



## Iceberg

Icebergs are made from frozen freshwater. They form when chunks of ice calve (break off) from glaciers, larger icebergs or ice shelves. Most icebergs are found near Antarctica and in the North Atlantic Ocean near Greenland. Icebergs can be all different shapes and sizes, from a few metres to hundreds of kilometres across. They are at least five metres tall. Icebergs can be dangerous to ships as they are largely hidden underwater and can tear into a ship's hull, causing severe damage. Polar bears hunt on icebergs and harbour seals use them as a refuge from predators. Icebergs can be moved by winds and currents until they eventually melt.





## Glacier

A glacier is a slow-moving mass of ice formed by the compaction of snow. Many years of snow build up before transforming into ice. Most glaciers are found in Antarctica and Greenland but they have formed in many places around the world. Glaciers can range from 50m to 1500m deep. Glaciers are usually found in remote, mountainous regions and therefore they present little danger to humans. However, melting can cause flooding to nearby towns or cities. Only a few tiny animals, such as glacial midges, snow fleas and ice worms, live on glaciers but they are visited by many birds and larger animals, such as polar bears. On average, glaciers move 1m per day.





## Mountain

Mountains in the polar regions are made of rock but are usually covered in snow and ice. The Arctic Cordillera range is found in the Canadian Arctic Archipelago islands. The highest peak in the Arctic is Mount Gunnbjörn in Greenland, at 3694m. The Transantarctic Mountains run across Antarctica. Vinson Massif is the highest peak, at 4892m. There is very little life in the Antarctic mountains due to the extreme conditions. Musk oxen, reindeer, polar bears, Arctic wolves and rock ptarmigans can be found in the Arctic mountains.





## Ice field

Ice fields are large areas of connected glaciers, usually covering the flat areas on high plateaus. They are made from snow that has been compressed and frozen. Ice fields can cover up to 50,000km<sup>2</sup> often with glaciers flowing from the edges. There are ice fields all over the world but they are most common in the Arctic and Antarctic regions. The ice is of varying depths from 100m to over 1000m. Ice fields are static, which means they don't move like glaciers. Large mammals and birds visit the ice fields but only small animals and insects can live in the extreme conditions.





## Tundra

Tundra is a large area of land where it is too cold for trees to grow and the ground below the surface is permanently frozen. This frozen layer is called permafrost and prevents many plants from growing roots deep into the soil. The low-growing vegetation that can grow in the tundra includes small shrubs, grasses and mosses. Tundra is found in many areas of the Arctic and small parts of the Antarctic. Some Arctic animals can live in the Tundra, including Arctic foxes, polar bears, reindeer and Arctic hares.





## Boreal forest

The boreal zone circles the Earth just south of the Arctic Circle. Boreal forests grow in this zone, covering 17% of the Earth's landmass in evergreen trees. Large areas of boreal forest are found in Canada, the USA and Europe, including Russia. Tall coniferous trees, such as pine, spruce and larch, grow there. The cold, wild habitat supports a wide variety of animals, including large mammals, such as moose, wolves and lynx.

