



Lesson 1: Fantastic plastic

investigating the properties of different materials

Why is plastic such a popular material?

Plastic is used everywhere. It is likely that your clothing and many of the things in the room you are in contain plastic. This is because it is a hugely versatile material that can be processed into lots of shapes, sizes and colours. It can be really flexible or super strong. In this lesson, children find out why plastic has become such a popular material.

Science concepts

The children will consider that

- there are lots of different types of plastics which have different properties
- plastic is widely used as a packaging material because it is lightweight, doesn't break easily and can be re-used and recycled
- particular materials are chosen for different products based on their properties

Science skills

- observing and measuring
- interpreting and communicating results

Key vocabulary

characteristic, irreversible, lightweight, marine, material, property, recycle, reusable, reversible, single-use

You will need

Each small group will need access to:

- reusable plastic bottle
- single-use plastic bottle
- glass bottle
- metal drinks can
- cardboard drinks carton
- reusable metal bottle
- scales (optional)
- [Additional Printable: Investigating the properties of materials – data table](#)