Geography Knowledge Organiser

Year 6 ★ Climate Change ★

Key Vocabulary

Climate change
Climate change is a change in the overall weather and temperature on Earth. (Not the day-to-day weather). The Earth is getting warmer due to some of the things humans are doing. This means it will be more difficult for livings things to survive.

Atmosphere
The layer of gas surrounding the Earth.

Fossil fuels
Natural resources from the ground that are burnt to create energy

Non -renewable energy
Non-renewable power sources such as coal, oil and gas can't be replaced once they have been used.

Renewable energy
Renewable power sources can be replaced. Solar, wind, geothermal and wave power are all examples

Power
Electricity, gas and oil are all sources of power. They give us energy to make things work.

Significant person

Greta Thunberg

Who are they?

Greta Thunberg is an environmental activist. She was born in Stockholm, Sweden, in 2003. When she was eight, she started learning about climate change. The more she learned, the more baffled she became as to why so little was being done about it.

How she has made an impact

She is the founder of a movement known as Fridays for Future. Thunberg began the movement in August 2018 when she missed school to sit outside the Swedish parliament with a sign that read (in Swedish) "School Strike for the Climate." Just over a year later, in September 2019, millions of protesters marched in climate strikes in more than 163 countries. The protests were held on all seven continents.

Prior Learning

- Find out what is the difference between weather and climate.
- Investigate which human activities are creating climate change.
- Find out what greenhouse gases do and how our atmosphere is changing.

Climate Zones

Tropical	Hot and humid, where rainforests are
Temperate	Mild summers and winters
Arctic/Polar	Cold for most of the year
Arid	Dry, found in deserts
Continental	Short hot summers and long cold winters
Mediterranean	Hot dry summers, cool wet winters

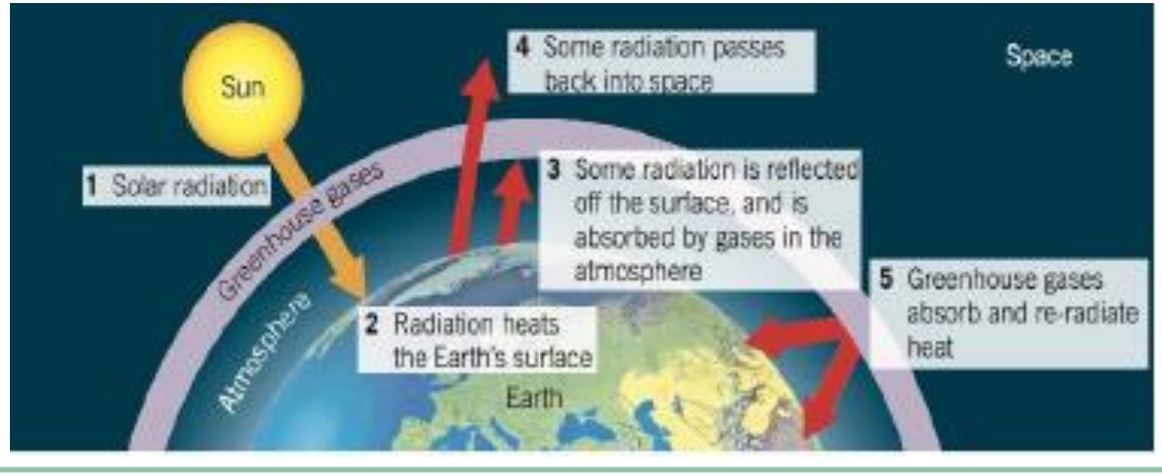
New Learning

The Atmosphere

- The air around us all the time is known as **atmosphere**. It is made up of a mixture of gases.
- When the Sun heats the Earth's surface, some of the radiation is absorbed and some is reflected back into space.
- Some of the gases in the atmosphere absorb radiation that is about to be reflected into space, this keeps the Earth at a warmer temperature than it would be without the atmosphere, this is needed as otherwise it would be too cold for life to survive.
- The gases in the atmosphere which absorb and trap this radiation are known as **greenhouse gases**, the most commonly known greenhouse gases are carbon dioxide and methane.

Global Warming

- Global warming is the gradual increase of the temperature of the Earth and is closely linked to the rise of the carbon dioxide levels in the atmosphere.



Climate change

- Long term changes to weather patterns are known as **climate change**
- This can cause the ice caps to melt, leading to sea levels rising and flooding of low level land
- Graphs alone cannot confirm that humans are the cause, but the majority of scientists now believe that human activity is a very likely cause
- We can help to prevent climate change by:
  - Using renewable energy resources
  - Using cars less
  - Buying and wasting less resources

Recycling

- **Recycling** is the collecting and processing of materials that have been used so that the resources can be used again
- Recycling can have both advantages and disadvantages:

Advantages	Disadvantages
• Resources will last longer • It uses less energy than extracting new materials • It reduces waste and pollution	• Separating rubbish can be seen as a nuisance • The lorries collecting recycling produce pollution • Some materials are easier to recycle than others