

# 4th Grade Reading: How Volcanoes Work (Nonfiction) - Answer Key

4th Grade - nonfiction comprehension and vocabulary in context | 20 minutes

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## Read the passage:

A volcano is an opening in the Earth's surface where melted rock can escape. Deep underground, it is so hot that rock melts into a thick, glowing liquid called magma. Magma is lighter than the solid rock around it, so it slowly rises toward the surface. Pressure builds up, like soda shaken in a bottle. When the pressure becomes too great, the volcano erupts. Once the magma reaches the surface and flows out, it is called lava. Lava can be hotter than 1,000 degrees. As lava cools, it hardens into new rock. Over many eruptions, this new rock can build up into a mountain. Some volcanoes have created whole islands this way. Scientists who study volcanoes watch them closely to warn people before an eruption.

## Read the passage. Then answer each question in a complete sentence using the text.

1. What is magma?

**Answer: Melted rock deep underground.**

2. What is magma called once it reaches the surface?

**Answer: Lava.**

3. Why does magma rise toward the surface?

**Answer: Because it is lighter than the solid rock around it.**

4. Use context clues: what does 'erupt' mean?

**Answer: When a volcano bursts and releases magma/lava because of built-up pressure.**

5. What is the main idea of the passage?

**Answer: Volcanoes form when melted rock rises and erupts, and over time they can build mountains and islands. (Sample answer.)**

## Challenge

6. Why does the author compare a volcano to shaken soda? Use the text.

**Answer: To show how pressure builds up until it must escape - like soda bursting out when the bottle opens.**