

Mapping the Mighty Mountains with Finn

Learning objective: To understand the physical characteristics and formation of mountain ranges.

Read the text carefully and answer the questions below. Ensure you use full sentences and evidence from the text where possible.

Finn the dolphin has traded his fins for hiking boots to explore the Earth's most dramatic landscapes. Mountains are massive landforms that rise high above the surrounding land, usually ending in a peak or summit. Many of the world's most famous mountain ranges, such as the Himalayas, were created millions of years ago when massive slabs of the Earth's crust, known as tectonic plates, collided. This immense pressure forced the rock upwards, folding it into towering peaks. As Finn climbs higher, he notices that the air becomes much thinner and the temperature drops rapidly. This is due to the altitude; the higher you go, the colder it gets. Over thousands of years, wind, rain, and ice slowly wear away the jagged rocks through a process called erosion, which reshapes the mountain's appearance. Whether they are young, sharp peaks or ancient, rounded slopes, mountains play a vital role in our climate and provide habitats for specialised plants and animals that can survive in extreme conditions. Finn loves looking out from the top, mapping how these giant structures influence the rivers that flow down into the valleys below.

Word bank: summit · tectonic plates · altitude · range · erosion · landscape

1. According to the text, how are many mountain ranges, such as the Himalayas, formed? (2 marks)

2. What happens to the temperature and the air as Finn climbs to a higher altitude? (2 marks)

3. Explain why the appearance of a mountain might change over thousands of years. (3 marks)

4. Why might it be difficult for some plants and animals to live at the very top of a mountain compared to the valley floor? (3 marks)

5. Do you think mountains are more important for the environment or for human adventure? Justify your answer using reasons from the text. (4 marks)

Draw: Draw a cross-section of a mountain range, labelling the summit, the tree line, and a valley river flowing at the base.



Extension challenge: Research the 'Seven Summits' of the world. Create a table comparing their heights in metres and explain why mountaineers might consider climbing the highest peak on every continent a significant challenge. If you were planning an expedition to a mountain, what three essential items would you pack and why?