

South Carolina Middle School Grade 7 Science delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts such as the classification and conservation of matter, organization in living systems, heredity and variation of traits, and interactions of living systems and the environment.

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: NATURE OF MATTER

- Lesson 1: What Is Matter?
- Lesson 2: Atomic Structure
- Lesson 3: Elements and the Periodic Table
- Lesson 4: Wrap-Up: Nature of Matter

### UNIT 4: DESCRIBING MATTER

- Lesson 1: Physical and Chemical Properties
- Lesson 2: Solids, Liquids, and Gases
- Lesson 3: Mixtures of Matter
- Lesson 4: Wrap-Up: Describing Matter

### UNIT 5: CHANGES IN MATTER

- Lesson 1: How Can Matter Change?
- Lesson 2: Changes of State
- Lesson 3: Chemical Equations
- Lesson 4: Wrap-Up: Changes in Matter

### UNIT 6: EARTH'S MATTER

- Lesson 1: Minerals
- Lesson 2: Soil

- Lesson 3: Wrap-Up: Earth's Matter

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

- Lesson 1: Semester Wrap-Up

## **UNIT 8: MOVEMENT OF MATTER THROUGH ECOSYSTEMS**

- Lesson 1: Characteristics of Ecosystems
- Lesson 2: Interactions in Ecosystems
- Lesson 3: Wrap-Up: Movement of Matter Through Ecosystems

## **UNIT 9: CHANGING ECOSYSTEMS**

- Lesson 1: Succession and Ecosystem Stability
- Lesson 2: Impacts of Humans
- Lesson 3: Wrap-Up: Changing Ecosystems

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

- Lesson 1: Cell Structure
- Lesson 2: Domains and Kingdoms of Life
- Lesson 3: Wrap-Up: Cells and Diversity of Life

## **UNIT 11: CELL PROCESSES**

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

## **UNIT 12: MULTICELLULAR BODIES**

- Lesson 1: Specialized Cells and Tissues
- Lesson 2: Organs and Organ Systems
- Lesson 3: Wrap-Up: Multicellular Bodies

## **UNIT 13: THE HUMAN BODY**

- Lesson 1: Human Organ Systems
- Lesson 2: Disease and Human Health
- Lesson 3: Wrap-Up: The Human Body

## **UNIT 14: GENETICS**

- Lesson 1: Inheritance
- Lesson 2: Genes and DNA
- Lesson 3: Biotechnology
- Lesson 4: Wrap-Up: Genetics

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

- Lesson 1: Semester Wrap-Up