

Key Concept Builder



Chapter 9.2 Review **LESSON 2**

Volcanoes

Key Concept What factors contribute to the eruption style of a volcano?

Directions: On each line, write the term from the word bank that correctly completes each sentence. Some terms might be used more than once or not at all.

- | | | | | |
|-----------|------------------|-----------|-------------------|------------------|
| andesite | ash | basalt | continental crust | dissolved |
| lava flow | mid-ocean ridges | mudflow | pulverized | pyroclastic flow |
| rhyolite | silica | viscosity | water vapor | |

- One factor that affects the explosivity of magma is the amount of dissolved gases it contains, in particular the amount of _____.
- Volcanic ash includes tiny particles of _____ volcanic rock and glass.
- The main chemical in magma is _____.
- The _____, or resistance to flow, of magma is related to the amount of silica in the magma.
- Magma that has low silica content forms _____.
- Basalt is commonly found along hot spots and _____.
- Magma with high silica content forms _____ and _____.
- Magma that is rich in silica forms when the mantle mixes with _____.
- Gas bubbles are kept from escaping when magma has high _____.
- A(n) _____ is a slow-moving eruption style.
- Large amounts of _____ can fall during an explosive eruption.
- When melted snow and ice mixes with mud and ash, a(n) _____ can result.
- A fast-moving avalanches of hot gas, ash, and rock is called a(n) _____.

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Key Concept Builder 

LESSON 2

Volcanoes

Key Concept How are volcanoes classified?

Directions: Answer each question in the space provided.

Type of Volcano	What is its eruption style?	What is its magma chemistry?	What is its physical appearance?
Shield volcano			• •
Composite volcano			• •
Cinder cone volcano			• •
Supervolcano			• •
<p>What warning signs make volcanoes predictable?</p> <p>• • • •</p>			
<p>How do volcanoes affect climate?</p> <p>• • •</p>			

Copyright © Glencoe/McGraw-Hill, a division of The McGraw-Hill Companies, Inc.

Content Vocabulary

LESSON 2

Volcanoes

Directions: Each of the sentences below is false. Make the sentence true by replacing the underlined word(s) with a term from the list below. Use each term only once. NOTE: You may need to change a term to its plural form.

- | | | | | |
|-------------|-------------------|-----------|--------------|---------|
| cinder cone | composite volcano | dissolved | hot spot | lava |
| magma | shield volcano | viscosity | volcanic ash | volcano |

- _____ 1. Molten rock erupts from a basalt.
- _____ 2. Magma is molten rock that flows along Earth's surface.
- _____ 3. A shield volcano is not associated with any plate boundary.
- _____ 4. A cinder cone is large and steep-sided, occurs along convergent plate boundaries, and results from explosive eruptions.
- _____ 5. Calderas have gentle slopes of basaltic lava; they are commonly located along divergent plate boundaries and ocean hot spots.
- _____ 6. A composite volcano is small and steep-sided, and it erupts basaltic lava.
- _____ 7. Lava is present beneath Earth's surface.
- _____ 8. When magma erupts explosively, it can send particles of rock and glass, or hot spots, into the air.
- _____ 9. Magma's resistance to flow is called its silica.
- _____ 10. Magma contains solidified gases, including carbon dioxide and sulfur dioxide.

Lesson Quiz A

Volcanoes

Multiple Choice

Directions: *On the line before each statement, write the letter of the correct answer.*

- _____ 1. A fast-moving cloud of hot gas, ash, and rock from an erupting volcano is a(n)
 - A. ash fall.
 - B. mudflow.
 - C. pyroclastic flow.

- _____ 2. Volcanoes form along convergent boundaries as a result of
 - A. seafloor spreading.
 - B. hot spots in the mantle.
 - C. subduction and rising magma.

- _____ 3. Eruption style depends on the magma's viscosity and the
 - A. volume of ash in the magma.
 - B. size of the volcano that erupts.
 - C. amount of dissolved gases in the magma.

- _____ 4. A large volcano with gentle slopes is a
 - A. shield volcano.
 - B. composite volcano.
 - C. cinder cone volcano.

True or False

Directions: *On the line before each statement, write T if the statement is true or F if the statement is false.*

- _____ 5. The Ring of Fire is a group of Hawaiian shield volcanoes.

- _____ 6. Composite volcanoes often form at convergent plate boundaries.

- _____ 7. Viscosity is a liquid's resistance to flow.

- _____ 8. A caldera is a large volcano that forms at a divergent plate boundary.

- _____ 9. A cinder cone is a small volcano with steep sides.

- _____ 10. Volcanoes that are not associated with plate boundaries are called hot spots.