



Human Impact on Oysters

Equipment required (per group)

- Print out of the 'Microfibre Experiment' worksheet, one per group
- Fabric samples (synthetic and natural fibres)
- Scissors
- 5 jars (with lids)
- Magnifying glass or microscope (optional)
- Tap water
- 5 coffee filters
- Funnel and empty container
- Internet enabled devices and internet access

To complete the activity

1. Share the video 'Stop Ocean Threads!' with the learners – www.tiramor.cymru/nativeoysters (Resource 2).
2. Explain that oysters are natural filters that help keep waterways clean by removing particles and debris from the water. Note that human activities can introduce pollutants, including microfibres from clothing, into aquatic ecosystems.
3. Ask learners to consider the following questions:
 - What are microfibres, and where do they come from?
 - How do microfibres enter rivers, bays, and oceans?
 - What impact could microfibres have on oysters and other marine life?
 - How might microfibres affect oysters' ability to filter water?
4. Share the 'Microfibre Experiment' worksheet with each group. Encourage learners to explore how microfibres from synthetic and natural fabrics behave in water and discuss their impact on oysters and water quality.
5. Support learners to record their findings.
6. Discuss findings. What differences did learners notice between synthetic and natural fibres? How might microfibres impact oysters' ability to filter water? What solutions could help reduce microfibre pollution in aquatic environments?
7. Provide an opportunity for learners to research and consider practical solutions to reduce microfibre pollution in their daily lives. This may include using a Guppyfriend washing bag or Cora Ball to capture microfibres during washing; installing a washing machine filter to washing machines to trap fibres; washing clothes less frequently; choosing natural fabrics (which decompose faster than synthetic fibres); using cooler water and gentle washing cycles to minimize shedding and raising awareness about microfibre pollution.
8. Support learners to create a short presentation or poster to present ways to reduce microfibre pollution.



Microfibre Experiment

What you will need

- Fabric samples (synthetic and natural fibres)
- Scissors
- 5 jars (with lids)
- Magnifying glass or microscope (optional)
- Tap water
- 5 coffee filters
- Funnel and empty container

STEP 1

Cut 5 fabric samples (synthetic and natural fibres) into small pieces, 1-2 cm².

STEP 2

Place each fabric sample into separate jars, filling each jar three-quarters full of water.

Screw the lid on tightly.

STEP 3

Fill the table below with details about each fabric sample and initial observations before agitation.

STEP 4

Shake each jar for 1-2 minutes to stimulate agitation.

Record any visible changes in the table below.

STEP 5

Pour each jar's content through a coffee filter placed in a funnel into an empty container below.

Record observations about what is captured by the filter in the table below.

FABRIC NAME	NATURAL/ SYNTHETIC	INITIAL OBSERVATION	AFTER AGITATION OBSERVATIONS	FILTRATION OBSERVATIONS

DISCUSS

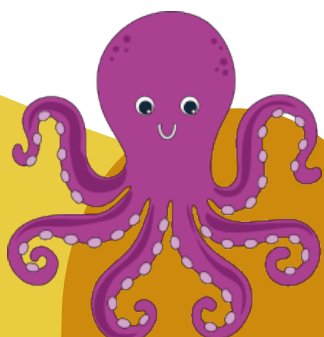
How might microfibres impact oysters' ability to filter water?

ADDITIONAL TASK

Optional

Research and create a presentation or poster proposing practical solutions to reduce microfibre pollution.

Focus on actions individuals and communities can take, including tools, technologies, and lifestyle changes to minimise microfibre release into the environment. Be prepared to share your presentation or poster with the class and discuss your proposed solutions!



Native oysters filter seawater to consume phytoplankton and organic matter – this results in cleaner and clearer water.