

Mapping the Peaks with Finn

Learning objective: To understand the physical processes and geographical features of mountain ranges.

Read the passage carefully and answer the questions below. Use evidence from the text to support your ideas.

Finn the dolphin has traded his ocean maps for an altimeter to explore the world's most magnificent mountain ranges. Mountains are massive landforms that rise high above the surrounding landscape, often forming long, jagged chains. They are primarily created by tectonic plate movements, where the Earth's crust collides, forcing rock layers upwards over millions of years. Once formed, these giants are sculpted by the relentless forces of nature. Glaciers act like giant icy chisels, carving deep U-shaped valleys, while wind and rain slowly wear down the craggy peaks through erosion. As you climb towards the summit, the air pressure drops and the temperature falls, creating distinct climate zones. At the base, you might find lush forests, but as the altitude increases, the environment becomes too harsh for most trees to survive. Finn notes that mountains are not just beautiful; they are vital for our planet, acting as essential water towers that collect snow and meltwater, which eventually feed the world's great rivers. Whether they are young, sharp peaks or ancient, weathered mounds, mountains tell the dramatic story of our planet's restless history.

Word bank: topography · tectonic · summit · altitude · erosion · range

1. According to the text, what two natural forces are responsible for sculpting mountains after they have been formed? (2 marks)

2. At what point in the passage does the author explain how mountains contribute to the world's water supply? (2 marks)

3. Explain why the vegetation changes as you climb higher towards a mountain summit. (3 marks)

4. Compare and contrast how tectonic plates and glaciers affect the physical appearance of a mountain range. (3 marks)

5. Do you think mountains should be protected from human activity, such as tourism and mining? Justify your answer using the information provided. (4 marks)

Draw: Draw a cross-section of a mountain, labelling the base with forest vegetation and the summit with snow. Include a small drawing of Finn the dolphin looking up at the peak through a telescope.



Extension challenge: Research a specific mountain range (such as the Himalayas or the Andes). Write a short paragraph explaining how the climate of that range influences the types of animals that live there. What might happen to these species if the mountain's altitude were significantly lower?