

Volcano Basics

Volcanology · Answer Key · 18 Questions

1. What is molten rock called when it is beneath the Earth's surface?

- A) Lava
- B) Ash
- C) Magma**
- D) Pyroclastic flow

2. What is the name for molten rock that erupts from a volcano onto the Earth's surface?

- A) Magma
- B) Sediment
- C) Lava**
- D) Crater

3. Which of these is a common gas released by volcanoes?

- A) Oxygen
- B) Hydrogen
- C) Carbon Dioxide**
- D) Nitrogen

4. What is the opening at the top of a volcano called?

- A) Vent
- B) Caldera
- C) Crater**
- D) Cone

5. Volcanoes are most often found near what geological features?

- A) River deltas
- B) Ocean trenches and tectonic plate boundaries**
- C) Vast deserts
- D) Large lakes

6. What is the term for a volcanic eruption that sprays ash, rock fragments, and gases into the air?

- A) Lava flow
- B) Subduction
- C) Explosive eruption**
- D) Magmatic intrusion

7. Which type of volcano is typically cone-shaped with steep sides and is built from layers of lava and ash?

- A) Shield volcano
- B) Cinder cone volcano
- C) Stratovolcano (Composite volcano)**
- D) Lava dome

8. What is a large, basin-shaped volcanic depression, often formed by a major eruption or collapse of a volcano?

- A) Crater
- B) Vent
- C) Caldera**
- D) Maar

9. What are hot, fast-moving clouds of gas and volcanic matter called?

- A) Lahar
- B) Pyroclastic flow**
- C) Volcanic bomb
- D) Tephra

10. Which famous volcano erupted in 79 AD, burying the Roman cities of Pompeii and Herculaneum?

- A) Mount Fuji
- B) Mount Vesuvius**
- C) Mount Kilimanjaro
- D) Mount Rainier

11. What are rock fragments ejected during a volcanic eruption called?

- A) Sediment
- B) Tephra**
- C) Scoria
- D) Pumice

12. The Hawaiian Islands were formed by volcanoes erupting from what type of geological feature?

- A) A mid-ocean ridge
- B) A subduction zone
- C) A hot spot**
- D) A rift valley

13. Which of these is NOT a form of tephra?

- A) Ash
- B) Volcanic bombs
- C) Lava**
- D) Cinders

14. What is the process called when tectonic plates move apart, allowing magma to rise to the surface?

- A) Subduction
- B) Collision
- C) Divergent boundary**
- D) Transform fault

15. What is the name for a mudflow on the slope of a volcano, typically caused by rapid melting of snow or ice by a volcanic eruption?

- A) Pyroclastic flow
- B) Lava flow
- C) Lahar**
- D) Volcanic gas

16. What is the main driving force behind most volcanic activity?

- A) Wind erosion
- B) Tectonic plate movement**
- C) Ocean currents
- D) Earth's magnetic field

17. Which is the most abundant gas released during volcanic eruptions?

- A) Helium
- B) Sulfur dioxide
- C) Water vapor**
- D) Methane

18. What type of volcano is generally flat and broad with gently sloping sides, formed by effusive eruptions of fluid lava?

- A) Stratovolcano
- B) Cinder cone
- C) Shield volcano**
- D) Caldera