Plastic Pollution

An introduction for teachers and youth leaders

Settings: Schools and youth groups

Age range: Approx 7-11 year olds*

Join the reduce and reuse revolution!

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, children 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, children 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 children to take action in their own lives, at home and in their community.

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

*Please adapt these activities to meet the needs of the children you work with.



Learning outcomes

Children will:

- ▶ Identify plastic in their everyday lives.
- Understand the impacts of plastic on the environment.
- Identify ways to reduce plastic in their lives.
- Take action to reduce plastic.

Resources needed

- Collection of everyday items (approximately 20) made from a variety of materials.
 Approximately half of these should be made from plastic.
- <u>'A World Full of Plastic'</u> (PowerPoint quiz).
- <u>'Sea Turtle and Girl's Plastic Story'</u> (video animation).
- '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.

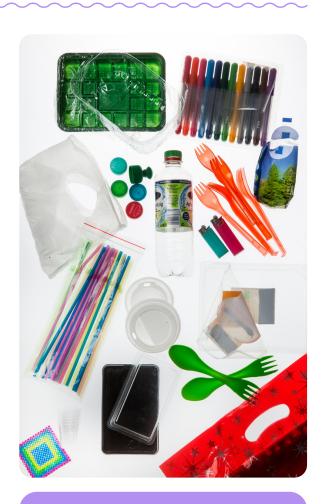


What to do

Help children identify plastic in their lives and why it has become so popular

Become a plastic detective

- Give children a variety of everyday items made from different materials or ask each child to collect an item from the room and place it in one pile.
- Challenge children to be plastic detectives by sorting the items into two piles - 'plastic' and 'non-plastic'. Encourage children to use their knowledge of materials from school science lessons.
- 3. Discuss with children how they know the items in the 'plastic' pile are made from plastic. Children may draw on their personal prior knowledge or talk about the properties of plastic they've learnt in science lessons. Some qualities of plastics are: it is usually cheap, light, durable and does not break easily.
 - Children could begin identifying the words and symbols that show an item is made from plastic. The worksheet 'Identifying Plastic' can be used to support children's understanding.
- 4. Ask children if they can think of any more items made from plastic. They could go on a 'plastic hunt' in pairs or groups to find plastic items around them. Encourage children to think about what the plastic is used for.
- 5. Come back together as a whole group and discuss the plastic items children saw and their
- 6. Introduce the quiz 'A World of Plastic' and complete it as a whole group.
- 7. Tell children we've found out there are huge amounts of plastic in the world. And, as plastic doesn't disappear when we've finished using it, it ends up everywhere. Tell children we will watch a video to help us think about the effects of plastic on the environment.



- **Healthcare** disposable syringes and PPE, including single-use face
- Transport replacing glass in aeroplane windows and in cars.

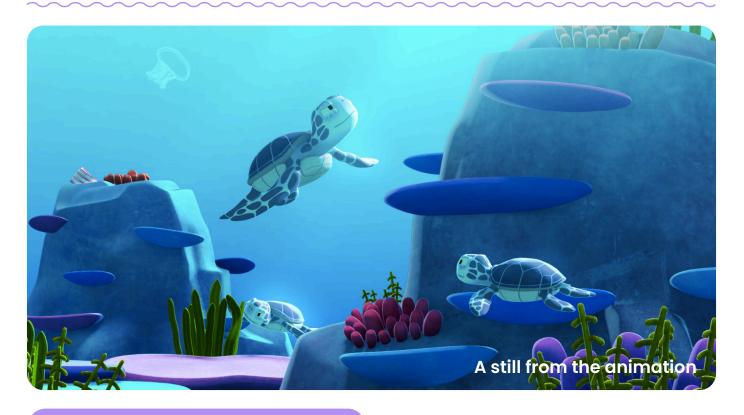
 Picnic items cups, plates, cutlery
- and straws.

 Toys dolls, balls and building blocks.
- Clothing the fibres in synthetic
- **Stationary** pens, scissors, pencil sharpeners and staplers.



What are the impacts of plastic?

Help children explore and understand the impacts of plastic pollution through an engaging animation



Questions

- Present the animation '<u>Sea Turtle and Girl's</u> Plastic Story'.
- 2. Use the video to stimulate a whole group discussion about plastic. Ask children questions like:
 - What did you learn from the video?
 - ▶ How is the environment changing?
 - Where do you think the plastic in the ocean came from?
- 3. Ask children what other questions they might have. Write these down. Children could research these themselves. 'The Plastic Problem' fact sheet is a great way for children to independently learn about the impacts of plastic.

Hot seating

- 1. A child chooses the character of the girl or the turtle from the video. They are put in the 'hot seat' a chair facing the rest of the group.
- 2. The rest of the children think of questions they wish to ask the character. For example, how did you feel when you saw the beach covered in litter? One at a time they will ask their questions. The child in the characters' role answers the questions from the perspective of their chosen character.

This activity can help children feel empathy for the characters in the film and deepen their understanding of the impacts of plastic. It is a good idea to help children get into character first through some whole group activities. Children could re-enact the video or you might ask them to close their eyes and think about questions from the girl or turtle's perspective. For example, how did you feel when you saw the rubbish on the beach?



Plastic investigation

Help children implement a plastic investigation and identify ways to cut plastic use in their everyday lives

- 1. Tell children 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 written down.
- 2. Show children the 'Plastic Investigation' worksheet. Discuss with children how to fill it in. Remind children of the activity they completed earlier as they learnt to identify items in their everyday lives made from plastic.
- 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. Children complete the plastic investigation.
- Share the plastic investigation results with the whole group. Discuss the findings and ask the children if we need all the plastic items they have recorded.
- 6. Ask the children 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 children's ideas. Encourage children to think about refusing single-use plastics, ways to reuse items instead of buying another, and ideas for non-plastic alternatives.

 The article '9 ways to reduce your plastic use' is a good starting point for ways to

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.





reduce plastic.

Make Change Happen

Empower children to take action to reduce and reuse plastic by helping them plan and implement their own change

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

Children could think about changes under the headings:

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

Show children 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 children:
 - 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 children 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 children have completed their plans, they present it to the whole class or group.

 Encourage the children to constructively critique each other's ideas. Ask children to think about questions like:

 What are the strengths of the plan?

 What are the weaknesses?
- 5. Give children the time and resources to carry out their action plan. This will help them see they have the power to make positive changes.



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

Invite a Greenpeace Speaker to talk to your school or club

They'll talk about the environmental challenges our planet faces and what children can do to help. Find out more at: www.act.gp/speakers

Check out more educational resources

We have a range of inspiring resources.
Find them <u>here</u>.

NOTE:







Record how many of each plastic item is used.

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

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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.

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

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





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.



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

