

Mapping the Earth's Giants: A Study of Mountains

Learning objective: To identify, describe, and explain the physical characteristics of mountain ranges and understand how they are formed.

Use your knowledge of physical geography to answer the questions below. Think carefully about the processes that shape our planet.

Word bank: Tectonic plates · Altitude · Summit · Fold mountains · Erosion · Glaciation · Range · Convection

1. Finn the dolphin has been reading about how mountains form. Explain the process of how two tectonic plates colliding can result in the creation of 'fold mountains'. (3 marks)

2. Compare and contrast the climate and vegetation found at the base of a mountain versus the conditions found at the summit. Why does the temperature change as altitude increases? (3 marks)

3. Identify two major mountain ranges in different continents and name the countries they span across. (2 marks)

4. Justify why many human settlements are rarely found at the highest altitudes of mountain ranges. (3 marks)

5. What might happen to the physical shape of a mountain range over millions of years due to the processes of weathering and erosion? Explain your reasoning. (3 marks)

6. Max the monkey is calculating the cost of a mountain expedition. If a climbing permit costs £125.50 and the group needs to hire four guides at £210.00 each, what is the total cost for the expedition? (2 marks)

Draw: Draw a cross-section of a mountain range. Label the summit, the snow line, the tree line, and an area showing evidence of glaciation (such as a U-shaped valley).



Extension challenge: Research the 'Seven Summits'. Choose one of these peaks and write a persuasive paragraph arguing why a mountaineer would choose to climb it, considering the physical challenges and the geographical features of that specific region.