

# GIVE NEW LIFE TO OLD CLOTHES!

WHO WE  
ARE

STEM  
INVESTIGATION  
17

## THE CHALLENGE



Each season, new fashions arrive in clothing stores. Many of the cheaper items are bought and then worn only a few times. This is sometimes called 'fast fashion'. Some people donate their clothes or sell them. But many clothes still end up in landfill.

Your challenge is to think of other uses for clothing and encourage people in your community to reduce their clothing waste. Choose an item of clothing such as a T-shirt and think of different ways to reuse it. As part of this investigation, you will learn about the different properties of materials and about sustainability.

## KEY UNDERSTANDINGS

This challenge will help you understand:

- Different materials have different properties.
- Some properties of materials are flexibility and strength.
- Clothing can be made from natural and processed materials.
- The properties of some materials can lead to waste.

## KEY SKILLS

This challenge will help you:

- Make careful observations.
- Describe the properties of different materials.
- Analyse information.
- Compare and contrast the properties of different materials.
- Transform ideas into something that can be seen.



Old clothes can be made into many useful products. Can you be creative and help reduce waste?



## KEY VOCABULARY

**biodegradable** – able to be broken down into very small parts by bacteria in soil

**fibre** – a natural or synthetic thread that may be made into products such as fabric

**property** – a feature of a material, such as strength or ability to change shape

**synthetic** – made by humans



## KEY ACTIONS

During this challenge, you will perform the following tasks:

- Find out about clothing waste.
- Explore the properties of clothing materials, and explore two- and three-dimensional shapes.
- Create new uses for an item of clothing.
- Create an awareness campaign.

**「BIG」  
「PICTURE」**

In some countries, more than 20 kilograms of clothing per person is thrown away each year. This is increasing as clothes become cheaper.

## DESIGN THINKING STAGES

As part of your challenge, you need to follow the five-step design thinking process:

