

Sustainability

Year 6

Knowledge organiser

What is plastic?

Plastic is a human-made material that can be formed into almost any shape. Most plastics are strong, durable, versatile and lightweight. Many plastics can resist damage by water, heat, chemicals and electricity. Manufacturers often use plastics instead of more expensive materials.



Why is plastic a problem for the environment?

Plastic waste is a global issue. Unfortunately, some of plastic's most useful qualities, like its durability, also make it harmful to the environment.

Most plastic waste is burned (incinerated), which can release harmful gases and damage the air we breathe. Some plastic is sent to other countries (exported) or dumped in landfill, which can pollute the soil and water. A small amount of plastic can be recycled, but around the world, very little actually is.

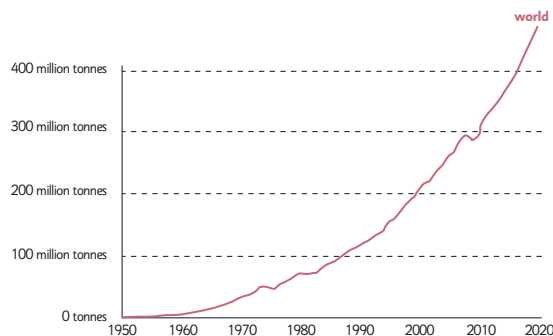
Plastic waste, when improperly managed, often ends up in the oceans. Plastic can take hundreds of years to break down, and when it does, it turns into tiny pieces called microplastics. These tiny pieces can be eaten by fish, birds, and other animals, and can even end up in the food that humans eat.



How has our plastic usage changed over time?

The way humans live has changed over time and so has the amount of plastic we use. There are several reasons for this:

- people want quick, practical and convenient solutions
- single-use plastics, such as bin bags and wet wipes, are used widely
- more food and drinks are consumed on the go
- the way we shop, along with the types of products we buy, has changed.



How can we reduce plastic waste?

The 5 Rs: Rethink, Refuse, Reduce, Reuse and Recycle

When reducing plastic waste, try to follow the five Rs:

- **Rethink** the things you need.
- **Refuse** plastic where you can.
- **Reduce** the amount of plastic you use.
- **Reuse** items whenever you can.
- **Recycle** as much as possible.



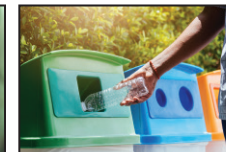
Switch to alternative **reusable** materials. Use beeswax wraps instead of cling film or plastic bags. Put snacks in reusable containers.



Rethink using plastic straws and cutlery. Try paper or metal reusable ones.



Bamboo is 100% decomposable and can be used for toothbrushes, lunchboxes, and cutlery. These items **reduce** the amount of plastic we use.



If plastic cannot be avoided or reused, encourage classmates and staff members to dispose of their plastic item in **recycling** bins around school.

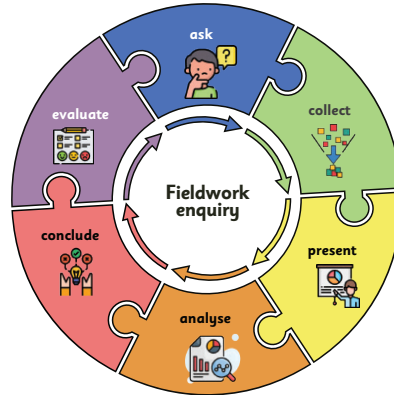


Refuse single-use plastic bottles. Refill a reusable bottle made of thick plastic or metal instead. Use water stations to fill up your bottle where possible.

How can we use fieldwork to help reduce our plastic waste?

From conducting **fieldwork** we can learn how humans interact with their environment. It gives us the evidence we need to make changes in the right places, where they will have the biggest impact.

We will follow a process to help us carry out an effective fieldwork investigation.



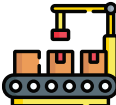
Case study: The Big Plastic Count

Every year, an organisation called Greenpeace conduct fieldwork by asking people to collect and count their plastic waste over the course of one week. From the results in 2024, they discovered that UK households throw away **approximately 1.7 billion** pieces of plastic packaging each week, amounting to an **estimated 90 billion** pieces annually.



https://commons.wikimedia.org/wiki/File:Greenpeace_Logo.jpg
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Key vocabulary

analyse 	conclude 	consumer 	dispose 	
durable 	estimate 	evaluate 	evidence 	
export 	impact 	implement 	investigate 	
manufacturer 	predict 	present 	production 	
recycle 	reduce 	sustainable 	synthetic 	versatile 

What is the UK government doing to help reduce plastic waste?

In 2015, a 5p charge was introduced on single-use plastic bags in England – this was increased to 10p in 2021.

Since 2020, they have continued to restrict and ban some single-use plastics such as straws, cutlery, cotton buds and certain food containers.

In October 2024, an EU rule was introduced. Plastic bottle tops must stay attached to bottles to reduce litter and help increase recycling. In the UK we don't have to follow this rule but many companies do.

The UK is working with other countries to stop plastic pollution worldwide by 2040.

Deposit Return Scheme: starting 2027

When you buy a drink, you pay a small deposit that you get back by returning your empty plastic bottle or can.

