Please use this pack to help create activities and lessons for students when you are exploring topics around plastic pollution, the oceans and environment. It is linked to Key Stages, but many of the activities could be simplified for younger children or enriched for older age groups.

BACKGROUND

The oceans are the largest life-sustaining resource on our planet. The oceans cover around 70% of our planet, and we’ve explored just 10% of our oceans’ contents. Research has shown that they contain around 80% of all living organisms. We simply cannot exist without our oceans. We need them. They provide our Earth with a moist, liveable climate, full of oxygen the from trillions of microscopic plants within the water, and produce close to 100 million tons of food each year, enough to provide one in every four or five people with their daily protein. Essentially, the harm we do to the ocean, we are ultimately doing to ourselves.

Although it is difficult to identify exactly how much plastic is in the ocean due to micro-particles and the amount that has sunk to the bottom, most scientists estimate that eight million metric tons of plastic end up in our oceans each year - adding to the estimated 150 million metric tons currently circulating in our oceans. That’s a lorry load of rubbish a minute. Travelling on ocean currents this plastic is now turning up in every corner of our planet – from British beaches, to uninhabited Pacific islands. It is even being found trapped in Arctic ice. The effects on ocean life are chilling. Big pieces of plastic are entangling turtles and seabirds and tiny pieces are clogging the stomachs of creatures who mistake it for food, from tiny zooplankton to whales. In fact, plastic pollution impacts nearly 700 species in the ocean, and also humans. According to the Ocean Conservancy, plastic has been found in more than 60 per cent of all seabirds and 100 per cent of sea turtle species. Plastic is now entering every level of the ocean food chain and even ending up in the seafood on our plates.

The world is currently producing nearly 300 million tons of plastic each year – a significant amount of which will end up in the oceans. Unfortunately, although plastic is a useful product, many of these products are created for single-use - with an estimated 50 per cent of plastic used once and thrown away. We urgently need to change our dependency on single-use plastic. We need to choose products that are sustainable and make more environmentally sensitive decisions when we shop. We need to put pressure on manufacturers, retailers and policy makers to ensure that we drastically reduce the amount of plastic entering our fragile ecosystems, emphasising a return to buying good quality products that can be reused rather than continuing our dependence on our current throwaway culture which so often includes single-use plastic items.
IDEAS FOR GENERAL SCHOOL ACTIVITIES

No single-use plastic in lunch boxes – use alternatives such as tin foil, reusable beeswax wraps or tea towels, paper bags, Tupperware, reusable bottles for drinks etc.

School assembly on the topic of plastic pollution and its effects on our oceans and wildlife (sample presentations available for download on resource page on the website).

Organise a litter pick around the school, your local park or beach.

Look at your school’s recycling system. What could be made better? Make/decorate boxes or signs for recycling areas.

Make posters about the impact of plastic pollution on the environment, recycling or other topics related to ocean health.

Write persuasive letters to local businesses, manufacturers or your MP about cutting back single-use and pointless plastic – see the guide on page 3.

Hold a junk modelling competition or exhibition, using plastic waste from home or school, creating models of sea creatures or other ocean related subjects.

In the week before 7th May, collect all the plastic litter from lunchboxes in each class in the school and weigh it. Which class had the most/least? This could be continued throughout the term. Which class can cut it back most?
Firstly, decide who the students will to write to – it could be your local MP, council, a retailer or restaurant chain, or a manufacturer. Make sure you can get hold of an address to send it to. This work could be written by hand or on a computer.

**Ideas for students for the letter:**

1. Introduce yourself!

2. Briefly describe the topic you are raising. Examples may be single-use plastic packaging, littering, recycling, plastic bags, straws etc.

3. Describe why it is important to you and what you think the impact of it is for our local environment/seas/rivers/park/oceans

4. What would you like to change? Do you have any ideas or suggestions that could be implemented or used instead?

5. Are you asking for a response? Action? Make it clear what you would like the outcome to be.

6. Sign your letter off politely with your name and the name of your school.
**Activity: Our Blue Planet**

**Key Stage:** 1 & 2  
**Subjects covered:** Geography, Science, Art, English, Drama

**Objectives:**
Students will be able to understand that the earth is a planet dominated by water, identify the oceans of the world and understand where they are in relation to the oceans. They will be able to identify the ways that they use and value the marine environment, and work out the connection between their own lives and the oceans.

**Materials:**
World Map (see attached, can be printed)  
Crayons, pens, pencils

**Method:**
Begin this activity with a lesson about the balance of ocean and continents with the students, identifying that the oceans cover over 70% of the planet. Talk about how earth is a water planet, if possible showing the students a globe or poster of the world. Discuss all the different animals and plants that can be found in the oceans, and how important this biodiversity is to the planet as a whole.

1. The students will then colour the map provided and label each of the oceans. They should then pinpoint where they live on the map, roughly! How far are they from the ocean? How many of them have been to the beach? What did they do there?

2. Ask the students to act out their favourite pastime at the beach. Get them to close their eyes and really imagine being at the beach before they start. What can they hear? What can they feel and smell?

3. Discuss with the students all the people who use the beach, and the different activities that may go on there. For example, tourists on holiday, fishermen, sailors etc.

4. Have the students drawing a picture or writing a short story describing their favourite beach activity.

**Extension:**
Find and read aloud stories and poems about the seas and oceans in class. Children could write their own ocean-inspired poems.
ACTIVITY: LETHAL LITTER AND DEADLY DEBRIS

Key Stage: 1 & 2

Subjects covered: Science, Art, English

Objectives:

Students will learn about the different types of wildlife that live in and depend on the oceans. They will consider all the different types of man-made litter and debris that could enter the seas and oceans, and what impact these have on the wildlife, noting the link between human activity and pollution in the marine environment.

Materials:

Large pieces of paper or card to make poster(s), old magazines, newspapers or pictures from the web of potential litter sources, crayons, pens, glue, scissors. Images of ocean wildlife (mammals, fish, birds) – from web/magazines etc.

Method:

1. Start by discussing with students all the different types of wildlife that live in the oceans – this may include mammals such as whales, dolphins and seals, seabirds, fish, jellyfish etc. What do they eat? Where might you find them (UK or further away?).

2. Either get the students to look up images of some of these animals online and print them out, or use pre-printed images from magazines etc, or they could draw them.

3. Talk to the students about all the different types of litter that might end up in the sea. This could be litter that is washed into the sea from land, for example packaging or plastic bottles, or debris lost at sea through commercial activities such as fishing net. How did it get there? How big is it? How might it be harmful to wildlife?

4. Again, find pictures of examples of potential litter and debris, or ask the students to draw them.

5. Using a large piece of paper, either work together as a class or split into groups of 4 to create posters showing how the wildlife could be impacted by the polluting items. Cut out the images and stick them on, add titles, captions and descriptions where necessary.

6. Discuss the posters with the children and talk about how we could try to stop these types of pollution and try to fix the existing problems related to litter and debris in the oceans.
Extension:

Students could present their posters to other members of the class or wider school as part of an assembly or exhibition.
**ACTIVITY: LITTER, LITTER, EVERYWHERE!**

**Key Stage:**
1, 2 & 3

**Subjects covered:**
Science, Social Science, Art

**Objectives:**
Students will learn that marine litter and debris comes from people, they will be able to identify different types of litter and rubbish and whether the items can be re-used or recycled, and if using the items was necessary. They will create a class recycling centre to show how they can actively manage their recycling and reduce waste.

**Materials:**

**Part A**
A prepared ‘bin’ (no food waste) containing a selection of common school/home waste. Should include, if possibly, lots of paper of different types (glossy, matt, white, printed, newspaper, cardboard etc), plastic drinks bottles, drinks cans, plastic bags, any old toys (plastic or otherwise), plastic packaging etc. The teacher should find out what can be recycled in the local area, curbside and at school – most local council website will provide this information online.

**Part B**
Cardboard box(es) with appropriate holes cut in the top for recycled items to go through, crayons, coloured paper, glue

**Method:**

**Part A**
1. Start a class discussion about the different sources of rubbish at home and at school.

2. Clear a space in class. Bring in the prepared bin. Pull out and show some of the different types of paper, then (if suitable) dramatically empty the bin in the free space to show the contents.

3. Talk with the students about how the rubbish is disposed of and where it goes. This could be drawn on the class whiteboard as a diagram with arrows – from class bin, to dustbin outside, to rubbish lorry, to landfill. Talk about the pressure on landfill sites and how full they are.

4. Look at the paper in the bin – how much of it has been properly used (both sides), could any of it be used more or reused for something else?
5. Look at the rest of the contents. How much of it could be reused? Recycled? What couldn’t be recycled? Could it have been avoided or replaced with something reusable [such as a reusable cup or bottle instead of disposable]?

6. Plastic bags – what could be used instead? Can they be recycled? [yes, often at supermarkets].

7. Talk about the toy[s] – what could be done with it instead of going in the bin? E.g. Charity shops, school fair or jumble sale, freecycle or similar websites etc.

Part B
1. Bring out the cardboard boxes for setting up a ‘recycling centre’ in the classroom.

2. Decide what each box will be used for* – paper, plastic lids, pens etc?

3. Ask the students to decorate the boxes using pens, crayons, coloured paper etc.

4. Use the box(es) for your recycling over the course of the week/term. Have you reduced how much needs to go in there by reusing wherever possible?

* Terracycle offer some recycling services to schools for pens, lids etc. It might be worth investigating whether your school could get any of these by visiting the Terracycle website, or at least finding out where the nearest drop-off point is.