

Finn's Volcanic Voyage: A Year 5 Geography Challenge

Learning objective: To understand the physical processes, structure, and location of volcanoes within the context of plate tectonics.

Join Finn the dolphin on his underwater expedition! Read each question carefully and select or write the most accurate geographical answer. Use your knowledge of the Earth's crust to help Finn navigate the volcanic islands.

Answer Key: 1. A (Tectonic plates); 2. True; 3. Lava; 4. B (Dormant); 5. False (Magma is below the surface); 6. Ring of Fire; 7. C (A bowl-shaped depression at the top of a volcano); 8. True; 9. Vent; 10. B (Extinct).

Word bank: Magma · Lava · Tectonic plates · Crater · Vent · Dormant · Extinct · Ring of Fire

1. What do we call the large, moving sections of the Earth's crust that cause volcanic activity when they collide or pull apart? A) Tectonic plates* B) Continental shelves C) Ocean currents D) Mantle layers (1 mark)

2. True or False: Volcanoes can be found on the ocean floor as well as on land. (1 mark)

3. What is the name for molten rock once it has erupted onto the Earth's surface? (1 mark)

4. A volcano that is currently resting but could erupt again in the future is called: A) Active B) Dormant* C) Extinct D) Explosive (1 mark)

5. True or False: Magma is the term used to describe molten rock that has already reached the surface. (1 mark)

6. What is the famous horseshoe-shaped region around the Pacific Ocean known for its high volcanic activity? (1 mark)

7. Which of these best defines a 'crater'? A) A deep river valley B) A mountain peak C) A bowl-shaped depression at the top of a volcano* D) A type of hardened rock (1 mark)

8. True or False: Volcanic eruptions can sometimes change the local weather by releasing ash and gases into the atmosphere. (1 mark)

9. What is the name of the opening through which volcanic material is ejected? (1 mark)

10. A volcano that is unlikely to ever erupt again is classified as: A) Active B) Extinct* C) Dormant D) Developing (1 mark)

Draw: Draw a cross-section of a volcano. Label the magma chamber, the main vent, the crater, and the lava flow. Add Finn the dolphin swimming in the sea nearby for scale!



Extension challenge: 1. Explain why many volcanoes are located near the boundaries of tectonic plates. 2. Compare and contrast an 'active' volcano with an 'extinct' volcano. 3. Justify why living near a volcano might be dangerous, yet some people still choose to live there. 4. What might happen to the local landscape and soil quality years after a volcanic eruption? 5. If you were a scientist monitoring a dormant volcano, what signs would you look for to predict a potential eruption? 6. Research a specific historical eruption and create a short diary entry from the perspective of someone witnessing the event.