#### **Curriculum Intent:**

To equip children with knowledge about places, people, resources and both natural and human environments, together with a deep understanding of



Year
------

Subject	Term	Unit
Geography	Autumn 2	Save our Planet

# Prior knowledge Building on knowledge and skills

- Know that the United Kingdom is made of 4 countries .England, Wales, Scotland and Northern Ireland. They are able to name the capital cities of the 4 countries and identify key characteristics of the countries. They are able to name the seas surrounding the 4 countries.
- Capital cities of the 4 UK countries London, Cardiff, Edinburgh and Belfast.
- They can name the 7 continents of the world and the surrounding oceans.
- They can identify the Equator and weather, physical and human features of Kenya East Africa

# **National Curriculum Focus**

## Human and physical geography

- Identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles. Geographical skills and fieldwork
- Use aerial photographs and plan perspectives to recognise landmarks and basic human and physical features.
  - Place knowledge
- Understand geographical similarities and differences through studying the human and physical geography of the United Kingdom, and the North and South Poles.

What?	To identify the seasonal and daily weather patterns of the UK. To
	identify North and South Poles on maps and globes. To know that
	weather is different in the North and South Poles from the UK because
	of the closeness to the Equator. Name some physical and human
	features of the North and South Poles compared to UK.
	To consider their role as a global citizen
Why?	To study a contrasting area in the world to the U.K. The weather, plants
Ť	and climate.
How?	Using globes, atlases, maps and aerial photographs. Compare physical
	and human characteristics of UK and the cold areas of the world.

#### Key questions.

Can I locate the UK, North and South Poles on world maps and the globe of the World?

Can I name the 4 seasons in the UK and the seasons in the Arctic Tundra region and say what weather is experienced in each season?

Can I name 3 human features found in the UK, Arctic and Antarctic regions?

Can I name 3 physical features found in the UK, Arctic and Antarctic regions?

Can I say what is the same and what is different about the plants found in the UK and the Arctic regions?

Can I explain what effect climate change is having on the weather and climate of the UK and the North and South Poles?

Can I explain what affect a changing climate in the Artic regions will have on other areas of the world near the Equator eg the Maldives.

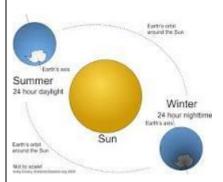
Can I explain how to prevent climate change?

	Key voc	abulary	
Continent	A group of countries that make up a land mass.	Season	Each of the four divisions of the year marked by particular weather patterns and daylight hours.
Country	An area of land led by a group of people.	Weather	The state of the atmosphere at a particular place and time as regards heat, cloudiness, dryness, sunshine, wind, rain, etc
Vegetation	Plants considered collectively, especially those found in a particular area or habitat.	Ocean	A large area of water.
Arctic tundra	The Arctic tundra is a harsh environment that only the toughest plants and animals can survive in.	Antarctica	It is at the very top of the Earth. It includes the areas around the North Pole.
Arctic	It is at the bottom of the Earth. It includes the areas around the South Pole	Equator	The Equator is an imaginary line that is drawn around the middle of the Earth to divide it into the Northern and Southern Hemispheres
Soil	The upper layer of earth in which plants grow.	Adaptations	An act or process of changing to better suit a situation.

Mountains	A large natural elevation of the earth's surface rising abruptly from the surrounding level that is larger than a hill.	Village	A group of houses and associated buildings, larger than a hamlet and smaller than a town, situated in a rural area.
Coast	The area of land around the seas and ocean.	River	Large natural stream of water flowing in a channel to the sea, a lake, or another river.
Climate change	Climate change refers to changes in the Earth's climates, at local, regional, or global scales, and is most commonly used to describe anthropogenic, or human-caused, climate change.	Global warming	Global warming refers to the rise in average global temperatures, which is linked to significant impacts on humans, wildlife, and ecosystems around the world.
Ozone layer	The ozone layer is a thin part of Earth's atmosphere that absorbs almost all of the sun's harmful ultraviolet light. The ozone layer acts as an invisible shield and protects us from harmful ultraviolet (UV) radiation from the sun. In particular, the ozone layer protects us from sun rays which cause sunburn. Long-term exposure to high levels of UV-B rays threatens human health and damages most animals, plants and microbes, so the ozone layer protects all life on Earth.		

Key learning: (Specific link to the NC here)		
Objective	Learning	
Can I name the 4 seasons and the weather patterns in the UK?	Name discuss characteristics of the 4 seasons of the UK. <a href="https://www.youtube.com/watch?v=r4Yi-CWB5Ik">https://www.youtube.com/watch?v=r4Yi-CWB5Ik</a> BBC Teach . What season are we in now? Keep a weather record as a class for the week.	
Can I explain the weather and climate of the Artic regions and the Equator?	Find and name North and South Poles and UK on maps, globes and in atlases. Find the equator on the globe of the world. Name the countries which sit along the Equator. Find out how the proximity to the Equator affects the climate and weather of a country.  To know that Antarctica is a continent but North Pole is made of ice no land. Find the Artic circle on the world map.  Know that inside the Artic tundra there are just two seasons.	

To know that along the Equator they have two seasons wet and dry.



Because of the earth's tilt and orbit around the sun, the poles receive less energy and heat from the sun. This results in only two polar two seasons—summer and winter. In summer at the poles, the sun does not set, and in winter the sun does not rise.

The **climate of the** <u>Arctic</u> is characterized by long, cold winters and short, cool summers. There is a large amount of variability in <u>climate</u> across the Arctic, but all regions experience extremes of <u>solar radiation</u> in both summer and winter. Some parts of the Arctic are covered by ice (<u>sea ice</u>, <u>glacial ice</u>, or <u>snow</u>) year-round, and nearly all parts of the Arctic experience long periods with some form of ice on the surface.

Discuss the weather and temperatures expected. Compare this to the Artic tundra regions which have only summer and winter. What is the weather like? The interior of Antarctica is often called a 'polar desert' as it only gets about 5cm of snowfall each year. Under such severe and harsh conditions there is hardly any vegetation in the Antarctic.

Know countries location in relation the Equator affects the weather. Revisit the weather patterns in Kenya East Africa which is situated on the Equator. How the temperatures are hot and humid all year round with little variation of temperature. Countries near the equator don't experience the four seasons like other places on Earth do. Countries on, or near, the equator have the same amount of daylight and darkness throughout the year.

Can I explain what effect climate change is having on the weather and climate of the UK and the North and South Poles?

Planet Earth is surrounded by a layer we call the atmosphere, which contains a layer of gas. This gas enables the Sun's rays to get through and heat up the earth.

This gas is incredibly important, as it also allows some of the heat from the Sun, to go back into space, so that Earth does not get too hot, and we are not damaged by the strong rays from the Sun.

It acts like a protective blanket! But unfortunately, our protective blanket is being damaged causing something called climate change Greenhouse gases are substances such as methane, carbon dioxide and water vapour. These gases stop heat from getting back from the Earth's atmosphere into space. This means the Earth is slowly getting warmer. Due to climate change, the polar ice caps are melting as the regions become warmer. Many indigenous people rely on local wildlife, like fish and reindeer, as the main part of their diet. As the number of animals decreases, the amount of available food also goes down. The melting ice is also causing sea levels to rise, which in turn causes flooding. The UK weather is getting more unpredictable – flooding and very hot temperatures. Islands which are low lying like the Maldives near the Equator when the sea level rises are not going to exist. People and animals will lose their homes. What can we as global citizens do to help slow down global warming? Can I identify key Use aerial photos, maps and atlases to identify cities towns, human features of villages, mountains, lakes and rivers. In the UK including London the UK and the Arctic Cardiff Edinburgh and Belfast Dudley, Wolverhampton and and Antarctic? Birmingham. – Key human features Know that there are no permanent cities in Antarctica only research stations. The biggest is McMurdo and second being Amundsen-Scott South Pole Station. Look at a map of the Arctic circle and name the countries which it

includes.



The largest communities north of the Arctic Circle are situated in Russia, Norway, and Sweden: Murmansk (population 295,374) and Norilsk (178,018) in Russia; Tromsø (75,638) in Norway, Vorkuta (58,133) in Russia, Bodø (52,357), and Harstad (24,703) in Norway; and Kiruna, Sweden (22,841). Rovaniemi (62,667) in Finland is the largest settlement in the immediate vicinity of the Arctic Circle, lying 6 km (4 mi) south of the line. Salekhard (51,186) in Russia is the only city in the world located directly on the Arctic Circle.

Can I identify key physical features of the UK and the Arctic and Antarctic?

<u>UK-</u> Use maps and atlases to find mountains Snowdon, Ben Nevis and Scafell Pike. Major rivers including River Severn, River Thames and River Trent. Largest lake in the UK, Lake Windermere.

<u>Antarctica-</u> Use maps and atlases to find Mount Vinson and the Transantarctic Mountains which divide West and East Antarctica. Find Lake Vostock a subglacial lake and Lake Fryxell. Know there are few rivers in Antarctica only melt water streams like Onyx River.

#### Arctic -

Use maps and atlases to locate tallest mountain in Greenland – Mount Gunnbjorn and the main rivers flowing into the Arctic Circle . Mckenzie, Yukon, Yenisey and Lena rivers.

Can I compare and contrast vegetation found in cold regions and those found in the UK?

Identify and find out how these plants adapted the Arctic tundra environment. tundra moss, arctic willow, bearberry, arctic poppy. Identify and compare to Arctic plants the following UK plants daisy, buttercup, nettles, poppies.

Climate change will endanger the vegetation on the Artic tundra plant species could become extinct.

https://www.bbc.co.uk/bitesize/clips/z669mp3 Equator and polar regions how Earth's climate is affected.

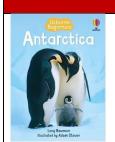
https://www.bbc.co.uk/teach/class-clips-video/geography-ks1--ks2-the-world/zkk6t39 Equator

https://www.bbc.co.uk/bitesize/topics/zx882hv/articles/z3sr4wx Arctic habitat

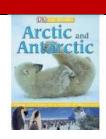
https://www.bbc.co.uk/teach/class-clips-video/pshe-eyfs-ks1-go-jetters-continent-of-antarctica/zj9c382 Antarctic habitat.

https://www.bbc.co.uk/bitesize/topics/zndc96f/articles/zp4sydm#:~:text=In%20the%20U K%2C%20we%20have,out%20how%20the%20weather%20changes. Seasons in uk

## **Recommended Reads**







### **Golden Thread**

Global awareness: Save our seas, save our trees and save our planet...

# Experience Day (Trip / visitor )

Now Press Play



Arclic



Dudley Zoo and "Ice world" workshop.