



## Curriculum

### Year 6 Scheme of Work for Geography

**Term: Spring Term 1**

**Topic: Antarctica and Climate Change**

#### Key Skills and Knowledge:

**Substantive knowledge:** Locational Knowledge: name and locate locations, use positioning systems, Place Knowledge: the connection of location with personal experiences, Human Processes: land use, Geography Skills: using maps and atlases.

**Concepts:** Place, Space, Scale, Human Processes, Cultural Awareness and Cultural Diversity.

#### Locational Knowledge

To locate Antarctica on the world map.

To explain the location of Antarctica, when identifying the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night).

To know that Antarctica is the fifth-largest continent.

#### Place Knowledge

To understand geographical similarities and differences through the study of physical geography.

To know that there are no countries in Antarctica.

To know Antarctica is the highest continent in the world.

To know that day and night are different at the South Pole. In summer, each day has 24 hours of daylight and in winter, 24 hours of darkness.

To know that the South Pole only has one sunrise and sunset during the whole year, in the autumn and spring equinoxes.

To know how Antarctica has changed over time.

To know what Antarctica could be like in the future.

To know that Antarctica is a desert.

To know that climate changes in Antarctic are affecting other places like, small island nations such as the Maldives and local places such as Whalley, Lancashire.

To know how global warming is affecting rainfall in the UK and its impact, and how people live (floods affect farming, settlements).

#### Geographical Skills.

To use maps, atlases, globes and digital/computer mapping to locate volcanoes and earthquake zones and describe features studied.

#### Human and Physical Geography

To describe and understand (tell the story) key aspects of:

physical geography, including:

To identify some of the physical features from aerial photographs and on maps and know the corresponding symbols.

To know that all the lines of longitude stop at the South Pole and every direction from here is north.

To know that the South Pole is further above sea level than the North Pole. This is because the ice sheet on Antarctica is so thick.

To know that the South Pole is colder than the North Pole.

To know no indigenous people live in Antarctica. Several thousand scientists and researchers from around the world live on the continent temporarily for work.

To know that the continent is governed by the Antarctic Treaty System in 1959. The treaty has banned any mining for minerals and military activity.

To know that Antarctica is officially a desert and is the driest continent in the world.

To know that most of Antarctica is covered by the Antarctic ice sheet, which on average is at least 1 mile (1.6km) thick.

To know that there are geographical features hidden under the ice, such as Lake Vostok - a huge lake that has been buried for an estimated 15 million years.

To know that Transantarctic Mountains separate the east and west regions of the continent.

To know that the highest peak is Mount Kirkpatrick.

To know about COP28

### Reading and Writing Opportunities (Long and Short Activities)

#### Creative Ideas and Hooks

#### Think like a Geographer

##### Key geographical questions

Where is the position of Antarctica on a global map?

What is climate change? How is it caused?

How will climate change affect the planet?

What can be done to reduce climate change?

What choices can you make to be more sustainable?

How is climate change affecting the lives of humans around the world?

Where in the world are people/places most effected by climate change?

What was Antarctica like in the past? How and why is it changing?

How is it similar or different to other localities that we have studied?

##### To ask and discover what it is physically like here by asking and researching:

To ask and discover the impact climate change is having on Antarctica's environment.

#### Write like a Geographer

##### To tell the story

Write a report on who discovered Antarctica.

Write a report on: How and why is it changing? How do people feel about these changes? What will it look like in the future? Why will it look like this? What evidence supports your findings?

Write a diary from the viewpoint of Lewis Pugh.

Debate - Imagine you are visiting Antarctica as a tourist. How would you make sure you didn't impact the environment?

##### Digital Maps –

Use Google Earth to discuss how and why places are connected.

Discuss how different the aerial view of Antarctica looks when zooming in and out.

To discuss - Do we still need paper maps in this digital age?

##### ART/DT/Homework

Create a fact on wildlife of the Antarctica.

Drama - Now press play story and resources. – Antarctica.

### Links to PSHCE, Equality and British Values Work

Respecting differences in the places studied – the distinctive characteristics of the world to build on the pupil's sense of belonging and understand how people can help slowing down climate change.

What it means to be different.

Equality and Diversity

Discuss how different the aerial view of Northwest England compared to Antarctica when zooming in and out.

Picture News/ Newsround

COP28 – Climate Change priorities.

Sustainability – discuss why is there a major concern for the future of Antarctica and for the marine life in the surrounding Southern Ocean.

<b>Key Vocabulary:</b>	<b>Resources Available / Visits/Visitors</b>	<b>Useful Websites:</b>
Antarctic Circle, continental drift, Antarctic Ocean, Antarctica, glacier, environment, blizzard, Ice Age, Global Warming, frostbite, atmosphere, climate, greenhouse gases, cold, greenhouse effect, continental shelf, continental slope, conservation, calving, tides, extinct, Ice floe, Ice Shelf, Ice Sheet, Iceberg, swell, Sub-Antarctic, Pack Ice, sediments, Latitude, crustacean, krill, plankton, pollution, expedition, South Pole, South Magnetic Pole, formations, Continent, habitat, humpback, Seals, Penguins, Whales and temperature.	Super Schemes Book Resources in school staff shared folder	<a href="http://www.earth.google.com">www.earth.google.com</a> <a href="https://discoveringantarctica.org.uk/challenges/sustainability/">https://discoveringantarctica.org.uk/challenges/sustainability/</a>
	<b>Misconceptions:</b> <b>Misconceptions about Volcanoes -</b> Penguins are the only birds in Antarctica. Antarctica is only for scientists. It's too cold to travel in Antarctica Antarctica is nothing but snow and ice. Polar bears live in Antarctica.	<b>Previous knowledge:</b> <b>Y3/4/5</b> Children will learn to identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn.