Activity:
Home single-use plastic survey

In this activity, pupils look at how much single-use plastic packaging is used in their household. They log the items individually at home before collating their findings as a class to get an understanding of the amount produced.

Most of the litter in the ocean is plastic. We can help the plastic pollution problem by reducing the amount of plastic we use

You will need:

- The following items (or images of them): paper, cardboard, clingfilm, picture of a cigarette butt, plastic carrier bag, glitter, glossy wrapping paper, tin can, aluminium can, crisp packet, plastic drink bottle, glass bottle, plastic milk carton, TetraPak carton, piece of food (e.g. fruit), wooden item, woollen item, disposable face mask
- Plastic and Not Plastic signs
- Litter timeline cards
- Survey form and parent letter for each pupil

What to do

Can you spot plastic in everyday items?

1. Not all plastic is obvious, so start by making sure that pupils know what packaging contains plastic. Put all the items (or images of them) in a pile.
2. Place the Plastic sign to one side of the pile, and the Not Plastic sign to the other.
3. One at a time, ask pupils to select an item and place it in the 'plastic' or 'not plastic' pile. Once all the items have been sorted, reveal the answers. Were there any surprises?
4. Look at the items in the 'plastic' pile. Which of the items can be reused? Which are 'single-use' and designed to be used only once?

MARINE CONSERVATION SOCIETY

Activity:
Home single-use plastic survey

How long does it take for litter to break down in the ocean?

1. Ask 6 pupils to make a timeline holding the cards.
2. Pick out the food, cardboard, crisp packet, plastic carrier bag, drinks can and plastic drinks bottle.
3. Give each item to a different pupil and ask them to place the item next to the time they think it will take for the item to degrade. Confirm the correct answers (see answer sheet).
4. Ask the pupils with the plastic items to step forward. There's a twist – the time given is the time it takes for the item to break *up.* The plastic breaks into smaller and smaller pieces but never goes away completely. Look at the plastic items and discuss how long the items are used for compared with how long they'll last on Earth.

Plastic never leaves the planet. It breaks up into smaller and smaller pieces, but never goes away

How much single-use plastic is used at home?

1. Give each pupil a survey form and ask them to record all the single-use plastic items thrown away over 5 days (in the bin or recycling). The simplest way to do this would be to record the item *before* it's thrown away. A letter for parents is included to help them support the activity.

How much single-use plastic do we use as a class?

1. Collate the results into a class spreadsheet of findings. Ask pupils to work together to present the findings as a graph showing the plastic that's most frequently thrown away. Discuss the results. What properties make plastic particularly useful? Could other materials be used instead?
2. Show pupils the Waste Funnel. The actions that make the most difference are at the top of the funnel (refuse, reuse). How could pupils reuse one of the plastic items thrown away? Can they think of how to refuse a plastic item?

MARINE CONSERVATION SOCIETY

Activity:
Home single-use plastic survey

Preparing for Step 3

In Step 3, you'll take action to help clean up our seas. You could choose to create a 'refuse plastic' campaign to change family and friends' behaviour.

If you choose to do this, prepare by looking back at the survey results. Write down the 5 most frequently found items in the left column. As a class, think of ways people could 'refuse' or 'reuse' each item.

Do pupils have ideas for other single-use plastic that could be refused? Add them to the list.

Plastic item	How could we refuse?	How could we reuse?

For Step 3, divide the class into groups who will work together to create a refuse plastic campaign.

You can carry out the project in the way that best suits your school's circumstances. We have created a pupil workbook for Reducing single-use plastic at home that shows one possible approach.

MARINE CONSERVATION SOCIETY

Activity:
Home single-use plastic survey

Why is single-use plastic a problem?

Plastic is incredibly useful – flexible, lightweight, durable and hygienic – but it lasts forever.

It doesn't biodegrade, but breaks down into smaller and smaller pieces. Too much plastic has short-term uses but long-term impacts on the planet. Did you know that 80% of the litter in the ocean is plastic?

How does plastic reach the ocean from the land?

- Littered – When people drop litter it can be washed or blown into drains and rivers and from there, travel to the sea.
- Left on beaches – Rubbish that is left on a beach can be washed directly into the sea and items placed into an overflowing bin can be blown into the sea.
- Blown from refuse trucks or off landfill sites – Plastic put in the bin ends up in landfill. Because it's light it can be blown into drains and rivers and into the sea.

What about recycling?

The government's statistics on waste in 2020 showed that only 47% of household plastic packaging was recycled.

Not everyone recycles (only about half of UK households), not all plastics can be recycled, and even plastic put into recycling bins may not be recycled due to problems experienced in the recycling process.

Solutions

No matter where you live, the plastic you throw away could end up in the sea.

Reducing plastic use is the only way to prevent it from ending up in our ocean.

Answer sheet

Plastic or not

Not plastic:

- Paper
- Cardboard
- Glass bottle
- Tin can
- Aluminium can
- Piece of food e.g. fruit
- Item made of wood
- Item made of wool

Plastic:

- Clingfilm
- Cigarette butt
- Plastic carrier bag
- Glitter
- Glossy wrapping paper
- Crisp packet
- Plastic drink bottle
- Plastic milk carton
- TetraPak carton
- Disposable face mask
- Reusable plastic objects e.g. lunchbox, toy

11 million tonnes of plastic ends up in the ocean worldwide each year. That's about a full rubbish truck every minute!

Single-use plastic

- Cling film
- Cigarette butt
- Plastic carrier bag
- Glitter
- Glossy wrapping paper
- Crisp packet
- Plastic drink bottle
- Plastic milk carton
- TetraPak carton
- Disposable face mask

Litter timeline

- Food waste – a few months
- Cardboard – 2 to 5 years
- Crisp packet – 75 years
- Plastic carrier bag – 250 years
- Aluminium can – 450 years
- Plastic drinks bottle – 800 years

The timings for plastic items are estimates, as it hasn't been around long enough for us to be certain, and plastic never fully disappears.

MARINE CONSERVATION SOCIETY

MARINE CONSERVATION SOCIETY

Plastic

MARINE CONSERVATION SOCIETY

Not plastic

MARINE CONSERVATION SOCIETY

A few months

MARINE CONSERVATION SOCIETY

2 to 5 years

MARINE CONSERVATION SOCIETY

75 years

MARINE CONSERVATION SOCIETY

250 years

MARINE CONSERVATION SOCIETY

450 years

MARINE CONSERVATION SOCIETY

800 years

Home survey recording form

Name:

Use this form to record how many of each type of single-use plastic item you throw away or recycle each day.

Item	*Day 1*	*Day 2*	*Day 3*	*Day 4*	*Day 5*
Plastic bottle					
Plastic pot					
Plastic tray/punnet					
TetraPak carton					
Crisp/snack packets					
Plastic bags (all sizes)					
Bubble wrap					
Plastic film/lids					
Blister packs					
Plastic pouches/sachets					
Frozen food bags					
Cheese wrap					
Plastic gloves or mask					
Foam or polystyrene					
Plastic tubes, sprays					
Other					

Waste Funnel

Reducing our waste means less landfill/ incineration and less litter

MARINE CONSERVATION SOCIETY