

Texas Science Grade 6 delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts such as the structure and properties of matter; the relationships among force, motion, and energy; the structure of Earth; and the organization of systems, including our solar system and living systems.

The two-semester course is arranged in themed units, each with two to three lessons. In each unit, activities make complex ideas accessible to students as they discover the nature of science through focused content, interactive mini-investigations, multi-modal representations, and personalized feedback. Each lesson includes a variety of activities such as direct instruction, application of skills, performance tasks, and formative and summative assessments. Students engage with the subject matter in an interactive, feedback-rich environment as they progress through standards-aligned content and demonstrate their learning through computer- and teacher-scored assignments.

This course is built to the Next Generation Science Standards for middle school science.

Length: Two Semesters

### **Unit 1: Science and Engineering**

- What Is Science?
- Types of Investigations
- What Is Engineering?
- Wrap-Up: Science and Engineering

### **Unit 2: Tools of Inquiry**

- Using Models
- Tools and Measurement
- Displaying and Interpreting Data
- Wrap-Up: Tools of Inquiry

### **Unit 3: Nature of Matter**

- What Is Matter?
- The Periodic Table
- Wrap-Up: Nature of Matter

### **Unit 4: Describing Matter**

- Properties of Matter
- Physical and Chemical Changes
- Wrap-Up: Describing Matter

### **Unit 5: Energy**

- Describing Energy

- Energy Transfer and Transformation
- Wrap-Up: Energy

### **Unit 6: Thermal Energy and Heat**

- Thermal Energy and Temperature
- Heat and Thermal Energy
- Energy Transfer and Technology
- Wrap-Up: Thermal Energy and Heat

### **Unit 7: Forces**

- Describing Forces
- Effects of Forces
- Gravitational Force
- Wrap-Up: Forces

### **Unit 8: Semester Wrap-up**

#### **Unit 9: Motion and Work**

- Describing Motion
- Work and Simple Machines
- Wrap-Up: Motion and Work

#### **Unit 10: Thermal Energy and Earth**

- The Earth System
- Plate Tectonics
- Wrap-Up: Thermal Energy and Earth

#### **Unit 11: The Geosphere**

- Minerals
- The Rock Cycle
- Soil
- Wrap-Up: The Geosphere

#### **Unit 12: Impacts of Humans**

- Natural Resources
- Impacts of Humans
- Wrap-Up: Impacts of Humans

#### **Unit 13: Earth's Place in Space**

- Our Solar System
- Our Sun and Other Stars
- Space Exploration
- Wrap-Up: Earth's Place in Space

#### **Unit 14: Life on Earth**

- Cell Structure
- Domains and Kingdoms of Life

- Characteristics of Ecosystems
- Wrap-Up: Life on Earth

**Unit 15: Semester Wrap-up**

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