

# Microplastics Science Activity

In these activities students examine materials containing microplastics. If you are able to find some polluted beach sand, this will be useful. If not, test a range of cosmetic materials and fabrics.

## Materials

- Several types of cosmetics that may contain microplastics, such as exfoliating hand-wash or facial scrubs
- A sample of polluted beach sand (if available)
- A sample of polar fleece or polyester fabric
- Magnifying glasses
- Water
- Clear acetate sheets
- A tub large enough to hold your fabric

## Procedure - Cosmetics

Spread the cosmetics onto a piece of acetate and invite students to firstly look for microplastics without the use of magnifying glasses to see if they can identify any microplastics with the naked eye. They can then use the magnifying glasses to see if they find any microplastics they were unable to observe with the naked eye. If you do find microplastics students can attempt to remove them.

Students can then add the microplastics to water. If you have time, you could create salt water and freshwater to see if the microplastics react differently to the different types of water. Students can record their observations in their workbooks.

## Procedure - Fabric

Place the pieces of fabric in a tub of water. Loosen the fabric by moving it around in the water vigorously (as it might be in a washing machine). Remove the fabric and invite students to study samples of the water - can they observe any microplastics? Collect samples and place them on the acetate.

## Procedure - Sand

Place the sand on a piece of acetate and invite students to firstly look for microplastics without the use of magnifying glasses to see if they can identify any microplastics with the naked eye. They can then use the magnifying glasses to see if they find any microplastics they were unable to observe with the naked eye. If you do find microplastics students can attempt to remove them.

## Conclusion

Invite students to create a communication piece to communicate their findings, including explanations and justifications for their interpretations.