



Lesson Sequence



1. Learn about climate change



2. Explore ways to reduce how much rubbish is sent to landfill



3. Explore ways to reduce energy consumption



4. Explore how climate change affects our planet



5. Explore what is being done to reduce climate change



6. Explore how data can demonstrate climate change

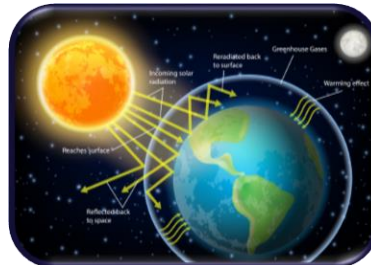
Greenhouse Gases

Some human activities produce greenhouse gases (carbon dioxide, methane, nitric oxide):

- Cutting down trees means more carbon dioxide stays in the air.
- Farming animals produces methane gas.
- Transport – fuels such as diesel and petrol produce carbon dioxide.
- Energy production: burning non-renewable sources such as coal, oil and gas produces greenhouse gases.

Climate Change

Greenhouse gases trap the heat from the sun and stop it leaving the Earth, causing the planet to become warmer. A warmer planet means the ice caps are melting, there is more flooding, heatwaves and droughts.



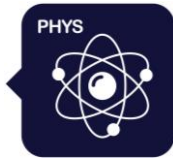
Energy Sources

Renewable	Non-renewable
Wind Solar Hydropower	Oil Coal Gas Nuclear power stations

How we can help

1. Recycle as much rubbish as possible so factories don't have to use coal and oil to make new products.
2. Buy products with recyclable packaging.
3. Switch off lights and electrical appliances when not in use.
4. Walk, cycle or car share.
5. Use renewable energy sources for power if possible.
6. Plant more trees as they use carbon dioxide to make food, so this helps reduce the amount in the atmosphere.
7. Eat less meat so fewer animals (who produce methane) are farmed.





Rocket Words

climate change	change in the Earth's usual weather conditions over many years
global warming	the process that causes the Earth to become hotter
greenhouse gases	gases in the Earth's atmosphere that trap heat
recycle	the process of taking waste materials and turning them into something new as opposed to being thrown away
emissions	things that are sent out into the air, like gases from cars and factories
renewable	a resource which can be used repeatedly because it is replaced naturally
non-renewable	a resource which cannot be used repeatedly
net zero	the balance between how much greenhouse gas we add to the environment and what is taken away