

# CLIMATE CHANGE EXPLAINED



## KEY WORDS THAT RELATE TO CLIMATE CHANGE:



### WEATHER:

A description of what conditions are like in one place at one time (hot, cold, windy, calm)

### THE GREENHOUSE EFFECT:

greenhouse gases (e.g. carbon dioxide, methane) trapping heat into the atmosphere

### GLOBAL WARMING:

the process of our planet heating up (increase in Earth's average temperature)

## WHAT IS CLIMATE CHANGE?

Climate change explains the long-term changes to our weather patterns.

There will always be natural changes in the climate. However, the climate is significantly changing now at speed.

### Causes of climate change:

- Burning fossil fuels (oil, gas) for energy
- Agriculture (planting crops, rearing animals)
- Deforestation

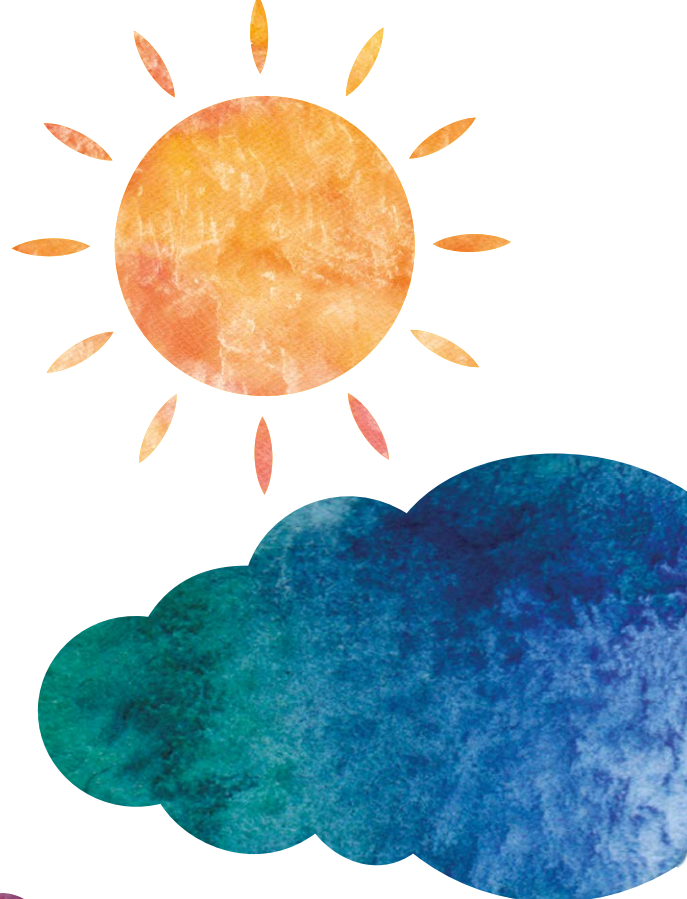


**CLIMATE:**  
the average of weather over time and across large geographic areas

### Why does climate change matter?

The consequences of the Earth's surface warming will have an impact on human society and the natural world. Many of the world's biggest challenges (from poverty to wildlife extinction) are made more difficult by climate change.





## Effects:

- Extreme weather (more rainfall, prolonged heat waves)
- Rising sea levels
- Ice melting (e.g. arctic sea ice)
- Threat to wildlife (flowers, plants, animals)
- Wildfires and droughts

## How can we help?

There are many ways we can reduce greenhouse gas emissions (e.g. reducing car use, reducing the amount of meat we eat, reducing water use, planting trees).

You will look at ways of individually helping in the Climate Change Activities resource.



## Climate and food:

### HOW DOES WHAT WE EAT IMPACT THE CLIMATE?

- Food security
- Crop yields
- What crops can be grown
- Fish stocks
- Nutritional value

Food security - how safely a country can access the food they need to keep them healthy); Crop yields - how much of a plant is grown; Fish stocks - how many fish there are in the sea; nutritional value - how much goodness we get from our food.



### HOW DOES WHAT WE EAT IMPACT THE CLIMATE?

All farming and food processing (getting food ready to eat) impacts the climate. But some farming and foods have more impact on the climate than others. Food impacts the climate due to:

- Water use
- Fertilisers and pesticides (chemicals that help plants to grow and protect them from insects)
- Farm machinery like tractors
- Damaging and not looking after the soil
- Vehicles transporting food a long way from farms to shops
- Processing food a lot (changing it from its natural state)
- Packaging food
- Wasting food



Can you make a difference to these things?