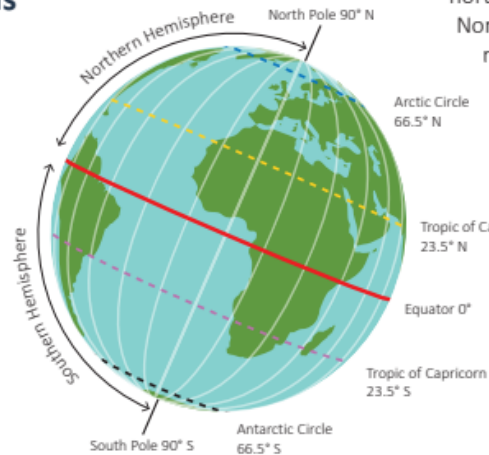


Frozen Kingdoms

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.



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.



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 -80°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.



Glossary

Antarctic Circle	An imaginary circle of latitude that lies 66.5° south of the equator. Everything south of this line is known as the Antarctic.
Arctic Circle	An imaginary circle of latitude that lies 66.5° north of the equator. Everything north of this line is known as the Arctic.
boreal forest	A large area of wetland covered in conifer trees. Boreal forests are found in countries that are in or near the Arctic Circle.
climate	The usual weather conditions that occur in a place over a long period.
horizon	The line where the sky appears to meet the Earth.
indigenous	Occurring naturally or originating in a particular place.
native	Referring to the animals and plants that occur naturally in a place.
North Pole	The most northern geographical point of the Earth.

polar day	Near constant daylight in the Arctic or Antarctic during the summer months when the Sun does not set below the horizon. Also known as Midnight Sun.
polar night	Near constant darkness in the Arctic or Antarctic during the winter months when the Sun does not rise above the horizon.
precipitation	Water that falls from clouds in the sky as rain, snow, hail or sleet.
South Pole	The most southern geographical point of the Earth.
tundra	An area of land where it is too cold for trees to grow and the ground below the surface is permanently frozen.

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.

