



Norfolk County Council

Norfolk recycles

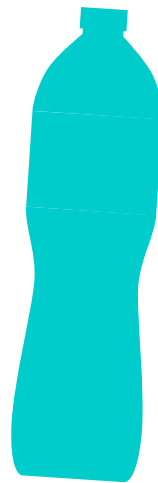
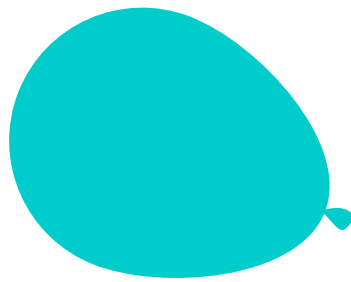
SWAP



SAVE



# REDUCE SINGLE ↓ USE



**AWARD SCHEME FOR  
NORFOLK SCHOOLS**

[www.norfolkrecycles.com](http://www.norfolkrecycles.com)

# WELCOME

## WELCOME TO OUR REDUCE SINGLE-USE SCHOOLS' PACK!

It's a resource full of information, support materials and activities designed to guide you towards becoming as close to completely single-use plastic free, and ideally single-use product free, as reasonably possible.

We understand that the idea of becoming single-use free may seem a little overwhelming to begin with, so we've broken things down into manageable chunks that allow you to start recognising your progress very quickly. We provide a 'Reduce Single-use charter' with action targets that will help to guide you through the positive changes you can make to become increasingly single-use free.

As you work your way through these actions, you will be rewarded for your commitment by achieving increasingly prestigious levels of our award, with the ultimate goal of earning the gold level by becoming as close to completely single-use free as possible.

Although the main focus of this program is on single-use plastics, it is a great opportunity to also find reusable alternatives to any other single-use products too. For example, when looking for a replacement for single-use plastic cutlery, opt for reusable metal items rather than substituting with another single-use material like wood. This will have further reaching benefits for the environment and encourage a greater level of sustainability in the long term.

Thank you for taking the first step towards becoming a single-use free school and good luck on your journey!

**"WE'RE HERE TO HELP YOU  
ALONG THE WAY WITH HANDY  
TIPS AND TEACHING NOTES!"**



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# INTRODUCTION

Single-use (or disposable) plastics can be defined as plastics that are only used once before they are thrown away or recycled.

Some of the biggest 'plastic polluters' are takeaway cups and lids, straws, bottles and bags, although plastic stirrers and cutlery are very problematic too.

Of the 300 million+ tonnes of plastic we produce every year, around 50% is intended for single-use purposes. This means that the majority of the plastic pollution that ends up in our oceans and environment is single-use and, although likely to only have been used for a few moments, it will have a long-lasting impact on our planet.



## BACKGROUND

The invention of plastic in 1907 was considered a breakthrough. This revolutionary material, that was relatively cheap to produce, lightweight, versatile, strong, colourful and didn't break easily, opened the door to a whole host of new possibilities. It offered improved hygiene and safety in areas of medicine, a safe, versatile material for making toys and other equipment for babies and children, as well as better packaging for food, and therefore a reduction in food waste.

For many years only the benefits of this material were perceived, with little knowledge of the potentially damaging consequences for natural eco-systems, the climate and human health.

Plastic production has increased from 2 million tonnes per year in 1950 to over 300 million tonnes per year in 2020. A total of around 8.3 billion tonnes (2019 figure) of plastic has been created since it was invented, with around 80% of it no longer in use and now circling the environment.



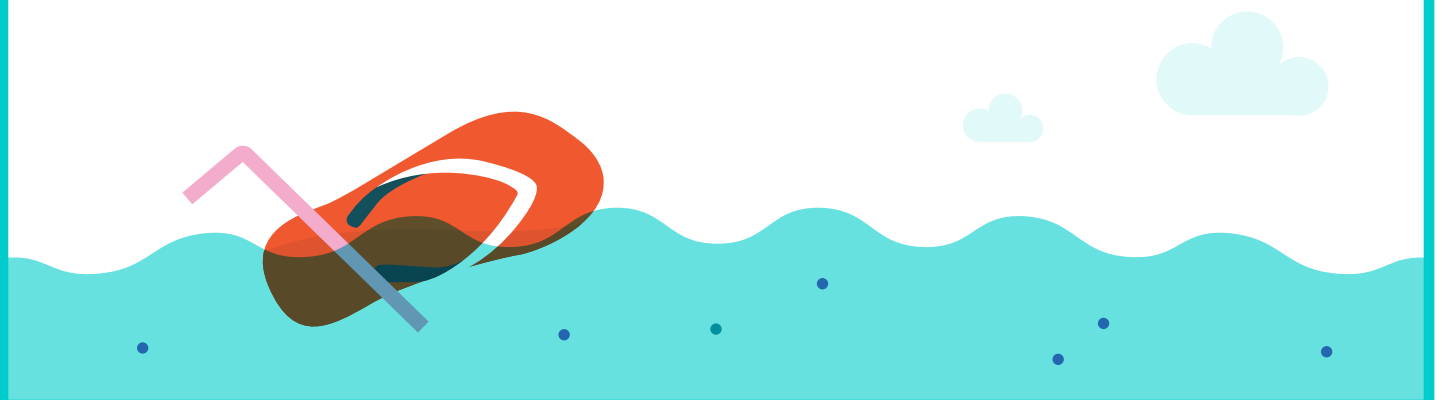
**"I CREATED BAKELITE –  
THE FIRST SYNTHETIC  
PLASTIC IN 1907"**

Leo Baekeland

# INTRODUCTION

## PROBLEMS

- ❌ Plastic in the environment will never degrade in a natural way. Plastics fragmentise into ever smaller pieces (micro-plastics) that can't be cleaned up properly
- ❌ Micro-plastics can be found in soil and even in the air we breathe. When fish ingest micro-plastics, mistaking them for food, the plastics could end up in our food chain. Although we don't yet know the full impact, there is potential that this could cause harm to human health
- ❌ Around 8 million tonnes of plastic flows into the sea every year. This is harming marine wildlife (through injury and accidental ingestion) and destroying habitats
- ❌ Synthetic items of clothing release plastic microfibres every time they're washed, hence adding to water pollution
- ❌ Plastic is made using fossil fuels: a finite resource
- ❌ The production of plastics contributes to climate change. The drilling for oil and processing it into plastic releases harmful gas emissions into the environment
- ❌ Only about 9% of the plastic that has been produced since its invention has been recycled. In addition to this, plastic can only be recycled 3 or 4 times before it reaches the end of its life
- ❌ Scientists predict that, if nothing changes in our plastic consumption habits, by 2050 there will be more plastic in the oceans than there are fish (by weight)



# INTRODUCTION

## WHAT'S BEING DONE?

The subject of single-use plastic is a very high-profile topic, with the government, local authorities, major organisations and businesses all working to find alternatives and solutions.



### SCHOOL TARGETS

The government has challenged all schools to eliminate their single-use plastics. The Department for Education will be helping school supply chains to replace single-use plastics with more sustainable alternatives.

## ALTERNATIVE PACKAGING

There are lots of alternatives to single-use plastic packaging already available that have less impact on the planet. For example, glass is reusable and infinitely recyclable and paper/card breaks down naturally and can be made from recycled/sustainable sources.

## UK PLASTICS PACT

This unique collaborative initiative aims to tackle plastic pollution at the source. More than 450 organisations have signed up to the pact, committing to an ambitious set of targets:

### By 2025

- **100% of plastic packaging will be reusable, recyclable or compostable**
- **70% of plastic packaging will be effectively recycled or composted**
- **Actions will have been taken to eliminate problematic or unnecessary single-use packaging items**
- **There will be a 30% average recycled content across all plastic packaging**



# INTRODUCTION

## WHAT CAN WE DO TO HELP?

We can all play our part in reducing single-use plastics by making some small changes to our lifestyles.

Here are some of our top tips for reducing single-use plastic usage:

- ✓ Carry a reusable water bottle
- ✓ Take your own reusable shopping bags
- ✓ Invest in a reusable cup for takeaway coffees
- ✓ Pack your lunch in reusable tubs or food wraps
- ✓ Take your own metal cutlery
- ✓ Refuse plastic straws
- ✓ Buy loose fruit and veg and pop it in a reusable bag
- ✓ Opt for products that use alternatives to plastic packaging where possible – try a paper wrapped bar of soap rather than buying it in a plastic bottle, or a glass jar of mayonnaise rather than a plastic squeeze bottle
- ✓ Take your own tubs to the deli, meat or fish counter
- ✓ Buy clothes made from natural fibres as synthetics shed plastic micro-fibres



**This pack contains lots of information and ideas to help you to reduce, and ultimately eliminate, single-use plastics (and products), within your school. Additionally, there are activities to help build the children's understanding of this topic and ideas to take home too.**

# EARNING AWARDS

## HOW IT WORKS

The overall aim of this project is to support your school in becoming as close to single-use plastic (and product) free as possible. In order to achieve this there are 3 simple steps to follow:



### STEP 1

**Sign up and make a pledge** to reduce single-use plastic (and products) in your school. To do this, visit:

[www.norfolkrecycles.com/reduce-single-use-for-schools](http://www.norfolkrecycles.com/reduce-single-use-for-schools)



### STEP 2

**Identify which actions on the Charter** you need to address. Complete a single-use plastic **audit** and compile an **action plan** to help you with this.



### STEP 3

**Make changes in school** to eliminate single-use plastics (and products). You can choose to tackle the **actions** in any order.



# EARNING AWARDS

## AWARDS STAGES

As you work your way through the steps you will achieve increasingly prestigious levels of the award:

### PLEDGE

**Sign up** to the reduce single-use schools scheme

### BRONZE AWARD

**Complete a total of 4 actions** from the charter

### SILVER AWARD

**Complete a total of 8 actions** from the charter

### GOLD AWARD

**Complete a total of 12 actions** from the charter and achieve single-use free status

For each level that you achieve, we will reward your school with:

- ✓ **A certificate**
- ✓ **An electronic (level specific) logo**

You will self-assess as you work through the project so, in order to receive your certificate, you will need to send us details of the targets you've met from the charter and evidence of the changes you've made to achieve this. Please see page 29 for further details.

If your school had already taken steps to reduce single-use items before you signed up to this scheme, and you have fulfilled one or more charter targets as a result, these achievements will also count towards your award.

The work you complete for this project can also help you to work towards Eco-schools awards.

For further details, please visit the Eco-schools website

[www.eco-schools.org.uk](http://www.eco-schools.org.uk)

**"FOUR AWARDS  
FOR YOUR SCHOOL  
TO COLLECT"**



# GETTING STARTED

To help to make the project more manageable, we've broken things down into key areas where single-use plastics (and products) are most likely to be identified as a problem.



## LUNCHTIME

- Any packaging associated with school provided lunches, including school packed lunches and hot meals. For example, plastic wrap on sandwiches, individual sauce sachets or disposable plastic cups or spoons
- Homemade packed lunches. For example, plastic wrap on sandwiches, drink pouches and biscuit/snack wrappers
- Any single-use plastics that are used to wrap/store food in the school kitchen
- Supplies for the school kitchen. Many of the ingredients will likely be provided in single-use plastic to maintain freshness and ensure hygiene.



## BREAKTIME

- Packaging on breaktime snacks provided by the school or sold in a school tuck shop
- Snacks brought in from home that are packaged in single-use plastic

## OTHER

- Any other single-use plastic products that are used in general areas of the school, including classrooms, staffroom and offices etc. For example, laminated displays that are only used once or disposable plastic cups
- Office supplies, such as reams of paper, are sometimes wrapped in plastic. Could you find a plastic free alternative?

In each area you should be aware that some single-use plastics are created within the school, some are brought in from home by the pupils and some are due to packaging from suppliers – all of these sources will need to be tackled.



# GETTING STARTED

We recommend that the project is led by a designated group of pupils, such as the Eco-council, and the associated key staff members. It will be important, however, to inform and involve all staff, pupils and parents to ensure the success of the project.

We provide a **'Waste free lunch pack'** that is specifically designed to help parents to reduce the amount of plastic packaging in their child's lunchbox and a useful **'Single-use swaps sheet'** for additional ideas.

Engaging with suppliers will also be key as many items arrive in school wrapped in single-use plastic. Suppliers, however, may be able to offer alternative packaging if you contact them. Alternatively, you may be able to switch to equivalent products that are packaged in a more eco-friendly way.



## PROJECT ACTIVITIES

Now it's time to make a start on reviewing your current use of single-use plastics in school and putting in place some strategies to reduce it.

This is our suggested order of activities:

- Introduce the school **Charter** and discuss the targets
- Run an **Assembly** to introduce the topic of single-use plastic
- Hold a single-use plastic **Audit** to assess the problems
- Put together an **Action Plan** to address the issues
- Involve the pupils in some additional **Activities** to enhance their knowledge



# SCHOOL CHARTER

## INTRODUCTION

The charter is made up of a set of targets which, once achieved, will help your school to reduce their use of single-use plastics and products as much as possible.

Begin by involving the pupils in ticking off any targets that you feel your school is already achieving. If this totals more than four, you can apply for your first award. Please see page 29 for further details.

Once you've completed this initial assessment, ask the group what could be done to find out exactly what the problem areas are in school. Introduce them to the idea of completing a single-use plastic audit and discuss how this could be useful.

**"SIGN YOUR SCHOOL  
UP TODAY!"**



# SCHOOL CHARTER

# SCHOOL CHARTER

We,

pledge to cut down on our use of single-use plastics (and products) as much as possible in our school!



## At lunchtime we will:

	Working towards	Achieved (date)
Use reusable plates, bowls and cups for all hot meals		
Have only reusable cutlery for eating school lunches with		
Use alternatives to single-use plastic packaging in all school provided lunches		
Reduce the amount of single-use plastic brought in home packed lunches by promoting 'Waste-free lunches'		
Ask kitchen staff to use reusable containers/single-use plastic alternatives for covering food during storage and preparation		
Reduce the amount of single-use plastic packaging suppliers use on food being delivered to school		

## At breaktime we will:

	Working towards	Achieved (date)
Eliminate single-use plastic packaging from school provided snacks		
Ask that snacks brought in from home are single-use plastic free		

## In other areas of school we will:

	Working towards	Achieved (date)
Ask everyone to bring in reusable bottles for their water		
Stop using any unnecessary single-use plastics/products in the staffroom		
As far as possible, use suppliers who offer alternatives to single-use plastic packaging		
Look for any other ways to reduce the use of single-use plastic around school		

# INTRODUCTORY ASSEMBLY

## RESOURCES

- **Examples of items made from single-use plastic**

(e.g. disposable water bottle, cling film, snack wrappers, plastic cutlery & straws, single-use carrier bag, packaged fruit/veg, plastic soap bottle, disposable coffee cup, balloons)

- **Picture resource**

(please see page 17)

- **Examples of reusable plastic alternatives**

(e.g. water bottle, sandwich wrap, reusable boxes, metal cutlery, reusable straw, shopping bag, fruit/veg in string bag, bar soap in box/paper wrapping, reusable coffee cup, fabric flag/bunting)

## INTRODUCTION

Explain that too much rubbish causes problems for the environment and for wildlife and wastes precious resources so it's important that we tackle it.



## PLASTIC

Today we're going to talk about one type of rubbish in particular – plastic. Since it was invented in 1907 (just over 100 years ago) 8.3 billion tonnes of plastic has been created:

- **That's the same as 18 x the weight of the entire population**
- **8.3 billion tonnes of lego bricks could cover the entire surface of the earth 16 times**

Out of that 8.3 billion tonnes of plastic:

- **9% has been recycled**
- **11% has been incinerated (this is the only way to fully destroy it)**
- **80% is still in the environment (could be in landfill, the oceans or the countryside)**

You could demonstrate percentages by asking pupils to all stand up to represent the 8.3 billion tonnes of plastic and then getting some to sit down to demonstrate each proportion.



# INTRODUCTORY ASSEMBLY

## PROBLEMS

So why is all this plastic a problem?  
Take ideas (You could use the visuals provided as prompts/to support)

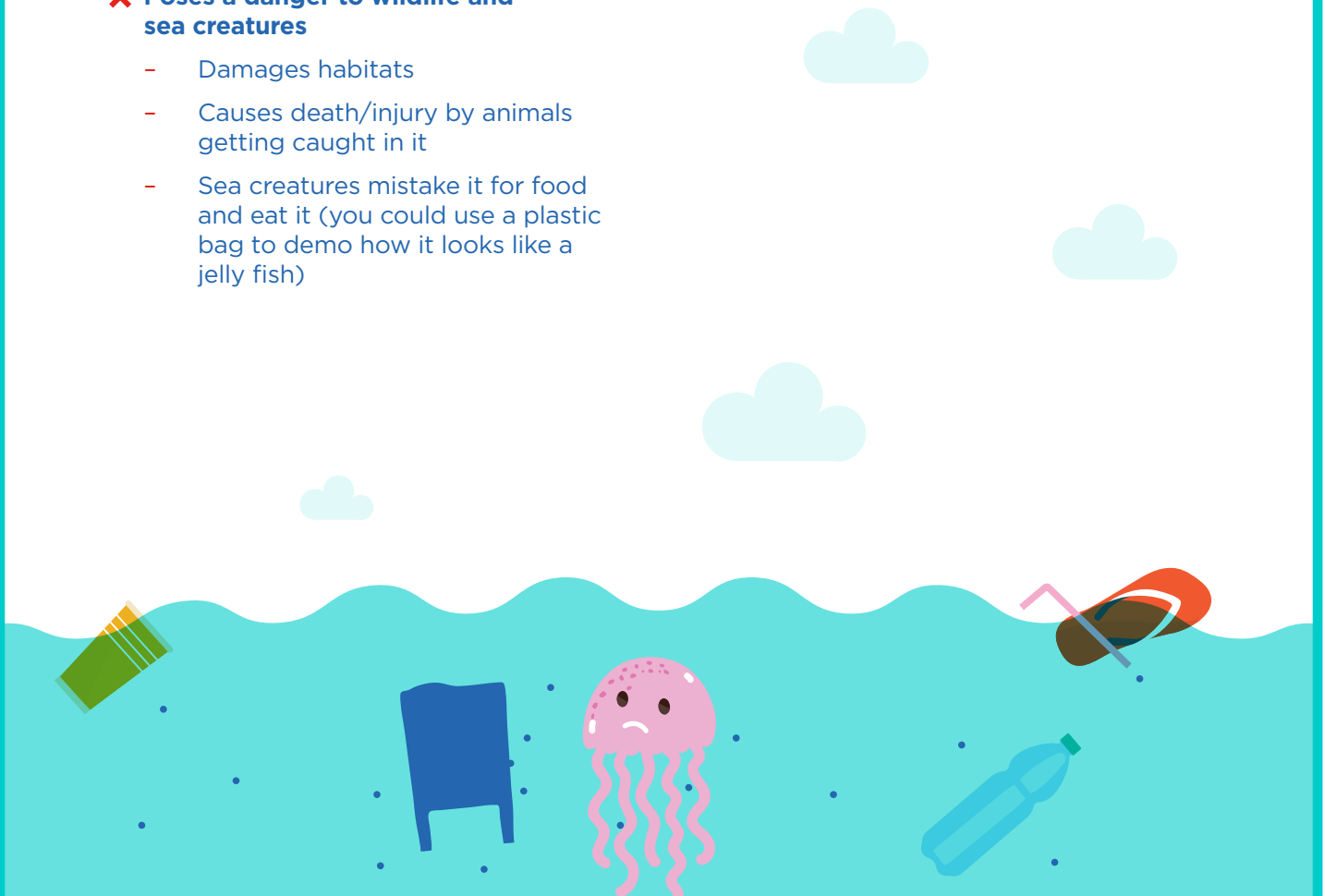
- ✗ **Uses fossil fuels to make – finite resource, pollution & water consumption in extracting oil and in plastic production process**
  - Huge carbon footprint
- ✗ **Pollutes oceans and beaches**
  - Plastic doesn't decompose (break down) in a natural way, just get smaller and smaller and can't be cleaned up – micro plastics
  - Lasts forever
- ✗ **Poses a danger to wildlife and sea creatures**
  - Damages habitats
  - Causes death/injury by animals getting caught in it
  - Sea creatures mistake it for food and eat it (you could use a plastic bag to demo how it looks like a jelly fish)

## SINGLE-USE PLASTIC

Most of this plastic waste is 'single-use plastic'. What do I mean by that?

- **Definition: single-use plastics, or disposable plastics, are only used once before they are thrown away or recycled**
- **Show some examples of items made from single-use plastics – put your hand up if this is something you use**

It's this type of plastic that's causing the biggest problems so we need to do something about it.



# INTRODUCTORY ASSEMBLY

## SOLUTIONS

The great news is that we can all help to do something about it (seems like a huge problem but lots of little changes can make a huge difference). What could we do:

- ✓ **We can recycle as much plastic as we can - but plastic can only be recycled 3-4 times before it reaches the end of its life, plus a lot of single-use plastic is not recyclable**
- ✓ **Reducing and reusing is great - finding alternatives to the items made from single-use plastic:**
  - Take an item made from single-use plastic and ask a pupil to come and select a waste free/reusable equivalent from the examples

Cover:

- **Things relevant to them such as water bottles, sandwich wraps**
- **Lunchtime things like plastic cutlery, straws**
- **Shopping (help parents with this one) carrier bags, packaged fruit/veg**
- **Items adults use like coffee cups**
- **Decorations like balloons - could use flags or bunting as alternatives**
- **Talk about tricky items that there aren't easy zero waste equivalents for - sweets, biscuits etc. What could you do? Make your own, look for alternative snacks that don't have plastic packaging or buy bigger packs and decant some into reusable tubs**



## NEXT STEPS

The school eco-council are going to be looking at the single-use plastic we have in school and finding ways to cut it down, and eventually get rid of it altogether, so we can become a single-use free school.



# INTRODUCTORY ASSEMBLY

Picture resource



**"HELP ME, HELP MY FRIENDS"**



## SINGLE-USE PLASTIC AUDIT

The audit is designed to identify the items of single-use plastics that are used in school throughout the entire day. It will look at waste that is created at lunchtime and breaktime, but also investigate any other times of the day, or areas of the school, where single-use plastic might be an issue.

At this point you may feel that you have a good understanding of what your school is already doing to cut down on single-use plastics and what issues you need to address next. If this is the case, you may opt to do only a partial audit that investigates target areas or areas of uncertainty.

**Please feel free to adapt the audit to suit the needs of your school.**



# SINGLE-USE PLASTIC AUDIT

## RESOURCES

- ✓ Tally sheets (please see pages 22-25)
- ✓ Clipboards
- ✓ Pencils

## PREPARING FOR THE AUDIT

The audit will need to be planned in advance and everyone in the school, both pupils and staff (including teaching staff, office staff, MSAs, kitchen staff and the site manager/caretaker), will need to be aware that it's happening.

Before undertaking the audit, explain to the pupils that they're going to help to find ways to reduce the amount of single-use plastic used in school. Before they can work out how to do this, they will need to know what the problems are.

Ask the pupils for their ideas about the types of single-use plastics that they think are thrown away:

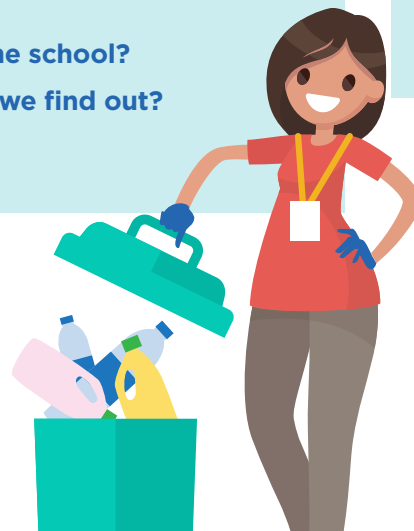
- **What time of day does this happen?**
- **Where in the school?**
- **How could we find out?**

## RUNNING THE AUDIT

Introduce the idea that members of the eco-council will record exactly what single-use plastics are being thrown away by keeping a tally at different points throughout the day

- **Pupils will not be sorting through bins or touching the rubbish**
- **They will simply stand near the bins and note down what they can see when other pupils come to dispose of their rubbish**
- **You could use some example items from a lunchbox to demonstrate how this will work**

As you run the audit you may wish to ask pupils to put any single-use plastics into clear bin bags, separate from any other types of waste, so that you can show them the volume of single-use plastics that are being used.



**"HAVE A LOOK IN THE BINS!"**

# SINGLE-USE PLASTIC AUDIT

## LUNCHTIME

Using the tally sheets provided (or similar) draw up a rota and allocate pupils from the eco-council time slots to stand near the bins in the lunch space to monitor what plastics are being thrown away. They should do this simply by looking at what is being thrown away and marking it on their tally sheet – they are not expected to touch or sort through the waste in anyway.

In order to identify the true source of the plastic waste, you may wish to ask pupils having school packed lunches to empty their rubbish into a different bin to those having home packed lunches, so it is easier for the pupils keeping the tallies to differentiate between the two.

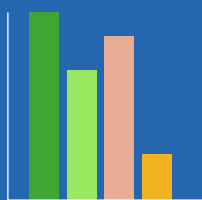
Pupils having hot dinners wouldn't usually produce any plastic waste (although please use your discretion if this is different in your school), however some may be created during the preparation of these meals. To gain a fuller picture you may therefore wish to speak to kitchen staff about any single-use plastics they use, such as clingfilm to cover food for storage, or plastic packaging in which food is delivered to the school.

## BREAKTIME

This should be monitored in a similar way to lunchtime, with pupils being asked to stand near bins and keep a tally of what plastics are being thrown away. Again, pupils are not expected to touch any of the waste.

## OTHER AREAS

Work out where all the other bins are in school (include classrooms, staffroom and offices but not toilets or medical rooms). Allocate members of the eco-council specific rooms/bins to check and, towards the end of the school day, ask them to take their tally sheets and record what they can see in the bins. They don't need to empty the bins or put their hands inside.



Once you have completed the tally sheets, you may wish to input the data into spreadsheets and convert it into graphs. This will make it easier for the pupils to work with during the action plan session.

# SINGLE-USE PLASTIC AUDIT

## AUDIT OF SUPPLIERS

This is a much wider audit as it may incorporate several areas of the school from which supplies are ordered. It is recommended that relevant members of staff are asked to keep a record of any products that arrive at the school in plastic packaging during a given period of time.

When an item is identified as being packaged in single-use plastic, suitable plastic free alternatives should be investigated.

Once this is completed, members of the eco-council can then collect the results to feed them into the action plan (when applicable).

**“PLEASE NOTE:  
ANY MEDICAL  
SUPPLIES ARE EXEMPT  
FROM THIS AUDIT”**



The main areas to look at are:

- **The kitchen**

- What foods arrive at school pre-packaged?
- Are there any viable plastic free alternatives?
- Could your current supplier eliminate any of the packaging at source?
- If completely plastic free isn't an option for certain products, is there scope for buying larger packs to reduce the overall plastic wastage?

- **Offices**

- Does the office paper come wrapped in plastic? Could this be changed to reams that are wrapped in paper?
- Are there any other items of stationery that come wrapped in plastic?

- **Staffroom**

- Are tea and coffee supplies packaged in plastic? Is there an alternative available?
- Are disposable plastic cups provided for a water dispenser?

- **Cleaning products**

- Is there any scope for changing disposable cleaning wipes, for example, to reusable cloths?
- Could any products supplied in plastic packaging be substituted?

# SINGLE-USE PLASTIC AUDIT



## LUNCHTIME TALLY SHEET

Which type of lunch are you looking at? (Please tick)

- School packed lunches
- Home packed lunches
- Other \_\_\_\_\_

Please keep a tally of all the pieces of plastic that are being thrown away:

ITEM	TALLY	TOTAL
Cling film/plastic film		
Plastic bag		
Plastic bottle		
Drink pouch		
Plastic cup		
Yoghurt pot/tube		
Plastic pot		
Crisp packet		
Biscuit/cake wrapper		
Snack wrapper (peperami, cheese etc)		
Plastic straw		
Plastic knife/fork/spoon		

# SINGLE-USE PLASTIC AUDIT



## BREAKTIME TALLY SHEET

Please keep a tally of all the pieces of plastic that are being thrown away:

ITEM	TALLY	TOTAL
Cling film/plastic film		
Plastic bag		
Plastic bottle		
Drink pouch		
Plastic cup		
Yoghurt pot/tube		
Plastic pot		
Crisp packet		
Biscuit/cake wrapper		
Snack wrapper (peperami, cheese etc)		
Plastic straw		
Plastic knife/fork/spoon		

# SINGLE-USE PLASTIC AUDIT

"WHICH ROOM ARE YOU LOOKING AT?"



## OTHER AREAS TALLY SHEET

Please keep a tally of all the pieces of plastic that are being thrown away:

ITEM	TALLY	TOTAL
Cling film/plastic film		
Plastic bag		
Plastic bottle		
Drink pouch		
Plastic cup		
Yoghurt pot		
Yoghurt tube		
Plastic pot		
Crisp packet		
Biscuit/cake wrapper		
Snack wrapper		
Plastic straw		
Plastic knife/fork/spoon		
Laminated paper		
Coffee cup lid		
Plastic wallet		



# SINGLE-USE PLASTIC AUDIT



## SUPPLIER AUDIT SHEET

CURRENT SUPPLIER	PRODUCT DETAILS	NOTES & SUGGESTED ALTERNATIVES

# REDUCE SINGLE-USE ACTION PLAN

After completing the plastic audit, you will need to identify the targets you would like to address on the charter.

Once the targets you wish to work on have been selected, you can use the information collected in the audit to help you to put together an action plan to reduce the single-use plastics (and products) in school.

Remember, you do not need to try to tackle everything at the same time – you will achieve an award for every four targets you complete on the charter. We therefore recommend working on a set of just four targets at a time and then, once those are complete, revisiting the charter, selecting the next four targets you wish to address and drawing up a new action plan for them.

## COMPILING THE ACTION PLAN

Discuss with the eco-council the charter targets you wish to work on.

In small groups, ask them to use the results from the audit, and/or their own knowledge and observations of the school, to start to draw out exactly what the problems are that they need to address in relation to each chosen target. For example:

- **For the lunchtime target ‘use reusable plates, bowls and cups for all hot meals’, they may have found that drinks for school lunches are served in disposable cups and that ice cream is provided in single-use bowls**
- **Or for the breaktime target ‘eliminate single-use plastic packaging from school provided snacks’, it might be that the tuck shop sells raisins in small plastic bags and flapjacks that are wrapped in clingfilm**

Once the problems have been identified, bring the pupils back together and involve them in thinking about what action needs to be taken in order to address these issues, what alternatives could be used instead of the single-use items and who will need to be involved in either actioning or approving it.

**Remember** – it is always better to replace single-use plastic items with something reusable if possible, rather than simply substituting with another single-use item made from a different material.

You may wish to record your ideas in a similar format to the example action plans on the following pages.



# REDUCE SINGLE-USE ACTION PLAN

## IMPLEMENTING THE ACTION PLAN

Once drawn up, the action plan should be a working document. As you begin working through it you may need to change or add things according to what happens – that is fine, it is important that it works for you.

There is no time limit to complete your targets, again it is down to what fits in best for your school. Tackle it one step at a time and you will soon start to see things progressing and all your hard work and commitment paying off.

## ACTION PLAN – EXAMPLE 1

TARGETS FROM CHARTER	HOW?	WHO?	WHEN?	MONITORING/ EVALUATION
<p><b>Lunchtime:</b></p> <p>Reduce the amount of single-use plastic brought in home packed lunches by promoting 'Waste-free lunches'</p>	<ul style="list-style-type: none"> <li>Run a 'waste-free lunch' project and introduce a weekly waste-free lunch day. Reward participation with house points</li> <li>Use the 'Waste free lunch pack' on the Norfolk recycles website for guidance</li> </ul>	Mrs S / eco-council	Autumn term	
<p><b>Lunchtime:</b></p> <p>Use alternatives to single-use plastic packaging in all school provided lunches</p>	<ul style="list-style-type: none"> <li>Buy large refillable pump dispensers to replace individual sauce sachets</li> <li>Provide reusable cups/allow children to bring own water/drink bottle to replace disposable 'juice cups' in school packed lunches</li> <li>Provide school packed lunches on reusable plates instead of in plastic wrapping (sandwiches, cakes etc)</li> </ul>	Mrs S / Kitchen staff	Autumn term	
<p><b>Lunchtime:</b></p> <p>Ask kitchen staff to use reusable containers/single-use plastic alternatives for covering food during storage and preparation</p>	<ul style="list-style-type: none"> <li>Kitchen staff to find ways of using lidded reusable tubs where possible</li> <li>Buy suitable reusable tubs</li> </ul>	Mr H / Kitchen staff	Spring term	
<p><b>Lunchtime:</b></p> <p>Reduce the amount of single-use plastic packaging suppliers use on food being delivered to schools</p>	<ul style="list-style-type: none"> <li>Speak to suppliers about alternatives/ take back schemes</li> <li>Investigate alternative suppliers</li> </ul>	Mr H / Kitchen staff	Spring term	

# REDUCE SINGLE-USE ACTION PLAN

## ACTION PLAN – EXAMPLE 2

ACTION TARGETS	HOW?	WHO?	WHEN?	MONITORING / EVALUATION
<p><b>Breaktime:</b> Eliminate single-use plastic packaging from school provided snacks</p>	<ul style="list-style-type: none"> <li>• Provide raisins/fruit in reusable tubs/ cups</li> <li>• Store flapjacks in lidded tub &amp; sell without packaging</li> <li>• Milk in reusable cup - house point for returning cup</li> </ul>	Mr H/ kitchen staff	Summer term	
<p><b>Breaktime:</b> Ask that snacks brought in from home are single-use plastic free</p>	<ul style="list-style-type: none"> <li>• Introduce a 'no plastic' snack policy - fruit/veg or snacks in reusable tubs will be allowed</li> <li>• Letters home to parents</li> <li>• Eco-council presentation in assembly</li> </ul>	Mr H / Mrs S / eco-council	Summer term	
<p><b>Other:</b> Stop using any unnecessary single-use plastics/products in the staffroom</p>	<ul style="list-style-type: none"> <li>• Buy reusable cups/glasses for staffroom &amp; provide to staff</li> <li>• Remove disposable cups from water dispenser</li> </ul>	Mr H / all staff	Spring term	
<p><b>Other:</b> Look for any other ways to reduce the use of single-use plastic around school</p>	<ul style="list-style-type: none"> <li>• Staff to only laminate display material that is intended to be used over and over again</li> <li>• Provide visitors with a reusable cup/glass instead of offering disposable cups</li> </ul>	Teaching / support staff All staff	Summer term Spring term	



# AWARD APPLICATION

## CONGRATULATIONS ON TAKING ANOTHER STEP TOWARDS BECOMING A SINGLE-USE FREE SCHOOL!

In order to apply for an award please email us at:

**zerowaste@norfolk.gov.uk**

with the following information:

- **School name and address**
- **Contact name, email address and phone number**
- **The award level(s) being applied for:**
  - **Bronze** (total of 4 targets on the charter completed)
  - **Silver** (total of 8 targets on the charter completed)
  - **Gold** (total of 12 targets on the charter completed)
- **Details of the charter targets you have completed and what actions you took to achieve them** (this could be in the form of a completed action plan)



**Please remember** - if you had already achieved some of the targets before beginning this project they will still count towards your award. Simply include brief details about what you did/do to meet them along with the information about any new targets you've met.

**If applying for your Silver or Gold award**, you do not need to resend details of the work completed that you've previously sent to us (we will have this on record).



We would love to see any photos showing the work you've completed and the changes you've made. If you're happy to share them with us, and for us to share them via our social media channels or on our website, please let us know.

Please contact us at **zerowaste@norfolk.gov.uk** if you have any queries.

## NEXT STEPS...

Now you have started your journey towards becoming a single-use plastic free school, you may wish to take things a step further...

### SPREAD THE WORD

**Help your family, friends and neighbours** to reduce single-use plastics and products at home. Waste free lunches and refillable water bottles for everyone are a great place to start! What other swaps could they make?

Take a look at our swap2save videos for some great ideas  
[www.norfolkrecycles.com/swap2save](http://www.norfolkrecycles.com/swap2save) 

### TAKE ON ANOTHER CHALLENGE

For further actions and accreditation, why not get involved with the **Surfers Against Sewage (SAS)** plastic free schools programme? The work you've completed so far can contribute to this, plus you will be provided with further challenges.


For further information, visit [www.plasticfreeschools.org.uk](http://www.plasticfreeschools.org.uk) 

### OPPORTUNITIES FOR OLDER STUDENTS

**Norfolk Youth Parliament** helps young people aged 11-18 to have a voice on the future of Norfolk and make a positive contribution to their community.

Every year, UK Youth Parliament run 'Make your Mark', a UK wide consultation to find out which issues matter most to young people. Youth Parliament then campaign for the next year on the chosen topics.

In 2021, hundreds & thousands of young people from across the UK voted plastic pollution as a top concern.

To find out more, get involved and contribute visit  
<https://www.norfolk.gov.uk/what-we-do-and-how-we-work/your-local-councils-and-mps/norfolk-youth-parliament> 



# ACTIVITIES

On the following pages you will find a selection of optional activity ideas designed to support and enhance pupils' understanding of the issues surrounding single-use plastics. They are curriculum linked and can be easily adapted to suit different age groups.



# GENERAL ACTIVITIES

These activities could be used as part of a PSHE session or to support the school's work as part of the wider curriculum.

## PLASTIC SORT

This activity would work well with slightly younger children.

Have a selection of single-use plastic items and reusable items (use either clean real examples or the picture cards provided on pages 33 - 34). Ask the children to sort the items into 2 hoops to show which items you only use once, and which items can be used again and again.

Look at the things in the 'items you only use once' hoop and ask them if they can think of something that you could use instead? Could they maybe find something in the 'reusable hoop'?

## SINGLE-USE SWAPS

Show a selection of single-use plastic items (e.g. cling film, disposable bottle, plastic carrier bag, wet wipes, plastic straws etc).

- **Why do we use them? (convenience, to keep food clean, just because they're there)**
- **Are there alternatives we could use?**

## MATCHING PAIRS GAME

In pairs/small groups give the children a set of the single-use swaps matching pairs cards (pages 33 - 34). Can they match the single-use plastic items to an appropriate reusable alternative?

- **Turn all the cards face-down, keeping the red (single-use items) cards separate from the green (waste free alternatives) cards**
- **Take it in turns to turn over 1 red and 1 green card**
  - If the green card shows a waste free alternative for the single-use item shown on the red card, keep them both
  - If they don't 'match', then turn them both face-down again
- **Continue until all the cards have been matched correctly**

Can anyone suggest any different waste free swaps for any of the single-use plastic items?

Based on what they've learnt from the game, could they design a single-use swap poster?

- **Extend them by asking them to research and add a related fact to their poster**





# MATCHING PAIRS GAME

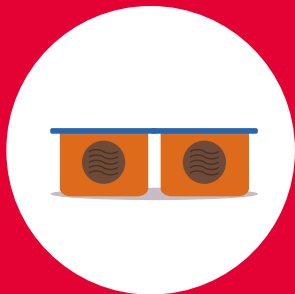
Resource sheet



**DISPOSABLE  
BOTTLES**



**SANDWICHES  
IN CLINGFILM**



**SNACK  
BISCUITS  
IN PLASTIC  
WRAPPER**



**PLASTIC  
CUTLERY**



**BAGGED  
FRUIT**



**PLASTIC  
STRAWS**



**PLASTIC  
CARRIER  
BAG**



**DISPOSABLE  
CUPS**



**INDIVIDUALLY  
WRAPPED  
CHEESE  
SNACK**



**WET WIPES**

# MATCHING PAIRS GAME

Resource sheet



**REUSABLE  
DRINK  
BOTTLES**



**SANDWICHES  
IN BEESWAX  
WRAP**



**HOMEMADE  
CAKE/  
BISCUITS IN  
REUSABLE  
TUB**



**METAL  
CUTLERY**



**LOOSE  
FRUIT**



**REUSABLE  
STRAWS**



**REUSABLE  
SHOPPING  
BAG**



**REUSABLE  
CUPS**



**CHEESE  
CHUNKS IN  
REUSABLE  
TUB**



**FLANNEL  
& WATER**

# DESIGN & TECHNOLOGY

## NATIONAL CURRICULUM AIMS

Critique, evaluate and test their ideas and products and the work of others

- *Investigate and analyse a range of existing products (Evaluate)*

Build and apply a repertoire of knowledge, understanding and skills in order to design products for a wide range of users

- *Use research to inform the design of innovative, functional, appealing products that are fit for purpose (Design)*

## PACKAGING

Look at a range of foods that use plastic packaging (use either the picture sheet provided on page 36 or real examples):

- **Bagged bananas/apples**
- **Soft fruit in punnet (strawberries, raspberries, blueberries etc) with plastic wrapping**
- **Can multipack wrapped in plastic**
- **Pre packed sandwiches wrapped in plastic**

Why do these foods have plastic packaging?

- **To prevent damage**
- **To keep them clean**
- **Waterproof**
- **For convenience**

In small groups ask the pupils to each look at one item and discuss whether they think all the packaging is necessary.

Ask pupils to feedback their ideas to the class. Try to cover:

- **Some packaging is not necessary, for example plastic holding a multipack together as the items within are already adequately packaged**
- **Some packaging may be necessary to prevent the food from being damaged during transit either between supplier and retailer or retailer and consumer**
- **Without adequate packaging, more food waste could be created**
- **Where packaging is necessary, does it have to be plastic or are suitable alternatives available?**

Can the pupils redesign the packaging for one (or more) of the items so that no single-use plastic is used?

# DESIGN & TECHNOLOGY

## Resource sheet



## ENGLISH

## NATIONAL CURRICULUM AIMS

Develop the habit of reading widely and often, for both pleasure and information

- Retrieve, record and present information from non-fiction
- Provide reasoned justifications for their views

Write clearly, accurately & coherently, adapting language & style for a range of contexts, purposes & audiences

- Writing composition
- Vocabulary, grammar and punctuation

## SHOULD SINGLE-USE PLASTICS BE BANNED?

This activity asks the children to research and consider both the pros and cons of single-use plastic, then present their ideas in the form of a balanced argument.

## Introduction

Explain to the pupils that when plastic was first invented in 1907 it was considered a huge breakthrough and for many years only the benefits of plastic were perceived '(please see page 4 for further information). As time has passed, we have become increasingly aware of the damaging consequences of plastics on the environment, mainly due to the fact that they don't breakdown in a natural way.

In the modern world single-use plastic plays a huge part in our everyday lifestyles and, although we now know that it brings with it many problems, we must also consider the positives.

## Research

Ask the pupils to use a range of resources, including the picture resource, infographic, magazine article and newspaper extract provided on pages 39 - 42 and/ or their own independent research, to begin to highlight some of the pros and cons of single-use plastic.

## Writing

Using the results from their research, pupils should write a balanced argument, clearly presenting ideas from both sides, as to whether they think that all single-use plastics should be completely banned.

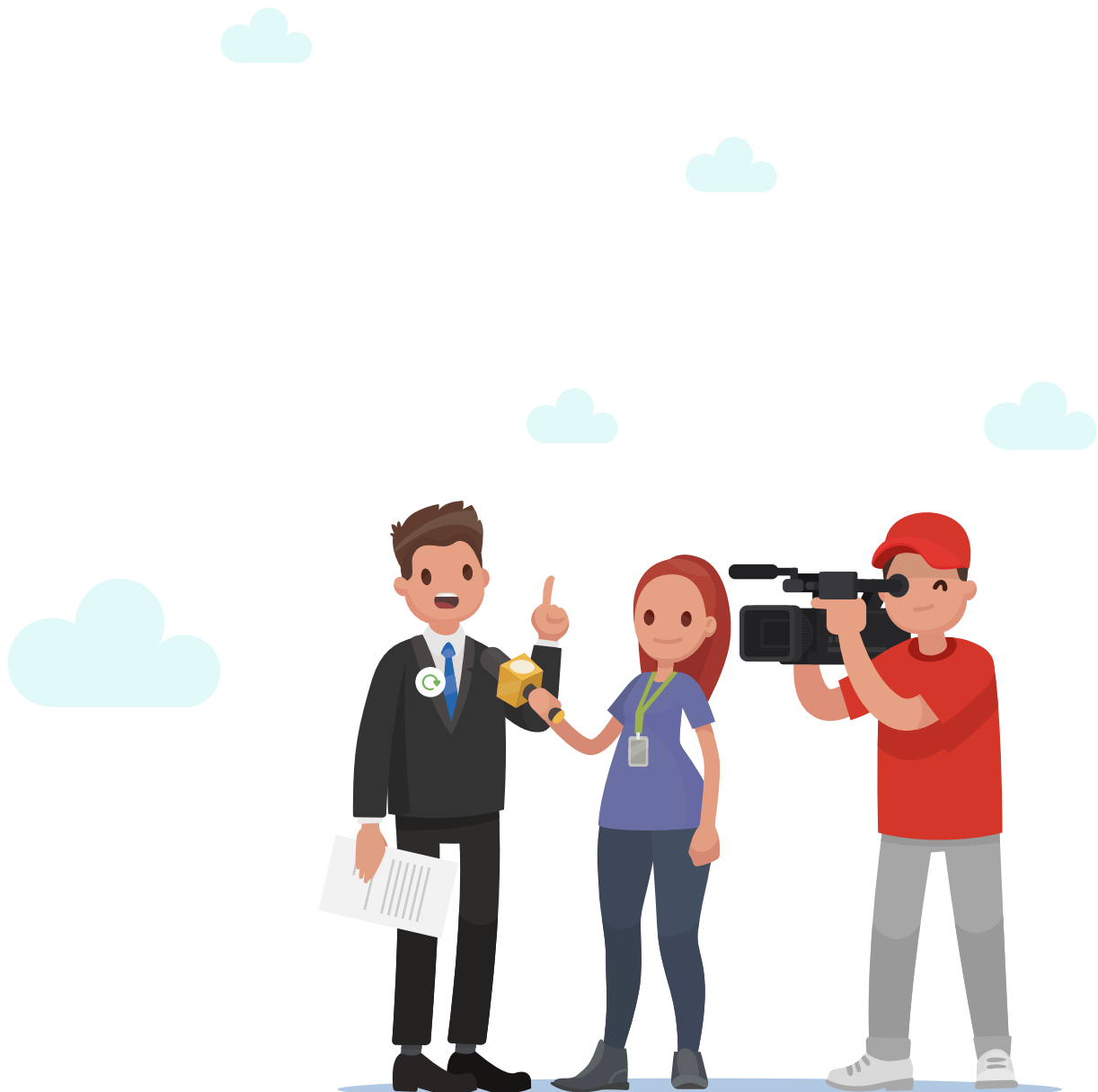
**What conclusion will they draw and what is their proposed resolution?**



# ENGLISH

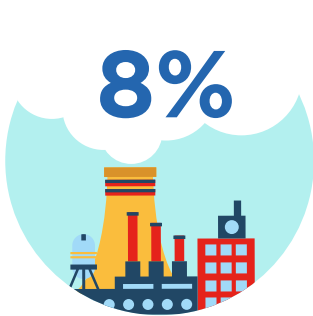
## WARNING LETTER

Imagine you're someone in the future, living in the year 2050. Using information about scientific predictions (the infographic provided may be a useful starting point) and your own imagination, write a warning letter to people today explaining what problems we're going to cause if we continue to waste plastic at the rate we currently are.



# ENGLISH

## Infographic



Plastic is made from fossil fuels (a non-renewable and finite resource) - 8% of the world's crude oil is used for producing plastic



Around 8 million tonnes of plastic flows into the sea every year



Around 50% of the plastic items produced are designed to be single-use and get thrown away almost immediately



Plastic doesn't degrade in a natural way - it breaks down into increasingly smaller pieces called micro-plastics

Micro-plastics can never be properly cleaned up



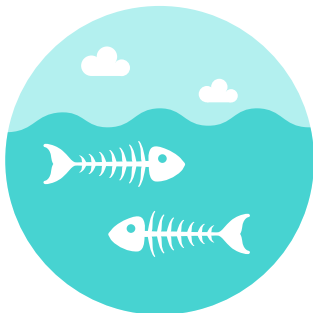
Sea creatures and birds can get caught in plastic waste or be injured by it



Fish and marine creatures ingest plastic

This can cause them harm or to choke

The plastic they eat could get into the human food chain



Plastic destroys marine habitats



663 species of animals and birds around the world are harmed by plastic every year



It is predicted that if nothing changes in our plastic consumption habits, by 2050 there will be more plastic in the oceans than fish



No ocean on Earth is unaffected by plastic pollution

# ENGLISH

Resource sheet



**“USE IMAGES LIKE THESE TO HELP YOU”**





INDEPENDENT

5th July 2019, by Manoj Dora and Eleni Iacovidou

# Why the answer to saving the environment isn't getting rid of all plastic food packaging

Plastic packaging does more than keep our food fresh on the shelves. Manoj Dora and Eleni Iacovidou explain that instantly reducing it isn't as sustainable as you might think.



*Plastic packaging is used in the food supply chain because it supports the safe distribution of food over long distances and minimises food waste by keeping food fresh for longer*

There has been a surge in awareness of the damage that plastic pollution does to our planet since the invention of plastic, and this has spurred a number of campaigns to remove single-use plastics from our daily lives.

And of course, this extends to food packaging.

Many people bemoan the large amount of packaging that supermarkets use, particularly for fruit and vegetables, most of which have their own natural protection. Nonetheless, a major reason that supermarkets use so much packaging is to protect food and prevent waste – particularly with fresh food. Removing plastic entirely from our food supply may not be the best solution when it comes to protecting the environment and conserving valuable resources.

Food supply chains are complex networks with lots of parts. Food typically travels from the fields where it is produced to a storage facility for processing. Then it's packaged, transported and distributed to shops, where it is marketed, before being bought and consumed. This takes a varying amount of time, depending on where it is farmed and how long it stays in someone's fridge or cupboard.

Plastic packaging is used in the food supply chain because it supports the safe distribution of food over long distances and minimises food waste by keeping food fresh for longer.

A 2016 study of food waste found that 88 million tonnes of food is wasted every year in the EU – that's 173kg per person and equals about 20 per cent of food produced. Minimising this wastage is crucial for environmental protection, as well as food security. Plastic packaging may be a necessary evil to reduce this high level of waste.

A number of factors must be taken into account when determining how useful plastic packaging is in the food supply chain, as it has the potential to preserve food and prevent its wastage.

For example, the use of just 1.5g of plastic film for wrapping a cucumber can extend its shelf life from three days to 14 days and selling grapes in plastic bags or trays has reduced in-store wastage of grapes by 20 per cent.

A lot of food is air freighted, so prolonging its shelf life has important benefits for the environment. Recent estimates suggest that the carbon footprint of food waste generated can be three times higher than that of plastic.

Furthermore, plastic packaging is more flexible and lighter than alternatives such as glass and card. This reduces transportation costs and the carbon emissions that come with them.

Simply removing plastic from food packaging is not as sustainable as you might think. There are lots of cases where plastic packaging can be beneficial at reducing waste. But food sellers need to think of ways to reduce and reuse the plastic where possible.

Plastic itself is a very useful material. We need to use it more effectively and more sparingly in some cases but we shouldn't get rid of it altogether.

\*\*\*Edited extract\*\*\*

For the full article visit: [www.independent.co.uk/life-style/food-and-drink/plastic-packaging-food-waste-global-warming-carbon-footprint-a8968541.html](http://www.independent.co.uk/life-style/food-and-drink/plastic-packaging-food-waste-global-warming-carbon-footprint-a8968541.html)

# ENGLISH

Resource sheet



7th October 2019, by Sarah Gibbens

# Can medical care exist without plastic?

Hospitals are filled with sterile single-use plastic. Environmental advocates are looking for less wasteful ways to keep healthcare hygienic.



Single-use plastic is facing more scrutiny than it ever has, and the medical industry could be the area where individual consumers have the least say.

It is estimated that 25 percent of the waste generated by a hospital is plastic.

Single-use plastic can be an attractive option for hospitals—cheap, durable, and easily tossed out—and each new fresh plastic container or covering offers a newly sterile environment. That's why clinicians cover themselves and everything they use in plastic.

Yet for all the ways plastic has revolutionised the medical industry over the past century, it's now being scrutinised for what happens after it's done its job. Plastic can easily end up in marine environments, where it breaks down into tiny particles called microplastics. And the fossil fuels required to produce those plastics can contaminate air and water.

Increasingly, say medical care providers, the unfettered use of plastic is conflicting with a doctor's promise to do no harm – but is avoiding plastic even possible?

## Fresh, clean plastic

A fact sheet published by the American Chemistry Council, a plastic trade group, says: "Single-use plastics are the cleanest, most efficient way," to facilitate health and hygiene in hospitals.

But those working to make hospitals more sustainable say plastics have been overused.

A survey of 332 hospitals looked at common single-use plastic items in operating rooms that had been successfully replaced by reusable items. Tools like surgical basins and sterilisation wraps could be reused and would reduce waste by several tonnes per year.

\*\*\*Edited extract\*\*\*

For the full article visit: <https://www.nationalgeographic.co.uk/environment-and-conservation/2019/10/can-medical-care-exist-without-plastic>

# ART & DESIGN

## NATIONAL CURRICULUM AIMS

Become proficient in a range of craft and design techniques

- *Improve mastery of techniques, including sculpture, with a range of materials*

Produce creative work

- *Use a range of materials creatively*

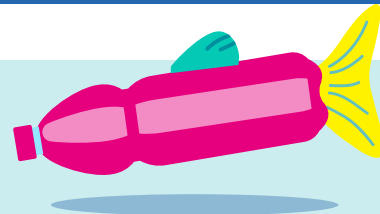
## SINGLE-USE SEA CREATURES

Use a selection of single-use plastics to create artwork or sculptures of sea creatures:

### Plastic bottles make great bodies for fish

- Fill them with flimsy plastic bags, sweet wrappers, plastic straws etc to add colour. This will also highlight that sea creatures can mistake small pieces of plastic for food and eat them
- Cut fins and tails out of slightly thicker plastic from items such as crisp multipack bags or larger sweet bags, and stick them on
- Bottle lids can make great fish eyes

“SEE SOME EXAMPLES OVERLEAF”



### Cut the end off a large plastic pop bottle and use it to create a jellyfish body

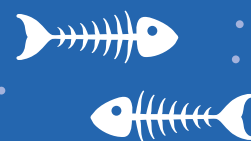
- Cut plastic bags into strips and stick around the bottom of the body to make tentacles
- Alternatively, to make a smaller/ simpler version, try using an upturned yoghurt pot for the body

### Make a collage out of single-use plastic items to create a picture of an animal, sea creature or bird

- For younger children, you could give them a cut-out fish shape and ask them to cover its belly with plastic items

## Extension

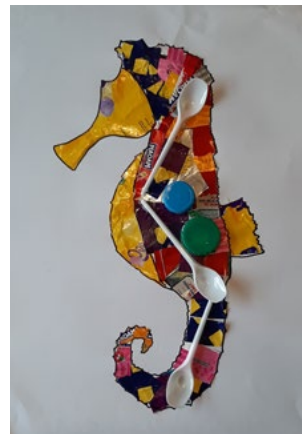
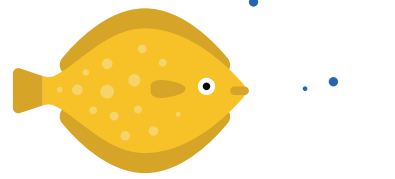
Ask the pupils to research and add facts about how damaging plastic can be in the oceans or environment.



# ART & DESIGN



Plastic jelly fish



Sea creature collage



Bottle fish



# SCIENCE

## NATIONAL CURRICULUM AIMS

Develop understanding of the nature, processes and methods of science to answer scientific questions about the world around them

- *Working scientifically (Everyday materials and their properties)*

## MATERIAL PROPERTIES INVESTIGATION

This activity asks pupils to work in small groups to investigate the properties of a selection of materials and look at their subsequent suitability for a range of different purposes. This will help to give pupils an insight into why plastic is so widely used, as well as asking them to consider some viable alternatives.

### Introduction

Present the pupils with a selection of materials to investigate including:

- **Glass** (save this for demonstration purposes only and don't give to the pupils)
- **Hard** (rigid) plastic
- **Soft** (flexible) plastic
- **Paper**
- **Fabric**
- **Metal**
- **Wood**

Explain to the pupils that all these materials have different properties (strength, transparency, flexibility etc) and that their varying properties make them suitable for different purposes.



# SCIENCE

## Testing the properties

It's going to be their job to test the following properties of each material (demonstrate how to test each of these using the glass).

Are the materials:

- **Waterproof:** use pipettes to drop water on one side, lift it up – is it wet underneath too?
- **Rigid:** hold by one end – does it keep its original shape?
- **Transparent:** can you see through it?
- **Strong:** are you able to tear it easily?
- **Flexible:** gently try to bend it
- **Shatterproof:** drop it onto a hard surface to see if it breaks (use a video to show how glass shatters). See an example here: [www.youtube.com/watch?v=t2NSxiFo1go](https://www.youtube.com/watch?v=t2NSxiFo1go)

Pupils can record their results in the properties table provided on page 47.

## Identifying purposes

Once the experiment is complete, and the properties table has been filled in, ask them to use this information to decide which materials are most suitable for each of the following purposes:

- **To contain liquid** (bottle) – it needs to be waterproof, rigid, transparent, strong (plastic/glass/metal)
- **For carrying things** (shopping bag) – it needs to be strong, flexible, shatterproof (plastic/fabric)
- **For eating food** (cutlery) – it needs to be rigid, strong, shatterproof (plastic/metal/wood)

They can use the purposes table provided on page 48 to help with this.

## Conclusion

Discuss the fact that different types of plastic are suitable for all these purposes because they have a wide range of properties. Explain that this is a big part of the reason why plastic is so widely used.

Would any of the other materials be suitable to use instead of plastic for these things? Which materials would be most suitable to make the items reusable?



# SCIENCE

## Investigating material properties

### PROPERTIES TABLE

Carry out experiments to find out the properties of each of the materials listed in the table.

MATERIALS	WATERPROOF	RIGID	TRANSPARENT	STRONG	FLEXIBLE	SHATTERPROOF
Glass	✓	✓	✓	✓		
Hard plastic						
Soft plastic						
Paper						
Fabric						
Metal						
Wood						

# SCIENCE

## Investigating material properties

### PURPOSES TABLE

Use what you have learnt about the properties of the materials investigated to complete this table.

Which materials would be suitable for creating a drink bottle, shopping bag and cutlery? Does it have to be plastic?

MATERIALS	DRINK BOTTLE (waterproof, rigid, transparent, strong)	SHOPPING BAG (strong, flexible, shatterproof)	CUTLERY (rigid, strong, shatterproof)
Glass			
Hard plastic			
Soft plastic			
Paper			
Fabric			
Metal			
Wood			