

## Eco-Warriors – Year 3 – Summer 2

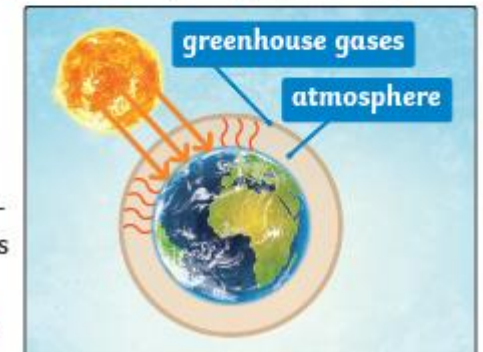
Key Vocabulary	
renewable	A resource that is replaced naturally and so can be used repeatedly, e.g. oxygen, water, wood.
non-renewable	A resource that is used faster than it can be naturally replaced. These resources will one day run out, e.g. coal, oil.
greenhouse gas	Gases in Earth's atmosphere that contribute to the <b>greenhouse effect</b> by preventing the Sun's heat from escaping back into space, e.g. carbon dioxide.
greenhouse effect	An effect whereby the Sun's heat is trapped within Earth's atmosphere by the layer of <b>greenhouse gases</b> , which surround Earth. This leads to a continuous rise in temperature, causing changing ecosystems and more extreme weather events.
climate change	A long-term change in the Earth's climate that affects average temperatures and weather patterns.
carbon footprint	A measure of the amount of carbon dioxide that is released into Earth's atmosphere as a direct result from the activities of a person, company or organisation.

### Key Knowledge

Litter and **pollution** can be dangerous for humans and **biodiversity**. Some animals may mistake litter for food and eat it. Litter can also trap and injure animals if they get tangled in it. Fumes from factories and vehicles can cause respiratory problems.



Everyday tasks like washing your hands and using the car require energy. **Non-renewable** energy sources, such as coal, oil and natural gas, produce large amounts of carbon dioxide when they are burned. Carbon dioxide is a **greenhouse gas** that builds up in the Earth's atmosphere over time and contributes to the **greenhouse effect** and **climate change**. Making new products and packaging also requires energy so often produces carbon dioxide. A **carbon footprint** is the measure of these carbon emissions that are released from daily activities. Following the 3Rs – **reducing waste**, **reusing** items and **recycling** – can help lower your **carbon footprint**.



### Key Knowledge

The amount of **waste** produced around the world is increasing. **Waste** comes in many different forms and includes food, packaging, clothing, single-use items and electronics (e-waste).

**Waste** is sometimes buried below ground at **landfill** sites where it will eventually **decompose** or it can be burnt at an energy recovery facility.


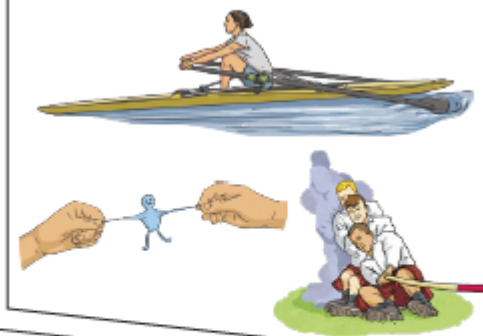
**Waste** can contribute to many different environmental issues including **pollution**, use of **non-renewable** resources, habitat loss and **climate change** through the production of **greenhouse gases**.

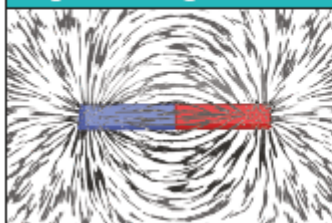

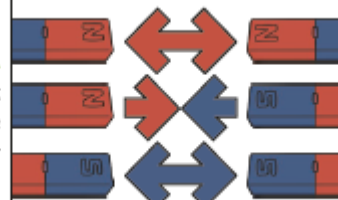


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Key Vocabulary	
<b>magnet</b>	An object which produces a <b>magnetic force</b> that pulls certain objects towards it.
<b>magnetic</b>	Objects which are <b>attracted</b> to a <b>magnet</b> are <b>magnetic</b> . Objects containing iron, nickel or cobalt metals are <b>magnetic</b> .
<b>magnetic field</b>	The area around a <b>magnet</b> where there is a <b>magnetic force</b> which will pull <b>magnetic</b> objects towards the <b>magnet</b> .
<b>poles</b>	North and south <b>poles</b> are found at different ends of a <b>magnet</b> .
<b>repel</b>	<b>Repulsion</b> is a <b>force</b> that pushes objects away. For example, when a north <b>pole</b> is placed near the north <b>pole</b> of another <b>magnet</b> , the two <b>poles</b> <b>repel</b> (push away from each other).
<b>attract</b>	<b>Attraction</b> is a <b>force</b> that pulls objects together. For example, when a north <b>pole</b> is placed near the south <b>pole</b> of another <b>magnet</b> , the two <b>poles</b> <b>attract</b> (pull together).

Key Vocabulary	
<b>forces</b>	Pushes or pulls.
<b>friction</b>	A <b>force</b> that acts between two <b>surfaces</b> or objects that are moving, or trying to move, across each other.
<b>surface</b>	The top layer of something.

Pushes	Pulls
	
<p><b>Forces</b> will change the motion of an object. They will either make it start to move, speed up, slow it down or even make it stop.</p>	

Key Knowledge		
	<p>Like <b>poles</b> <b>repel</b>. Opposite <b>poles</b> <b>attract</b>.</p>	
<p>A <b>magnetic field</b> is invisible. You can see the <b>magnetic field</b> here though. This is what happens when iron filings are placed on top of a piece of paper with a <b>magnet</b> underneath.</p>		<p>The needle in a compass is a <b>magnet</b>. A compass always points north-south on Earth.</p>