



Use map skills and consider actions to improve the world around us

You will need

- Maps or atlases of the UK, or online access to [Google Earth](#)
- Items collected on a litter pick (cleaned) or images of them
- [Marine Litter Image Reel](#)

What to do

Map your route to the ocean

Most of the litter in the ocean comes from the land. It's washed or blown into rivers or drains, and from there it's transported to the sea. In the UK, we're never more than 70 miles from the coast.

1. Using [Google Earth](#) or a map, everyone should find their location, and then the nearest river.
2. If using a map, follow the river to its mouth (the estuary) and then locate the entrance to the sea.
3. If using Google Earth, type the name of the nearest river into the search bar. Click 'more information' to find the mouth of the river, where it enters the ocean. Type this into the search bar to see the location on the map.
4. This route is how litter could reach the ocean.

Consider the impact of litter on marine life

1. The person leading the activity should set out a selection of items collected on a litter pick.
2. As a group, talk about how each item could affect marine animals. The [image reel](#) includes images and information about the impact of items commonly found in the environment. The group leader should decide what to share from the reel – the pictures might be distressing for some people, and it might be more appropriate to talk about impact rather than look at the images.

Take a personal action to reduce litter

Some of the litter in the ocean and on beaches is waste that was disposed of correctly but escaped from refuse trucks or landfill sites. Reducing the amount of waste we produce is key to reducing litter.

1. Everyone should think of one thing they will change in their life to reduce the amount of waste they create.
2. Everyone should take their action for a week and report back on their progress at the next meeting. Talk about whether it was possible to keep to the change. Can people learn from one another?

Reflection

This activity is about understanding the effect our actions can have on the world around us. Can you think of other ways that we might affect places we can't see? What could you do to reduce your negative impact on the world?

Marine Litter Image Reel



Image: David Pereiras via Shutterstock



Image: Natasha Ewins

Litter reaches the ocean in a number of ways: it's washed in from our rivers, is left on our beaches, or is cast overboard from boats.

Marine Life vs Marine Litter

How does litter harm wildlife?

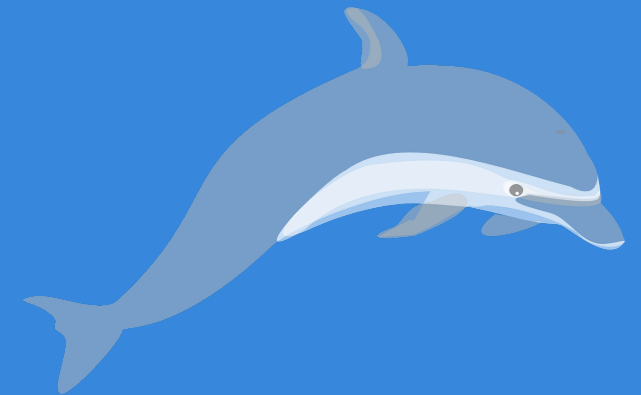
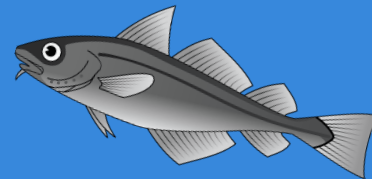
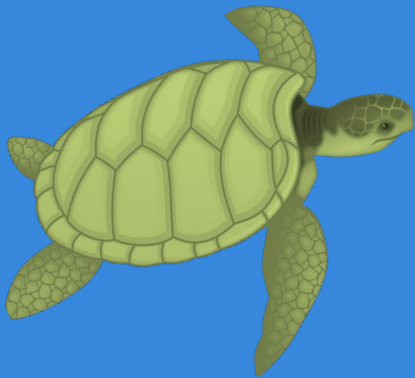
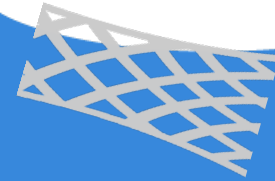
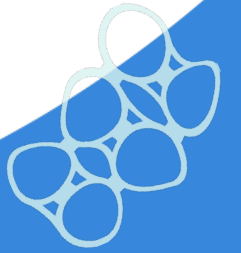




Image: A Different Perspective via Pixabay



Image: Tim Mossholder via Unsplash

Marine life

Litter items can cause harm to all sorts of marine life, from tiny plankton to whales. Ingestion of litter, particularly plastic, is very problematic for marine life who are unable to digest it.



Image: Nataliya Vaitkevich via Pexels



Image: Matt Barnes

Marine life

Animals can become entangled in litter, causing injury, reduced mobility and even death.



Image: Natasha Ewins



Image: Natasha Ewins

Microplastic pollution

Microplastics are a serious environmental issue. They are plastics that have broken up into pieces smaller than 5mm, as well as pieces that enter the environment this size like microfibres or plastic nurdles, which are the small plastic pellets used in the production of plastic products.

Sources

How does litter travel to the ocean?

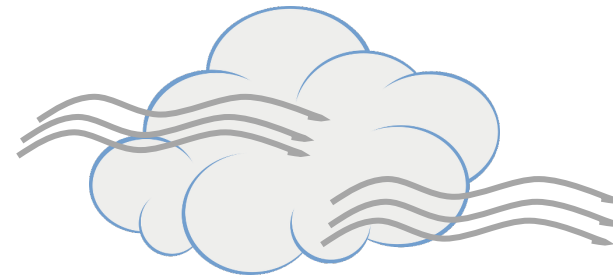
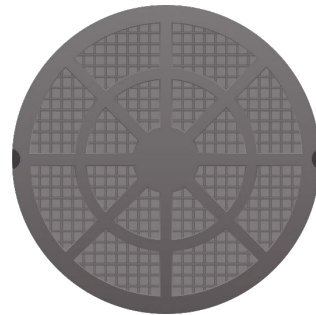
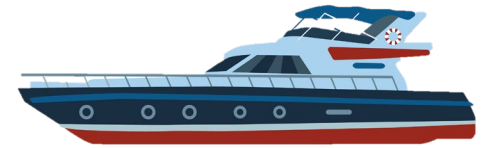




Image: MCS/Kate Wilson



Image: Jasmin Sessler via Unsplash

Marine litter sources

Inland sources of litter can include intentional and accidental littering, items flushed down toilets, sinks and drains, windblown litter from bins and landfill, and litter carried by rainwater into drains rivers and eventually the sea.



Marine litter sources

Litter is also a problem at sea, with sources like fishing, sailing, speed boats, commercial ships and container spills causing litter pollution.



Image: Brian Yurasits via Unsplash



Image: Andy Pearson

Litter timeline

Litter in the ocean takes longer to degrade than litter on land, but will eventually start to break up due to wave action, currents, saltwater and sunlight.



Litter timeline

Degradation time varies greatly from 1–450 years depending on the properties of the litter.



Litter surveys

Litter surveys are not only important for clearing rubbish, but also for gathering data on the types of litter polluting our environment.



Image: Natasha Ewins



Image: Brian Yurasits via Unsplash

Litter surveys

We all need to do our bit to reduce litter in the environment. By rethinking how we shop and what we use in our daily lives, we can all make a difference.



Image: Marta Ortigosa via Pexels



Image: Natasha Ewins

Litter surveys

Refusing unnecessary plastic and other materials, reducing the amount of products we consume, and repairing rather than replacing are all important actions we can take.



Can you organise an ocean-friendly celebration?

You will need

- A party or celebration to plan
- The following items or images of them: paper, cardboard, cling film, picture of a cigarette butt, plastic carrier bag, glitter, glossy wrapping paper, tin can, aluminium can, crisp packet, plastic drinks bottle, glass bottle, plastic milk carton, Tetra Pak carton, piece of food (e.g. fruit), something wooden, something woollen, single-use face mask
- [Plastic and Not Plastic signs](#) and [timeline labels](#)
- [Activity answers](#)
- [Plastic party image](#) if prompts are needed
- [Plastic-free party planner](#)

Around 11 million tons of plastic end up in the ocean each year. That's about a full rubbish truck every minute! Parties and celebrations can be times when we use a lot of single-use plastic, but it's possible to go plastic free with a little planning.

This activity supports Requirement 4 of Beavers My World Challenge award.

What to do

Can you spot plastic in everyday items?

1. The leader of the activity should put all the items in a pile. Place the [Plastic](#) sign to one side of the pile, and the [Not plastic](#) sign to the other.
2. One at a time, each person should select an item and place it in the 'plastic' or 'not plastic' pile.
3. Once all the items have been sorted, the leader of the activity should reveal the [answers](#). Were there any surprises?
4. As a group, consider the items in the 'plastic' pile. Identify which of the items can be reused and which are designed to be used only once.



Image: Lidya Nada via Unsplash



Image: Brian Yurasits via Unsplash



How long for litter break down?

1. The leader of the activity should ask six people to make a timeline holding the [time cards](#).
2. The leader should pick out: food; cardboard; crisp packet; plastic carrier bag; drinks can; and plastic drinks bottle.
3. Give each item to a different person and ask them to place the item next to the time they think it will take for the item to break down.
4. Once all the items have been placed in a pile, the leader should confirm the correct [answers](#).
3. Ask those holding plastic items to step forward. There's a twist – the time given is the time it takes for the item to break *up*. Plastic lasts forever; it breaks up into smaller and smaller pieces but never breaks down completely.
4. Consider the single-use plastic items. How does everyone feel about the amount of time they are used versus the time they will be on the planet?

Plastic-free party planners

1. Altogether or in small groups, think about an upcoming party or celebration. Make a list of all the single-use plastic items that might be used, for example decorations, for serving food and drinks. The person leading the activity could show the [plastic party image](#) to support discussions if needed.
2. Now write down alternatives to single-use plastic. Those needing more support could use the [Plastic-free party planner](#).
3. As a group, talk about how making these choices for a party or celebration will help the environment and the ocean.

Reflection

How difficult was it to avoid single-use plastic? Were there any items that couldn't be substituted? Are there other areas of life where you could avoid single-use plastic?



Answers

Plastic or not

Plastic:

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

Not plastic:

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

Single-use plastic items

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

Breakdown times of litter

- 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. It hasn't been around long enough to be certain, and plastic never fully disappears.

Plastic

Not Plastic

**A few
months**

**2 to 5
years**

75

years

250
years

450
years

800
years

Plastic party



Image: Lidya Nada via Unsplash

Plastic-free party planner

Can you go plastic free?

