

Geography—The Polar Regions

What our children should already know

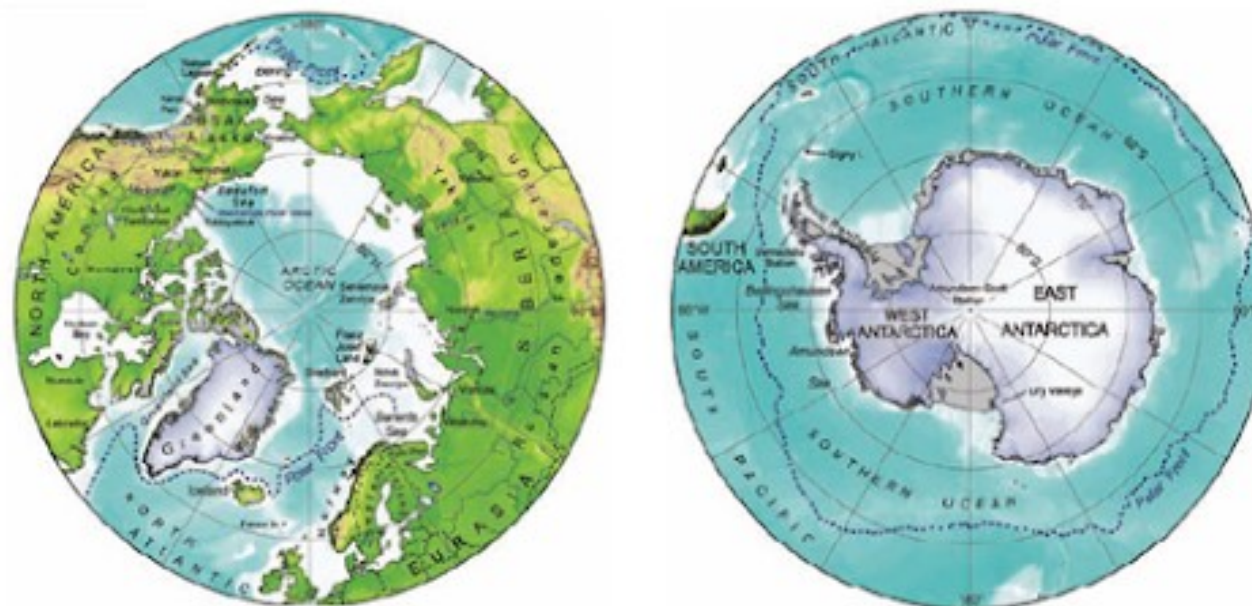
- There are different climates around the world.
- Countries are colder at the Northern and Southern points of the planet and that it is hotter in regions around the Equator.
- Different animals are adapted to live in their various habitats, and that people live in cold regions.
- Global warming is affecting the environment.

Key Vocabulary

polar	Relating to the North or South poles.
region	An area or part of a country that has specific characteristics or features.
hemisphere	A half of the earth's sphere.
latitude	Imaginary horizontal lines that run across the earth's surface, parallel to the Equator.
longitude	Imaginary vertical lines that run from the North to the South poles.
global warming	The gradual increase in the overall temperature of the earth's atmosphere.
pollution	The contamination of air, water or soil by dangerous or harmful substances.
habitat	The natural home or environment of an animal or plant.
climate	The weather conditions in an area or region.
Arctic circle	A line of latitude that marks the Arctic region in the Northern Hemisphere.
Antarctic circle	A line of latitude that marks the Antarctic Southern Hemisphere,
Permafrost	ground that remains completely frozen—32°F (0° C) or colder—for at least 2 years.
settlement	A place where people establish a community.



Maps



Lesson Sequence

- WALT identify the polar regions and features of them.
- WALT investigate the climate impact on a settlement in Norway.
- WALT compare habitats and living things in Bolton and Polar Regions.
- WALT explore the physical features in the Polar Regions.
- WALT analyse the effect of global warming.
- WALT write a knowledge based diary entry in role.

Human Features

Describe and understand key aspects of:

- Types of settlement and land use (remote towns and villages, communities that live/work in polar regions)
- Economic activity and trade links
- *The distribution of natural resources and energy, food, minerals and water*

Physical Features

Describe and understand key aspects of:

- Climate zones (harsh, barren and extremely cold environments—The Arctic Circle is made up of ice that melts/freezes across the year; Antarctica is a land mass that is frozen over with ice permanently)
- Biomes
- *Rivers and mountains*
- The Water Cycle (including how the seas are affected by pollution and global warming)

Final Outcome

Children will create a group presentation that demonstrates the significance of global warming on our polar environments, as well as the information they have learned from research about populations, habitats and comparisons between world climates (in roleplay/drama form)

SMSC Links

- Spiritual** - Understanding that some spiritual beliefs may differ from scientific/geographical facts
- Moral** - Knowing that the actions of humans have caused pollution, which has led to global warming
- Social** - Awareness that civilisations live in polar regions and endure hardship, recognising our privilege
- Cultural** - Recognising traditions from cultures and communities in polar regions e.g. Inuit tribes

Key Milestones

- I can identify the position of the Arctic and Antarctic circles (Investigate places)
- I can locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America (Investigate places)
- I can make comments on countries' environmental regions, human and physical characteristics and their major cities (Communicate geographically)
- I can describe and understand the key aspects of settlements and land use, economic activity and trade links (Investigate patterns)

Choices

- Children's own beliefs/religious practices compared to scientific explanations.
- Ways in which children and families impact global climate change/eco systems that affect the polar regions.

Polar Regions Retrieval Grid

Name three animals that live in the Arctic region.	What is the climate like in a polar region? Describe it.	How many hemispheres are there on Earth, and what are they called?	Name three animals that can be found living in the Antarctic region.
How is global warming affecting the polar ice caps/polar habitats? Explain as much as you can.	What is the name given to a group of people living in the same area or region?	Why are rising sea levels a serious problem? Explain in as much detail as you can.	What is an animal habitat? Explain and give an example of one.
Why is it extremely cold in polar regions, compared to regions around the Equator? Explain in detail.	What are the names of the lines of latitude? The central one is called the Equator.	What does the word "permafrost" mean?	Complete this: Pollution is contributing to global _____, which is heating up the atmosphere and _____ polar ice.
How are polar bears adapted to live in their polar environment? Give at least three ways.	Complete this: The Arctic Circle is in the _____ hemisphere, and Antarctica is in the _____ hemisphere.	How do people survive in settlements within polar regions? Explain as fully as you can.	In what ways could we help the environment to prevent making more pollution? List as many as you can.

One Point

Two Points

Three Points

Four Points