

# DROWNING IN PLASTIC



KS3



- Science
- Geography
- Citizenship



40 mins

SUSTAINABLE  
DEVELOPMENT  
GOALS SDG  
1&154

## OVERVIEW

Plastic in our oceans is a worldwide problem that needs solving.

This session uses fun practical work and discussion to investigate: looking at why, where and what we can do about it.

## OBJECTIVES

- Understand why plastic is such a widely used material and that we cannot stop using it.
- Understand why plastic builds up in certain places in the oceans.
- Understand how plastic enters the oceanic food web and how it is already being ingested by us.
- Investigate recycling plastics, those that can and those that can't.

## LEARNING SESSION CONTENT

This workshop begins by discussing the structure of plastic, showing how tough and resilient it is and explaining how the long polymer chains do not break down properly but a piece of plastic just splits up into smaller and smaller tough bits.

The currents in the oceans collect plastic waste in certain areas, because it floats. These gyres can be called 'garbage patches'. Using visuals, the way the plastic collects into a plastic 'soup' is explained.

If time permits, a practical to filter microplastics and experience how they can fill in fingerprints will happen.

With pictures to help, the effects of plastic on animals in the sea is discussed.

Then the recycling of plastic is explored, using examples of everyday plastic that can be recycled, can't be recycled and is biodegradable. The recycling symbols and numbers are explained.

Finally, some current ideas about reducing our usage of plastic and cleaning up our oceans are given including different ways The Deep is trying to reduce plastic use.