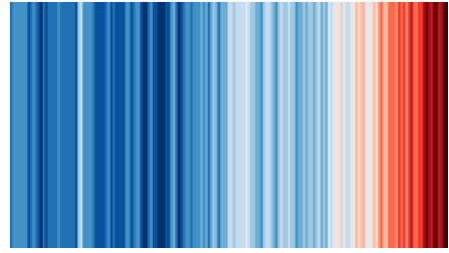


Geography: How is climate change affecting the world?

Year 6 Spring 1

Key Facts

- **Climate change** describes a shift in Earth's weather patterns over a long period of time. These include more frequent and powerful extreme weather events, rising temperatures and changes to rainfall sequences. Our climate is transforming faster now than it has for the last 1,000 years.
- The **warming stripes** (see image) were devised by British climate scientist, Ed Hawkins, and show the annual temperatures from 1850-2024. The darker reds represent the warmest years.
- Each year, the amount of carbon dioxide in the atmosphere is increasing and this is contributing to global warming. **Carbon dioxide** is referred to as a **greenhouse gas** because, along with other gases such as methane, it stops heat bouncing back into space from the Earth's surface. Fossil fuels are the main source of carbon dioxide emissions and are the principal cause of changes in weather patterns around the world.
- For nearly 30 years, a conference of the parties (**COP**) have met at the UN Climate Change Conference to decide what can be done to tackle global warming. In 2021, **COP26** was held in Glasgow, Scotland.
- A **carbon footprint** is the calculation of the total amount of all the greenhouse gases produced through a given activity, person, country, business or product.



Key Vocabulary

- **Carbon sink** – a natural area that absorbs more carbon dioxide than it releases.
- **Climate** - the average weather conditions in a particular location based on the average weather experienced there over 30 years or more.
- **Desertification** – the process of land, which was once often used for farming, turning into desert.
- **Fossil Fuels** – a non-renewable fuel such as coal or gas, formed from the remains of living organisms. They release carbon dioxide when burnt.
- **Global Warming** – a gradual increase in the overall temperature of the Earth's atmosphere caused by increased levels of carbon dioxide and other pollutants.
- **Greenhouse Gas** – a gas that stops the sun's heat reflecting away from the Earth and traps it in our atmosphere.

Website Links

If you'd like to learn more and see how you can make a difference, visit the websites below.

- <https://www.rainforest-alliance.org/>
- <https://footprint.wwf.org.uk/#/>
- <https://www.natgeokids.com/uk/discover/geography/general-geography/what-is-climate-change/>

Enquiry Questions

- What is climate?
- What signs of climate change can be seen around the world?
- Why is the climate changing?
- How will climate change affect migration?
- What is my carbon footprint? Can I reduce it?
- What are individuals and governments around the world doing to tackle global warming?
- How is climate change affecting the local area?

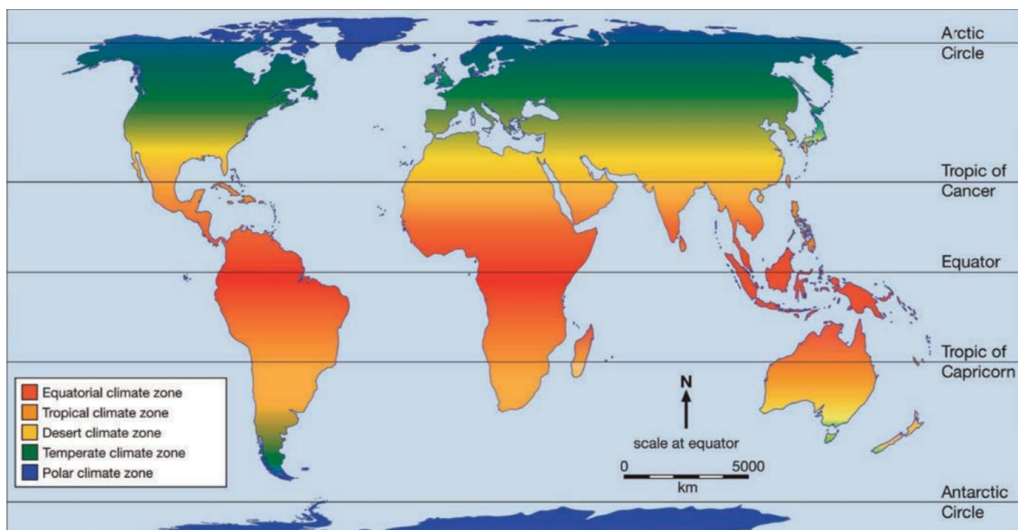
Geographical Skills

- Use maps, aerial photos, plans and web resources to describe what a locality might be like.
- Explain how human activity has caused an environment to change.
- Expand map skills to include non-UK countries.
- Identify, describe, compare, contrast and explain how global warming is affecting weather patterns around the world and evaluate its impact in different places.

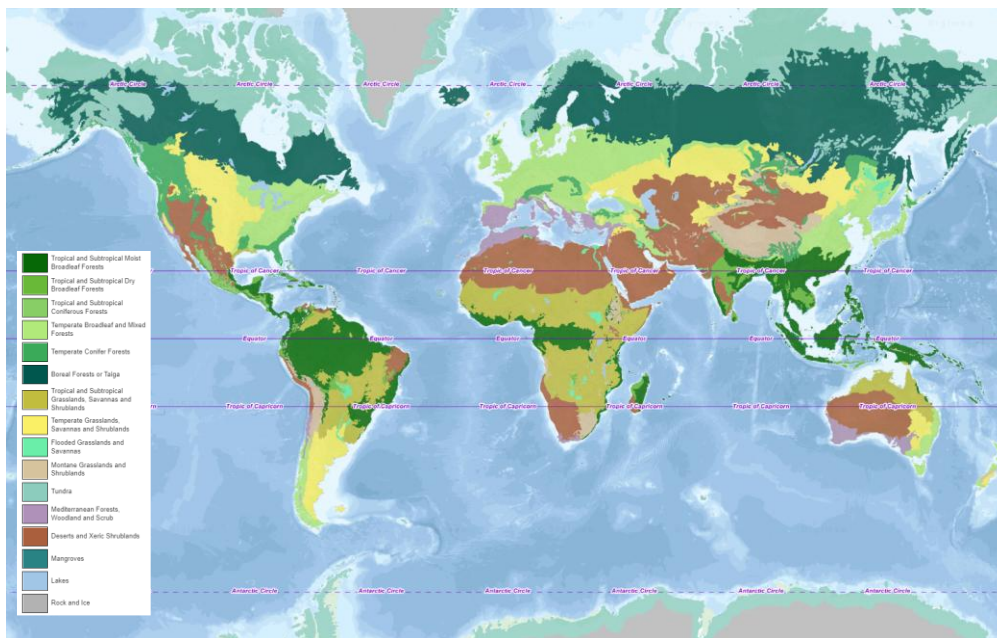
Why don't you...

- Write a speech as if you were addressing the world about global warming?
- Paint a picture of a natural disaster caused by global warming?
- Create your own graph to show the rise in temperatures due to global warming?

Map 1: Map of the World's Climate Zones



Map 2: Map of the World's Biomes and Vegetation Belts



Map 3: Physical Map of the World

