Advanced Volcanology Fundamentals

Volcanology · Answer Key · 12 Questions

1. Which specific type of volcano is characterized by the accumulation of basaltic lava flows and has a broad, gently sloping profile?

A) Cinder cone
B) Stratovolcano
C) Shield volcano
D) Lava dome

2. What is the primary factor that determines whether a volcanic eruption will be explosive or effusive?

A) The height of the volcano
B) The viscosity of the magma
C) The age of the surrounding rock
D) The number of nearby earthquakes

3. Which volcanic feature is formed when a magma chamber collapses after a massive eruption, creating a large, basin-shaped depression?

A) Caldera
B) Fumarole
C) Batholith
D) Vent

4. What is the term for a fast-moving, high-temperature density current of gas and volcanic matter that flows down the side of a volcano?

A) Lahar
B) Tephra
C) Pyroclastic flow
D) Basaltic flood

5. At which type of tectonic plate boundary are the most powerful stratovolcanoes typically formed?

A) Divergent boundary
B) Transform boundary
C) Subduction zone
D) Mid-ocean ridge

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

6. Which term describes the size of volcanic particles, such as ash, lapilli, and volcanic bombs, collectively?

A) Magma
B) Tephra
C) Obsidian
D) Pumice

7. What is the main chemical component that significantly increases the viscosity of magma?

A) Iron
B) Magnesium
C) Silica
D) Calcium

8. A lahar is a specific type of volcanic hazard characterized by which of the following?

A) A cloud of sulfurous gas
B) A river of mud and volcanic debris
C) A high-velocity earthquake wave
D) A solidified lava plug

9. Which of these is a localized zone of hot mantle material that rises to the surface, often far from plate boundaries?

A) Hotspot
B) Rift zone
C) Trench
D) Fracture zone

10. What is the defining characteristic of a cinder cone volcano?

A) Layered lava and ash flows
B) Predominantly explosive, short-lived eruptions of loose pyroclastic fragments
C) Low-viscosity lava flows forming vast plains
D) Long-term intrusive formation of granite

11. Which of these volcanic gases is generally emitted in the greatest quantity during an eruption?

A) Sulfur dioxide
B) Hydrogen chloride
C) Water vapor
D) Carbon monoxide

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.

12. What is the name for a volcanic vent that emits only volcanic gases, primarily steam?

A) Geyser
B) Fumarole
C) Caldera
D) Plug

Quixly | This material was auto-generated. Quixly is not liable for errors or omissions. Visit quixlylearn.com to report corrections.