



Ages 4-8

## An Introduction to Plastic Pollution as a Topic

### What's the problem with plastic?

Introducing plastic as a material.

Students can start to identify plastic in their everyday lives.

Have the students pass round a piece of plastic and notice things about it, for example, what does it feel like? Is it bendy? Stretchy? Waterproof? Do you think we could digest it?

What is it made from?

Some characteristics:

- It is man-made – plastic is made from **fossil fuels**
- It lasts a long time (forever!) – it does not decompose in nature
- We use it all the time
- We have too much of it

Plastic lasts forever and does not decompose!

Even if it comes from the mountains or cities, plastic can find its way into the ocean.

Most plastic flows into the ocean through rivers and open dumps.

### What happens to plastic in the ocean?

Not only is plastic in the ocean dirty, it also gets mistaken for food and entangles sea animals.

- **Animals mistake it for food.** Sea turtles for example, like to eat jellyfish. But when they see a plastic bag floating in the water, they mistake it for food and can choke on it. Not a pleasant surprise!



**Animals get entangled.** This is a huge problem for sea life, they don't have hands and arms to help them remove the plastic, so they have to live with it.

### Plastic enters the food chain

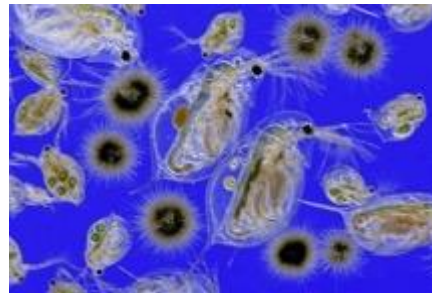
Small creatures called plankton live in the ocean as well. They are at the bottom of the food chain and are a very important part of the ocean. Creatures like plankton create over half of the oxygen we breathe! This means that every second breath we take, we can thank our plankton friends. Scientists have found out that plankton might be eating little pieces of plastic that are broken down.



### In more depth:

**Zooplankton** drift in the ocean. They eat another type of plankton called **phytoplankton**, just like plants, they use the energy from sunlight to live.

**Another fun fact about plankton:** they might be one of the tiniest creatures in the ocean, but it is food for one of the biggest creatures, the blue whale. If anything happens to plankton – it will have an effect on many other species in the ocean – and on us.



### Where does all this plastic come from?

We've all used plastic bags before and we've all seen plastic before.

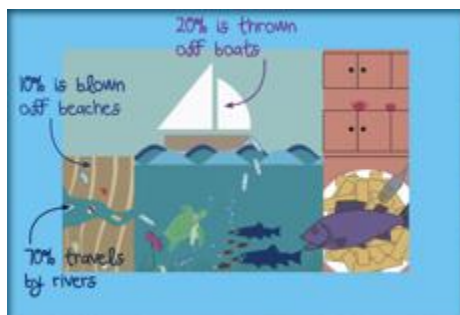
Can you think of a plastic object? We all use it every day. But how does it get into the ocean?

20% plastic is thrown off boats

10% is blown off beaches

**70%** travels by rivers into the ocean – mainly from cities or open dumps!

See **Activity 3**: How does plastic get into the ocean?



## Call to action: What can we do?

Who wants to help? The less plastic we learn to use every day, the less will end up in the oceans or in the planet. How can each of us help stop plastic pollution? Any ideas on how we can stop plastic from getting into the ocean?

**Put it in the bin - throw your trash in the bin, not the ocean!**

**Help us share the message! Tell your friends** why they shouldn't litter. See Activity

## The Three Rs

### INTRODUCE THE THREE Rs Reduce, Reuse and Recycle

Where does your rubbish go when you throw it away?

How can you **reduce** the plastic you use?

Think of a creative art project you can do to **reuse** your plastic trash.

For each "R" there can be a creative activity to show how it can be done.

**REDUCE** – Do you have your own bottle? Do your parents have their own shopping bags?  
Help them reduce their use of plastic.

#### Design your own reusable bag

Plastic bags are harmful to sea turtles and other marine animals.

How can we reduce the use of plastic bags?

By making your own beautiful canvas bag with an underwater scene or a slogan!



#### Design a reusable bottle

Reusable bottles are great because they help us reduce our plastic use. Design a bottle that is nice enough that people will want to use it over and over again. Make it colourful and ocean friendly.

**REUSE** – Try and buy things you can use more than one time

How can we reuse plastic we want to throw away?

See [Maker Session 1](#)

**RECYCLE** – Help recycle plastic

See [Activity 4](#)

## Facts and Figures

- A plastic bottle in the ocean can last up to 100 years, floating around.
- We use over 5 trillion plastic bags every year.
- Over 90% of seabirds and almost all sea turtle species have been found with plastic in their stomachs.
- It takes 500-1,000 years for plastic to degrade.
- 50% of the plastic we use, we use just once and throw away.
- Almost every piece of plastic ever made, still exists today, in landfill or in the ocean