

# Fun Facts for Older Primary Students



## Climate Change

### What is Climate change?

Climate can be described as the average weather over a period of time. Climate change means a significant change in the weather (e.g. temperature, rainfall, or wind) lasting for an extended period - decades or longer.

The Earth's climate has changed many times during the planet's history, with events ranging from ice ages to long periods of warmth. What's different about this period of the earth's history is that **human activities** are significantly contributing to climate change through our emissions of greenhouse gases.

### What is the Greenhouse Effect?

A greenhouse is a small house made of glass that is used to grow plants.

The greenhouse traps the sun's rays and keeps the heat from escaping. It is warm inside.

In the same way that the glass traps heat in a greenhouse, the atmosphere traps heat next to the earth.



The atmosphere is a thin layer of gases surrounding the earth.

Certain gases in the atmosphere such as carbon dioxide, methane and water vapour trap energy from the sun. These natural greenhouse gases act like a big blanket around the earth, keeping it warm.

Humans can create extra greenhouse gases but this means that more heat gets trapped.

This causes the temperature of the earth to rise, which results in **Global Warming**. Global Warming is the recorded increase in the average temperatures of the earth's atmosphere and oceans. Global Warming affects the weather patterns on Earth and causes Climate Change.

Scientists insist that the average temperature on Earth will **continue to increase** as long as we keep increasing the amounts of greenhouse gases we put into the atmosphere.

### Effects of Climate Change

Climate Change alters our environment. It leads to extreme weather phenomena such as flooding and drought.

Melting glaciers will cause the sea level to rise making coastal plains uninhabitable.

Climate change will affect farming and food supply. Some animal and plant species may be forced out of their natural habitats and they may be under threat of extinction (e.g. the polar bear).

## How do humans cause Climate Change?

Since the Industrial Revolution greenhouse gases have been released into the atmosphere.

**Deforestation** and the **burning of fossil fuels** are the main contributors to this problem.

The earth is 5 billion years old and its climate has changed gradually, over many thousands of years.

However, the climate we are familiar with has mainly occurred during the last 50 years.

The temperature of the earth has increased by 1°C over the last 100 years and is expected to increase a further 2- 6° C over the next century.

## How can we help?

Small changes in temperature really do upset the balance of the earth. So, simple everyday actions can create greenhouse gases. We can help by:

*Saving energy*



*Switch off your T.V.*

*Recycling*



*Using renewable energy sources*



*Planting trees*



*Eating less meat*



*Any other ideas?*

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