

Frozen Kingdom

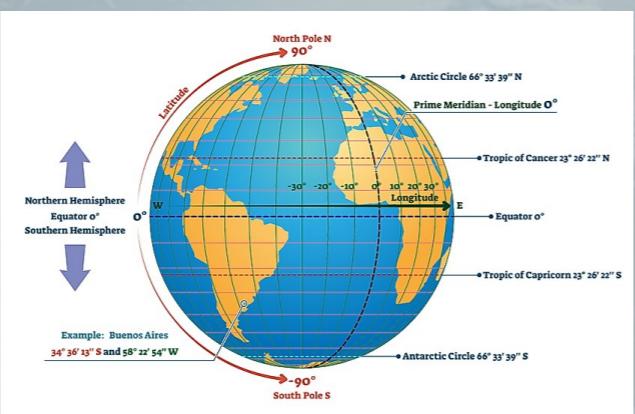
Knowledge Organiser.

Key Words

Key word	Meaning
Antarctic Circle	An imaginary circle of latitude that lies 66.5° south of the equator.
Arctic Circle	An imaginary circle of latitude that lies 66.5° north of the equator
Climate	The usual weather conditions that occur in a place over a long period.
Indigenous	Occurring naturally or originating in a particular place.
Precipitation	Water that falls from clouds in the sky as rain, snow, hail or sleet
Tundra	An area of land where it is too cold for trees to grow and the ground below the surface is permanently frozen.

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.



Polar Landscapes:

Much of the polar regions is covered with snow and ice all year round. Polar landscape features include glaciers, ice fields and icebergs.

Glacier:

Glaciers are slow-moving masses of flowing ice, formed by the compaction of snow. They can vary in depth from 50m to 1500m.



Ice Field:

Ice fields are large areas of connected glaciers covering flat areas, such as valleys and high plateaus. They are made from compressed and frozen snow.



Iceberg:

Icebergs are chunks of ice that calve, or break off, from glaciers and ice sheets and float in the sea. Wind and water erode icebergs into sculptural shapes.



Arctic Region:

The Arctic region consists of the Arctic Ocean and the northern parts of Canada, Alaska, Russia, Finland, Sweden, Norway, Greenland and Iceland. Winter temperatures can reach -55°C and summer temperatures can reach 10°C. The Arctic region has a varied landscape including mountains, tundra and boreal forest. It is home to small populations of people and an amazing variety of plants and animals including the polar bear, Arctic fox, Arctic hare and walrus.



Natural Resources:

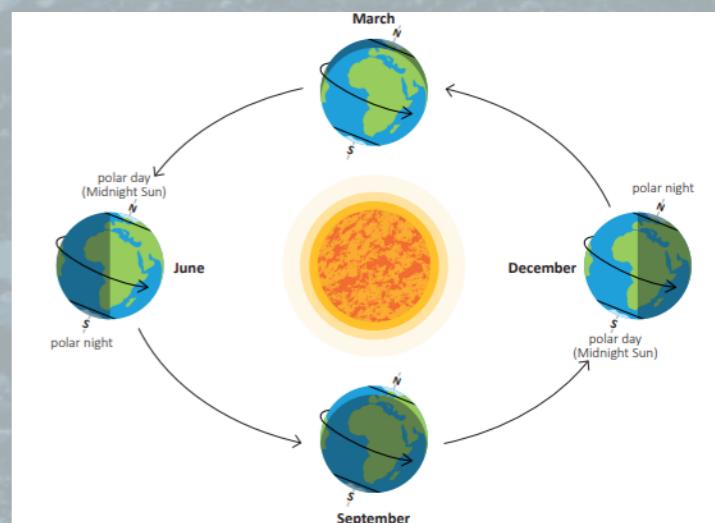
Natural resources in the Arctic include oil, gas, minerals, metals, fish, wood and freshwater. Arctic inhabitants use the natural resources available for fuel, food and to sell to other countries. However, many of the resources have not yet been touched as they are difficult to extract, especially those that underneath the frozen waters of the Arctic Ocean.

Indigenous People:

The indigenous peoples of the Arctic have inhabited the area for thousands of years. In the past, they adapted to the cold, harsh conditions by hunting and eating animals native to the area, such as seals, whales and walruses, and using reindeer skins to keep warm. Many lived nomadic lifestyles, following reindeer herds. Today, many indigenous peoples live in permanent settlements and have a modern lifestyle, but some still follow the traditional way of life.

Polar Day and Night:

Due to the tilt of the Earth, the poles experience nearly 24 hours of daylight during the summer months. This is called polar day, or Midnight Sun. In the winter, the poles experience nearly 24 hours of darkness. This is called polar night.



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Polar Exploration.

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.



Robert Falcon Scott:

Robert Falcon Scott (1868–1912) was a British explorer who led two expeditions to the Antarctic. His second expedition turned into a race to the South Pole that Scott's team lost, losing their lives in the attempt.



Roald Amundsen:

Roald Amundsen (1872–1928) was a Norwegian explorer. He was the first to discover the Northwest Passage in the Arctic that joined the Atlantic Ocean to the Pacific Ocean. In 1911, he led a successful expedition to be the first to reach the South Pole, beating Scott's team.

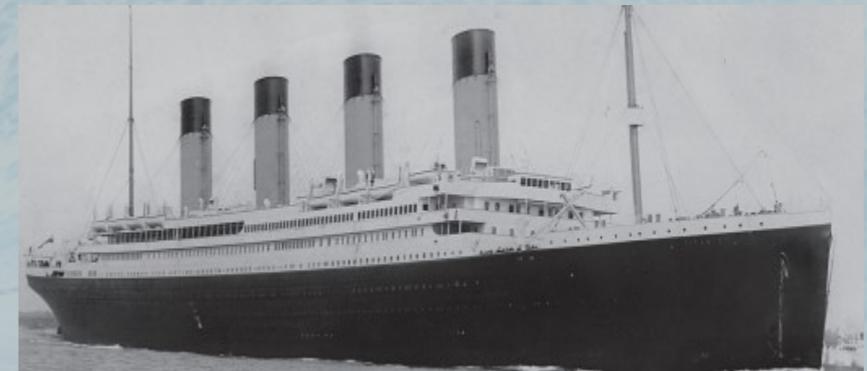
Ernest Shackleton:

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.



Titanic:

The RMS Titanic sank on 15th April 1912. Four days after leaving Southampton, UK and just 300 miles from its destination of New York, USA, the lookout crew spotted an iceberg in the Titanic's path. The ship collided with the iceberg, damaging its hull. At 2:20am on 15th April, the Titanic began to sink. Although the crew sent distress signals, none of the ships who responded were able to reach the Titanic before she sank. It is estimated that 1500 people were killed and only 700 survived.



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.

