The Plastics Challenge!

1. Background
Litter not only makes the marine environment look unpleasant - it kills thousands of marine animals every year, usually by ingestion, entanglement or smothering. Plastic is the most commonly found material and it does not biodegrade, rather it breaks down into smaller and smaller pieces which are mistaken for plankton or other food sources. Single-use plastic items, like carrier bags and bottles, are a particular problem as they are used once and thrown away, but last forever in our environment. The only real answer to this is for us all to reduce the number of single use items, particularly plastic, that we use, so we are all ‘doing our bit’ to reduce our impact on the environment.

2. Set the Scene
In an open space, lay out the Litter Timeline cards in order with the litter items in a rubbish pile in front. Use the paper as an example, discuss its properties and encourage children to think about what they know about paper. Match the paper to ‘months/year’. Emphasise that these are scientists’ best predictions, as we haven’t had materials like plastic for long enough to truly know. Invite one child at a time to choose an item and guess how long it is estimated to take to biodegrade. Remind each student to use the paper as a guide. Once each item has been matched to a time, starting with months/year, children should turn over the time card to reveal the answers.

3. Resources
- Plastic Challenge Planning Sheet
- Plastic Ocean
- Plastic Challenge Letter
- Litter Timeline (printed back to back), one of each of the litter

4. Investigate
Discuss the timeline. Was anyone surprised by the answers? Which items could be recycled? Reused? Could any of the items be avoided? How? Visit the Plastic Challenge website at www.mcsuk.org/plastic-challenge. Read through the introductory information. Children to identify what the challenge is about and how they can get involved. Invite children to take part in the challenge. Explain that you will be doing the Plastic Challenge in school and encourage children to take part at home too. Give out the Plastic Challenge Letter to explain the challenge to parents.

5. Apply
As a group, brainstorm all the plastic items that the class use in a day. In small groups of 3/4, children should use the Plastic Challenge Planning Sheet to list the items that they personally use, identify those that are single-use plastic and identify an alternative to use during the Plastic Challenge. Each child should also decide if they are going to complete the challenge for a day, week or a full month.

6. Extend
Find out about the North Pacific Garbage Patch. Start by reading through the information in Plastic Ocean. Identify key words to help with the search and then use Google safe search to find more useful websites. Use the information to record a short (2 min) Newsround-style report on the issue to inform others. Remember to share your videos with on social media @mcsuk or to education@mcsuk.org.

7. Reflect
Review how children are finding the Plastic Challenge. Discuss challenges and successes. Ask children to write a paragraph about their experiences and send to us @mcsuk or to education@mcsuk.org.

Subject/Topic: Human impacts, litter, materials, environmental issues
Suitable for ages: All Years
Paper
Months/years
cardboard
2-5 years
4 years
Plastic carrier bag
20-50+ years
Crisp Packet
75 years
Drinks can
450 years
Disposable
Nappy
500 years
Plastic Drink Bottle
450-1000 years
glass
Forever?
Dear Parents/Guardians,

As part of our learning about **environmental responsibility and sustainable living**, in school we will be taking part in the Marine Conservation Society’s Plastic Challenge. This will involve cutting out use of disposable plastic items for a **day/week/month**.

Plastic litter has a huge impact on our environment, with our ocean and its wildlife suffering due to our use, and subsequent disposal of, throw-away plastic items. Taking part in the Plastic Challenge is one way to raise awareness of our environmental footprint and the steps that we can all take to make a difference.

If you would like to take part in the plastic challenge at home, and support our work in school, please visit [www.mcsuk.org/plasticchallenge](http://www.mcsuk.org/plasticchallenge) for information about the challenge and how to sign up.

Yours sincerely,
Plastic Challenge Planning

1. Add any plastic items that you use to Column I. They don’t have to be made from plastic only, they might have plastic parts inside.
2. Decide if the item is:
   - single use - used once and then thrown away, like cotton buds
   - disposable - used several times then thrown away, like a biro pen
   - long-term - used for a long time, like a computer.
3. For single-use or disposable items, decide how you will avoid using them during the challenge.

| Plastic Items I Use | Single-use, disposable or long-term? | I will avoid using the item by ...
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Plastic Ocean

Our oceans have no boundaries, and when it comes to rubbish in the sea, that means it’s everyone’s problem.

All caught up

Gyres are large rotating currents in our ocean where water spirals around. It’s where much of the litter that is floating in the sea collects. The five main gyres across the globe collect man-made debris, especially plastic objects.

Floating rubbish dumps

The North Pacific Gyre contains the biggest rubbish dump on the planet. Nicknamed the ‘Great Pacific Garbage Patch’, it’s estimated to be almost twice the size of the UK! In this area, there’s 6 times more microscopic plastic than plankton in the water.

A plastic bottle dropped in Canada may end up on the Cornish coast. Marine litter really is a global issue.

You can make a difference

Never drop litter, recycle more and reduce the amount of plastic you use.