Knowledge Organiser: Looking after the environment

Careers connected to Looking after the environment: Wildlife Biologist, Zoologist, Oceanographer, Marine Biologist, Landscape Architect.

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 what happens when fuels are burnt

5. Explore the outcomes of COP26

6. Compare data associated with the weather

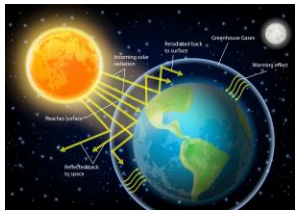
Greenhouse gases

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.

Scientists look at trends in weather data to track how the Earth's climate is changing.

Climate Change/Global Warming



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 will melt.
Some animals will lose their habitat
Water levels will rise, causing some land to disappear under water.

Energy Sources

Renewable	Non-renewable
• Wind farms • Solar farms • Hydro power stations	Oil Coal Gas (Fossil fuels)

Reduce Reuse Recycle

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. Plants and trees use carbon dioxide to make food so planting more helps reduce the amount in the atmosphere.
7. Eat less meat so less animals are farmed.

Rocket Words

	weather	the condition outside at a particular time and place
	global warming	the process that causes the earth to become hotter
	recycle	the process of taking waste and turning them into something new
	biodegrade	to naturally break down
	net zero	how much greenhouse gas is added to the environment and what is taken away
	greenhouse gases	gases in Earth's atmosphere that trap heat
	industrial revolution	a period of major change in the way products are made
	combustion	another name for burning
	COP	conference of parties
	conference	an organised meeting of people with common interests
	species	a group of living things categorized together because of similarities in features
	habitat	the home of an animal or plant

What I already know:

Year 4

- ❑ Recognise that living things can be grouped in a variety of ways
- ❑ Explore and use classification keys to help group
- ❑ Identify and name a variety of living things in their local and wider environment
- ❑ Recognise that environments can change and that this can sometimes pose dangers to living things

What I will learn now:

Year 6

- ❑ **Recording data and results**
- ❑ **Reporting and presenting findings from enquiries - including conclusions, causal relationships and explanations of and a degree of trust in results**
- ❑ **Identifying scientific evidence that has been used to support or refute ideas or arguments**
- ❑ **Using test results to make predictions to set up further comparative and fair tests**

What I will learn next:

KS3

- ❑ Changes in the environment may leave individuals within a species, and some entire species, less well adapted to compete successfully and reproduce, which in turn may lead to extinction.

Knowledge Organiser: Year 6 Looking after the environment

Before & After Test

Tick the correct statements.

Global warming means the Earth is on fire.		Oxygen is a greenhouse gas.	
Farming animals creates a greenhouse gas.		Carbon dioxide is a green house gas.	
Using a diesel car creates a greenhouse gas.		Scientists study weather data to see how our climate is changing.	
Global warming means the Earth's climate is getting warmer.		Trees use carbon dioxide from the air.	

Name a renewable energy source.

_____

Name a non-renewable energy source.

_____

Describe global warming. Use these words to help you:

greenhouse gases heat sun Earth warmer

_____

_____

_____

_____

Name an effect of global warming.

_____

_____

Write 2 ways humans can help prevent global warming.

1. _____

_____

2. _____

_____