

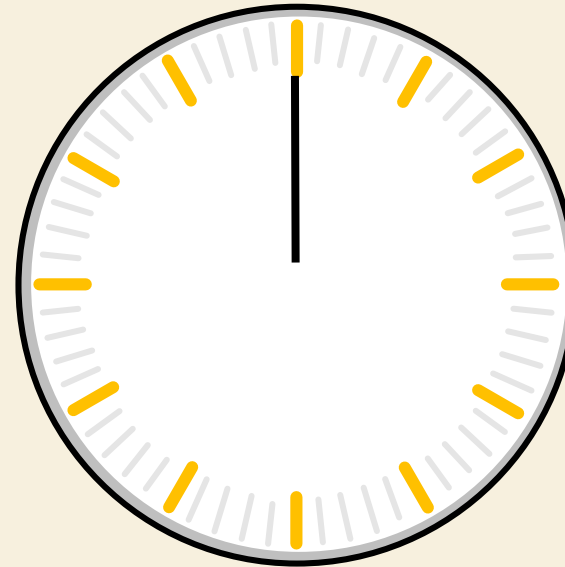
# Connections

## Think and Write

Plastic is a very popular material. Think about all the objects at home and school which are made from plastic. You have a minute to jot down as many as you can!

Go!

Start



Exchange ideas with the person beside you. How many are the same? Did you find that easy or tricky?

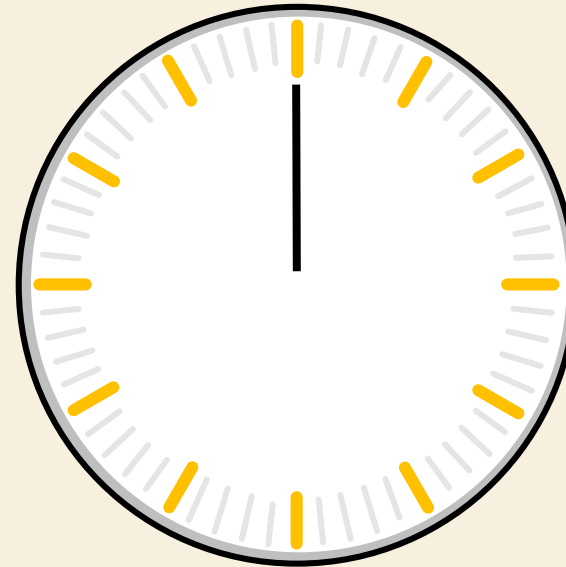
# Connections

## Think and Write

You have one minute to think of as many things as you can which are **not** made from plastic and write them down.

Go!

Start



Exchange ideas with the person beside you. How many are the same? Did you find that easy or tricky?

# AMCAN

Learn about the effects of plastic on the environment

## Learning Outcomes

### Challenging:

Describe how plastic waste makes you feel.

### More Challenging:

Explain how we could help reduce plastic waste.

### Most Challenging:

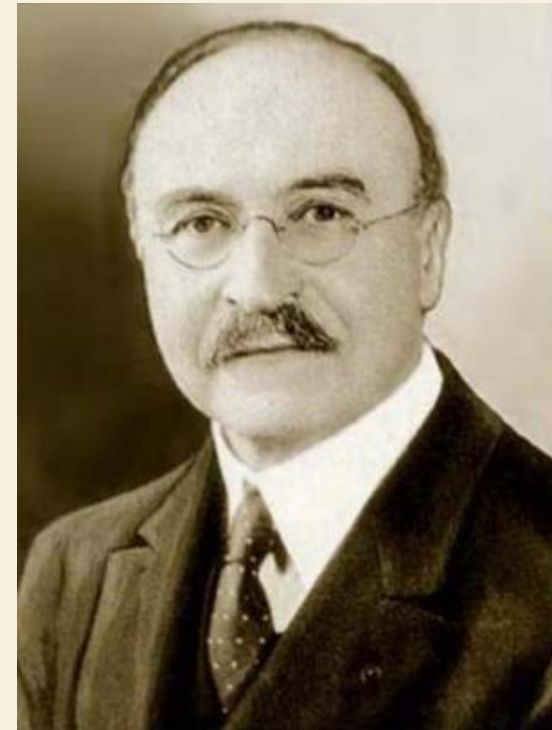
Compose a letter to your MP about plastic and its effects on the environment.

# The Birth of Plastic

Plastic was first created by a British inventor called Alexander Parkes in 1855. He used some natural materials in his plastic.

Then, in 1907, Leo Baekeland, a Belgian living in New York, invented the first synthetic plastic which he named Bakelite. It was created using hydrocarbon chemicals.

After the Second World War, it was mass produced and used in making televisions, trays, jewellery, furniture and even toys.



# Plastic Is Useful!



It keeps things airtight, which is ideal for keeping food fresh.



It is waterproof so nothing leaks out or drips in.



It can be made into a range of items from chairs to cars, dice to drainpipes.



It can even be used in craft and art work!

## Did you know?

The word 'plastic' comes from the Greek word 'plastikos' which means 'fit for moulding'.

## Discuss it

Talk about the other uses of plastic.

# Producing Plastic

The production of plastics requires natural products, such as coal, natural gas and crude oil. These fossil fuels are extracted from the earth. Fossil fuels are a finite resource: they take millions of years to form, which means they will run out eventually. Manufacturing plastic releases harmful gases into the air, which contribute to global warming.

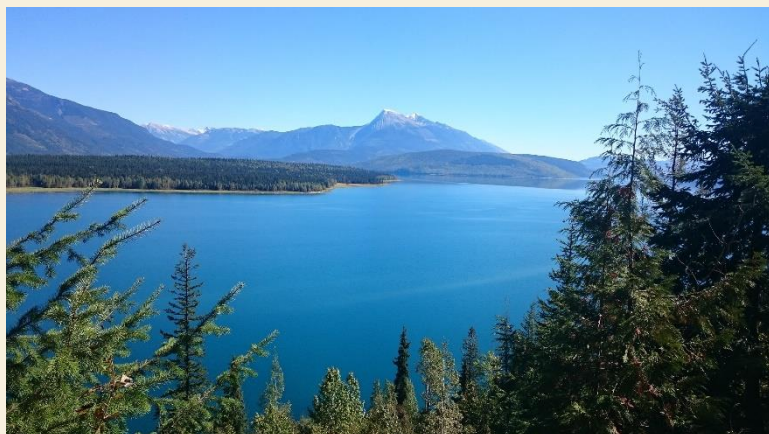


## Fact

There are more than 300 million tonnes of plastic produced each year. That amount is close to the weight of the human population on Earth! By the end of the century, it is estimated that 30 billion tonnes will be produced. The impact on the Earth will be huge.

# Task 1

Look at these pictures. How do they make you feel?



# Task 1

Plastic is incredibly durable and it is not biodegradable. It does not decompose like vegetables, fruit or meat.

Getting rid of unwanted plastic is a challenge. If it is burned, harmful gases are released into the atmosphere. This causes air pollution.

It is usually buried in huge landfill sites. Even though we don't see it, it is still there and it can last for many decades.



## Fact

There are efforts being made to produce biodegradable plastic. At the moment, these depend on sunlight, which doesn't help the plastic in landfills.



# Task 1



Think about it

What do you think about these pictures?

All living things should be able to live free from pollution and harm from plastics. So, what can we do?

## Task 2

Click on the picture to watch the clip. Answer questions in work booklet



## Task 2

Click on the picture to watch the clip.  
How do you feel watching it?



# Task 3

Read through the information about end plastic pollution.

## End Plastic Pollution

### Our Planet

We only have one planet and so we need to take responsibility for it. This means looking after the earth and everything in it and making sure we don't damage it in anyway. Everyone can play their part in making sure the earth is safe, clean and looked after and this also includes caring for the plants, animals, birds, sea creatures and each other. Over time, people have been caring less and less about the earth and now we are trying to deal with the consequences that have been caused. One major problem that has occurred is known as plastic pollution which has unfortunately, been caused by careless humans. Luckily, there are things we can do to help reduce this damage.

### What Is Plastic Pollution?

The biggest problem with unwanted plastic is the **pollution** and damage it causes to the environment. Because plastic is cheap and easy to make, humans buy and use a lot of it. They then throw this away. But, plastic is strong and **durable** because it was made to last. So when it is thrown away, it takes hundreds of years to **decompose**. It breaks into tiny pieces, which then get blown around by the wind and the rain. Lots of the plastic ends up in our streams, rivers and the ocean.

The amount of plastic on the planet is increasing more and more rapidly, meaning it is threatening our planet through poisoning and injuring **marine** life, littering beaches and landscapes, clogging **landfills** and making humans (and other animals) ill.



### Did You Know...?

- There are 6.3 billion tonnes of plastic waste on Earth.
- 80% of the **debris** floating in the oceans is plastic.
- 267 species of animal around the world are harmed by plastic (either through swallowing or becoming tangled in plastic).



## End Plastic Pollution

### What Can You Do to 'End Plastic Pollution'?

#### The Three Rs: First Reduce, Then Reuse, Then Recycle

There are lots of things we can all do to help end plastic pollution. We need to remember the three Rs but it is important to first try to 'reduce' our use of plastics, then 'reuse' where possible. The last resort is to 'recycle' as this still has a negative impact on the environment.



- **Reduce:** Avoid single-use plastics, such as takeaway cups and straws, instead use alternatives such as bamboo. You can't do this alone, so it is important to talk to your family, head teacher or school council about how your school and family can reduce their plastic use.
- **Reuse:** If you have plastic items, ensure that you use them multiple times. For example, instead of buying new ones, refill and reuse water bottles and lunch bags. Also avoid using single-use plastic bags for shopping, using strong, long-lasting fabric bags instead.
- **Recycle:** Check for the recycling symbol before you buy plastic and make sure that you always recycle plastic when you can, instead of **disposing** of it with the normal rubbish.



### Glossary

- debris:** Scattered pieces of rubbish.
- decompose:** Rot away.
- disposing:** Throwing something away.
- durable:** Hard-wearing.
- landfills:** An area filled with waste.
- marine:** Relating to, or found in, the sea.
- pollution:** Something harmful or poisonous within the environment.



# Task 3

Answer the questions.

## Questions

1. What do we have a responsibility for? Tick one.

- To look after the earth.
- To care for animals.
- To keep the earth safe and clean.
- All of the above.

2. But, plastic is strong and **durable**, because it was made to last. What does the word **durable** mean? Tick one.

- single-use
- hard-wearing
- long-lasting
- never-ending

3. Number these events to show the order in which they happen:

- Humans buy and use a lot of plastic.
- Plastic is made.
- Plastic is durable so takes hundreds of years to decompose.
- Humans throw away plastic.
- Plastic breaks into tiny pieces which end up in our streams, rivers and oceans.

4. Name three ways that plastic is threatening our planet.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

5. Find and copy a phrase or sentence which tells you that plastic pollution can hurt animals.

\_\_\_\_\_

6. Why is it better to **reduce** your use of plastic rather than to **recycle** plastic?

\_\_\_\_\_  
\_\_\_\_\_

7. What one thing could you do today to help reduce plastic pollution?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. In your own words, explain what plastic pollution is.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Task 3

## The answers

1. What do we have a responsibility for? Tick one.

- To look after the earth.
- To care for animals.
- To keep the earth safe and clean.
- All of the above.**

2. *But, plastic is strong and **durable**, because it was made to last.*

What does the word **durable** mean? Tick one.

- single-use
- hard-wearing**
- long-lasting
- never-ending

3. Number these events to show the order in which they happen:

- 2** Humans buy and use a lot of plastic.
- 1** Plastic is made.
- 4** Plastic is durable so takes hundreds of years to decompose.
- 3** Humans throw away plastic.
- 5** Plastic breaks into tiny pieces which end up in our streams, rivers and oceans.

## Task 3

4. Name three ways that plastic is threatening our planet.

**Accept any three of the following: poisoning and injuring/harming marine/sea life; littering beaches and landscapes; clogging landfills; making humans (and other animals) ill.**

5. Find and copy a phrase or sentence which tells you that plastic pollution can hurt animals.

**Accept any of the following: poisoning and injuring marine life; making animals ill; 267 species of animal around the world are harmed by plastic (either through swallowing or becoming tangled in plastic).**

## Task 3

6. Why is it better to **reduce** your use of plastic rather than to **recycle** plastic?

**Pupils' own responses, such as: When you recycle plastic, it still has a negative effect on the environment whereas by reducing your use of plastic, you are not contributing less**

7. What one thing could you do today to help reduce plastic pollution?

**Pupils' own responses, such as: I could encourage my family to buy or make some fabric shopping bags to use in place of the single-use plastic bags that we currently use.**

8. In your own words, explain what plastic pollution is.

**Pupils' own responses, such as: Plastic pollution is all of the plastic waste in our environment, especially the tiny pieces which are so harmful to us and animals. There are now 6.3 billion tonnes of plastic waste on Earth, which takes hundreds of years to decompose.**



## What You Can Do

Look at these two pictures. Which do you think is the right thing to use, to help the environment?



Water bottles are one of the main causes of environmental pollution. Instead of using lots of water bottles and throwing them away, have a glass or mug of water. Not only is it environmentally-friendly, it is also cheaper!

## What You Can Do

Look at these two bags.

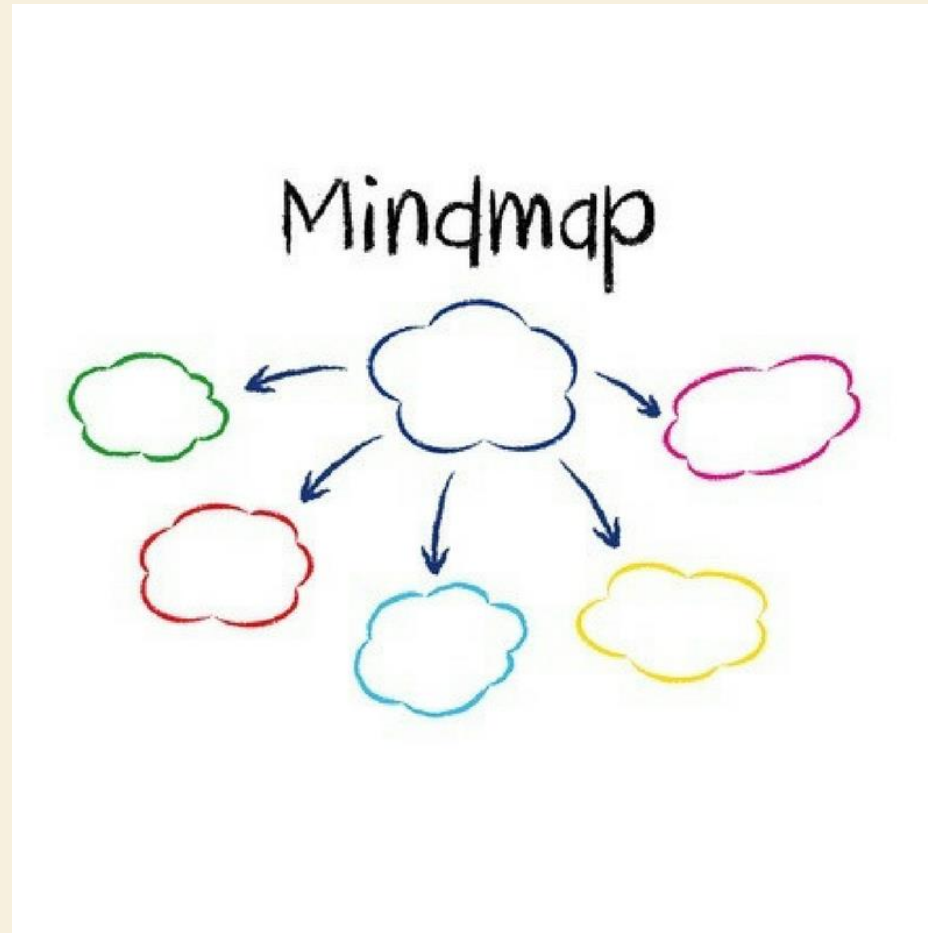
Which do you think is the more environmentally-friendly bag?



Carrier bags are often used once and thrown away. Instead, buy a bag for life and keep using it. Since many shops charge 5p per bag, a reusable one is cheaper too!

## Task 4

What ways could we tackle plastic pollution?



Share your ideas

# Task 5

## Being Green

Write to your MP using this activity sheet, about your concerns.

When plastic is manufactured, the process damages the air quality. This contributes to global warming.

Most plastics cannot be recycled so they get dumped in landfill sites.

Plastics does not completely decompose. Instead it turns into smaller and smaller pieces called microplastics. They get blown into rivers, seas and other natural areas.



If plastic molecules are blown into a river, they can poison plants and it can also injure or kill animals. Many organisms get tangled up in plastic string and bags, which can result in them getting injured or dying.

We can live without plastic if we take time to consider other options.

**Do it!**

# Task 5

Write to your MP using this activity sheet, about your concerns.

Write a formal letter to your MP about the use of plastics and the effect that they have on the environment.

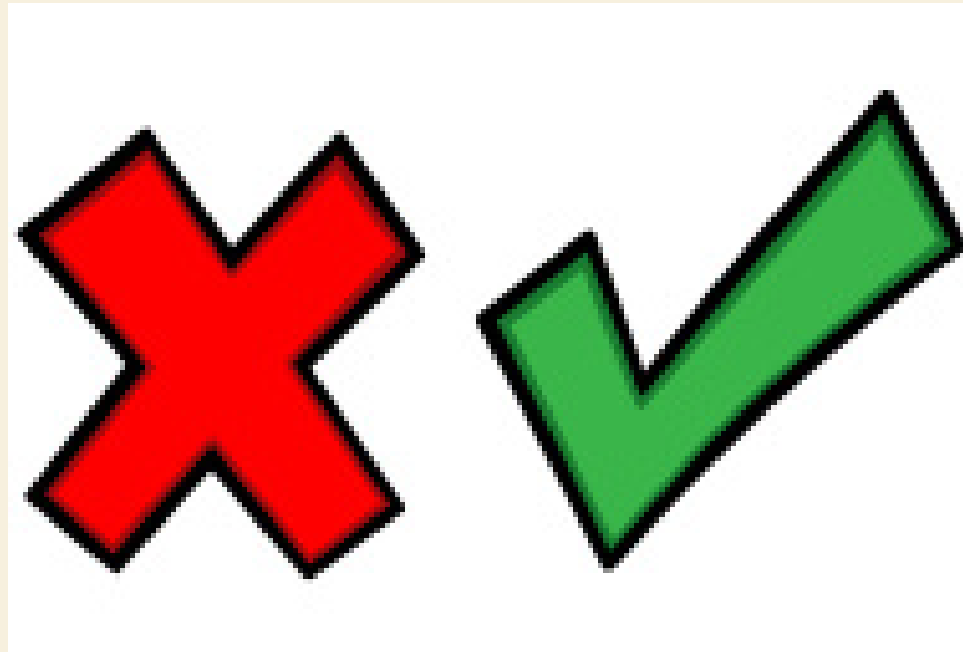
**Remember to:**

- write the sender's address;
- write the address of the recipient;
- write the date;
- put the greeting 'Dear Mr/Mrs/Miss';
- write an introduction;
- add more details organised into paragraphs;
- write a conclusion saying what needs to happen next;
- finish with 'Yours sincerely' as you know the recipient;
- put your name at the end;

Use your own device if you have one to find any further information to support your letter.

# Task 5

Use the last page in your booklet to self assess your letter.



# Our Responsibility

By making small changes, we can all make a difference. Let's all work together to make the Earth a healthier and cleaner place for everything.



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## Learning Outcomes

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