

Frozen Kingdom

Welcome to the planet's coldest lands... vast wilds, hostile territories, incredibly beautiful yet often deadly. Take shelter from the elements or fall prey to icy winds and deepest chill. Trek bravely and valiantly across treacherous terrain to the ends of the Earth, treading deep in snow or pulled by a team of mighty sled dogs. Be alert, for magnificent mammals roam these lands, sometimes hungry or fresh for a fight. Perhaps a hunting polar bear or an arctic fox; hunting rodents and swift as the wind.

Key facts

- The Antarctic is a continent surrounded by ocean. The Arctic is an ice-covered ocean surrounded by continents.
- Antarctica is the Southern-most continent on Earth.
- The word 'arctic' comes from the Greek word, 'arktikos', or 'country of the great bear'.
- Antarctica is the driest, windiest, emptiest and coldest place on Earth.
- The Arctic has a wealth of natural resources, including fish, oil, gas and minerals.
- Above the Arctic Circle, there is all-day sunshine in the summer for at least one day a year (and there is a full 24-hour of full-day darkness for at least one day too!)
- Extreme cold weather may result in injuries such as frostbite and hypothermia.

Key Vocabulary

Antarctica-a continent around the South Pole

Aurora Australis- also known as the southern lights, a natural light display in the Earth's sky

Aurora Borealis-also known as the northern lights, a natural light display in the Earth's sky

Climate-the general weather conditions that are typical of a place.

Continent-a very large area of land, such as Africa or Asia that consists of several countries.

Cores-The core of an object, building, or city is the central part of it.

Cryosphere-The frozen portions of the Earth's surface water (or hydrosphere), including: oceans, lakes, rivers, snow cover, glaciers, ice caps, ice sheets, and frozen ground (permafrost).

Glaciers-an extremely large mass of ice, which moves very slowly, often down a mountain valley.

Habitats-The habitat of an animal or plant is the natural environment in which it normally lives or grows.

Iceberg-large tall mass of ice floating in the sea.

Ice caps- thick layers of ice and snow that cover the North and South Poles.

Ice sheets-a large thick area of ice, especially one that exists for a long time.

Migrating-moving from one place to another, especially in order to find work or to live somewhere for a short time.

North Pole- Northern end of the Earth's axis

Permafrost-land that is permanently frozen to a great depth.

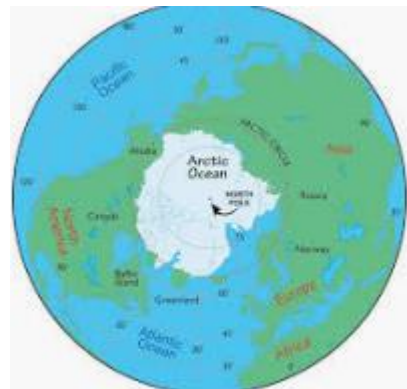
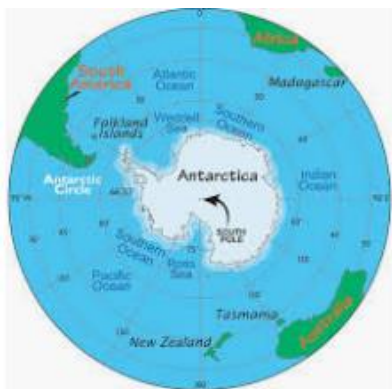
Polar habitats- habitats that are located at the very top and very bottom of the Earth. They are cold, windy and have a lot of snow and ice

Regions-A region is a large area of land that is different from other areas of land

Southern hemisphere-that half of the earth lying south of the equator

South Pole-The *South Pole* is the *southern* end of Earth's axis.

Tundra-one of the large flat areas of land in the north of Europe, Asia, and America. The ground below the top layer of soil is always frozen and no trees grow there.



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Prior Learning

Year 1:

> Understand geographical similarities and differences through studying the human and physical geography of a non-European country.

Year 2:

> Locate the Equator, North and South Poles and the relevant weather and seasonal patterns linked to them.

> Identify the location of hot and cold areas of the world in relation to the Equator and the North and South Poles.

Year 5:

> Identify the position and significance of the lines of latitude and longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Prime/Greenwich Meridian and time zones.

> Looking at our land use in different climate zones for example how someone might use the land in a polar climate zone compared to a tropical climate zone.

Following on:

Year 6:

> Think about settlement use and why people move (push/pull factors) and human/physical features that affect that.

> Geographical study and investigation based on a question. Such as: As a member of the local council what would you build on this land in our local area and why?

Key Dates/Events

- 1699** Edmond Halley searches for the 'Unknown Southern Land', reaching 52°24'S and reporting tabular icebergs.
- 1773-75** Captain James Cook crosses the Antarctic Circle three times.
- 1829** Captain Henry Foster leads the first scientific expedition to Antarctica to discover the true shape of the Earth using gravity measurements.
- 1874** HMS Challenger becomes the first steamship to cross the Antarctic Circle and proves Antarctica is a continent
- 1895** Resolution passed at the Sixth International Geographical Congress advocating the exploration of Antarctica
- 1897-99** Belgian Antarctic Expedition (Adrien de Gerlache)
- 1898-1900** British Antarctic Expedition (Carsten Borchgrevink)
- 1901-04** National Antarctic 'Discovery' Expedition (Captain Falcon Scott)
- 1904** First humpback whale caught in Antarctica

Key People

- Captain James Cook
- Børge Ousland
- Robert Falcon Scott
- Roald Amundsen
- Ernest Shackleton
- Sir Edmund Hillary
- Fridtjof Nansen
- Robert Peary
- Richard Evelyn Byrd
- Ranulph Fiennes
- Ann Bancroft



Robert Falcon Scott

Captain Robert Falcon Scott was a British Royal Navy officer and explorer who led two expeditions to the Antarctic regions: the Discovery Expedition (1901–1904) and the ill-fated Terra Nova Expedition (1910–1913). On the first expedition, he set a new southern record by marching to latitude 82°S and discovered

the Antarctic Plateau. On the second venture, Scott led a party of five, which reached the South Pole on 17 January 1912. On their return journey, Scott's party discovered plant fossils, proving Antarctica was once forested and joined to other continents. A planned meeting with supporting dog teams from the base camp failed, despite Scott's written instructions, and at a distance of 150 miles from their base camp and 11 miles from the next depot, Scott and his companions perished.

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