

Plastic pollution: lesson 3 of 4

How much plastic do we use?

Track your own plastic, then follow it across the ocean



Clearing a beach near MCP. Photo: MCP



The plastic tracker

1. For one day, or a whole week, write down every piece of single-use plastic you use.
2. Single-use means it is thrown away after one use: wrappers, sachets, bottles, straws, bags and cups.
3. Mark each one: could you have refused it, reused something or chosen something else?
4. Bring your tracker back to class.

Start now

What single-use plastic have you already used today? Break time counts!



Class data

1. Add up how many pieces everyone used.
2. Make a bar chart of the five most common items.
3. Work out the class total for a whole year.
4. Now scale up: how much for the whole school?

Example

If 30 students each use 4 pieces a day, that is 120 a day, or 43,800 a year.



Every day in the Philippines

163 million

sachets

48 million

shopping bags (sando bags)

45 million

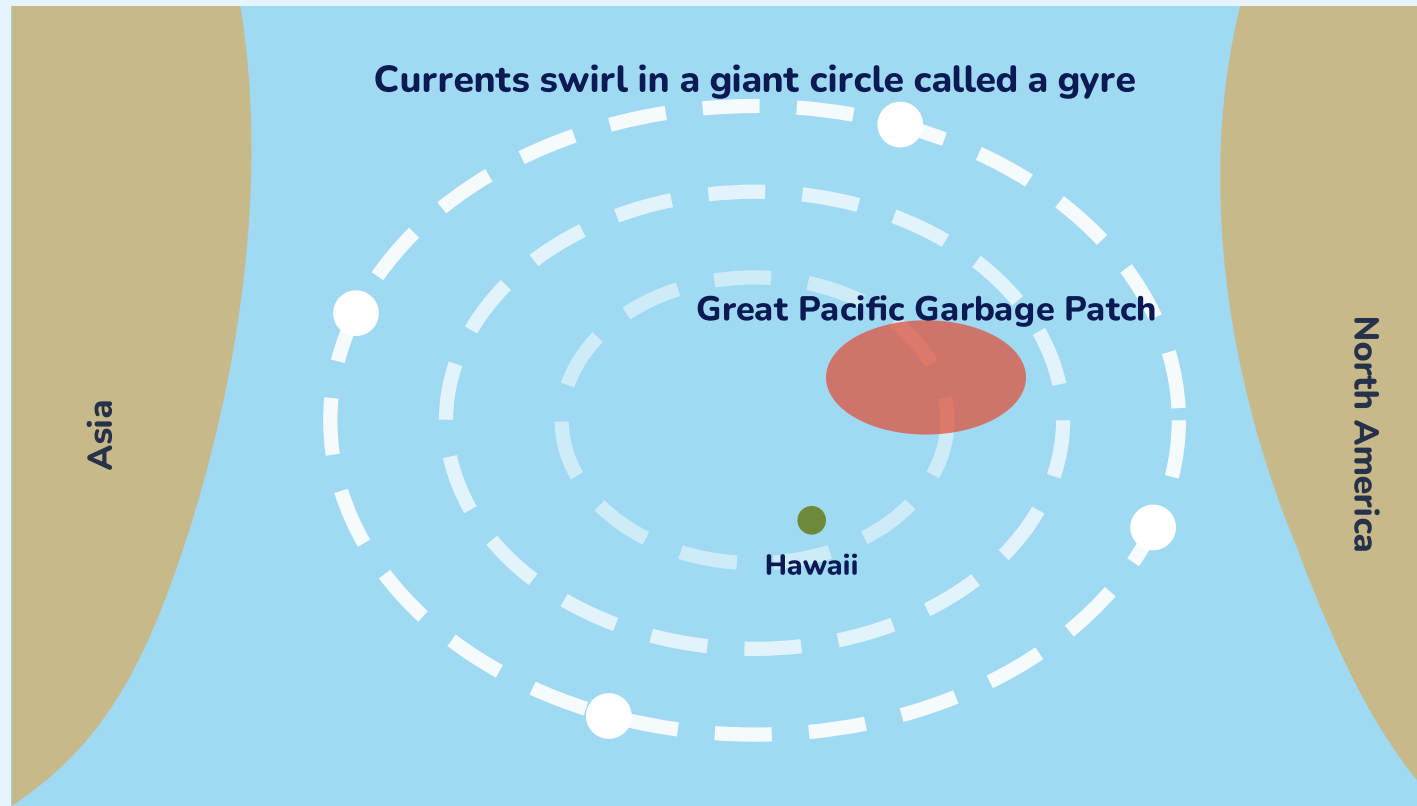
thin film bags (labo bags)

How does your class compare? Could the class choose one item to cut down on?



Where does ocean plastic end up?

Winds and currents move ocean water around in giant swirling circles called gyres. Floating plastic gathers in the middle.



The Great Pacific Garbage Patch

**1.6 million
km²**

the area it covers, more than
five times the size of the
Philippines

79,000 t

of floating plastic, at least

46%

of it, by weight, is fishing
nets

It is not a floating island you can walk on. Most pieces are small and spread out, like pepper in soup.

How we know: Lebreton and others, Scientific Reports, 2018



The rubber duck story

In 1992, a shipping container fell off a ship in the North Pacific, and about 29,000 plastic bath toys floated away.

For years afterwards, they washed up on beaches thousands of kilometres apart. Scientists used where they landed to learn how ocean currents move.

What does this story tell us about plastic that falls into the sea anywhere?



Refuse, reduce, reuse, recycle

The best choices are at the top. Recycling helps, but only a small share of plastic is ever recycled.



Swap it



Sachet

Refill a bottle at a refill station or sari-sari store that offers refills.



Plastic bottle

Carry a refillable water bottle.



Sando bag

Bring a bayong or cloth bag.



Plastic cutlery

Keep a spoon and fork in your bag.



Talk about it

Which single-use plastic did our class use most?

Which swap would be easiest for you? Which would be hardest?

Why do you think so much plastic ends up in the middle of the ocean?

Next time: take action with a clean-up, a campaign or an upcycling project



Photos and sources

Photos: beach clean-up by MCP. All illustrations drawn for this lesson by Marine Conservation Philippines.

Sources:

- GAIA (2019). Plastics Exposed.
- Lebreton, L. and others (2018). Scientific Reports.
- Ebbesmeyer, C. and Scigliano, E. (2009). Flotsametrics and the Floating World.
- OECD (2022). Global Plastics Outlook.

Full links are in the teacher reading. Free to use and share for education. Made by Marine Conservation Philippines. More free lessons: marineconservationphilippines.org/resources/teachers-resources/

