# Why should we reduce, reuse, recycle?

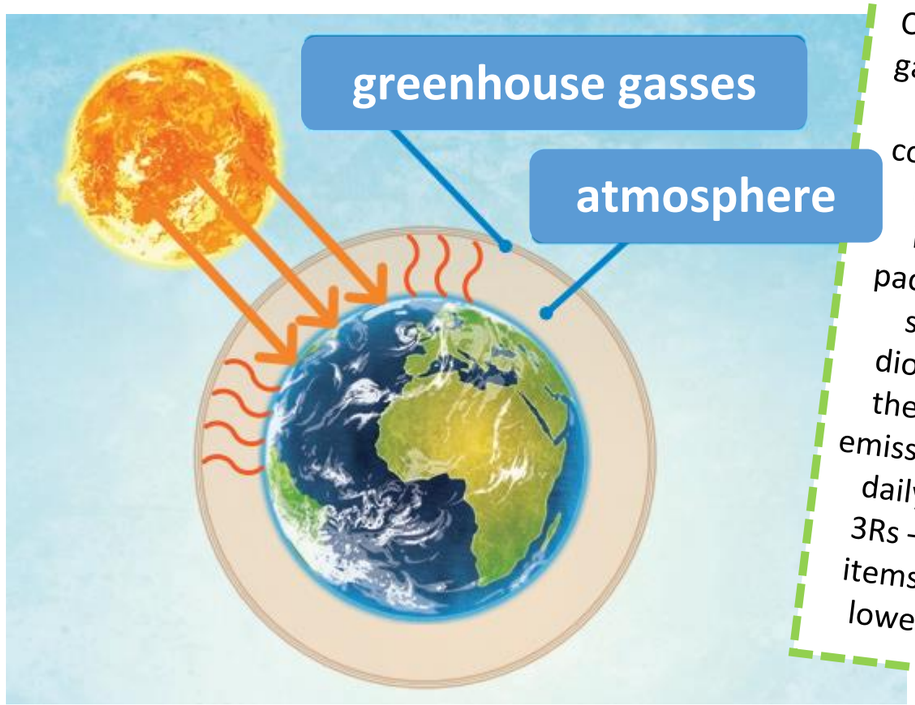
## KNOWLEDGE ORGANISER

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.

reduce

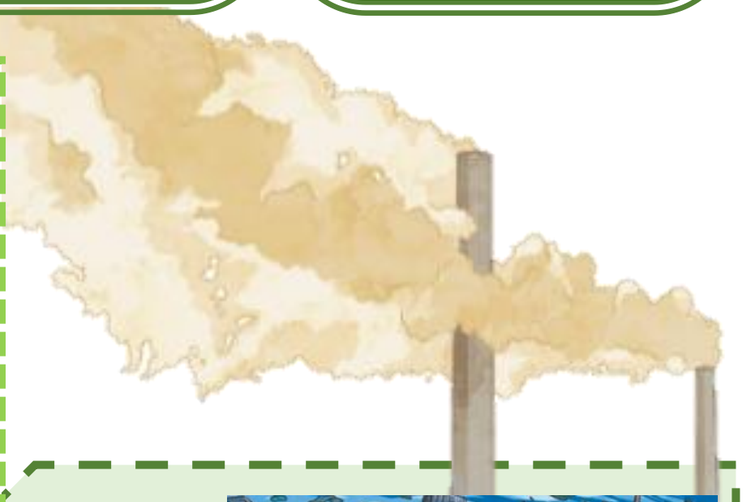
reuse

recycle

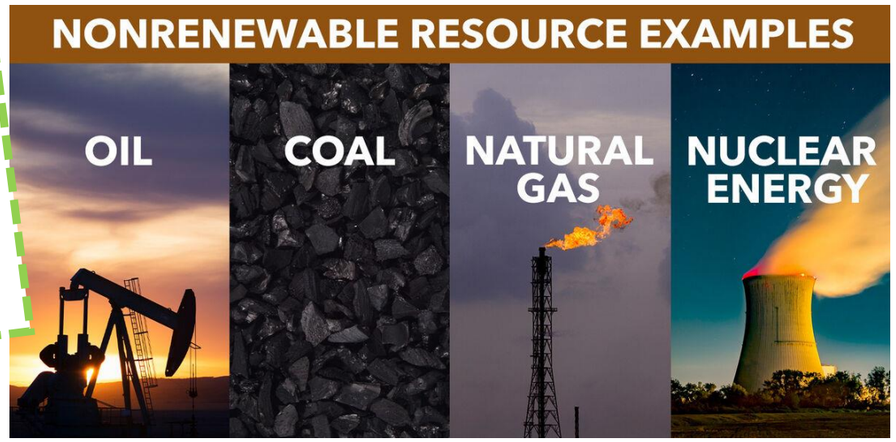



Carbon dioxide is a greenhouse gas that builds up in the Earth's atmosphere over time and contributes to the greenhouse effect and climate change. Making new products and packaging also requires energy so often produces carbon dioxide. A carbon footprint is the measure of these carbon emissions that are released from daily activities. Following the 3Rs – reducing waste, reusing items and recycling – can help lower your carbon footprint.

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.



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.




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.

| Key Vocabulary | | | |
|---|---|---|---|
| **biodegradable** | An object that is biodegradable can be broken down by bacteria or other living organisms. | **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. |
| **biodiversity** | The variety of living things (such as plants and animals) in an area and how those living things depend on each other to meet their needs. | **pollution** | The presence of harmful things in the environment. |
| **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. | **recycle** | Converting waste into reusable materials. |
| **climate change** | A long-term change in the Earth's climate that affects average temperatures and weather patterns. | **reduce** | Trying to cut down on the amount of waste produced, e.g. by only buying what is needed and reusing items. |
| **decompose** | Rot, decay and break down into smaller parts. | **renewable** | A resource that is replaced naturally and so can be used repeatedly, e.g. oxygen, water, wood. |
| **greenhouse effect** | Gases in Earth's atmosphere that contribute to the greenhouse effect by preventing the Sun's heat from escaping back into space, e.g. carbon dioxide. | **reuse** | Using waste items again (sometimes for a different purpose) or buying items that can be specifically used repeatedly, e.g. refillable water bottles and wax wraps. |
| **greenhouse gas** | An effect whereby the Sun's heat is trapped within Earth's atmosphere by the layer of greenhouse gases, which surround Earth. This leads to a continuous rise in temperature, causing changing ecosystems and more extreme weather events. | **sustainable** | Working and living in a way that ensures there will still be natural resources (e.g. food, water, minerals) left for future generations. |
| **landfill** | The disposal of waste by burying it. | **waste** | Unwanted or unusable materials or objects that are thrown away. |