

Welcome!

Grade 4, Unit 5 Our Planet: Geology

In this unit, students will learn about Earth's layers and geological features.

What's the story?

Students will learn that the earth is composed of **layers** that, through heat and pressure, cause movements that result in **geological features** above and below the earth's surface. They will also explore the relationships between those different **geological processes** and how they affect the **landscape** and related **environments** of the earth.

What will my student learn?

Students will learn about the theory of **plate tectonics** and how it explains the presence of **volcanoes**, **mountains**, **underwater trenches**, **ridges**, and other geological features. They will also study geological processes like **rock formation**, **weathering**, and **erosion** to understand how the earth changes over time and why it looks the way it does.

Students will review the stages of the writing process and engage in several **short writing projects**. They will have many opportunities to write, some of which include **drafting an informational pamphlet** about tsunamis, writing a **wiki entry** about a specific volcano, and creating an **informative text** about a type of rock or item in the rock cycle.

Conversation starters

Ask your student questions about the unit to promote discussion and continued learning:

- 1. What similarities did geologists observe as they examined fossils on different continents?
 - **Follow up:** What similarities did geologists observe as they examined rock formations on different continents?
- 2. What are seismic waves?
 - **Follow up:** What did scientists learn from studying them? Where can seismic waves travel?
- 3. What are tectonic plates?
 - **Follow up:** What are some different ways tectonic plates can move?
- 4. What is the difference between an earthquake and an aftershock? **Follow up:** What does a seismograph do?
- 5. What happens below the earth's surface to form a volcano?
 Follow up: What happens above the earth's surface to form a volcano?