



Antarctica



Vocabulary

Antarctica	The world's fifth largest continent located at the South Pole.
biome	A region of the Earth's surface and the particular combination of weather conditions, plants, and animals that are found in it.
continent	One of the seven large land masses on the earth's surface, surrounded, or mainly surrounded, by sea and usually consisting of various countries.
ecosystem	All the living things in an area and the way they affect each other and the environment.
expedition	A journey undertaken by a group of people with a particular purpose.
Ice sheet	A layer of ice covering a large piece of land.
Ice shelf	A large, floating platform of ice that extends from a glacier into the ocean.
glacier	A large mass of ice that moves slowly.
desert	An area where there is very little rain and not many plants.
hemisphere	one of two halves of the earth, especially above or below the equator
climate	The general weather conditions usually found in a particular place
navigate	To direct the way that a ship will travel
South pole	The point on the earth's surface that is furthest south.



Antarctica is the fifth largest **continent** (based on size) but it has no countries or cities. It has the smallest population of any continent, around 1,000 people in the winter and 10,000 people in the summer. These are scientists who carry out experiments to find out more about climate change and how this is impacting the icy areas and **glaciers** of Antarctica.

Antarctica is the driest and coldest continent on Earth (on average 20oC colder than the Arctic). The coldest temperature recorded here was -89.2 oC. It is also the windiest place on Earth. Winds can reach 218mph!

The major biome in Antarctica is icy **desert**.

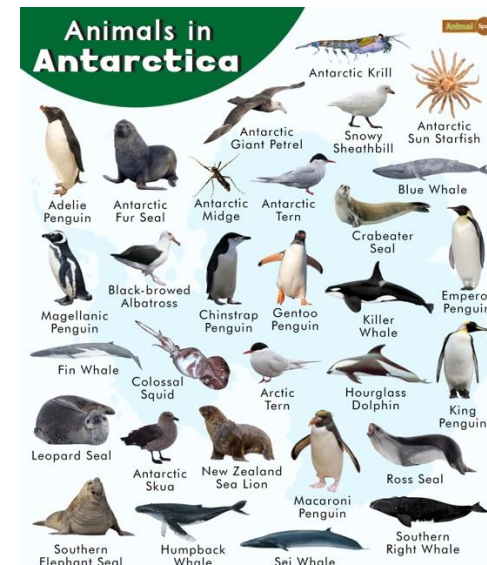
98% of Antarctica is covered by ice. 90% of the world's ice is located in **Antarctica**, which also makes 60-70% of the world's freshwater supply.

Dear parents,

Our next Humanities topic is a Geography unit called '**Antarctica**'. Please help your children to prepare for this topic by learning some of the key words and the facts on this sheet.

There are some homework activities on the back of this sheet. Your child can complete these at any time. Your child's teacher would love to see what they have created.

Thank you for your support,
Kind regards,
Year 4 Teachers

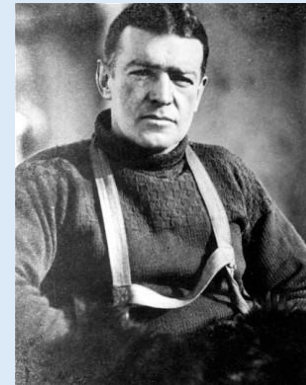


Ernest Shackleton

Ernest Shackleton wanted to be the first person to cross the entire **continent** in one **expedition**. In 1914, he began his **expedition** on board a ship called Endurance. In early 1915, disaster struck as his ship became trapped in ice. Shackleton and his men had to abandon his ship and they had to live on the ice.

In the spring of 1916, the ice began to thaw and Shackleton and his team boarded small boats and headed to nearby deserted island - Elephant Island. **Shackleton** and five men took a small **lifeboat** and headed to South Georgia (800 miles away), leaving everybody else behind. After 17 days, they arrived at South Georgia and they were able to organise a rescue mission for the other men.

Shackleton and his team were on the ice for almost two years, but thanks to **Shackleton's** bravery and heroic actions, in what seemed like a hopeless situation, nobody died.



Expeditions to Antarctica - The First to the South Pole

After several failed attempts to be the first person to reach the South Pole, in 1910, Captain Robert Falcon Scott and his team of 12 men (the Terra Nova Team) set up camp on **Antarctica**. They wanted to be the first there to represent the United Kingdom.

Unfortunately, when they arrived they learnt that a rival team of Norwegian explorers, led by Roald Amundsen were also camped on Antarctica to. The race was on to see who would be the first.

On 17th January 1912, Scott and five of his team reached the South Pole (the other seven had returned to base along the way). There was just one problem... the Amundsen Expedition had beaten them. They had arrived on 14th December, 1911 (over a month earlier) and planted the Norwegian flag.

Scott's Terra Nova team planted the British flag and returned home. Unfortunately, nobody from Scott's team survived the return journey to base.

Climate Change

The world is getting warmer and most scientists believe that this is due to human activity, such as burning fossil fuels like coal, gas and oil.

Over the last 50 years, the west coast of the Antarctic Peninsula has been one of the most rapidly warming parts of the planet (+3oC). This warming is not only restricted to the land but can also be noted in the Southern Ocean (+1oC).

The warming of the Peninsula and the melting of ice, snow, glaciers and ice sheets is effecting wildlife:

- Where penguin colonies live has changed
- Some penguin species have declined in population e.g. emperor penguins have declined by half in places
- More plants are being found on the Antarctic Peninsula
- Antarctic krill is declining. This is an important part of the food chain as it is eaten by many other ocean animals.

Although Antarctica is many thousands of miles away, changes here effect the world. Due to melting ice and snow, satellite measurements since the early 1990s show that sea levels are rising at a rate of 3mm per year. This may eventually lead to the flooding of many coastal areas and whole islands being lost under the world's oceans.

Homework Ideas:

- Create a paper mache iceberg.
- Research the events that happened in 1910 with Scott's Terra Nova Team, when the British attempted to find the South Pole and present your findings to the class - a poster, a PowerPoint presentation, a model etc.
- Write a newspaper about Scott finishing second in his expedition to the South Pole.
- Make a model of Shackleton's ship, the Endurance.
- Draw and paint a picture of an iceberg.
- Create a board game about exploring Antarctica.
- Draw a portrait of Shackleton, Amundsen or Scott.
- Create a fact poster for a famous Antarctic Explorer.
- Draw/paint a map of Antarctica.