

Plastic Pollution

When people think about plastic, they may think of lots of everyday objects that make our lives easier, including food containers, toys and gadgets and even the pipes that carry water to and from our homes. In fact, plastic is so popular in the UK today that it is almost impossible to imagine life without it.

While plastic makes human lives easier, it makes the lives of Britain's wildlife much harder and it could be **endangering** the existence of some of our much-loved creatures.

Almost 80% of plastic produced over the last 70 years has been thrown away.



Plastic Waste Facts

160,000 plastic bags are used around the world every second.



By 2015, 6,300 million metric tonnes of plastic waste had been created.



Plastic and the Environment

There are many different ways that plastic can enter the environment:

- not disposing of it properly, e.g. littering;
- washed down drains from face washes and clothing;
- spilled overboard by ships;
- escaped from factories and warehouses;
- blown out of bins or landfills by the wind;
- abandoned, e.g. fishing nets.

So much plastic enters the environment each year that it can be found in fresh water, soil, air and oceans around the world.



Of all of the plastic waste created by 2015, 9% was recycled, 12% was burnt, 79% was put in landfills or the natural environment.

The Problem with Plastic

Most types of plastic are neither **biodegradable** nor **compostable**. Therefore, any plastic that ends up in the local environment will not break down over time, like paper, fruit peel or natural fabrics do. Plastic will simply remain where it is forever unless it is removed by humans or mistakenly consumed by wildlife.

A huge problem with the plastic that ends up in the environment is the chemicals it releases. Over time, pieces of plastic litter will break into smaller pieces. When plastic breaks into **microplastics**, it is eaten by wildlife that mistake it for food.

Scarily, these microplastics contain **toxic** chemicals and heavy metals that are poisonous and deadly to local wildlife.

These make their way into the food chain, affecting not only the animal that ate the plastic but any animal that then goes on to consume the first animal.



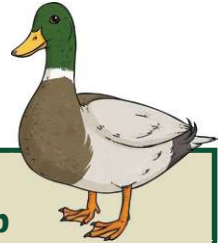
"Female Mallard By Water With Rubbish" by Martin Kessel

Threats to Wildlife

The largest threats to wildlife from plastic waste in the environment are:

- death or injury caused by becoming tangled in plastic waste, for example, birds that become trapped in fishing nets or hedgehogs caught in plastic can holders;

- animals eating plastic waste by mistake, thinking that it is food, for example some birds eat plastic bags that float in a pond because they think that they are fish;
- poisoning from the chemicals within the plastic which can lead to illness and death.



How We Can Help

People around the world have caused the plastic problem we face today and it cannot be fixed overnight. The best way to stop any further harm to wildlife is by changing how we think about and use plastic. Some helpful tips are:

- Instead of using plastic items, such as straws and plastic bags, buy reusable items, e.g. flasks for hot drinks and canvas shopping bags.
- Glitter and balloons can also be damaging to the environment and dangerous to animals, who may mistake them for food.
- Recycle as much of your waste as possible.
- Safely pick up litter you see in the environment.



Glossary

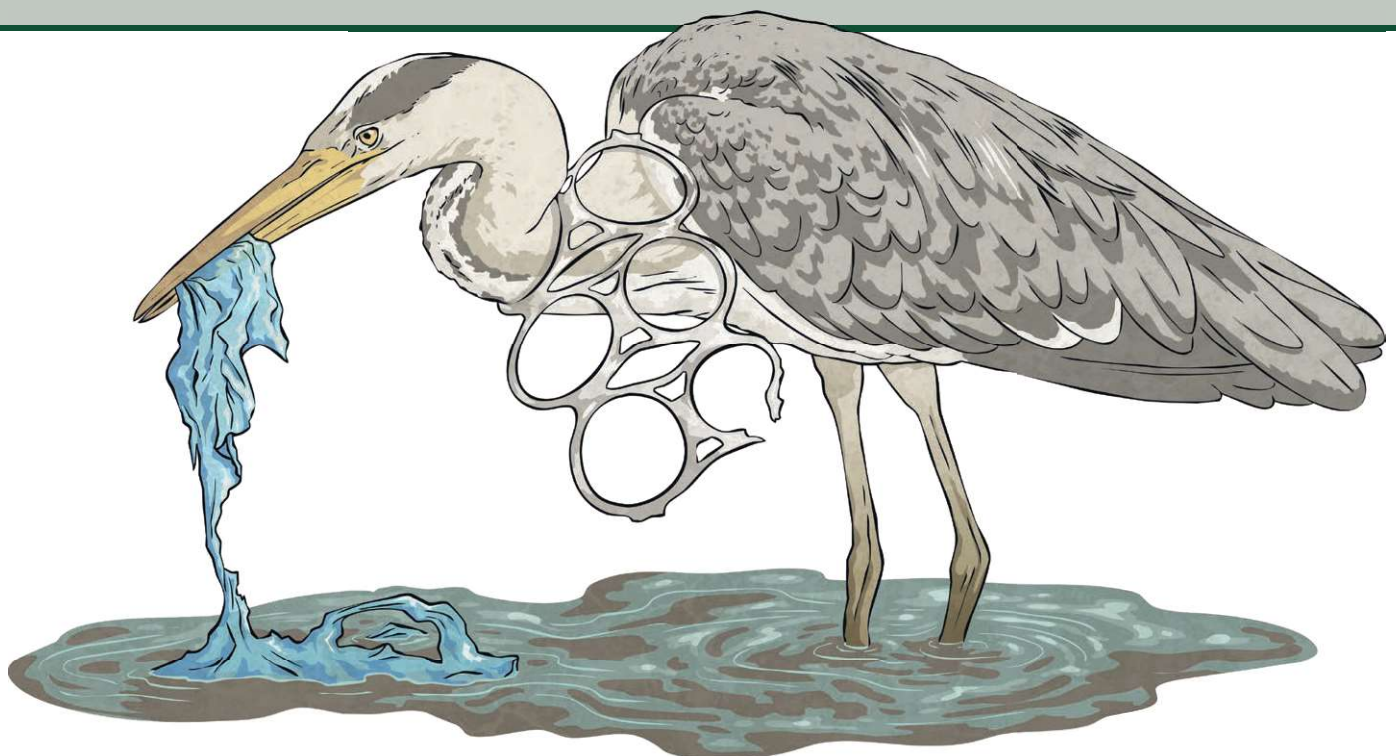
biodegradable: Something that can be naturally broken down by bacteria.

compostable: Something that is biodegradable and can help support plant growth.

endanger: To put something or someone at risk or in danger.

microplastics: Extremely small pieces of plastic in the environment resulting from the breakdown of bigger pieces of plastic waste.

toxic: Something poisonous or harmful.



Questions

1. Which of these is not a way that plastic enters the environment? Tick one.

- ☐ by being blown out of bins
- ☐ by being abandoned by humans
- ☐ by being dug up from the ground
- ☐ by being washed down drains

2. Using the infographic to help you, match the percentages to the correct fact.

9%	Existing plastic that has been burnt.
12%	Existing plastic which has ended up in landfills or the natural environment.
79%	Existing plastic that has been recycled.

3. Find and copy **two** examples of items that the text implies will break down over time.

- _____
- _____

4. **...and could be endangering the existence of some of our much-loved creatures.**

Which word or phrase could the author have used instead of the word **endangering** in this sentence?

5. Find and copy one adjective from the section titled **The Problem with Plastic** that describes the chemicals found in microplastics.

6. Summarise the section entitled **Threats to Wildlife** in 30 words or fewer.

7. Which fact from the text did you find most shocking? Give **two** reasons for your answer.

8. Fully explain the dangers of microplastics.

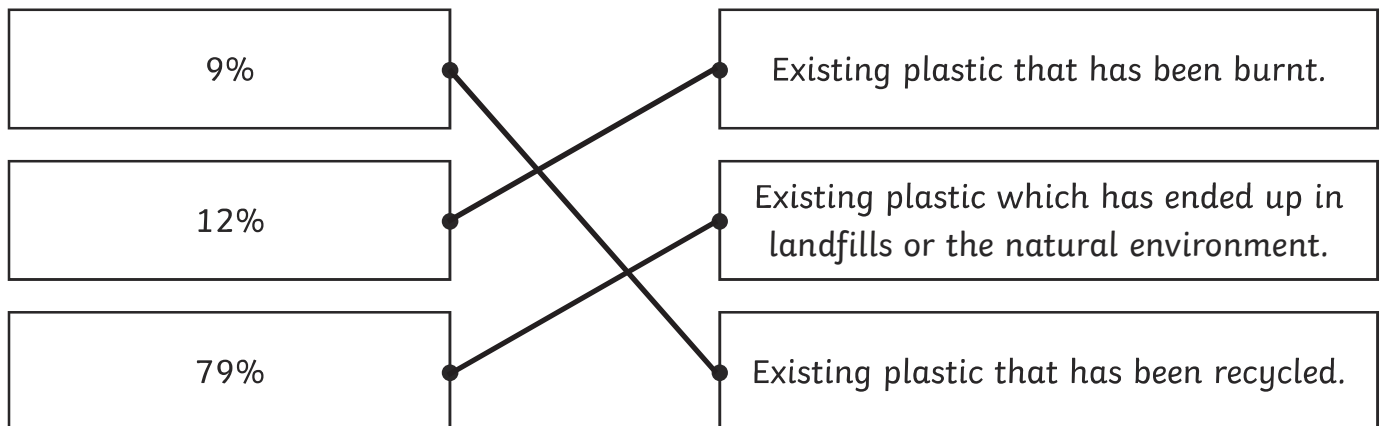
9. Conduct some research on the Internet. What are the UK Government currently doing to reduce the effects of plastic pollution in the UK?

Answers

1. Which of these is not a way that plastic enters the environment? Tick one.

- ☐ by being blown out of bins
- ☐ by being abandoned by humans
- ☒ **by being dug up from the ground**
- ☐ by being washed down drains

2. Using the infographic to help you, match the percentages to the correct fact.



3. Find and copy **two** examples of items that the text implies will break down over time.

Accept any two of the following: paper; fruit peels; fabric.

4. **...and could be endangering the existence of some of our much-loved creatures.**

Which word or phrase could the author have used instead of the word **endangering** in this sentence?

Accept any appropriate synonym, such as: risking; compromising; jeopardising; damaging; putting in danger.

5. Find and copy one adjective from the section titled **The Problem with Plastic** that describes the chemicals found in microplastics.

toxic

6. Summarise the section titled **Threats to Wildlife** in 30 words or fewer.

Pupils' own responses, such as: Plastic pollution can harm wildlife because creatures may become tangled in waste, eat the plastic by mistake and become poisoned by the chemicals in the plastic.

7. Which fact from the text did you find most shocking? Give **two** reasons for your answer.

Pupils' own responses, such as: I found it most shocking that 160,000 plastic bags are used every second because this is a very large number and I did not realise that plastic bags were used on this scale. It also shocks me because it shows how few people use reusable bags.

8. Fully explain the dangers of microplastics.

Pupils' own responses, such as: Microplastics are dangerous because they can be mistakenly eaten by wildlife that think that it is food. When the wildlife eat the microplastic, they can become poisoned or killed by the dangerous chemicals it contains.

9. Conduct some research on the Internet. What are the UK Government currently doing to reduce the effects of plastic pollution in the UK?

Pupils' own responses, such as: The UK Government have joined the Commonwealth Clean Oceans Alliance and have promised funds to help improve waste management to stop plastics entering the waters.