

Finn's Volcanic Voyage

Learning objective: To understand the formation and features of volcanoes as part of physical geography.

Read the passage below carefully and answer the questions using evidence from the text.

Finn the dolphin loves exploring deep underwater trenches, where he often discovers amazing geological features. One of his favourite sights is an underwater volcano. Volcanoes are openings in the Earth's crust that allow molten rock, gases, and ash to escape from beneath the surface. Deep inside the Earth, where it is incredibly hot, rock melts into a thick substance called magma. When pressure builds up, the magma is forced upwards through a vent. Once it breaks through the surface, it is known as lava.

Many volcanoes are found near the boundaries of tectonic plates, which are massive slabs of rock that make up the Earth's outer layer. As these plates shift, they can create cracks that allow volcanoes to form. While some eruptions are explosive and send ash high into the atmosphere, others are much quieter, oozing lava slowly down the mountain's slope. Over time, the layers of cooled lava build up to create the iconic cone shape we see on land. Finn finds it fascinating that these powerful forces are constantly shaping the world we live on, even beneath the crashing waves of the ocean.

Word bank: Magma · Lava · Crust · Eruption · Tectonic plates · Vent · Summit

1. According to the text, what is the difference between magma and lava? (2 marks)

2. Where are many volcanoes typically located in relation to the Earth's structure? (1 mark)

3. Why might a volcano be described as a 'powerful force' that shapes the Earth? (2 marks)

4. How might the experience of watching an explosive eruption differ from watching one that 'oozes' lava? (2 marks)

5. Do you think living near a volcano is a good idea? Give one reason for your opinion based on the text. (2 marks)

Draw: Draw a cross-section of a volcano. Label the magma chamber, the vent, and the lava flowing down the side.



Extension challenge: Research one famous volcano from history. Write three facts about its most recent or most famous eruption to share with the class.