

# Fashion challenge

45 mins

Guides

## About this activity

The fashion industry is polluting our rivers and ocean. Investigate the invisible pollution released by clothes, learn how to choose ocean-friendly fashion, and upstyle a T-shirt.

## Outcomes:

- Carry out an experiment into microfibres
- Find simple ways to reduce microfibre pollution
- Take part in a fashion challenge to restyle a piece of old clothing

## You will need:

### *For Microfibre experiment:*

- A large bottle with a lid, three-quarters full of water
- Piece of brightly coloured synthetic material (fleece, nylon, polyester). The material should be new, or nearly new, as new fabric releases the most microfibres
- Sieve and a bowl to catch drained water
- Filter paper or a piece of thick kitchen roll
- Magnifying glass

### *For Ocean-friendly fashion:*

- Copies of [Fashion and the ocean Fact File](#)

### *For Fashion challenge::*

- Fabric scissors, needles, thread, ribbons, broaches
- Old T-shirts. If you don't have T-shirts, you could use other unwanted clothing, including men's pieces or items that are too big. Don't buy new clothes – the purpose is to show how old clothes can be revived!
- [Restyle challenge inspiration](#)

# Fashion challenge

## Every time clothes are washed, they release thousands of microfibres.

Wastewater treatment plants can't filter out microfibres, which means they're washed into our rivers and seas. Every day, the equivalent of two rubbish trucks of microfibres are released into European waters where they can be eaten by, and harm, marine animals.

## Part 1 Microfibre experiment

1. In small groups, put a piece of fabric into a bottle three-quarters full of water. Screw the lid on tightly. Take it in turns to shake the bottle for 30 seconds for a total of 2 minutes.
2. Line the sieve with the filter paper or kitchen roll and carefully pour the water through the filter/paper.
3. Take it in turns to look at the paper through the magnifying glass. The tiny fibres are microfibres.

Most washing machines don't have filters to catch microfibres, which means they're released into wastewater. The fibres can't be removed at sewage works, and they're then released into rivers and the ocean.

## Part 2 Ocean-friendly fashion

It's thought that a single load of washing could release thousands of microfibres. New clothes are the worst for shedding these fibres, as the first few washes release the highest levels of them.

These microfibres end up in our rivers and eventually the ocean. Some fibres contain harmful chemicals or become harmful when they combine with toxins in seawater. Marine life - including the fish we eat - accidentally eat these fibres. Add to this that the fashion industry accounts for 10% of global carbon emissions each year (more than all flights and shipping activity combined), and you can see the scale of the problem.

1. Look at the [Fashion and the ocean Fact File](#) and talk about the problems associated with fashion choices. List the things you could do to make your fashion choices more ocean friendly. What can you:
  - Reduce?
  - Refuse?
  - Reuse?
  - Recycle?

## Part 3 Restyle challenge

1. Hold a T-shirt restyling challenge. Don't be afraid to be bold! Cut it up to create a new neckline or a crop top, make an oversized T-shirt into a dress, or add accessories.
2. The [Restyle challenge inspiration sheet](#) provides lots of ideas. If you'd like more guidance, there are 'How to restyle an old T-shirt' tutorials on YouTube.

If a T-shirt restyle isn't possible, you could have a clothes swap instead. After everyone has been 'shopping,' you could hold a fashion show of the new-to-you outfits.

## Badge link

You could create a fashion collection based on reducing microfibre pollution for your Conscious Consumer interest badge.



# Fashion and the ocean



## Plastic pollution

Our clothes are made of millions of tiny microfibres. With every wash, these fibres shed from our clothes.

- 60% of the material used in making clothes worldwide is a form of plastic, such as polyester, nylon and acrylic. This means microfibres from these fabrics are tiny pieces of plastic
- A single wash can release over 700,000 microfibres. Every week in the UK about 9.4 trillion fibres are released from washing clothes
- The fibres are too small to be filtered at sewerage plants and many are released into rivers and ultimately our ocean
- Once in the ocean, animals can ingest microfibres and they build up in the food chain over time. Microplastics have been found in many types of seafood we eat, including mussels, fish and shrimp
- New clothes release the highest levels of fibres when first washed



## Climate change and the ocean

Climate change is impacting our ocean. Rising ocean temperatures are affecting many plant and animal species, and rising carbon dioxide levels are causing ocean acidification, which is killing coral and other species. Additionally, rising air temperatures are causing extreme weather events and melting ice in polar regions, impacting fragile coastal communities and habitats.

- The fashion industry accounts for 10% of global carbon emissions – more than all flights and shipping activity combined
- In the UK, an estimated 350,000 tonnes of clothes end up in landfill every year. That's over 15,000 rubbish trucks!
- It's estimated that we bought 60% more clothes in 2021 than in 2000. According to the World Bank, 40% of clothing purchased is never worn
- Returning items bought online can double the transport emissions. It can be cheaper for some online retailers and brands to dump or burn unwanted returns rather than repackaging and reselling
- Less than 1% of material in unwanted clothing is recycled into new clothing

# Restyle challenge inspiration

## What will you make?

Here are some ideas to inspire your T-shirt restyling. Use one of these or try your own!



**Crop the T-shirt**



**Make a new neck shape**



**Create a fun cut-out shoulder design**



**Cut lots of lines up from the bottom to make a fringe**



**Cut one line into the front then tie into a knot**

### Tips!

- Be brave! Don't be afraid to cut into the material
- Don't cut the T-shirt when anyone's wearing it
- Start cutting away small pieces first. You can always take more away later!