

Understanding Volcanoes and Earthquakes

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Quizzes

Contents

Chapter 1	
Earth Is Always Changing	3
Chapter 2	
What Causes Volcanoes?	5
Chapter 3	
A Monster Volcano	7
Chapter 4	
What Causes Earthquakes?	9
Chapter 5	
Monster Earthquakes	11
Chapter 6	
Killer Waves and Other Long Distance Damage	13
Chapter 7	
Fighting Volcanoes and Earthquakes	15

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Start-to-Finish® Core Content



Chapter 1: Earth Is Always Changing

Comprehension Questions

1. What did Earth probably look like millions of years ago?
 - a. Continents were drifting together.
 - b. There was only one big continent — a supercontinent.
 - c. Earth was mostly land.
 - d. Earth looked just like it does today.

2. How is Earth like an egg?
 - a. Earth's crust is a bit like the shell of an egg, the mantle is like the egg white, and the core is like the yolk.
 - b. Earth is the same shape as an egg.
 - c. The mantle and core of Earth are made of a thick liquid like egg yolk.
 - d. The crust of Earth is solid and has no cracks in it.

3. What is plate tectonics?
 - a. Digging 20 miles into the ground.
 - b. The study of ancient fossils from the Pangea.
 - c. The movement of large pieces of Earth's crust.
 - d. Plants spreading across two continents.

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Chapter 1: Earth Is Always Changing

Vocabulary Questions

1. _____ is the study of how Earth changes over time.
 - a. Wegener
 - b. Celsius
 - c. Vulcan
 - d. Geology

2. A _____ is a part of an animal or plant that has hardened into rock or left its shape in a rock.
 - a. fossil
 - b. mantle
 - c. crust
 - d. plate

3. Earth's _____ is made up of partly molten (melted) rock and metal.
 - a. mantle
 - b. crust
 - c. core
 - d. tectonic plate

4. One system of measuring temperature is called _____ degrees.
 - a. Celsius
 - b. core
 - c. Pangea
 - d. liquid

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Chapter 2: What Causes Volcanoes?

Comprehension Questions

1. What do all volcanoes have in common?
 - a. All volcanoes are formed over a plume.
 - b. All volcanoes require a plate collision.
 - c. All volcanoes are at least two million years old.
 - d. All volcanoes are formed by hot molten rock called magma.

2. What creates most of the volcanoes on earth?
 - a. Strong winds from a tornado.
 - b. Tectonic plates crashing together or pulling apart.
 - c. The cooling of lava.
 - d. Water boiling at 450 degrees Celsius.

3. Where do hot spot volcanoes form?
 - a. They form over a plume which is a column or channel of magma underneath one of Earth's plates.
 - b. They form along the Ring of Fire in the Indian Ocean.
 - c. They form inside the chambers (pockets) of a volcano.
 - d. They form in Iceland along a crack under the Atlantic Ocean.

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Chapter 2: What Causes Volcanoes?

Vocabulary Questions

1. Molten rock that forms in Earth's mantle or middle layer is called _____.
 - a. core gas
 - b. tectonic plates
 - c. magma
 - d. chamber rock
2. A _____ is a channel of magma that rises up from the mantle underneath one of Earth's plates.
 - a. boundary
 - b. plume
 - c. drift
 - d. fossil
3. The line of volcanoes around the edges of the Pacific Ocean is called _____.
 - a. the Ring of Fire
 - b. the Pangea
 - c. Iceland
 - d. the Vulcan Ring
4. When molten rock pours out onto Earth's surface, volcanologists call it _____.
 - a. soda gas
 - b. metal
 - c. lava
 - d. crust

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Chapter 3: A Monster Volcano

Comprehension Questions

1. What are some of the clues that Mount Pelée gave when it was about to erupt?
 - a. All the ants, snakes and centipedes disappeared.
 - b. Fish in the ocean suddenly died and black ash filled the sky.
 - c. Loud booms like thunder came from the mountain.
 - d. Toxic gas killed birds, and the mountain began to grow in size.

2. How did people nearby react to the clues?
 - a. Most people did not believe that the mountain was about to erupt.
 - b. Most people built thick stone walls around their homes.
 - c. People left the island and went to Martinique.
 - d. People blamed Charles Thompson for the problems.

3. Why do scientists say that pyroclastic flows are killers?
 - a. Because a pyroclastic flow can drift to other continents.
 - b. Because a pyroclastic flow can form hot spots that become volcanoes too.
 - c. Because a pyroclastic flow is extremely hot and can burn anything in its path.
 - d. Because a pyroclastic flow contains enough water to drown people.

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Chapter 3: A Monster Volcano

Vocabulary Questions

1. _____ gas will hurt or kill people and animals when they breathe it.
 - a. soda
 - b. planet
 - c. toxic
 - d. molten

2. A _____ is a cloud of hot gas that blasts out of a volcano and moves very fast.
 - a. pyroclastic flow
 - b. volcanologist
 - c. supercontinent
 - d. Celsius

3. Mount Pelée started giving off a gas that smelled like rotten eggs. The smell told people that there was _____ in the gas.
 - a. magma
 - b. sulfur
 - c. black ash
 - d. egg yolk

4. People in the city of St. Pierre didn't pay much attention to the _____ that were coming from Mount Pelée.
 - a. animals
 - b. geologists
 - c. clues
 - d. fossils

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Chapter 4: What Causes Earthquakes?

Comprehension Questions

1. What kind of movement causes earthquakes?
 - a. The movement of a pyroclastic flow.
 - b. The movement of Earth's tectonic plates rubbing against each other or sliding under each other.
 - c. The movement of lava deep in Earth's core.
 - d. The movement of active volcanoes.

2. What is an earthquake zone?
 - a. An area where scientists expect earthquakes to happen.
 - b. An area where earthquakes never happen.
 - c. An area that contains active volcanoes.
 - d. An area where large earthquakes happen every year.

3. Why do tectonic plates sometimes move suddenly or jump?
 - a. Because magma explodes in a chamber in Earth's crust.
 - b. Because a volcano has just erupted.
 - c. Because too many cars and trucks are moving through an earthquake zone.
 - d. Because the edges of the plates are rocky, rough, and bumpy.

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Chapter 4: What Causes Earthquakes?

Vocabulary Questions

1. The tectonic plates are always moving, causing thousands of _____ every day around the world.
 - a. volcanoes
 - b. deaths
 - c. earthquakes
 - d. dotted lines

2. A crack or line in Earth's crust is called a _____.
 - a. plate
 - b. fault
 - c. zone
 - d. boundary

3. Farmers plow the soil and cut long straight rows called _____.
 - a. furrows
 - b. edges
 - c. fields
 - d. centipedes

4. As time goes by, _____ builds and builds in the place where the tectonic plates are stuck.
 - a. a furrow
 - b. pressure
 - c. the plate
 - d. distance

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Chapter 5: Monster Earthquakes

Comprehension Questions

1. How do scientists tell how strong an earthquake was?
 - a. By using a seismograph and the Richter Scale.
 - b. By using a Chinese invention that is nearly 2000 years old.
 - c. By looking at how much damage the earthquake caused.
 - d. By measuring how far the tectonic plates moved.

2. What was the strongest earthquake that scientists have measured?
 - a. An earthquake that happened just before Mount Pelée erupted.
 - b. An earthquake in China in the year 132.
 - c. An earthquake in California.
 - d. An earthquake in Chile in 1960.

3. What was the second strongest earthquake?
 - a. An earthquake in the Atlantic Ocean near a volcanic hot spot.
 - b. An earthquake near Japan that killed 30,000 people.
 - c. An earthquake in Alaska in 1964.
 - d. The Great Earthquake of 1906 that struck in San Francisco.

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Chapter 5: Monster Earthquakes

Vocabulary Questions

1. _____ are smaller earthquakes that come after a bigger one on the same fault.
 - a. Uplifts
 - b. Foreshocks
 - c. Faults
 - d. Aftershocks

2. Today, earthquakes are measured and recorded on a machine called a _____.
 - a. seismograph
 - b. Richter
 - c. dragon head
 - d. tape recorder

3. The strength of an earthquake is called its _____.
 - a. zone
 - b. magnitude
 - c. scale
 - d. boundary

4. The _____ of an earthquake is the ground above the place in the crust where an earthquake starts.
 - a. island
 - b. epicenter
 - c. hot spot
 - d. plume

Understanding Volcanoes and Earthquakes

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Chapter 6: Killer Waves and Other Long Distance Damage

Comprehension Questions

1. How can an earthquake kill people thousands of miles away?
 - a. By creating killer waves that travel thousands of miles across the ocean.
 - b. By putting deadly sulphur gas into the air.
 - c. By creating volcanoes thousands of miles away.
 - d. By starting a super-hot pyroclastic flow that travels at 200 miles an hour.

2. What events can cause tsunamis?
 - a. Forest fires, cracks in Earth's crust and pyroclastic flows.
 - b. Flooding rivers.
 - c. Earthquakes, volcanic eruptions in or near the ocean, or giant landslides.
 - d. Thunderstorms.

3. How did the eruption of Tambora kill people on the other side of the world?
 - a. Dust and gas from the eruption caused temperatures to go down all around the world, and this destroyed crops and caused famine.
 - b. The atmosphere got so hot that people on the other side of the world were burned to death.
 - c. The volcano caused dangerous earthquakes all around the world.
 - d. The ash from the volcano made crops around the world turn a reddish color.

Understanding Volcanoes and Earthquakes

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Chapter 6: Killer Waves and Other Long Distance Damage

Vocabulary Questions

1. The blanket of air around Earth is called the _____.
 - a. uplift
 - b. plume
 - c. atmosphere
 - d. mantle

2. In a _____, people starve because they don't have enough food to eat.
 - a. fault
 - b. famine
 - c. pyroclastic flow
 - d. death toll

3. A giant wave that is caused by an earthquake or volcano is called _____.
 - a. an aftershock
 - b. an earthquake zone
 - c. a tsunami
 - d. a plate

4. People can die in earthquakes when buildings and roads _____.
 - a. collapse
 - b. erupt
 - c. collide
 - d. drift

Understanding Volcanoes and Earthquakes

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Chapter 7: Fighting Volcanoes and Earthquakes

Comprehension Questions

1. How are volcanologists trying to save people from volcanoes?
 - a. Volcanologists use tools to monitor the land, and then they try to predict when a volcano is likely to erupt.
 - b. Volcanologists learn first aid, and then join rescue teams to save people.
 - c. Volcanologists teach people to use the Richter Scale.
 - d. Volcanologists give a seismograph to every village and city that is near a volcano.

2. How are scientists trying to save people from earthquakes and tsunamis?
 - a. By making sure that everybody has left the city before an earthquake or tsunami arrives.
 - b. By telling everyone they should never live in countries where earthquakes and tsunamis are possible.
 - c. By designing buildings that won't collapse in earthquakes and by setting up systems to warn people about tsunamis.
 - d. By sending records of the death toll all around the world.

3. How did cold water save a town in Iceland?
 - a. Scientists sprayed the hot lava with cold sea water to stop the lava flow from destroying the town.
 - b. A cold rain put out the fires that were started by a volcano.
 - c. A rescue team brought cold water from Alaska to Iceland so that the people there had clean water to drink.
 - d. Scientists used airplanes to drop chunks of sea ice into the mouth of a volcano.

Understanding Volcanoes and Earthquakes

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Chapter 7: Fighting Volcanoes and Earthquakes

Vocabulary Questions

1. An active volcano is a dangerous place to be. People who live nearby must _____.
 - a. move inside
 - b. build
 - c. spray
 - d. evacuate
2. Scientists use seismographs to _____ the land around a volcano.
 - a. pressure
 - b. monitor
 - c. swell
 - d. dig
3. Scientists use many tools to help them make _____ about volcanoes, earthquakes and tsunamis.
 - a. clues
 - b. furrows
 - c. predictions
 - d. pictures
4. _____ are rules or laws that builders must follow to make buildings safer during earthquakes.
 - a. Building codes
 - b. Pangeas
 - c. Epicenters
 - d. Plate tectonics