

Physical Science Grade 8 delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts including the interactions of matter; motion and stability; waves and their technological applications; and energy.

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 state standards.

Length: Two semesters

UNIT 1: SCIENCE AND ENGINEERING

- Lesson 1: What Is Science?
- Lesson 2: Types of Investigations
- Lesson 3: What Is Engineering?
- Lesson 4: Wrap-Up: Science and Engineering

UNIT 2: TOOLS OF INQUIRY

- Lesson 1: Using Models
- Lesson 2: Tools and Measurement
- Lesson 3: Displaying and Interpreting Data
- Lesson 4: Wrap-Up: Tools of Inquiry

UNIT 3: NATURE OF MATTER

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

UNIT 4: DESCRIBING MATTER

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

UNIT 5: CHANGES IN MATTER

- Lesson 1: Physical and Chemical Changes
- Lesson 2: Changes of State
- Lesson 3: Chemical Equations
- Lesson 4: Wrap-Up: Changes in Matter

UNIT 6: SEMESTER WRAP-UP

- Lesson 1: Semester Wrap-Up

