Climate Change – Year 6

How is climate change effecting the world?

How can we live more sustainably?

Prior Learning

Y5 – Biomes, climate zones – Rainforests unit – deforestation and its link to Global Warming

Y3 – Project Arctic – Iceland (new in 2023)

Other curriculum areas: PSHE and Science - electricity

	Key question and NC objective	knowledge to be taught
L1	**What is sustainability?** **LO: understand and use the term 'sustainability'** Describe and understand key features of human and physical geography (The understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments) Human geography, including: types of land use, economic activity and the distribution of natural resources including energy.	• Retrieval – continents, oceans, Equator, Tropics • To compare the sustainability of packaging and cars. • To understand what sustainability is and its links to development.
L2	What is the Greenhouse Effect is and how does it link to Global Warming and climate change? LO: summarise what the Greenhouse Effect is and explain how it is linked to global warming and climate change (The understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments)	• Retrieval – countries of the UK • To identify that the use of fossil fuels (non-renewable energy) increases greenhouse gases. • To understand what the Greenhouse Effect is and identify greenhouse gases. • To understand the difference between Global Warming and climate change. • To understand the key causes of Global Warming.

L3	LO: identify the effects of Global Warming and Climate Change What are the effects of Global Warming on Climate Change? Describe and understand key features of human and physical geography (The understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments) Human geography, including: types of land use, economic activity and the distribution of natural resources including energy.	• Retrieval – Capital cities of the UK, What is global warming? Name a greenhouse gas. • Locate areas of the world that have experienced extreme weather events. • To compare aerial images to see how physical features have changed over time due to climate change • To identify the problems that climate change is causing: extreme weather/melting ice/sea-level rising and their impacts. • To examine the evidence that Global Warming is happening and how it is measured. • Identify links between the causes and effects of Global Warming.
L4	LO: demonstrate an understanding of the use of fossil fuels to generate energy and know that they are a non-renewable source of energy. What are fossil fuels and how are they used generate energy? What is non-renewable source of energy? (The understanding of the interaction between physical and human processes, and of the formation and use of landscapes and environments) Human geography, including: types of land use, economic activity and the distribution of natural resources including energy.	• Retrieval – bodies of water, list two reasons for climate change. • To make links between the burning of fossil fuels, the amount of co2 released into the atmosphere and its contribution to Global Warming. • To understand the historical context of generating power. • To be able to identify fossil fuels and understand how they are used to generate power and their advantages and disadvantages. • To understand that fossil fuels are non-renewable sources of energy.
L5	LO: demonstrate an understanding of renewable sources of energy and how we will produce and use energy differently in the future.	• Retrieval – counties, fossil fuels. • To interpret and compare different countries and their energy sources making links to their geographical locations.

	What are renewable sources of energy and how we will produce and use energy differently in the future? Physical geography, including:, rivers and volcanoes. Human geography, including: types of land use, economic activity and the distribution of natural resources including energy.	• To name renewable sources of energy and their advantages and disadvantages. Link to discursive writing in English – Wind Farm debate Fieldwork – identify sites around Melbourne that could have a wind turbine located there. Map locations of onshore wind farms in the UK.
L6	LO: identify changes we can make in our own lives to reduce our carbon footprint and live more sustainably. How can we make changes in our own lives to reduce our carbon footprint and live more sustainably? Human geography, including: types of land use, economic activity and the distribution of natural resources including energy.	• Retrieval – what is sustainsbility? • To learn what a carbon footprint is – teacher could complete the footprint quiz to show all of the usages that add to it • To identify ways to reduce your carbon footprint • To understand sustainability and how to be more sustainable through choices made.
• Assessment: end of unit and assessment grid		
	Vocabulary	
Tier 1	Temperature energy resources electricity supply environment Temperature energy resources electricity supply environment development solar wind tidal coal gas oil extreme weather drought flooding rising sea levels heatwave ice storm hurricanes forest fires	
Tier 2	Conservation sustainability renewable non-renewable biomass atmosphere Climate ozone layer economy poverty emissions fossil fuels nuclear energy pledge	
Tier 3	hydropower geothermal climate change carbon footprint Greenhouse effect Global Warming	