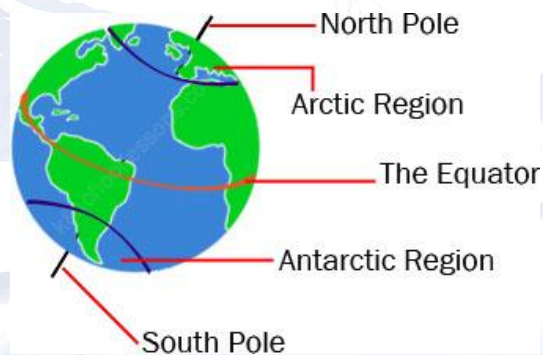


# Frozen Kingdom

## The Arctic region

The Arctic region is found in the Northern Hemisphere and includes parts of Canada, Alaska, Russia, Finland, Sweden, Norway, Greenland and Iceland along with the Arctic Ocean. Temperatures can reach  $-68^{\circ}\text{C}$  in the winter months, making it one of the coldest places on Earth.



## The Antarctic region

The Antarctic region is found in the Southern Hemisphere and it is the world's fifth largest continent. It is covered in an ice sheet that is up to 4.8km thick. It is the coldest, driest, highest and windiest continent on Earth. Temperatures can reach  $-89^{\circ}\text{C}$ , there is no precipitation and wind speeds can reach 80km per hour in some areas.

## Nature in the Polar Regions

The Arctic region is home to small populations of people and an amazing variety of plants and animals, including the polar bear, the arctic fox and the walrus.



There are no people that live permanently in the Antarctic region and only two native kinds of the flowering plants, but it has a rich sea life, including the emperor penguin, humpback whale and leopard seal.



## Threats to the Polar Regions

Unfortunately, the Polar Regions face many threats to their ecosystems. The main threats to these regions plants and animals are global warming, pollution and overfishing.

## Glossary

**Expedition** – a group journey with a particular purpose.

**Explorer** – someone who travels to undiscovered places.

**Glacier** – a large body of ice.

**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.

**Ice sheet** – a thick sheet of ice covering an extensive area.

**Inuit** – people that have always lived in the Arctic regions.

**Northern Hemisphere** – the part of Earth that is to the north of the equator.

**Sea ice** – a thin, fragile layer of frozen seawater.

**Southern Hemisphere** – the part of the Earth to the south of the Equator.

## Ernest Shackleton

### Date and place of Birth:

15th February, 1874 in County Kildare, Ireland

### Date of Death:

5th January, 1922 in Grytviken, South Georgia and the South Sandwich Islands



Ernest Shackleton is considered to be one of the most inspirational explorers and leaders of the 20th Century. He was a polar explorer who carried out expeditions to Antarctica.

## Shackleton's early Life

In his early life, he loved to read and had an active imagination. Shackleton's father wanted him to become a doctor, however, he had other ideas. At the age of just 16, he joined the Merchant Navy and by the time he was 18, he had been promoted to First Mate.

## Shackleton's expeditions

In 1901, Shackleton went on his first expedition to Antarctica with famous explorer Scott. However, he had to return home due to illness. Then he went again in 1907, but this time the entire crew were sent home. In 1914, Endurance set sail and this was his most successful and famous expedition to

## Shackleton Timeline

- **1874** – Shackleton is born
- **1890** – Shackleton joined the Merchant Navy
- **1892** – he progressed to First Mate
- **1901** – Shackleton joined Scott on the British National Antarctic (discovery) Expedition.
- **1903** – Shackleton sent home due to illness
- **1907** – The British Antarctic (Nimrod) Expedition set sail
- **1909** – Returned to England after being forced to turn back
- **1914** – Endurance sets sail from London
- **1915** – Endurance trapped in ice drifts for 10 months
- **1916** – Shackleton reunites with his crew and returns to England
- **1921** – The Quest departs England on the Shackleton-Rowett Antarctic expedition
- **1922** – Shackleton dies

## Auroras

Auroras are displays of coloured lights seen in the skies near the North and South Poles. The lights are created when electrically charged particles from the Sun collide with oxygen and nitrogen gas particles in the Earth's atmosphere.

The Aurora Borealis, or Northern Lights, can be seen from Norway, Finland, Sweden, Iceland, Canada and as far south as Scotland and northern England.



The Aurora Australis, or Southern Lights, are more difficult to see as the lights are mostly seen around Antarctica and the southern Indian Ocean.

