

# Sustainability



Year 6

Knowledge Organiser

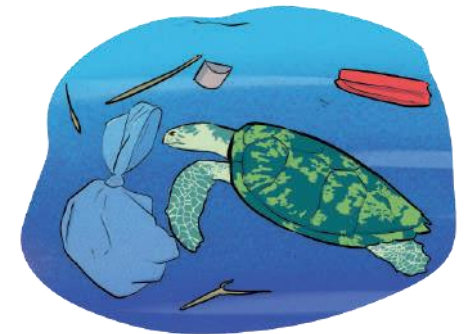
## What is plastic?

Plastic is a human-made material that can be formed into almost any shape. Most plastics are strong, long-lasting and lightweight. They resist damage by water, heat, chemicals and electricity. Manufacturers often use plastics instead of more expensive materials and in many car body parts, plastic replaces metal.



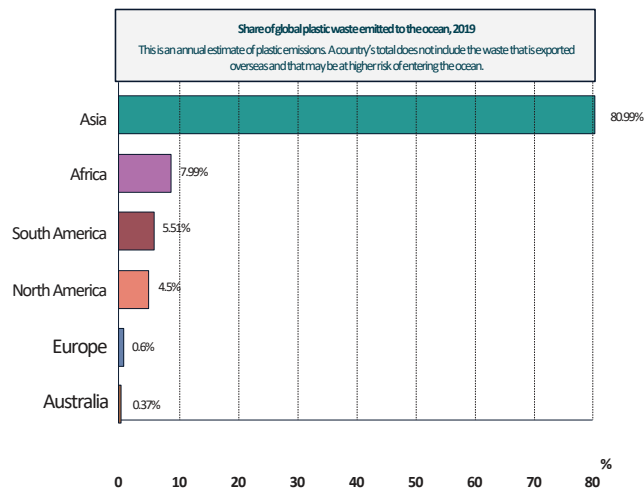
## Why is plastic a problem for the environment?

Unfortunately, some of plastic's best properties, such as its durability and long-lasting life, are the things that cause problems in the environment. Unless recycled, they remain on our planet, clogging up landfills and making their way to the ocean. Plastic can take over 400 years to decompose (break down), and even then, it just gets smaller and ends up being swallowed by fish and other marine animals and birds and is eventually eaten by humans.



## Plastic waste on a global scale

Asia emits the most plastic waste into the ocean (80.99%). The UK emits more plastic than most of Europe.



## Cornwall beaches

The Tidal Revival app, launched in 2018. The app is designed to encourage more people to pick up plastic the next time they visit their local beach. It allows people to record details on the plastic waste they have collected. These details can then be used to create a valuable database to measure and monitor the scale of the problem.

A team of researchers at the University of Plymouth conducted a study into the app and found that plastic was the most common material found as beach litter. It also highlighted that the amount of litter varies by region.



## Ways to reduce plastic waste

Rethink, Refuse, Reduce, Reuse and Recycle.



Switch to alternative reusable materials. Use **beeswax wraps** instead of **clingfilm** or **plastic bags**.



Avoid **plastic straws** and **cutlery**. Try **paper** or **metal** reusable ones.



**Bamboo** is 100% decomposable and can be used for **toothbrushes**, **lunch boxes** and **chopping boards**.



**Chewing gum** is also made of plastic! Try to buy less chewing gum and throw it in the correct **recycling container**. You can also choose **natural** and **organic** chewing gums.



If you have no choice but to buy a plastic bottle or a plastic container, **reuse it** instead of throwing it away. Refill water bottles and containers can be used to **store other food**.



Before buying new **pencils**, **pens** and **notebooks**, check if you have any at home. You'll reduce your plastic by **cutting down on the packaging** these items are often wrapped in.



Look out for **school supplies** in **plastic-free packaging**, like single pencils, erasers and pens.



Buy pencils **made of wood** instead of mechanical pencils, which are often made from (and packaged in) **plastic**.



If your school isn't already recycling plastic bottles and utensils, **talk to your teachers** about how to start. Why not ask about setting up an **eco club** with your classmates to **make your school greener**?



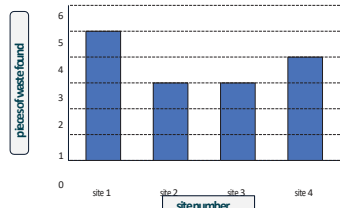
Encourage classmates and staff members to have **plastic-free packed lunches**.



Talk to the headteacher and parent's association about selling **second-hand uniforms**.

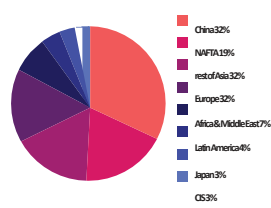
## Plastic waste on a global scale

A bar graph to show amounts of waste found across school sites



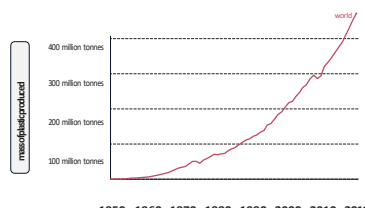
**Bar charts** allow us to organise information using **bars of different lengths**. The length of these bars represents the **size of the information** collected by comparing one bar to another.

Distribution of global plastic production



**Pie charts** show the **proportion of answers** from surveys or investigations. They are called pie charts because they are round and show the categories like **slices from a pie** (or a cake).

Global plastics production  
Plastic production refers to the annual production of polymers in resin and fibres.



**Line graphs** can be used to represent data to show **changes over time**. It is plotted as **individual points connected by lines**.

## Evaluation of your fieldwork

Evaluating your fieldwork is an important step so that you can learn from it. These are some questions you may want to ask yourself:

- What went well in your fieldwork?
- Did you use the right tools?
- What would you do differently if you did the fieldwork again?
- What else do you want to find out?

