

7th Grade Science Standards

Semester One

Unit One Introduction to Earth Science

Chapter 1 The World of Earth Science

- A. Describe careers associated with earth science.
- B. Explain the scientific method.
- C. Explain variables and controls.
- D. Demonstrate how models are used in science.
- E. Use graphs, tables and charts.
- F. Use relevant safety procedures.

Unit Two Earth's Resources

Chapter 3 Minerals of the Earth's Crust (Sections 1&2)

- A. Explain the four characteristics of a mineral.
- B. Classify minerals using common mineral-identification techniques.
- C. Explain special properties of minerals.

Chapter 4 Rocks: Mineral Mixtures (Section 1)

- A. Describe how each type of rock changes into another as it moves through the rock cycle.
- B. List two characteristics of rock that are used to help classify it.

Unit 3 The Restless Earth

Chapter 7 Plate Tectonics

- A. Describe the inside of the Earth.
- B. Explain how scientists know about the Earth's interior structure.
- C. Describe Wegener's theory of continental drift.
- D. Explain how sea-floor spreading provides a way for continents to move.
- E. Describe 3 forces thought to move tectonic plates.
- F. Describe major types of folds.
- G. Explain how faults differ.
- H. Describe how mountains form.

Chapter 8 Earthquakes (Sections 1&4)

- A. Determine what causes earthquakes.

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B. Explain how earthquakes are detected.

C. Describe what seismic studies reveal about the interior of earth and other cosmic bodies.

Chapter 9 Volcanoes

A. Classify types of volcanic eruptions.

B. Describe the effects volcanoes have on earth.

C. Explain the relationship between volcanoes and plate tectonics.

Unit Six Weather and Climate

Chapter 16 Understanding Weather

A. Describe the water cycle.

B. Describe air masses.

C. Relate weather changes to fronts

D. Describe the formation of thunderstorms, tornadoes, and hurricanes.

E. Describe weather instruments.

F. Interpret a weather map.