



Lesson 3: Reversible changes the tricky bit about recycling

What happens when we recycle plastics?

Many plastics can be recycled, which is great as it should mean that we can use the same material over and over again. The problem is recycling isn't a perfect process. In this activity, children will learn that different types of plastic cannot be mixed in recycling. They will model recycling plastic using playdough to understand the problems associated with trying to recycle lots of different plastics together. Children could use this activity as a chance to practise the skill of demonstrating and explaining their understanding of science to others.

Science concepts

The children will consider that

- to understand recycling plastic, it is important to understand reversible and irreversible changes
- some types of plastics can be melted and reformed to make new items, after their first use
- using the same material over and over again can cause the material to lose its quality and be less useful over time

Science skills

- interpreting and communicating results
- evaluating

Key vocabulary

material, melting, property, recycling, recycling code, reversible

You will need

- a selection of single use plastic typical of household recycling, with a range of recycling codes.
- playdough
- an alternative dough, such as plasticine or sticky tack