

Exploring the Frozen Frontiers: A Polar Geography Report

Learning objective: To describe and explain the geographical features, climate, and environmental challenges of the Arctic and Antarctic regions.

Use this writing frame to structure your non-chronological report. Incorporate technical vocabulary and ensure you compare the physical characteristics of both the Arctic and the Antarctic.

Finn the dolphin has travelled far from his usual warm waters to investigate the mysterious, icy realms at the very top and bottom of our globe.

Word bank: consequently · furthermore · in contrast · frigid · permafrost · biodiversity · glaciation · ecosystem · predominantly · sustainability

1. Introduction: Define the location of the two polar regions. Start by stating: 'The Earth's polar regions are found at the extreme northern and southern ends of the planet, known as the Arctic and the Antarctic respectively...' (2 marks)

2. Physical Geography: Describe the landscape of the Arctic compared to the Antarctic. Use this prompt: 'While the Arctic consists of a frozen ocean surrounded by land, the Antarctic is a massive, ice-covered continent; explain why this difference is significant.' (3 marks)

3. Climate and Weather: Explain the extreme conditions found in these regions. Start with: 'Temperatures in the polar regions remain below freezing for the majority of the year, which creates...' (2 marks)

4. Flora and Fauna: Describe how life survives in the cold. Use this prompt: 'Flora and fauna in the polar regions have evolved unique adaptations to survive the harsh environment; for example...' (3 marks)

5. Environmental Concerns: Discuss the impact of global climate change. Start with: 'A major concern for these fragile ecosystems is the rising global temperature, which results in...' (3 marks)

6. Conclusion: Justify why these regions are important to the rest of the world. Start with: 'In conclusion, the polar regions are vital to the Earth's climate stability because...' (2 marks)

Extension challenge: Imagine you are a scientist stationed in Antarctica. Write a diary entry explaining the challenges of conducting research in such an extreme environment. Justify why you believe it is essential to protect these wilderness areas from human exploitation. What might happen if the polar ice sheets were to disappear entirely?