

Exploring Weather and Climate with Finn the Dolphin

Learning objective: To distinguish between weather and climate, and understand how different geographical regions experience varying conditions.

Read each question carefully. Use your geographical knowledge to provide detailed, reasoned explanations. Think like an explorer mapping the world's diverse environments.

Finn the Dolphin has been traveling the globe, charting the currents and noting the air above him. He has observed that while the rain in the North Sea can change within an hour, the icy conditions of the Arctic remain frozen for most of the year. Understanding the difference between a daily forecast and a long-term climate zone is the key to mapping our planet.

Word bank: Atmosphere · Precipitation · Meteorology · Temperature · Equator · Polar · Tropical · Variability

1. Finn observes that the weather in a coastal village changes daily, but the climate of the region stays the same for years. Explain the fundamental difference between 'weather' and 'climate'. (3 marks)

2. Compare and contrast a tropical climate found near the Equator with a polar climate found at the Earth's extremes. How do these differences impact the plants and animals living there? (4 marks)

3. Justify your answer: Why is it important for farmers in the UK to understand both the daily weather forecast and the seasonal climate patterns when deciding which crops to plant? (3 marks)

4. What might happen if the global climate shifted, causing polar ice caps to melt? Consider the impact on Finn's ocean home and coastal geography. (3 marks)

5. If you were to design a house specifically for a hot, arid climate, what features would you include to manage the temperature? Use geographical reasoning to support your ideas. (3 marks)

6. Explain why the temperature is generally much warmer near the Equator than it is near the North or South Poles. (2 marks)

Draw: Draw a split-screen illustration. On the left side, depict a tropical rainforest with heavy precipitation. On the right side, draw a polar landscape with ice and snow. Label the key geographical features in both scenes.



Extension challenge: Research a specific country of your choice. Create a 'Climate Profile' that includes the average annual temperature, the types of precipitation they experience, and how the climate influences the traditional clothing and housing styles of the people who live there.