

Grade 4 Geography Assessment: Volcanoes and the Earth's Crust

Learning objective: To assess understanding of the structure of the Earth, the causes of volcanic eruptions, and the impact of volcanic activity on the landscape and human life.

Read each question carefully. Ensure your answers are clear and use geographical vocabulary where appropriate. You have 45 minutes to complete this assessment.

Finn the dolphin has been traveling the world's oceans. While studying the map of the ocean floor, Finn discovered a series of underwater mountains and deep trenches. He noticed that many of these are located where the Earth's outer shell, the crust, is split into large sections. When these sections move, pressure builds up deep beneath the surface. Sometimes, this pressure is released through a volcano, sending melted rock and gases into the air or across the land.

Word bank: Magma · Lava · Crust · Mantle · Tectonic plates · Vent · Dormant · Extinct · Active

1. Using the word bank, name the three main layers of the Earth starting from the outside and moving inwards. (3 marks)

2. Explain the difference between 'magma' and 'lava'. (2 marks)

3. What are the names of the large sections of the Earth's crust that move to cause volcanic activity? (1 mark)

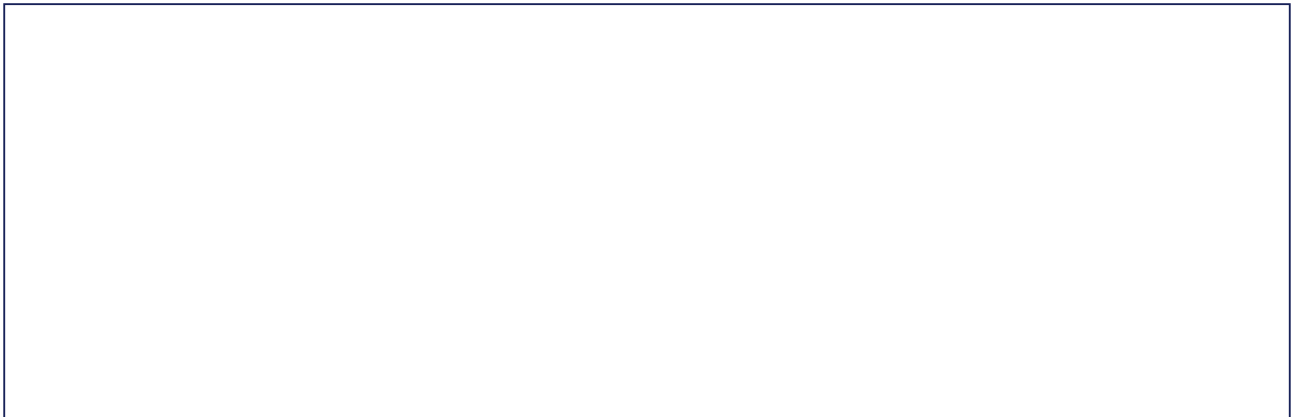
4. Describe the difference between an 'active' volcano and an 'extinct' volcano. (4 marks)

5. Nova the owl is studying how volcanoes change the landscape. Name two positive effects that volcanic soil can have on the environment. (4 marks)

6. Max the monkey is trying to calculate the cost of cleaning up after a volcanic eruption. If a local village needs to spend £1,250 on air filters and £875 on removing ash from roofs, what is the total cost in pounds? (2 marks)

7. Imagine you are a scientist living near a volcano. Write a short report (approx. 100 words) describing the physical features of a volcano and explaining why people might choose to live near one despite the risks. (9 marks)

Draw: Draw a labelled diagram of a volcano. Ensure you include the following labels: Crater, Vent, Magma Chamber, and Lava Flow.



Extension challenge: Total: /25