

Journey to the Frozen Frontiers: Exploring Earth's Polar Regions

Bundle up for an icy expedition—discover the wonders of the world's most extreme environments!

- The Arctic is an ocean surrounded by land, whereas the Antarctic is a continent surrounded by ocean. Explain why this geographical difference affects the way these two regions change with the seasons.
- Permafrost is a layer of soil that remains frozen for two or more years. Justify why this creates a challenging environment for building permanent human settlements.
- Compare and contrast the wildlife found in the Arctic, such as the polar bear, with the fauna of the Antarctic, such as the penguin. Why do these species not naturally overlap?
- The Aurora Borealis and Aurora Australis are spectacular light displays. Explain the scientific phenomenon behind these colourful dancing lights in the polar skies.
- What might happen if global temperatures continue to rise, causing the polar ice caps to melt at an accelerated rate? Consider the impact on global sea levels and coastal geography.
- Finn the dolphin has been mapping the migration routes of marine mammals. Why are these cold, nutrient-rich waters essential for the survival of the entire global ocean food chain?

Did you know? Did you know? Despite being covered in ice, the Antarctic is technically the world's largest desert! Because it is so cold, the air is extremely dry, meaning the region receives very little annual precipitation—less than 50mm in some inland areas.

Key vocabulary: Tundra · Permafrost · Glacier · Latitude · Indigenous · Bioluminescence · Precipitation · Ecosystem