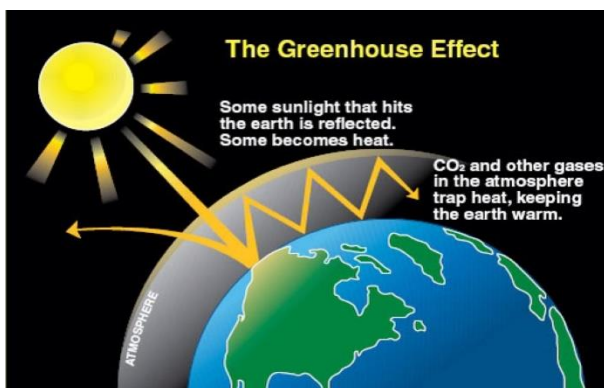


**Key knowledge and understanding:**

- Each year the amount of carbon dioxide in the atmosphere is increasing ,contributing to global warming.
- There are more extreme weather events around the world due to global warming and climate change.
- 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
- 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.

**What: (key vocab)**

atmosphere	the layer of gases that surrounds Earth
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
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
North Pole	the northernmost point on the Earth
polar regions	the areas around the North and South Poles.
South Pole	the southernmost point on the Earth
renewable energy	Energy made from resources that nature will replace, like wind, water and sunshine
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

Geographical skills and enquiry

- locate the polar regions and the Arctic and Antarctic Circles on a world map
- Describe how the polar regions are changing and explain some of the reasons for change
- Describe key aspects of the polar regions
- Observe, measure and record the weather