

Weather and Climate: Global Patterns with Finn the Dolphin

Learning objective: To understand the distinction between weather and climate, and to identify how geographical factors influence global climate zones.

Read each question carefully and use your knowledge of meteorological patterns to provide detailed, scientific responses. Ensure you use the vocabulary provided in the word bank to support your explanations.

Finn the dolphin is mapping the ocean currents and observing how different regions of the world maintain unique weather patterns. Weather refers to the short-term state of the atmosphere, while climate represents the average weather conditions over a long period. Understanding these differences is essential for geography.

Word bank: Atmosphere · Precipitation · Meteorological · Equator · Latitude · Temperature · Climate Zone · Tropics

1. Explain the difference between 'weather' and 'climate' using an example of a typical day in the UK versus the general climate of the UK. (2 marks)

2. Why do countries located near the Equator experience significantly higher average temperatures than those located at high latitudes? (3 marks)

3. Compare and contrast a 'Tropical' climate zone with a 'Polar' climate zone. Mention at least two key differences in their environments. (3 marks)

4. Justify why a farmer in a temperate climate must plan their crop planting differently than a farmer in an arid desert climate. (3 marks)

5. What might happen to global ecosystems if the average temperature in a specific climate zone increased by 3 degrees Celsius over the next century? (4 marks)

6. If Finn the dolphin travels from the Arctic Circle to the Tropics, describe how the meteorological conditions he observes would change. (3 marks)

Draw: Draw a cross-section of the Earth. Label the Equator, the Northern Hemisphere, the Southern Hemisphere, and use arrows to show where the sun's rays hit the Earth most directly versus the poles.



Extension challenge: Imagine you are a climatologist. Choose a country of your choice and write a brief report explaining its climate zone. Predict how a change in ocean currents might affect the future climate of that region. Use evidence to support your prediction.