluate written compositions using assigned and established criteria;
- conduct research and raise new questions for further investigation;
- write to express, discover, record, develop, reflect on ideas, and problem solve; and
- compose journals, letters, reviews, poems, narratives, and instructions.

### **VIEWING/REPRESENTING.** Students:

- understand and interpret visual messages and media;
- analyze and critique media; and
- produce visual images, messages, and meanings that communicate effectively.

**NOTE:** Students of limited English proficiency (LEP) enrolled in Spanish Language Arts and/or in English as a Second Language will be expected to learn these same knowledge and skills for this grade level; however, students in Spanish Language Arts will learn these skills through their native language, and students in English as a Second Language will apply these skills at their proficiency level in English.

## SOCIAL STUDIES

In fourth grade social studies, your child will learn:

### **HISTORY.** Students:

- compare similarities and differences of Native American groups in Texas and the Western Hemisphere before European exploration;
- explain causes and effects of European exploration and colonization of Texas and the Western Hemisphere;
- explain causes and effects of the Texas Revolution, the Republic of Texas, and the annexation of Texas to the United States;
- describe political, economic, and social changes in Texas during the last half of the 19th century; and
- describe important issues, events, and individuals of the 20th century in Texas.

### **GEOGRAPHY.** Students:

- use geographic tools to collect, analyze, and interpret data;
- describe political, economic, and physical regions in Texas and the Western Hemisphere;
- explain the location and patterns of settlement and the geographic factors that influence where people live in Texas; and
- describe how people in Texas adapt to and modify their environment.

### **ECONOMICS.** Students:

- explain basic patterns of work and economic activities of early societies in Texas;
- describe the characteristics and benefits of the free enterprise system in Texas; and
- identify how Texas, the United States, and the world are economically interdependent.

### **GOVERNMENT.** Students:

- compare how people organized governments in different ways during the early development of Texas;
- identify important ideas in historic documents, such as the Texas Declaration of Independence; and
- explain the basic functions of the three branches of state government.

### **CITIZENSHIP.** Students:

- explain important customs, symbols, and celebrations of Texas;
- explain the role of the individual in state and local elections; and
- identify leaders in state and local government and tell how to contact them.

### **CULTURE.** Students:

- identify the contributions of people of various racial, ethnic, and religious groups to Texas.

### **SCIENCE, TECHNOLOGY, AND SOCIETY.** Students:

- describe the impact of science and technology on life in Texas.

### **SOCIAL STUDIES SKILLS.** Students:

- apply critical-thinking skills, communicate effectively, and use problem-solving and decision-making processes.

# MATHEMATICS

In fourth grade mathematics, your child will learn:

**NUMBER, OPERATION, AND QUANTITATIVE REASONING.** Students:

- read, write, compare, and order whole numbers through millions;
- read, write, compare, and order decimals through hundredths;
- model fractions greater than one;
- generate equivalent fractions using models;
- compare and order fractions using concrete and picture models;
- relate fractions and decimals for tenths and hundredths;
- add and subtract whole numbers and decimals to hundredths;
- model factors and products;
- represent multiplication and division;
- recall and apply multiplication facts;
- multiply with two-digit multipliers;
- divide with a one-digit divisor;
- use addition and subtraction to solve problems;
- round to ten, hundred, or thousand; and
- estimate products and quotients.

**PATTERNS, RELATIONSHIPS, AND ALGEBRAIC THINKING.** Students:

- use patterns to remember multiplication facts;
- solve division problems using fact families;
- use patterns to multiply by 10 and 100; and
- describe the relationship between two sets of data.

**GEOMETRY AND SPATIAL REASONING.** Students:

- use formal language for angles;
- identify parallel and perpendicular lines;
- describe shapes and solids with vertices, edges, and faces;
- demonstrate translations, reflections, and rotations;
- verify congruence and symmetry; and
- locate and name whole numbers, fractions, and decimals on number line.

**MEASUREMENT.** Students:

- estimate and measure weight and capacity; and
- measure length, perimeter, time, temperature, and area.

**PROBABILITY AND STATISTICS.** Students:

- interpret bar graphs;
- list possible outcomes of a probability experiment; and
- use a pair of numbers to describe the probability of an event.

**PROBLEM SOLVING.** Students:

- identify the mathematics in everyday situations;
- use a problem-solving model;
- select or develop an appropriate problem-solving strategy;
- explain and record observations;
- relate informal language to mathematical language and symbols; and
- make generalizations from patterns.

# SCIENCE

In fourth grade science, your child will learn:

**FIELD AND LABORATORY INVESTIGATIONS.** Students:

- demonstrate safe, environmentally appropriate, and ethical practices; and
- learn to use and conserve, dispose and recycle resources.

**SCIENTIFIC INQUIRY.** Students:

- plan and implement descriptive and simple investigations, ask well-defined questions, formulate hypotheses, select and use appropriate equipment and technology, collect, analyze and interpret information, observe and measure, and communicate valid conclusions; and
- construct graphs, tables, maps, charts to organize, examine, and evaluate information.

**CRITICAL THINKING, PROBLEM SOLVING, AND DECISION MAKING SKILLS.** Students:

- analyze, review, and critique scientific explanations/hypotheses/ theories, including strengths and weaknesses, and draw inferences on promotional materials for products and services;
- evaluate research on scientific thought, society, and the environment; and
- connect science concepts with history of science and contributions of scientists.

**TOOLS AND MODELS.** Students:

- collect information, measure, and compare using tools, including safety goggles, microscopes, sound recorders, computers, hand lenses, thermometers, meter sticks, balances, and compasses;
- represent the natural world using models and analyze their limitations; and
- demonstrate that repeated investigations may increase the reliability of results.

**SYSTEMS, CYCLES, PATTERNS, AND CHANGE.** Students:

- identify and describe roles of organisms in living systems and parts in non-living objects and predict and draw conclusions when part of a system is removed; and
- identify patterns of change and use reflection to verify symmetry.

**MATTER AND PHYSICAL PROPERTIES.** Students:

- observe and record changes in states of matter caused by heat and conduct tests, compare data, and draw conclusions about physical properties of matter-states, conduction, density, and buoyancy.

**ADAPTATIONS.** Students:

- identify characteristics that allow survival and reproduction of species;
- compare adaptive characteristics of species and identify and compare species that lived in the past to existing species; and
- distinguish inherited and learned characteristics providing examples.

**PAST, PRESENT, AND FUTURE EVENTS.** Students:

- identify and observe effects of events that require time for change to become noticeable.

**PROCESSES OF THE NATURAL WORLD.** Students:

- test properties of soils, effects of oceans on land, and the Sun as our major source of energy.