

Key Vocabulary:

Antarctica – The most southerly continent on Earth, covered in snow and ice.

capsize – When a boat is overturned in water.

climate - The average weather conditions that occur in a place over a long period.

crevasse – A deep crack in ice.

expedition – a group journey with a particular purpose.

fossil fuel – A natural fuel such as coal or gas which is burned for energy.

glacier – a large body of ice.

horizon - The line where the sky appears to meet the Earth.

iceberg – a floating mass of ice that has detached from a glacier.

ice cap – an ice sheet that covers less than 50,000 square kilometres of land.

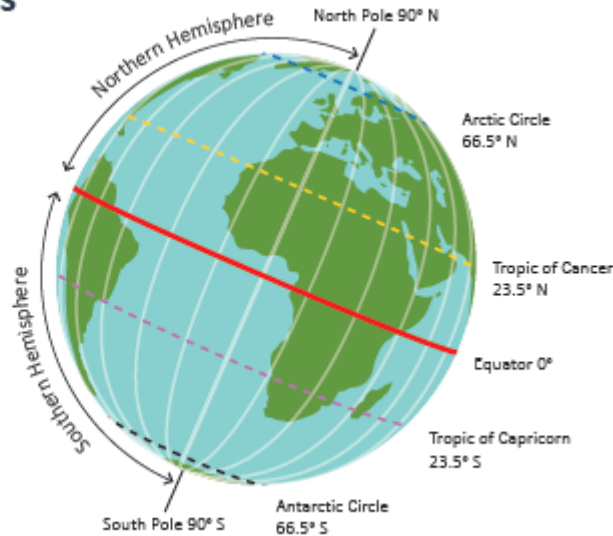
pack ice– A large area of ice formed when many smaller pieces of ice are pushed together by the sea or wind.

Southern Hemisphere – the part of Earth that is to the south of the equator.

Improve Our World

The polar regions

The Earth has two polar regions: the Arctic Circle in the Northern Hemisphere and the Antarctic Circle in the Southern Hemisphere. Polar regions have long, cold winters and temperatures mostly below freezing. The weather can be very windy with little precipitation.



Climate change

Human activities such as burning fossil fuels and deforestation are releasing gases into the atmosphere that are causing the temperature of the Earth to rise and its climate to change. The Arctic landscape and wildlife are at risk due to this change. Scientists are concerned that the rising global temperature is causing the polar ice to melt. If the polar ice melts, sea levels and temperatures will rise, weather patterns will change and the polar regions will be damaged.



Global Warming

Antarctic region

Antarctica is the world's fifth-largest continent and is covered in an ice sheet that is up to 4800m thick. It is the coldest, driest, highest and windiest continent on Earth. Temperatures can drop to -89°C , there is little precipitation, and wind speeds can reach 80km per hour. There are only two native species of flowering plants in Antarctica, but there is a rich sea life, including the emperor penguin, humpback whale and leopard seal. No people live permanently in the Antarctic. However, scientists stay for part of the year to carry out research and tourists visit in the summer months to see the landscape and wildlife.



emperor penguin



humpback whale



Ernest Shackleton (1874–1922) was a British explorer who led an expedition to attempt to walk across Antarctica. However, his ship became stuck in sea ice and sank. Shackleton and his men managed to survive for 18 months before making their way to safety.

Polar discovery

Due to the harsh and inhospitable conditions, the polar regions were the last places on Earth to be explored. During the golden age of polar exploration, between 1898 and 1916, explorers searched for the Northwest Passage in the Arctic and raced to reach the South Pole in Antarctica. Three famous polar explorers were Robert Falcon Scott, Roald Amundsen and Ernest Shackleton.