

What to expect from Level 2 – Investigate

During this level, children will learn about how plastic gets into the ocean, and the impact that plastic pollution has on us, our communities and our natural environment.

They will also learn about the 6R's to help you think of ways to cut down your problem plastics. They will do some investigating to identify the problem plastics in your school so you can pick the top two to tackle, then create an action plan to decide how you'll achieve it! You'll share what you found out and what you want to do about it.

Lesson Outline

Lesson 1 – How does plastic end up in our oceans?

In this lesson, children will learn all about how our plastic waste can travel and end up in the ocean. They will also explore the effect that this pollution has on our wildlife.

Lesson 2 – The 5 Gyres (Garbage Patches)

In this lesson, children will learn all about the 5 Gyres, focusing on the largest of them all, The Great Pacific Garbage Patch. They will learn all about why these garbage patches form and what is being done to stop this plastic pollution.

Lesson 3 – The 6 R's

In this lesson, children will learn about the 6 R's (Reduce, Refuse, Recycle, Rethink, Reuse, Repair) and how they can act on these in their own lives as well as in school.

Lesson 4 – Action Planning

In this session, children will investigate the problematic plastic in their school and will write an action plan to reduce at least two of these plastics.

LEVEL 2 – INVESTIGATE

Lesson 1 – How does plastic end up in our oceans?

Lesson input

PowerPoint available

Introduce the focus of the lesson ‘How does plastic end up in our oceans?’ and discuss as a class.

How does plastic travel? Use the [Common Sea interactive diagram](#) to discuss main ways that plastic waste can end up in our oceans.

As you go through the lesson, discuss the impact that plastic pollution has on wildlife. Use the Impact on Wildlife factsheet and take a look at [this website](#) to find out which species are currently affected by it.

Impact on Wildlife:

- Entanglement
- Animals eating plastic
- Plastic enters the food chain
- Pollution causes threats to marine ecosystems

Share images with the children showing the damage that plastic is having on our waterways. Discuss what they could do to help and then look at the images of the clean

Activity

Children are to complete further research in to the impact of plastic pollution in our oceans, possibly using books, the internet and fact sheets. They can then create a presentation about the dangers of plastic pollution, explaining what can be done to prevent this.

Additional Activity

Create an upcycled plastic wave to show that you are part of the Plastic Clever Schools Community. Take a look at the Let’s Make Waves How to sheet to find out more.



Resources

- [Impact on Wildlife factsheet.](#)
- Let’s Make Waves (How to sheet)

Book recommendations

- Clean Up by Nathan Bryon
- How to Make a Better World by Keilly Swift
- The Sea Book by Charlotte Milner

Plastic Clever Schools Actions:

- Photo – Complete your [Plastic Clever School Audit](#) and upload a photo of your results to your [profile](#).
- Photo or Video – Upload an example of your presentations to your [profile](#).

LEVEL 2 – INVESTIGATE

Lesson 2 – The 5 Gyres (Garbage Patches)

Lesson input

PowerPoint available

What happens to the rubbish that ends up in our oceans? Allow the children to discuss and share ideas.

Did you know that plastic is estimated to take between 450-1000 years to biodegrade? So what effect can this pollution have?

Share the information with the children all about the 5 Gyres (Garbage Patches), what they are and how they are created (information on PowerPoint and factsheet)

Watch the video all about [The Great Pacific Garbage Patch](#) (on PowerPoint)

Discuss what happened to the rubber ducks bath toys that fell overboard on its way from Hong Kong to the United States.

Activity

Children are to complete the activity sheet all about the rubber ducks, plotting locations on map and answering questions in order to understand ocean plastic pollution further.



1. On the map, mark the sites where the animals have landed or been sighted.



2. Draw arrows to show the path of their journeys, including the circulation pattern.
3. Have the ducks remained in the North Pacific convergence zone (Great Pacific Garbage Patch)?
4. Where did the ducks first wash ashore?
5. Why do you think this was the case?
6. Describe the route the ducks took to arrive on the coasts around the Atlantic.
7. What does this route tell us about the connectivity of the oceans?
8. What do these journeys suggest about the origin of a piece of plastic found in any ocean and the distance it could have travelled?

Resources

- Common Seas – What happened to the rubber ducks? activity sheet
- [The 5 Gyres factsheet](#)

Book recommendations

- A Whales Tale Online Story <https://www.youtube.com/watch?v=xFPoIU5iiYQ>
- Planet Full of Plastic – Neal Layton

Plastic Clever Schools Actions:

- Photo – Upload examples of your activity to your [profile](#).

LEVEL 2 – INVESTIGATE

Lesson 3 – The 6 R's

Lesson input

Introduce the 6 R's to the children, using the PowerPoint.

- Reduce
- Refuse
- Recycle
- Rethink
- Reuse
- Repair

As you go through each one, encourage the children to think about how they could use each R in their own lives.

As a class, think about the questions below and discuss. Think, Pair, Share.

How could we use the 6 R's in school?

What do we already do?

What could we do differently?

Activity

Children are to create posters to promote the 6 R's which they can display around school or on their Plastic Clever School display board.



Resources

- [The 6 R's factsheet](#)

Book recommendations

- Stuff – Maddie Moate
- What A Waste: Rubbish, Recycling, and Protecting our Planet – Jess French

Plastic Clever Schools Actions:

- Photo – Upload examples of your posters to your [profile](#).

LEVEL 2 – INVESTIGATE

Lesson 4 – Action Planning



Lesson input

Before the session, ask a selection of classes, parents and teachers to complete the [Plastic Survey \(Click here to access it\)](#).

Explain to the children that now you have learnt all about plastic pollution and how it is damaging our environment, it is time to start planning how you are going to help the environment by tackling plastic in your own school.

Work through the PowerPoint thinking about each of the focus questions (this could be done on large sheets of paper in groups or as a class discussion).

Activity

As a class, create an action plan, using the discussion from the PowerPoint and the Plastic Clever School Action Plan Sheet.

Don't forget to share your journey so far and your Action Plan with KAP as well as teachers and pupils. This will help them to join your mission.

Resources

- Plastic Survey
- Plastic Clever School Action Plan Sheet

Book recommendations

Plastic Clever Schools Actions:

- Photo – Complete your [Plastic Clever School Action Plan](#), outing at least two types of problem plastics in your school and upload photos to your [profile](#).