



## SCIENCE

In fourth grade science, your child will learn:

### **FIELD AND LABORATORY INVESTIGATIONS. Students:**

- Demonstrate safe, environmentally appropriate, and ethical practices
- 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
- 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
- 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
- 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 nonliving objects and predict and draw conclusions when part of a system is removed
- 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
- 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



## **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 19'h century
- 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
- 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
- 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
- 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
- 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