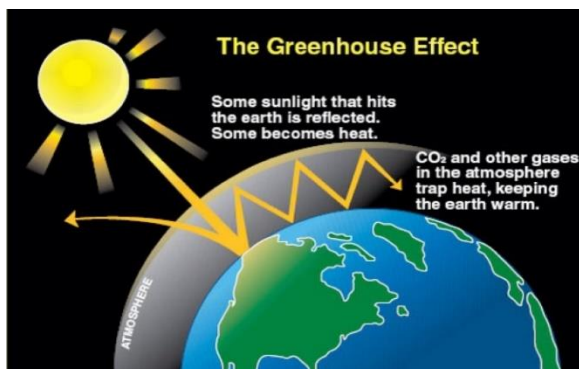


**Key knowledge and understanding:**

- Each year the amount of carbon dioxide in the atmosphere is increasing, contributing to global warming.
- The world's average temperature has increased by 0.9°C over the last 100 years which is having significant effects and causing more extreme weather worldwide
- Global warming is causing ice sheets, sea ice and glaciers around the North Pole and South Pole and in high mountain ranges to melt.
- Fossil fuels are the main source of carbon dioxide emissions, which, along with other greenhouse gases are the primary cause of changes in weather patterns around the world
- Instead of using fossil fuels, government have been developing renewable energy sources
- the 2015 Paris Agreement between 200 countries set ambitious targets to reduce greenhouse gases and control temperature increases
- There are ways we can all help reduce global warming and climate change.

How global warming is created: Greenhouse gases are trapped within Earth's atmosphere, blocking the heat from escaping the atmosphere. This is a natural effect but it is made worse by more carbon dioxide being produced.

**What: (key vocab)**

atmosphere	the layer of gases that surrounds Earth
biome	a large region of Earth that has a certain climate and certain types of living things
carbon dioxide (CO ₂)	a gas that is formed by burning fuels and by the act of breathing and that is absorbed from the air by plants
Carbon footprint	the amount of greenhouse gases and especially carbon dioxide given off by something (as a person's activities) during a given period
climate	an area's long-term weather patterns
fossil fuels	fuels that come from very old life forms such as coal, petroleum, and natural gas
global warming	the increase in Earth's average temperature over a long period of time
gas	air-like substances that can move around freely
greenhouse gases	gases in Earth's atmosphere that trap heat
The greenhouse effect	The warming of Earth's surface and the air above it caused by greenhouse gases
meteorologist	a type of scientist that studies the atmosphere to predict and understand earth's weather
Northern Hemisphere	the half of the Earth that is north of the Equator
North Pole	the northernmost point on the Earth
Polar Regions	the areas around the North and South Poles.
precipitation	water moving from the air to the surface e.g. rain, sleet, hail and snow
renewable	Energy made from resources that nature will replace, like wind, water and sunshine
Southern Hemisphere	the half of the Earth that is south of the Equator
South Pole	the southernmost point on the Earth
sustainable	using natural resources in a way that we could keep doing for a long time
energy	"the ability to do work", how things change and move
temperature	the degree of hotness or coldness measured using a thermometer
water cycle	the continuous journey water takes from the sea, to the sky, to the land and back to the sea
weather	the day to day state of the atmosphere, describing how hot or cold, wet or dry, calm or stormy, clear or cloudy it is.
wind	is the movement of air near Earth's surface

Where: (significant places)

Arctic		The Arctic is a polar region located around the Earth's North Pole.
Antarctic		The Antarctic is a polar region located around the Earth's South Pole

Who: (significant people)

Greta Thunberg		a young Swedish environmental activist who has inspired people all over the world to protest against climate change
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Geographical skills and enquiry

- Locate the Northern and Southern hemisphere, the Polar Regions and the Arctic and Antarctic Circles on a world map
- Describe and understand how the Polar Regions are changing and explain some of the reasons for change
- Describe and understand key aspects of the Polar Regions
- Observe, measure and record the weather