Finn’s Volcanic Voyage: Mapping the Ring of Fire

Learning objective: To identify the key features of a volcano and understand their geographical distribution around the world.

Finn the dolphin has been mapping the ocean floor and has discovered a series of active volcanoes! Use the word bank to label the diagram of the volcano below and answer the questions to help Finn complete his geographical survey.

Word bank: Magma · Lava · Crater · Vent · Tectonic Plates · Ash Cloud · Conduit

1. Explain the difference between magma and lava. Why do they have different names? (2 marks)

2. Volcanoes are often found along the edges of tectonic plates. Why do you think this is a common location for volcanic activity? (2 marks)

3. True or False: All volcanoes are mountains that erupt with fire. Give one reason for your answer. (2 marks)

4. If a scientist was monitoring a volcano, what is one piece of equipment or observation they might use to check if it is about to erupt? (1 mark)

5. Name one positive impact that volcanic activity can have on the surrounding environment or soil. (1 mark)

Draw: Draw a cross-section of a volcano. Label the following parts using your word bank: Crater, Vent, Magma, and Ash Cloud. Ensure you show the layers of the earth beneath the volcano.

Extension challenge: Research the 'Pacific Ring of Fire'. Write a short paragraph explaining why this area is so significant to geographers and how it relates to the movement of the Earth's crust.