

Enquiry: How is climate change affecting the world?

What the pupils will know

- The difference between weather and climate
- The climate of polar, temperate and tropical regions
- What the greenhouse effect and global warming are
- How climate change is different from global warming
- Some of the changes being caused by climate change in Gambia and their impact on people
- Some of the changes being caused by climate change in the state of Victoria in Australia and their impact on people
- Some of the changes being caused by climate change in coastal areas of the United Kingdom and their impact on people
- Some of the changes being caused by climate change in Greenland and their impact on people
- Countries around the world where weather patterns have been most affected by climate change
- How countries around the world are acting to reduce global warming
- How individuals, families and communities like schools are taking action to reduce global warming
- What the UK government is doing on a national level to reduce carbon emissions

National Curriculum Coverage

Locational knowledge

 name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time

Human and physical geography

Describe and understand key aspects of:

- physical geography, including climate zones, biomes and vegetation belts
- human geography, including types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world

Geographical techniques the pupils will learn and apply

Statistical representation:

Drawing and interpreting: line graphs, multiple line graphs, bar graphs and climate graphs

Mapwork

- Interpreting OS 1:50,000 *Landranger* maps using the key, eight points of the compass and four and six figure grid references
- Interpreting a range of atlas thematic maps e.g., changing weather patterns, ice sheet distribution and thickness, global temperature differences and countries most impacted by evidence of climate change

Imagery

Terrestrial, aerial and satellite photographs (orientating with OS map locations) and GIS Google Earth Pro

Disciplinary thinking skills the pupils will use to understand what they know

Synthesise	Bring together a range of ideas and facts from different sources to
	develop an argument or explanation for something.
Explain	Demonstrate understanding and comprehension of how or why
	something is the way it is as a result of synthesising information.
Empathise	The capacity to place oneself impartially in another's position to
	better understand their motives, decisions and actions (even if they
	are not shared values).
Informed	A knowledgeable summing up of the main points or issues about
conclusion	something.
Reasoned	A personal view or opinion about something supported by factual
judgement	evidence.
Justify	Give reasons to show or prove what you feel to be right or
	reasonable.
Apply	The transfer of knowledge and/or skills learned in one context to
	help make sense of a different situation
Evaluate	Weigh up and judge the relative importance of something in
	relation to counter ideas and arguments.
Critique	Review and examine something critically particularly to gain an
	awareness of its limitations and reliability as evidence
Hypothesise	Come up with an idea, question or theory that can be investigated
	to see whether it has any validity or truth.

SEND

In line with our school policy, we ensure inclusion through constructing enquiries which are graduated in 'bite size' steps allowing for the setting of personalised targets, a broad range of learning and teaching strategies including questioning, working with additional adults where appropriate and a holistic approach to assessing achievement.

End Points of Learning

Pupils making a good level of progress will:

- **Describe and explain** the difference between weather and climate
- **Describe and explain** the climate of polar, temperate and tropical regions
- Explain what the greenhouse effect is and its link to global warming
- Understand how climate change is different from global warming
- Explain some of the impacts of climate change in Gambia and evaluate and reach a judgement about their impact on people
- Explain some of the changes being caused by climate change in the state of Victoria in Australia and reach an informed conclusion about their impact on people
- Understand some of the changes being caused by climate change in coastal areas of the United Kingdom and reach a judgement about what people are doing locally to mitigate its effects
- **Explain** some of the changes being caused by climate change in Greenland and **evaluate and critique** the opposing views that people have about them
- **Identify, observe and locate** those countries around the world where changes in weather patterns caused by climate change are creating hazards
- Explain, evaluate and reach a judgement about how countries around the world are acting to reduce global warming
- Explain and justify the actions individuals, families and communities like schools are taking to reduce global warming
- Explain, evaluate and reach a judgement about what the UK government is doing on a national level to reduce carbon emissions

Pupils working at greater depth will also:

Understand what the concept of a 'carbon footprint' is and evaluate the most effective measures individuals, organisations and communities might consider taking to reducing their carbon footprint

Prior Learning

Earlier in Key Stage 1 and Lower Key Stage 2 pupils learned:

- The five elements of the weather
- How weather affects people's day to day lives
- The difference between weather and climate
- The climate of polar, temperate and tropical regions
- The difference between physical and human features and processes
- About greenhouse gases and the causes of global warning
- Some of the effects of global warming in the Arctic and Antarctic
- How living more sustainably could reduce greenhouse gas emissions
- What the UK government is doing to reduce CO2 emissions
- Fossil fuels and renewable sources of energy