

# What is global warming and what effect does it have on the world?

Geographical Concepts

Retrieval

Rights Respecting Schools



Environmental  
Impact



Year 4  
Year 3



6



24

Where?

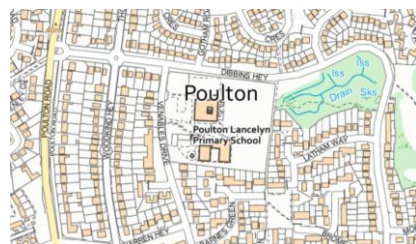
Key Vocabulary



Fieldwork



Air pollution  
survey of our  
local area



Atmosphere

The atmosphere is the layer of gases that surrounds the Earth

Carbon dioxide

Carbon dioxide is a greenhouse gas

Fossil fuel

Coal, oil or natural gas that are formed from the remains of dead organisms, known as fossils.

Global warming

The increase in Earth's average temperature over a long period of time

Carbon footprint

The amount of carbon dioxide released into the air because of your own energy needs.

Pollution

Pollution happens when the environment is contaminated, or dirtied, by waste, chemicals, and other harmful substances

What?

1. The word climate means the long-term weather patterns for a particular area. On Earth we have different climates depending on where you are. **Climate change** (sometimes called global warming) is the **process of our planet heating up**. Our planet has **warmed by an average of 1°C** in the last 100 years. The Earth's climate is getting warmer mostly because of **human activity**. In the Earth's atmosphere we have gases called **greenhouse gases**. Humans are increasing the amount of greenhouse gases we have in our atmosphere **by burning fossil fuels** (oil, coal and natural gas) and **cutting down forests**.



2. Approximately **80%** of the UK's total **energy consumption** (for uses such as electricity, transport and heating) comes from **fossil fuels** (coal, oil, petroleum and natural gas products). These are **non renewable energy** sources – supplies are limited. **Fossil fuels, deforestation, agriculture and cement** are all human contributors. **Changing energy from the sun and volcanic eruptions** are natural contributors to global warming. A **carbon footprint** is used to describe the amount of carbon dioxide released into the atmosphere as a result of activities by an individual person, an organisation, a community, a country or an event.



3. Climate change is having an impact on the **whole world**. **Sea levels** are rising, limiting available fresh water, destroying home and crops and causing **coastal erosion**. Typhoons and **storms** are becoming stronger. **Heat waves and draughts** are becoming more severe and more common.



4. Climate change **affects everyone** around the world. Climate change affects those in **poorer places more**. The people who are affected the most are the ones who have contributed the least to global warming.



5. **Pollution** is when **gases, smoke and chemicals** are **introduced into the environment** in large doses that makes it harmful for humans, animals and plants. Some forms of pollution can be seen, some are invisible. **Air pollution** is caused by solid and liquid particles and certain gases that are suspended in the air. These particles and gases can come from car and truck exhaust, factories, dust, pollen, mold spores, volcanoes and wildfires. **Plastic pollution** is excess plastic that, due to its durability and the sheer amount produced, can now be found in the sea, on beaches, in lakes and rivers. **Noise pollution** is the word scientists give to sounds that can harm the people and creatures who hear them. You can usually see pollution on the land, in the air, or in water. But noise pollution is invisible. **Light Pollution** the effects of excess light coming from cities at night.

