Grade 5 Geography Assessment: Understanding Global Climates

Learning objective: To demonstrate knowledge of climate zones, the impact of the equator, and how human activity influences the Earth's climate.

Read each question carefully. Use your geographical vocabulary to provide clear, detailed answers. Ensure you use full sentences for written responses.

Finn the dolphin has been traveling across the world's oceans, mapping the different environments he encounters. He notices that the water temperature and weather patterns change significantly as he moves from the icy regions near the poles towards the warmer waters near the center of the Earth. On land, Nova the owl observes that these climate patterns dictate exactly which plants and animals can survive in each region.

Word bank: Equator · Tropics · Hemisphere · Atmosphere · Greenhouse effect · Climate change · Latitude · Precipitation · Temperature · Adaptation

1. Explain the difference between 'weather' and 'climate' in your own words. (2 marks)

2. Why are regions near the Equator generally much warmer than regions near the North and South Poles? Refer to the Earth's latitude in your answer. (3 marks)

3. Identify two characteristics of a Tropical climate zone. (2 marks)

4. Max the monkey is studying the greenhouse effect. Describe how human activity, such as burning fossil fuels, is contributing to global climate change. (4 marks)

5. Give one example of an adaptation a plant or animal might make to survive in an arid (desert) climate. (2 marks)

6. Look at the table below: City A (London) has an average annual rainfall of 600mm. City B (a rainforest location) has an average annual rainfall of 2,500mm. Using your geographical knowledge, explain why these two locations have such different levels of precipitation. (4 marks)

7. Extended Writing: Imagine you are an explorer visiting a new region. Write a report (approx. 100 words) describing the climate you find there. Include details about the temperature, typical weather patterns, and how the local environment has adapted to this climate. Ensure you use at least four terms from the word bank. (5 marks)

Draw: Draw a labelled diagram of the Earth showing the Equator, the Northern and Southern Hemispheres, and the location of the Tropics.

Extension challenge: Total: /25. Research task: Find out the cost of installing solar panels for an average home (£5,000 - £8,000) and write a short paragraph on why renewable energy is important for the future of our climate.