



# Year 3 and 4 Geography Curriculum: Climate Change

In this topic your child will learn about climate change, what causes it and how it affects the Earth, as well as how we can stop it.

## Core Knowledge

**Climate** change is the change in normal weather conditions over time, like temperature and rainfall, and it is happening because of human activity on Earth. When we burn **fossil fuels** to make power, they release **greenhouse gases** such as **carbon dioxide (CO2)**, which absorb the sun's radiation and heat up the Earth in a process called the greenhouse effect.

Because the temperature of the Earth is increasing, ice is melting in the coldest places on Earth, causing **habitats** for animals like penguins and polar bears to shrink and sea levels to rise, which can cause flooding and erosion on the coast. The changes in ocean and air temperature cause changes to weather patterns around the globe, leading to extreme weather and **natural disasters**. In some places there is less rainfall, leading to **droughts**, heatwaves and **bushfires**. In some places there is extreme rainfall, leading to flooding and hurricanes. This extreme weather can destroy habitats for animals and can be dangerous to people too.

It is not only climate change that disturbs habitats, but human activity too. Human activity produces air and plastic **pollution**, which can harm plants and animals and sometimes when we build, we take over areas where animals live, such as forests. Without humans around, animals could return to their natural habitats.

Greenpeace are an organisation who are passionate about protecting the environment and want a greener, healthier and more peaceful planet that can sustain life for generations to come. Greta Thunberg is a girl from Sweden who wants to help the world stop climate change. She inspired lots of people to speak up about climate change and has since given many important talks across the world about climate change.

There are many ways that we can help tackle climate change. Using **renewable energy** instead of fossil fuels reduces the amount of greenhouse gas in the environment. Litter picking and recycling reduces the amount of waste and plastic pollution. Planting trees and plants reduces the amount of CO2 in the atmosphere and you can reduce your **carbon footprint** by using less electricity and energy.

## Key Vocabulary

Climate	The weather in a location over a long period of time	
Greenhouse Gas	Gases that are part of the greenhouse effect by absorbing the sun's radiation	
Carbon Dioxide (CO2)	A gas that is produced when we burn fossil fuels	
Fossil Fuel	Natural fuels like coal, oil and gas that formed in the earth long ago	
Natural Disaster	A natural event that can cause lots of damage to people and the environment	
Drought	A period of very low rainfall, leading to a water shortage	
Bushfires	A fire in a forest that spreads quickly	
Habitat	The natural home of an animal in the wild	
Pollution	Chemicals introduced into the environment that can harm animals, plants and humans	

**Renewable Energy**

Fuel that does not run out when it is used



**Carbon Footprint**

The amount of carbon dioxide you release into the atmosphere



## Context Quiz

### Question

### Answer

What does climate change mean?

Change in normal weather over time

What is the greenhouse effect?

Gases absorbing the sun's radiation/heat to warm the earth

Name a greenhouse gas

Carbon Dioxide (CO<sub>2</sub>), Methane, Water Vapour

Is climate change causing the Earth to get colder or warmer?

Warmer

What can the ice caps melting cause?

Destroying habitats / sea level rise

Droughts are caused by what?

Low rainfall and hot temperatures

What are two types of pollution?

Air and plastic

What is the name of the organisation that are trying to stop climate change?

Greenpeace

Are solar panels a fossil fuel or renewable energy?

Renewable energy

How can you help reduce climate change?

Using renewable energy/reducing waste/recycling/saving electricity and energy

## Useful websites to support your child with this topic



<https://climatekids.nasa.gov/climate-change-meaning/>

<https://www.wwf.org.uk/get-involved/schools/resources/climate-change-resources>

<https://www.natgeokids.com/uk/kids-club/cool-kids/general-kids-club/greta-thunberg-facts/>

<https://www.bbc.co.uk/teach/class-clips-video/science--geography-ks2-how-climate-change-is-affecting-penguins-and-their-habitats/zb2rkmn>

<https://www.worldwildlife.org/pages/why-are-glaciers-and-sea-ice-melting>

[https://www.edenproject.com/learn/for-everyone/rainforests-and-climate?gclid=CjwKCAjw5lj2BRBdEiwA0Frc9WW-7XGbnJ3rHvqYQGFEEnXayfezcsSQWxsZ7\\_AeIU8DHBKP3SeFRoCAwsQAvD\\_BwE](https://www.edenproject.com/learn/for-everyone/rainforests-and-climate?gclid=CjwKCAjw5lj2BRBdEiwA0Frc9WW-7XGbnJ3rHvqYQGFEEnXayfezcsSQWxsZ7_AeIU8DHBKP3SeFRoCAwsQAvD_BwE)

