

Year 5 Geography Assessment: Weather and Climate

Learning objective: To demonstrate an understanding of weather patterns, climate zones, and the impact of environmental factors on global regions.

Read each question carefully. Use your geographical vocabulary to provide precise answers. For extended responses, ensure you provide evidence or reasoning to justify your points.

Finn the dolphin has been travelling across the globe, mapping the differences between daily weather and long-term climate. He has noticed that while a sudden thunderstorm might soak the ocean surface in the afternoon (weather), the regions near the Equator remain consistently hot and humid throughout the year (climate). Meanwhile, Kit the fox has been studying how the Earth's tilt affects the seasons in different hemispheres, noting that when it is winter in the Northern Hemisphere, it is summer in the Southern Hemisphere.

Word bank: Equator · Precipitation · Atmosphere · Meteorologist · Temperature · Climate Zone · Tropical · Arid · Hemisphere · Latitude

1. Explain the difference between 'weather' and 'climate' using an example from Finn's observations. (2 marks)

2. Why do regions located near the Equator generally experience higher temperatures than those near the poles? (2 marks)

3. If a town has an annual rainfall of less than 250mm, which climate zone is it likely to be in? Justify your answer. (3 marks)

4. Compare and contrast the climate of a tropical rainforest with an arid desert. Mention at least two specific factors. (4 marks)

5. Describe how the Earth's tilt creates seasons. Why does the Northern Hemisphere experience summer while the Southern Hemisphere experiences winter? (4 marks)

6. Nova the owl is planning a migration route. Explain why it is important for her to distinguish between a temporary weather front and a permanent climate zone before she sets off. (3 marks)

7. Extended Writing: Imagine you are a scientist studying the impact of climate change on a specific biome (e.g., the Arctic or a coastal region). Write a report explaining how a slight shift in global temperature might affect the local ecosystem and the animals living there. (5 marks) (5 marks)

Draw: Draw a cross-section diagram of the Earth, clearly labelling the Equator, the Northern Hemisphere, and the Southern Hemisphere. Use arrows to show the direction of sunlight hitting the Equator compared to the poles.



Extension challenge: Total: /25. Challenge: What might happen to global weather patterns if the Earth were not tilted on its axis? Provide a logical argument based on your knowledge of solar energy distribution.