



KNOWLEDGE ORGANISER -

The Frozen Kingdom

Summer 1- Year 6

Biomes

Biomes are areas of the planet with a similar climate and landscape, where similar animals and plants live. Some of the world's main biomes include rainforest, desert, savannah, grassland, woodland and tundra.

Each biome has characteristics that make it unique, for example Alaska is a type of tundra.

MOUNTAINS

Snow and ice exist in high altitude environments all year round. The animals that live in mountain regions have developed specialised ways of dealing with lower levels of oxygen as well as the cold.



BOREAL FOREST

Boreal forest or taiga is the world's largest terrestrial biome. Trees such as pines, spruce and larch have adapted to survive the extreme cold in winter. It is home to a wide range of animals including several mammal and bird species.



TUNDRA

At high latitudes and high altitudes lies a treeless region known as tundra. Permanently frozen subsoil, called permafrost, underlies the region. Arctic tundra springs to life in the brief summer and is an important breeding ground for birds.



ICE CAPS

Two huge land masses are almost completely covered in ice. Antarctica and Greenland. The fringes are home to several sea bird and seal species that are adapted to living and feeding in permanently icy areas.



SEA ICE

The oceans in the polar regions get so cold in winter that they freeze. Sea ice is salty, but less salty than sea water. Polar bears rely on sea ice for hunting and it provides a birthing place for seals and walrus.



Famous Explorers



In 1910, British explorer Robert Falcon Scott set out for the South Pole in a bid to reach it first and win a prize. He arrived on 17th January 1912 but was beaten there by Roald Amundsen from Norway who was the first person to visit both the North and South Pole.

Climate Change

Human activity has caused the Earth to get warmer in the last 100 years. Climate change means that the polar ice caps are melting as the regions become warmer. This is endangering wildlife.

The Arctic- North Pole



The Arctic ocean is the main feature of the Arctic. However, it is covered by thick sea ice for most of the year, underneath a blanket of snow. Therefore, the Arctic is quite flat compared to the Antarctic. The Arctic is not as cold as the Antarctic: The ocean warms the air a little. It is still very cold though! In some months, the Northern lights can be seen in the Arctic. Polar bears are one of the apex predators in the Arctic. The Arctic fox, reindeer, walrus, beluga whales and narwhals also live in the Arctic circle.

The Antarctic is based on a large land continent (Antarctica) covered in ice and snow. Antarctica has several mountains as well as huge glaciers. Large icebergs can be found at sea. Antarctica is the coldest place on Earth. The temperature can reach as low as -89°C ! Worse still, freezing blizzards can take place for days at a time Emperor penguins are one of Antarctica's famous residents. A number of seals and birds also live in Antarctica.

The Antarctic- South Pole



Interesting Facts

- In the Arctic, because of the Earth's tilt, for at least one day a year there's an entire day of darkness in this freezing region — and also a full day of sunshine!

-Antarctica is the driest continent of the seven continents. Antarctica is an icy desert with very little rain-fall throughout the year.

Key Vocabulary

biome	An areas of the planet with a similar climate and landscape, where similar animals and plants live.
tundra	An area of land where it is too cold for trees to grow and the ground below the surface is permanently frozen.
longitude	Lines of longitude calculate how far east or west a place is. These lines run from the top of the Earth to the bottom.
latitude	Lines of latitude calculate how far north or south a place is. These lines run parallel to 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.
glacier	A glacier is a thick mass of ice that covers a large area of land.
iceberg	A huge chunk of ice floating in the ocean is called an iceberg.