

Warm-up questions: Volcanoes

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Questions: 20

Finish**Save All****Help****1. VQ1** (Points: 10)

Immediately after an eruption at Kilauea in Hawaii, the surface of the volcano _____

- 1. subsides, making the slopes of the volcano less steep.
- 2. inflates, making the slopes of the volcano slightly steeper.
- 3. shows higher tilt in the north-south direction.
- 4. cracks open in many places surrounding the summit.
- 5. shows higher tilt in the east-west direction.

Save Answer

2. VQ2 (Points: 10)

Which of the following volcanic hazards is typically the deadliest for people?

- 1. Pyroclastic flows from Hawaiian eruptions.
- 2. Ash falls from Hawaiian eruptions.
- 3. Ash falls from maars.
- 4. Pyroclastic flows from stratovolcanoes.
- 5. Ash falls from stratovolcanoes.

Save Answer

3. VQ3 (Points: 10)

Which of the following eruptions had the highest Volcanic Explosivity Index?

- 1. Mt. Unzen, 1991
- 2. Yellowstone caldera, 600,000 years ago
- 3. Kilauea, 2007
- 4. Mt. Toba, 70,000 years ago
- 5. Mt. St. Helens, 1980

Save Answer

4. VQ4 (Points: 10)

Which volcano poses the greatest risk to life and property in Vancouver and southern British Columbia?

- 1. Mt. Cayley
- 2. Mt. Garibaldi
- 3. Mt. Baker
- 4. Mt. Rainier
- 5. Mt. Meager

Save Answer

5. VQ5 (Points: 10)

Which magma composition will produce the most explosive volcanoes?

- 1. gabbro
- 2. rhyolite
- 3. andesite

- 4. dacite
- 5. basalt

Save Answer

6. VQ6 (Points: 10)

Which of the following is most significant danger to the Metro Vancouver area from a nearby volcanic eruption?

- 1. Lateral blast
- 2. Ash fall
- 3. Pyroclastic flow
- 4. Lahar
- 5. Poisonous gases

Save Answer

7. VQ7 (Points: 10)

Why did you choose your answer for Question 5?

- 1. That magma composition is the most common in volcanoes
- 2. That magma composition flows very fast
- 3. That magma composition is typical of Hawaiian-type eruptions
- 4. That magma composition has the highest viscosity
- 5. That magma composition is rich in crystals

Save Answer

8. VQ8 (Points: 10)

Large eruptions from stratovolcanoes typically affect climate by:

- 1. ash particles blocking sunlight and causing global cooling
- 2. reducing alpine ice cover, contributing to global warming.
- 3. melting large quantities of ice causing sea level to rise.
- 4. heating ocean water with lava flows.
- 5. heating the atmosphere, causing global warming.

Save Answer

9. VQ9 (Points: 10)

How did the residents of Vestmannaeyjar, Iceland, save their harbor from a lava flow?

- 1. They dug channels that diverted the lava flow away from the harbor.
- 2. They extracted more geothermal energy that was being produced by the volcano, decreasing the volume of lava erupted
- 3. They chilled the lava flow with water, making the flow solidify before it blocked the harbor
- 4. They constructed high cement walls around the harbor and the lava solidified against the walls
- 5. As the lava cooled, they blasted the new rock away and dumped it offshore

Save Answer

10. VQ10 (Points: 10)

Which of the following is the most common volcanic rock on Earth?

- 1. Dacite
- 2. Basalt
- 3. Granite
- 4. rhyolite
- 5. andesite

Save Answer

11. VQ11 (Points: 10)

Airline traffic between North America and Asia is very susceptible to _____ erupted from volcanoes in British Columbia and Alaska?

- 1. pyroclastic flows
- 2. Lava flows
- 3. Lahars
- 4. Volcanic bombs
- 5. Volcanic ash

Save Answer

12. VQ12 (Points: 10)

Which of the following volcanic hazards can occur without an accompanying eruption?

- 1. lava flow
- 2. volcanic ash cloud
- 3. pyroclastic flow
- 4. sector collapse / volcanic landslide
- 5. volcanic bombs

Save Answer

13. VQ13 (Points: 10)

If you are hiking in Garibaldi Provincial Park and your map identifies a feature near your trail as "The Cinder Cone", what material would you be most likely to encounter as you walk near this feature?

- 1. Dacit
- 2. Granite
- 3. Rhyolite
- 4. Andesite
- 5. Basalt

Save Answer

14. VQ14 (Points: 10)

Why are stratovolcanoes the most important type of volcano around the Pacific Rim?

- 1. they are typical of hot-spots
- 2. they are typical of continent-ocean subduction zones
- 3. they are found nowhere else
- 4. they are typical of continental rifting
- 5. they are typical of mid-ocean ridges

Save Answer

15. VQ15 (Points: 10)

The two primary volcanic gases are:

- 1. carbon monoxide and carbon dioxide
- 2. carbon dioxide and water vapour
- 3. chlorine gas and carbon monoxide
- 4. hydrogen sulfide and carbon monoxide
- 5. chlorine gas and hydrogen sulfide

Save Answer

16. VQ16 (Points: 10)

The Hawaiian volcanic chain extends from west to east, growing progressively older to the west. The youngest volcano (at the east end) is still active. This age progression implies that movement of the Pacific Plate in this region has been to the

- 1. northwest
- 2. northeast
- 3. east
- 4. southwest
- 5. west

17. VQ17 (Points: 10)

How can studying the geologic history of a volcano help most in eruption forecasting?

- 1. Mapping pyroclastic flows from previous eruptions will show exactly where the pyroclastic flows will go in the next eruption
- 2. Most volcanoes erupt with a regular periodicity, so knowing the time period between eruptive cycles allows accurate predictions of when the next eruption will occur
- 3. Mapping previous volcanic deposits from a volcano is helpful for developing hazard maps for use in land-use planning and disaster preparedness
- 4. Mapping the extent of lahars from previous eruptions will show exactly where the lahars will go in the next eruption
- 5. Information from geologic records allows scientists to pinpoint how big the next eruption will be from a certain volcano

18. VQ18 (Points: 10)

Good news, you have been told that your annual charity bicycle-ride is up to the top of a volcano. But it is next week and you have an injured knee; which type of volcano do you MOST want to ride up?

- 1. A cinder cone
- 2. A tuya
- 3. a stratovolcano
- 4. a composite volcano
- 5. a shield volcano

19. VQ19 (Points: 10)

Jokulhlaups are:

- 1. rubbly, slow moving lava flows in Iceland, similar to aa in Hawaii.
- 2. tsunami-triggering collapses of basaltic rock off of Iceland.
- 3. low viscosity basaltic lava flows at hotspots like Iceland.
- 4. floods induced by volcanic eruptions underneath glaciers.
- 5. plants that tolerate highly acidic soils that are the first to recolonize a lava flow.

20. VQ20 (Points: 10)

Maars are:

- 1. basaltic lava flows with low explosivity.
- 2. lava flows on Earth's Moon.
- 3. cinder cones on the flanks of larger volcanoes.
- 4. craters formed by the interaction of magma with groundwater.
- 5. lava flows in Hawaii that flow all the way to the ocean and are quenched by seawater.