

Exploring Weather and Climate with Nova the Owl

Learning objective: To describe and understand the differences between weather and climate, and identify key characteristics of different climate zones.

Nova the Owl is preparing a report on the world's climates. Use this writing scaffold to help you distinguish between short-term weather conditions and long-term climate patterns. Ensure you use geographical vocabulary to justify your descriptions.

While the weather outside our window changes from hour to hour, the climate of a region tells a much longer story about the patterns we expect to see over many years.

Word bank: meteorological · precipitation · temperature · climate zones · equatorial · temperate · polar · fluctuate · atmosphere · consequently · furthermore · in contrast · predictable

1. Weather versus Climate: Define the difference between weather and climate using the sentence starter: 'Weather refers to the atmospheric conditions at a specific moment, whereas climate is...' (2 marks)

2. Climate Zones: Describe the characteristics of a chosen climate zone. Start with: 'One of the world's major climate zones is the [insert name] zone, which is typically identified by...' (3 marks)

3. Explain why Nova might experience different weather in the UK compared to someone living near the equator. Use the word 'consequently' in your explanation. (3 marks)

4. Compare and contrast: How does the vegetation in a polar climate differ from a temperate climate? Start with: 'In contrast to temperate regions, polar areas struggle to support diverse plant life because...' (3 marks)

5. Justify your answer: If a region has a very high annual rainfall, does this automatically mean it is a tropical climate? Explain your reasoning. (4 marks)

6. What might happen if a region's climate began to change rapidly over a short period of time? Describe the potential impact on local wildlife. (4 marks)

Extension challenge: Research a specific country. Create a 'Climate Fact File' that includes a detailed analysis of why that country has its specific climate based on its location on the globe (latitude). Use your knowledge of the equator and the tropics to support your findings.