

# Plastic Pollution

## An introduction for teachers and youth leaders

### Join the reduce and reuse revolution!

**Settings:**  
Schools  
and youth  
groups

**Age range:**  
Approx  
11–14 year  
olds\*

Plastic is versatile and long-lasting, finding its way into every corner of our lives. But the very qualities that make plastic so useful also make it a problem. Cheap and disposable, plastic is a symbol of our throwaway culture. As a result, vast quantities pollute our world. Much of it flows into the oceans, turning them into a plastic soup. The equivalent of a truckload of plastic enters the ocean every single minute!

Media coverage shows companies making commitments and pledges to reduce plastic use. But none of these have been enough to stop the problem. The plastic problem remains and has increased; supermarket use of plastic packaging has actually risen in the last couple of years.

Through a range of engaging activities, young people will learn to identify plastic in their everyday lives and think about how this can be reduced. Through learning about the impacts of plastic pollution on the environment, young people will understand why reducing the amount of plastic in our everyday lives is important. At Greenpeace, we believe everyone should have the opportunity to take action for our planet. The resource provides inspiration for young people to take action in their own lives, at home and in their community.

The activities can be linked to Citizenship, Design & Technology and Geography National Curriculum objectives.

**\*Please adapt these activities to meet the needs of the young people you work with.**



### Learning outcomes

Young people will:

- ▶ Develop an understanding of what plastic is.
- ▶ Identify plastic in their everyday lives.
- ▶ Understand the impacts of plastic on the environment.
- ▶ Identify unnecessary plastic in their lives.
- ▶ Take action to reduce plastic usage.

### Resources needed

- ▶ [‘The Big Plastic Quiz’](#) (presentation).
- ▶ [‘The Impacts of Plastic Pollution’](#) (presentation).
- ▶ [‘Plastic Ruining Your Day?’](#) (video).
- ▶ [‘Plastic Investigation’](#) (worksheet) on page 6.
- ▶ [‘Make Change Happen Action Plan’](#) (worksheet) on page 7.
- ▶ [‘Reduce and Reuse Plastic Ideas’](#) on page 8.
- ▶ [‘Identifying Plastic’](#) on page 9.

# What to do

Help young people to explore plastic and its impacts on the environment



## What is plastic?

Young people will develop their knowledge of plastic through an engaging quiz.

1. Ask young people what they know about plastic and if they think they can easily identify it. Discuss ideas as a whole class or group.
2. Challenge young people to '[The Big Plastic Quiz](#)'. Click through each question and ask young people to take their best guess. Young people could answer by standing up if they think it is true or sitting down if they think it is not true.
3. Discuss any questions they found challenging. Young people may want to find out more about areas they found interesting through their own research.

## Impacts of plastic

Help young people explore the impacts of plastic pollution further.

1. Ask young people what they know about problems plastic pollution can cause. Encourage them to think about what they learnt in '[The Big Plastic Quiz](#)' and any prior knowledge they have. Discuss ideas as a whole class or group.
2. Present the presentation '[The Impacts of Plastic Pollution](#)' to young people.
3. Ask young people to look at the photos and think about the impact of plastic pollution. Information about the impacts is provided in the slide notes.
4. Young people can explore the impacts of plastic pollution independently by reading '[The Plastic Problem](#)' fact sheet or looking at the [plastic pollution webpage](#). This information will help them with ideas of what can be done to tackle the problem.



## What to do

**Use a video to help young people think about the excessive amount of plastic in our everyday lives and how they can help make change.**

## Excessive plastic

1. Present the video of '[Plastic Ruining Your Day?](#)'
2. Discuss the video as a group. Encourage young people to see that whilst each use of plastic can seem relatively harmless, the cumulative effect has huge consequences.
3. Explain to young people that the amount of plastic used globally has been increasing. From the 1950s to the 1970s, only a small amount of plastic was produced. However, by the 1990s, this amount had more than tripled. The amount of plastic being produced is continuing to grow.
4. Ask young people: how much plastic on average does a UK household throw away each week? Multiple choice options: 45 items, 79 items, 141 items.

Answer: 141 items

5. Ask the young people to imagine multiplying 141 by every household in the country – that's a lot of plastic.
6. Get young people individually or in groups to list out the plastic items they use and start thinking about how they can use fewer.

## Learning check

Young people will have learnt:

- ▶ Most plastic is made from petroleum.
- ▶ Plastic doesn't disappear from the environment.
- ▶ Plastic is found all over the world.
- ▶ Plastic is harmful to the environment.
- ▶ The amount of plastic used globally continues to increase.



# Plastic Investigation

Help young people implement a plastic investigation to identify how to cut plastic in their everyday lives

1. Tell young people they will carry out a plastic investigation in their class, youth group or whole school. Explain a plastic investigation is when all the plastic being used in one place (or by a group of people) over a period of time is recorded.
2. Show young people the 'Plastic Investigation' worksheet on page 6. Discuss with young people how to fill it in. Young people may wish to use the 'Identifying Plastic' information sheet to help them.
3. As a group, decide when and how the plastic investigation will be conducted. Choose the period it will be conducted over – lunchtime, during a lesson, a whole day or a week.
4. Young people complete the plastic investigation.
5. Share the plastic investigation results with the whole group. Discuss the findings and ask the young people if we need all the plastic items they have recorded.
6. Ask the young people to circle the items we don't need in blue and the items we could replace with a non-plastic alternative in green. Discuss the young people's ideas. Encourage young people to think about refusing single-use plastics, ways to reuse items instead of buying new and ideas for non-plastic alternatives. The article '[9 ways to reduce your plastic use](#)' is a good starting point for ways to reduce plastic.



## NOTE:

During the pandemic, the world has used approximately 129 billion disposable face masks every MONTH. These masks are made of plastic and cannot be recycled. But this can easily be avoided by using reusable face masks.





# Make Change Happen

**Empower young people to take action to reduce and reuse through helping them plan and implement their own change**

1. Tell young people we've begun identifying plastic items we don't need in our lives. Ask young people: how could we reduce or reuse plastic in our everyday lives? Give young people time to write any ideas they have down.

Young people could think about changes under the headings:

- ▶ I could...
- ▶ My friends and family could...
- ▶ My school/youth group could...
- ▶ My local community could...

Show young people the worksheet 'Reduce and Reuse Plastic Ideas' for inspiration or encourage them to research ideas.

2. Come back together as a whole class or group and write a shared list of the ideas. Discuss the ideas together. Talk about the strengths and weaknesses of each idea. Ask young people:
  - ▶ What are they going to do as individuals?
  - ▶ What are they going to ask others to do or change?
3. In pairs or groups, ask young people to create a plan for how they will make one of these changes happen. Give each pair or group a copy of the sheet 'Make Change Happen Action Plan' to help them.
4. Once young people have completed their plans, they present it to the whole class or group. Encourage the young people to constructively critique each other's ideas. Ask young people to think about questions like: What are the strengths of the plan? What are the weaknesses?
5. Give young people the time and resources to carry out their action plan. This will help them see they have the power to make positive changes.

## NOTE:

Young people may want to carry out the plastic investigation again to check their actions have made a difference.



## What next?

### Tell Greenpeace what you've been up to

We'd love to hear about your plastic investigation and activities - send your photos and stories to: [getactive.uk@greenpeace.org](mailto:getactive.uk@greenpeace.org)

### Invite a Greenpeace Speaker to talk to your school or club

They'll talk about the environmental challenges our planet faces and what young people can do to help. Find out more at: [www.act.gp/speakers](http://www.act.gp/speakers)

### Check out more educational resources

We have a range of inspiring resources. Find them [here](#).



# Plastic Investigation

Record how many of each plastic item is used.

The number of plastic items used during ..... e.g lunchtime, a week.

PLASTIC ITEMS	TALLY	TOTAL



# Make Change Happen Action Plan

## WHAT DO WE WANT TO ACHIEVE?

Say what you aim to do.

## WHAT DO WE NEED?

Say what equipment and resources you will need.

## WHAT WILL WE DO TO MAKE IT HAPPEN?

Say how you will achieve your aim. Think about timings, tasks and who will be responsible.

## WHO WILL HELP US?

Say who will help make your project a success, like teachers, local businesses, friends or family.

# Reduce and Reuse Plastic Ideas

Run a competition to see which class or group can reduce their plastic use the most over a month.



Share your top tips for reducing plastic use with friends and family by making and distributing a zine. Use the instructions in 'Let's write about it' to find out how.

Persuade your school or club to go single-use plastic free.

Set up recycling in your school or club.

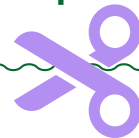


Invite friends and family to a zero plastic party to show them how they can reduce and reuse.



Write to your local MP or Councillor. Tell them why you are worried about plastic pollution and what you would like them to do to help.

Set up a 'make and reuse' club. Make and fix items from old products to avoid purchasing new plastic products.



Create posters and stick them up around your school or club with 10 top tips for reducing the amount of plastic you use. The top 10 tips could include: carry a reusable water bottle, eat snacks like fruit which aren't covered in plastic wrapping, avoid plastic straws when possible and use a refillable pen.

## TOP 10 TIPS!













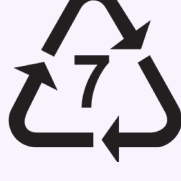

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- 2.....
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- 10.....





# Identifying plastic

Most plastic usually has a symbol of a number with arrows surrounding it. These symbols are called Resin Identification Codes. They help identify the type of plastic used in a product. The symbol is useful for finding out if a product can be recycled.

SYMBOL	NAME	EXAMPLE USES	RECYCLABILITY
	<b>PET or PETE</b> <i>Polyethylene terephthalate</i>	Clear drinks bottles, food packaging and textile fibres. 	Easily recyclable. Recycled PET is usually used in fleece and carpets.
	<b>HDPE</b> <i>High density polyethylene</i>	Milk, shampoo and cleaning products bottles. 	Easily recyclable. Recycled into garden furniture, litter bins and pipes.
	<b>PVC</b> <i>Polyvinyl chloride</i>	Window frames, drainage pipes, clothing and toys. 	Not usually recycled.
	<b>LDPE</b> <i>Low density polyethylene</i>	Carrier bags, rubbish bags and packaging films. 	Not usually recycled. However, recycling of LDPE is expected to increase.
	<b>PP</b> <i>Polypropylene</i>	Most bottle tops, drinking straws, margarine tubs and waterproof clothing. 	Not usually recycled. However, PP recycling is expected to increase.
	<b>PS</b> <i>Polystyrene</i>	Disposable cups, yoghurt pots and cushioning for breakable objects in packaging. 	Not usually recycled.
	<b>OTHER</b>	Nylon, acrylic glass (perspex) and items made from a mix of plastics. 	Not generally recycled.