



What should I already know?

- There are 7 continents and 5 oceans.
- The significant lines of longitude and latitude.
- How night and day are caused by the Earth's rotation.

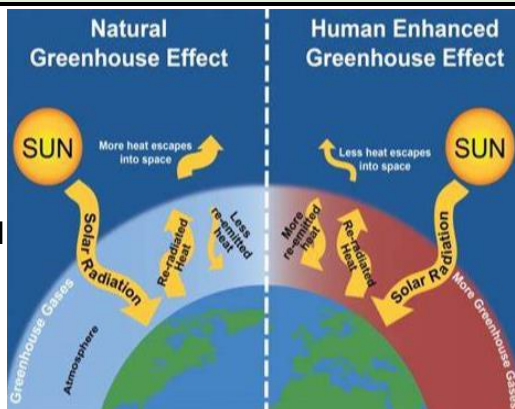
What will I know by the end of the unit?

What is the difference between weather and climate?

- Weather is a description of the conditions in a particular place **at any given time**.
- For example: hot, cold, wet, windy, calm or stormy.
- Climate is a description of the **average weather conditions** in a particular place over the **past 30 years**.
- Climate is influenced by lots of things such as the position of the continent or how high the ground is.

What is climate change?

- The climate around the World has changed naturally over thousands of years.
- In recent years, and today, the climate across the World is changing at a far accelerated rate.



What causes climate change?

- Humans are **burning fossil fuels**: coal, oil and gas are used to generate power and they release gases, which are trapped in our atmosphere.
- This creates the **greenhouse effect**; heat can enter the atmosphere but not escape, causing the Earth to heat up.
- **Deforestation**: trees remove carbon dioxide from the atmosphere. The more that are cut down, the less CO2 that can be removed.
- **Farming**: cows produce methane, which is a greenhouse gas, that gets trapped in the atmosphere.

How can we slow down climate change?

- Reduce the amounts of fossil fuels we burn.
- Use renewable energy such as solar or wind power.
- Save energy e.g. switch off lights when you leave a room.
- Reduce, reuse and recycle.
- Act against forest loss and replant trees.

Vocabulary

atmosphere	natural gases that surround Earth
climate	the average weather of an area over 30 years
climate change	a change to the average climate experienced by an area
deforestation	cutting down trees without replanting them
fossil fuels	a natural fuel: coal, oil and gas
greenhouse effect	the Earth heating up because gases are trapped in the atmosphere
human geography	man-made features
physical geography	natural features
polar region	an area with a freezing climate
renewable energy	an energy source that will not run out, such as the sun or wind
temperate	an area that has a mild climate and four seasons
tropical	a climate that is wet and hot
weather	the conditions outside

What are the effects of climate change?

- Extreme weather.
- Shrinking ice caps.
- Rising sea levels.
- Human life and civilization are impacted by each of these effects.

Temperature change in the last 50 years

