Activity: Microfibres investigation

Every time clothes are washed, they release thousands of microfibres. Use this experiment to show pupils how easily fabrics shed fibres.

You will need for each group:

- Large bottles with lids, three-quarters full of water
- Pieces of brightly coloured synthetic and natural materials. The material should be new, or nearly new, as new fabric releases the most microfibres
- Sieve (and bowl or sink for draining water)
- Filter paper
- Magnifying glass or microscope
- Investigation sheet

A single wash can release over 700,000 microfibres, and it's estimated that **every week in the UK 9.4 trillion fibres are released** from washing clothes

What to do

1. Give small groups of pupils the equipment and ask them to discuss ideas for an investigation into microfibre release from synthetic fabric into the ocean. Encourage pupils to consider how to make their test fair. Note ideas on the investigation sheet.
2. Ask pupils to 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, shaking the bottle for a total of 2 mins.
3. Line the sieve with the filter paper and carefully pour through the water. Take it in turns to look at the paper through the magnifying glass and record the findings. The tiny fibres are 'microfibres'.
4. As a class, discuss what happens to these fibres when clothes are washed in a washing machine. Our Stop ocean threads video has more details.

Microfibres are released every time clothes are washed. Most washing machines don't have filters, which means these fibres are released into waste water. Most can't be removed at sewage works and are released into rivers and the ocean. These fibres are then ingested by marine animals and can build up in the food chain. They can also fill marine animals' stomachs and affect how they grow.

MARINE CONSERVATION SOCIETY

Our Investigation

Name: _____

_____

We are finding out about....

_____

_____

_____

This is what we will do....

_____

_____

_____

_____

_____

This is a picture of what we will need

We will make it a fair test by...

What I think will happen...

This picture shows our results

We found out that...