

Year 5 Geography Assessment: The Majesty of Mountains

Learning objective: To demonstrate knowledge of mountain formation, climate zones, and the impact of human activity on mountain environments.

Read each question carefully. Answer in full sentences where indicated. Use the provided word bank to support your explanations. Ensure your handwriting is clear and your geographical terminology is precise.

Finn the dolphin has been mapping the world's geography. He notes that mountains are not just beautiful; they are vital parts of our planet. They form through the movement of the Earth's crust, create unique weather patterns, and provide habitats for rare plants and animals. As elevation increases, the temperature drops, creating distinct 'layers' of life known as altitudinal zonation.

Word bank: altitude · tectonic plates · fold mountains · summit · climate zone · precipitation · erosion · biodiversity

1. Explain the process by which fold mountains are formed. Reference the movement of the Earth's surface. (2 marks)

2. Define the term 'altitude' and describe how it influences the climate at the summit of a mountain compared to the base. (2 marks)

3. List two specific ways in which human activity can negatively affect delicate mountain ecosystems. (2 marks)

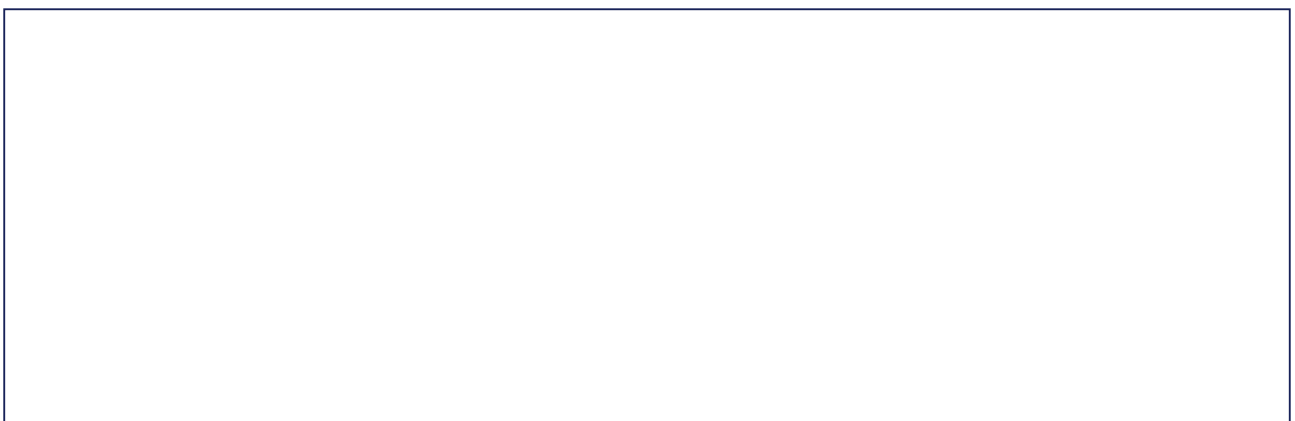
4. Compare and contrast the living conditions for flora and fauna at the base of a mountain versus the peak. Use geographical vocabulary. (4 marks)

5. Justify why mountain ranges often act as a barrier to weather systems and clouds, leading to different levels of precipitation on either side. (4 marks)

6. What might happen to mountain biodiversity if global temperatures continue to rise? Explain the risks to species that rely on high-altitude, cold climates. (4 marks)

7. Extended Writing: Imagine you are an explorer climbing a major mountain range. Describe your journey from the foothills to the summit. Include details about how the landscape, temperature, and vegetation change as you ascend. (5 marks) (5 marks)

Draw: Draw a cross-section of a mountain. Label the base, the tree line, the summit, and one example of how a human might use the mountain (e.g., for tourism or energy).



Extension challenge: Total: /25. Research task: If it costs £1,200 to fund a small scientific expedition to a local hill, and the school receives a grant of £500, how much more money must be raised? Explain why funding mountain research is important for our future understanding of climate change.