

Finn's Global Climate Expedition

Learning objective: To understand the differences between climate zones and identify the factors that influence global climate patterns.

Use your knowledge of geography to answer the following questions. Think carefully about how distance from the Equator and physical features affect the weather patterns of different regions.

Finn the dolphin is mapping the world's oceans and coasts. As he travels from the icy regions near the North Pole down towards the warm, sun-drenched waters near the Equator, he notices how the environment changes. Finn observes that some areas have consistent rainfall all year, while others experience distinct dry and wet seasons. He uses his maps to record these climate zones, noting how temperature and weather change based on the Earth's position relative to the sun.

Word bank: Equator · Tropics · Temperate · Polar · Latitude · Precipitation · Altitude · Climate Zone

1. Explain why the climate near the Equator is generally much warmer than the climate near the Polar regions. Use the word 'latitude' in your explanation. (2 marks)

2. Compare and contrast a Temperate climate zone with a Tropical climate zone. What are the main differences in their seasonal weather patterns? (3 marks)

3. Justify your answer: If a mountain range is located within a tropical region, would the climate at the very top of the mountain be the same as the climate at the bottom? Explain your reasoning. (3 marks)

4. What might happen to the animals living in a Polar climate zone if the average global temperature were to rise significantly? Describe one potential consequence. (2 marks)

5. Define the term 'climate' and explain how it differs from 'weather'. (2 marks)

6. Finn is planning a trip to a region with a Mediterranean climate. Based on your knowledge, what type of clothing should he advise his friends to pack for the summer months and why? (2 marks)

Draw: Draw a map of the world and color-code the three main climate zones (Polar, Temperate, and Tropical). Include a key to show which color represents each zone.



Extension challenge: Imagine you are an explorer writing a diary entry about visiting a new climate zone. Describe the vegetation, the temperature, and the types of clothes you are wearing. How does this climate compare to the one you live in today?