

Volcanology Basics

Earth Science · Answer Key · 8 Questions

1. Which type of volcano is formed primarily by layers of hardened lava flows and typically has a steep, conical shape?

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

2. What is the term for molten rock that is located beneath the Earth's surface?

- A) Lava
- B) Magma**
- C) Tephra
- D) Basalt

3. The 'Ring of Fire' is a major area in the basin of which ocean where many earthquakes and volcanic eruptions occur?

- A) Atlantic Ocean
- B) Indian Ocean
- C) Pacific Ocean**
- D) Arctic Ocean

4. Which of these is a broad, gently sloping volcano formed by the eruption of low-viscosity basaltic lava?

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

5. What is the name of the opening or rupture in the Earth's crust through which lava, ash, and gases escape?

- A) Crater
- B) Vent**
- C) Magma chamber
- D) Fissure

6. Which material, ejected during a volcanic eruption, consists of fragmented rock, minerals, and volcanic glass?

- A) Pumice
- B) Pyroclastic debris**
- C) Obsidian
- D) Andesite

7. What is the primary gas released during a volcanic eruption that makes up the majority of volcanic emissions?

- A) Oxygen
- B) Nitrogen
- C) Water vapor**
- D) Helium

8. A caldera is formed when which of the following events occurs?

- A) The gradual buildup of lava flows
- B) The collapse of a volcano into its emptied magma chamber**
- C) The shifting of tectonic plates
- D) The cooling of a lava lake