MS Earth and Space Science is a two-semester course aligned to the Indiana Academic Standards for Science (Grades 6 – 8). This course delivers instruction, practice, and review to help students develop scientific literacy, deepen conceptual understanding, and apply scientific practices. Students explore concepts including Earth's systems, engineering design, the nature of the universe, and the interaction between humans 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, multimodal 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.

The materials needed for this course include specified lab materials.

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: Planet Earth

- Models of Earth
- Earth's Structure and Cycles
- Wrap-Up: Planet Earth

Unit 4: The Geosphere

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

Unit 5: Our Changing Planet

- Deforming Earth's Crust

Copyright© Edmentum Inc. All Rights Reserved.

- Weathering and Erosion
- Geologic Time
- Wrap-Up: Our Changing Planet

Unit 6: Earth's Plates

- Plate Tectonics
- Earthquakes and Volcanoes
- Wrap-Up: Earth's Plates

Unit 7: Semester Wrap-Up

- Semester Wrap-Up

Unit 8: The Atmosphere, Hydrosphere, and Cryosphere

- Freshwater and Ice
- Oceans
- The Atmosphere
- Wrap-Up: The Atmosphere, Hydrosphere, and Cryosphere

Unit 9: Weather and Climate

- Weather
- Severe Weather
- Climate
- Wrap-Up: Weather and Climate

Unit 10: Humans and Earth's Resources

- Natural Resources
- Impacts of Humans
- Wrap-Up: Humans and Earth's Resources

Unit 11: The Solar System

- Sun-Earth-Moon System
- Our Solar System
- Wrap-Up: The Solar System

Unit 12: Exploring the Universe

- The Universe
- Our Sun and Other Stars
- Space Exploration
- Wrap-Up: Exploring the Universe

Unit 13: Semester Wrap-Up

- Semester Wrap-Up

Copyright© Edmentum Inc. All Rights Reserved.