

Florida Middle School M/J Comprehensive Science 2 delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts such as how Earth's structures and organisms change over time, the interdependence of living systems and the environment, and how energy can be transferred and transformed.

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: 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: MODELS

- Lesson 1: Using Models
- Lesson 2: Models of Earth
- Lesson 3: Wrap-Up: Models

UNIT 4: ENERGY AND WORK

- Lesson 1: Describing Energy
- Lesson 2: Energy Transfer and Transformation
- Lesson 3: Work and Simple Machines
- Lesson 4: Wrap-Up: Energy and Work

UNIT 5: ENERGY AND WAVES

- Lesson 1: Mechanical Waves and Sound
- Lesson 2: Electromagnetic Waves
- Lesson 3: Waves and Matter
- Lesson 4: Wrap-Up: Energy and Waves

UNIT 6: THERMAL ENERGY

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

UNIT 7: THERMAL ENERGY AND CHANGE

- Lesson 1: Changes of State
- Lesson 2: Energy Transfer and Technology
- Lesson 3: Wrap-Up: Thermal Energy and Change

UNIT 8: THERMAL ENERGY AND EARTH

- Lesson 1: The Earth System
- Lesson 2: The Rock Cycle
- Lesson 3: Plate Tectonics
- Lesson 4: Wrap-Up: Thermal Energy and Earth

UNIT 9: SEMESTER WRAP-UP

- Lesson 1: Semester Wrap-Up

UNIT 10: OUR CHANGING PLANET

- Lesson 1: Deforming Earth's Crust
- Lesson 2: Earthquakes and Volcanoes
- Lesson 3: Wrap-Up: Our Changing Planet

UNIT 11: HUMANS AND EARTH'S RESOURCES

- Lesson 1: Natural Resources
- Lesson 2: Soil
- Lesson 3: Impacts of Humans
- Lesson 4: Wrap-Up: Humans and Earth's Resources

UNIT 12: LIFE ON EARTH

- Lesson 1: Characteristics of Life
- Lesson 2: Cell Growth and Reproduction
- Lesson 3: Classification of Living Things
- Lesson 4: Wrap-Up: Life on Earth

UNIT 13: GENETICS

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

UNIT 14: REPRODUCTION AND DEVELOPMENT

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

UNIT 15: ECOLOGY

- Lesson 1: Characteristics of Ecosystems
- Lesson 2: Interactions in Ecosystems
- Lesson 3: Succession and Ecosystem Stability
- Lesson 4: Wrap-Up: Ecology

UNIT 16: CHANGE OVER TIME

- Lesson 1: Geologic Time
- Lesson 2: Theory of Evolution
- Lesson 3: Natural Selection

- Lesson 4: Wrap-Up: Change Over Time

UNIT 17: SEMESTER WRAP-UP

- Lesson 1: Semester Wrap-Up