

Finn's Volcanic Voyage

Learning objective: To identify the key features of a volcano and understand how they are formed.

Read the passage carefully, then answer the questions below. Use full sentences where appropriate.

Finn the dolphin loves exploring the deep ocean floor. During his travels, he often encounters magnificent underwater mountains known as volcanoes. A volcano is an opening in the Earth's crust that allows molten rock, gases, and ash to escape from below. Deep beneath the surface, the rock is so hot that it melts into a thick liquid called magma. When pressure builds up, the magma is forced upwards through a central vent. Once it breaks through the surface and flows out, it is renamed lava. Some volcanoes are found where tectonic plates meet, as the movement of these giant rocky slabs creates gaps for the magma to rise. Not all volcanoes are explosive; some simply ooze lava slowly, while others remain dormant for centuries, appearing as peaceful mountains. When an eruption occurs, it can reshape the surrounding landscape, cooling into new rock and even creating islands in the middle of the ocean. Finn finds it fascinating how these powerful geological structures are constantly changing the face of our planet.

Word bank: magma · lava · crater · tectonic plates · eruption · vent

1. What is the difference between magma and lava according to the text? (2 marks)

2. Where does the magma travel through to reach the Earth's surface? (1 mark)

3. Why might the meeting of tectonic plates lead to the formation of a volcano? (2 marks)

4. Explain why the author describes some volcanoes as 'dormant' rather than 'explosive'. (2 marks)

5. Justify your answer: Do you think volcanoes are more destructive or constructive for the Earth? Explain your reasoning. (3 marks)

Draw: Draw a cross-section diagram of a volcano. Label the magma chamber, the vent, the crater, and the lava flow.



Extension challenge: Research the 'Ring of Fire'. Write a short paragraph explaining why Finn the dolphin might see so many volcanoes in that specific part of the Pacific Ocean. Use the term 'tectonic plates' in your explanation.