

South Carolina Middle School Grade 6 Science delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts such as Earth's weather and climate, energy transfer and conservation, and the diversity of life.

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: NATURE OF SCIENCE**

- Lesson 1: What Is Science?
- Lesson 2: Types of Investigations
- Lesson 3: Using Models
- Lesson 4: Wrap-Up: Nature of Science

#### **UNIT 2: MEASUREMENT AND DATA**

- Lesson 1: Tools and Measurement
- Lesson 2: Displaying and Interpreting Data
- Lesson 3: Wrap-Up: Measurement and Data

#### **UNIT 3: ENERGY**

- Lesson 1: Describing Energy
- Lesson 2: Energy Transfer and Transformation
- Lesson 3: Wrap-Up: Energy

# **UNIT 4: ENERGY, FORCE, AND WORK**

- Lesson 1: Electromagnetic Forces
- Lesson 2: Work and Simple Machines
- Lesson 3: Wrap-Up: Energy, Force, and Work

## **UNIT 5: THERMAL ENERGY AND HEAT**

- Lesson 1: Thermal Energy and Temperature
- Lesson 2: Heat and Thermal Energy
- Lesson 3: Energy Transfer and Technology
- Lesson 4: Wrap-Up: Thermal Energy and Heat

# **UNIT 6: THERMAL ENERGY AND EARTH SYSTEMS**

- Lesson 1: Freshwater and Ice
- Lesson 2: Oceans
- Lesson 3: The Atmosphere
- Lesson 4: Wrap-Up: Thermal Energy and Earth Systems

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# **UNIT 7: SEMESTER WRAP-UP**

• Lesson 1: Semester Wrap-Up

#### **UNIT 8: WEATHER AND CLIMATE**

- Lesson 1: Weather
- Lesson 2: Severe Weather
- Lesson 3: Climate
- Lesson 4: Wrap-Up: Weather and Climate

### **UNIT 9: LIFE ON EARTH**

- Lesson 1: Characteristics of Life
- Lesson 2: Chemistry of Life
- Lesson 3: Wrap-Up: Life on Earth

## **UNIT 10: DIVERSITY OF LIFE**

- Lesson 1: Domains and Kingdoms of Life
- Lesson 2: Classification of Living Things
- Lesson 3: Wrap-Up: Diversity of Life

### **UNIT 11: CELLS**

- Lesson 1: Cell Nutrition and Transport
- Lesson 2: Cell Growth and Reproduction
- Lesson 3: Wrap-Up: Cells

# **UNIT 12: REPRODUCTION AND DEVELOPMENT**

- Lesson 1: Patterns of Reproduction
- Lesson 2: Life Cycles
- Lesson 3: Wrap-Up: Reproduction and Development

# **UNIT 13: ADAPTATIONS**

- Lesson 1: Organs and Organ Systems
- Lesson 2: Specialized Cells and Tissues
- Lesson 3: Natural Selection
- Lesson 4: Wrap-Up: Adaptations

### **UNIT 14: RESPONSE TO STIMULI**

- Lesson 1: Animal Behaviors
- Lesson 2: Plant Responses
- Lesson 3: Wrap-Up: Response to Stimuli

# **UNIT 15: SEMESTER WRAP-UP**

• Lesson 1: Semester Wrap-Up