

Lesson One: Curious Continents

Factsheet for teachers

Key Questions

- Where is Antarctica?
- What is Antarctica 'made of'?
- What time is it at the South Pole?

Location

Antarctica is a continent. Of all the continents in the world Antarctica is the 5th largest. It is found at the south on the Earth. It covers the South Pole with a surface area approximately twice the size of Australia. The other continents that are closest to Antarctica are South Africa, Australia and the closest is the southern tip of South America which is only 1000kms away.

The size of Antarctica changes in the winter as the edge of the ice grows around the coast due to the sea ice. Its size doubles during the winter months. Antarctica is the coldest and windiest continent on earth. Blizzards and wind speeds greater than 100km per hour are common as are temperatures below -50degrees C. The Antarctica weather is much colder than the Arctic temperature at the North Pole. This is because the south pole and its ice covers a large piece of land and is much higher than the North Pole, which is a large flat piece of ice with no land that covers the ocean.

Antarctica is cold all year round; it is the coldest place on earth. In winter the temperature ranges between -80°- 90° c and in summer the temperature can reach up to 15° c.

Land Mass

- Vinson Massif is Antarctica's highest point, rising to a height of 4,897 metres.
- The largest, the Ross Ice Shelf, is the size of France.

Unlike the arctic region in the north, Antarctica is a continent. It is land; though 99% of Antarctica is covered with a vast ice sheet. The ice sheet averages 2,450 metres deep and holds about 70% of the world's fresh water. Antarctica's ice sheet is constantly on the move. Huge rivers of ice known as glaciers are pulled slowly by gravity from the interior towards the sea. On reaching the sea, the glaciers spill out over the water's surface and create gigantic floating blocks of ice called ice shelves.

Time

Antarctica is one of the most interesting places in the world when it comes to keeping time. Technically, Antarctica, and the North Pole, falls under all time zones currently followed by the rest of the world. This is because the longitude lines that are used to define time zones all meet at the two poles.

Antarctica, therefore, not only has 24 time zones, but there is at least one point - the South Pole - where a clock synchronized to the time in any part of the world will be correct. Go to Time and Date website: <http://www.timeanddate.com/time/time-zone-antarctica.html>