

Activity Title:

Rubbish and Recycling at the Beach

Focusing questions

- What can and cannot be recycled naturally at the beach and why?
- What effect does rubbish have on the beach and marine environment?

Resources required

Saving a Seagull - story by Ann Graeme

Prior learning

1b Beach brainstorm

3b Parts of the beach and human activities

5c Positive and negative beach use

Method

- 1 Pair share stories from your own experiences of finding rubbish on the beach.
- 2 Read the story 'Saving a Seagull' by Ann Graeme.
- 3 Hold a class discussion, using these focus questions:
 - In the story, what was recycled naturally at the beach, and how?
 - What were examples of non-recyclable rubbish on the beach, and how could they affect beach users and wildlife?
- 4 Create an illustrated picture book of the story as a class. Cut out the paragraph boxes from the attached sheet and glue each paragraph to the bottom of a blank A4 page. Assign one page per student to illustrate.
- 5 After each student has illustrated their page, staple or bind the pages together into a book.
- 6 Conclude the activity using the following questions for discussion and reflection:
 - Why be litter-free at the beach?
 - What can individuals/groups/communities do about rubbish on the beach?
 - What more would you like to learn about rubbish and your beach?
 - How could you find this out?
 - What have we learnt?

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Rubbish and Recycling at the Beach

Environmental Education Aspect:

About and for/with the environment

Environmental Education Concept:

- Personal and social responsibility for action
- Biodiversity
- Sustainability
- Interdependence

Curriculum Links:

- Literacy
- Arts
- Science
- Social Science

Suggested Curriculum Level:

- Levels 1-4



Alternative activities:

- Complete the 'How long does litter stay in the sea?' Activity sheet
- Use the 'Global problem: plastic' fact sheet to learn how plastics and other litter gets into the ocean.

Possible next steps

- Google 'marine debris and wildlife images' for photos of rubbish on beaches and its effect on marine life, share / discuss with the class.
- View a Youtube video on the topic. Examples of short clips include: The Great Pacific Garbage Patch; Midway Island, North Pacific Ocean.
- Do further study on ocean pollution by googling 'ocean rubbish nz' – suggested websites:
 - www.seakeepers-nz.com.
 - www.theoceancleanup.com
 - www.plastinography.org
 - www.sustainablecoastlines.org
- Organise a beach clean-up with your school/local community. Contact Coast Care for help with organising an event.



SAVING A SEAGULL

A Story about rubbish and recycling at the beach

By Ann Graeme



Bang! Crash! Tinkle! Tinkle! The recycling truck was passing and the contents of the bins clattered and crashed as they were thrown into the truck. Just across the dunes on the beach, the recyclers were working too, but they were much quieter.

There was a dead fish on the sand and it was starting to stink. It needed recycling so sea lice and crabs were busy eating it up.

The big red crabs were in a hurry, pushing the hermit crabs aside and ripping off bits of flesh to stuff in their mouths. They knew they didn't have much time. The sun was coming up and soon the gulls would arrive. Then the crabs would have to hide or the seagulls would eat them.

The hermit crabs went on eating. They weren't scared of the gulls. They could back into their shells if a seagull pecked at them.

There was seaweed washed up on the beach too, lots of leathery brown kelp. Hundreds of sandhoppers, like big fleas, were nibbling it up. It was a big job and could take weeks, so little by little the hoppers were burying the seaweed in the sand. This would help to keep it moist and hide the hoppers from the sharp eyes of the red-billed gulls and the dotterels.

As the sun rose the birds arrived, hungry for their breakfast. There was a lot of squabbling over the dead fish but the red-billed gulls managed to steal chunks from under the beak of the big, bossy black-backed gull. In a few hours the smelly dead fish was gone.

But there were some things on the sand that the animals couldn't recycle. There was a broken plastic spade and a jandal. There were five plastic bags and an ice cream wrapper. There were bottles and cans and – oh no! – there was a mess of fishing line and a tangled gull struggling to get free!

It was lucky for the gull that Riley and Callum were looking for shells for their collection. They were picking up some of the rubbish too, because they knew that dolphins choked on floating plastic bags and sea birds ate beads of polystyrene. It was lucky too that Callum had his Swiss army knife, or they couldn't have cut the line that was wrapped around the bird's legs.

Riley held the bird, which was brave of her because it was frightened and tried to peck her. But she held it firmly and Callum cut and unwound the strands of fishing line until the bird was free.

And away it flew. You don't get any thanks from a seagull but Riley and Callum were very happy, knowing that they had saved its life. In the days to come they saw lots of seagulls and they always wondered, 'Is that the bird we saved?'



SAVING A SEAGULL

A Story about rubbish and recycling at the beach



By Ann Graeme

Title page

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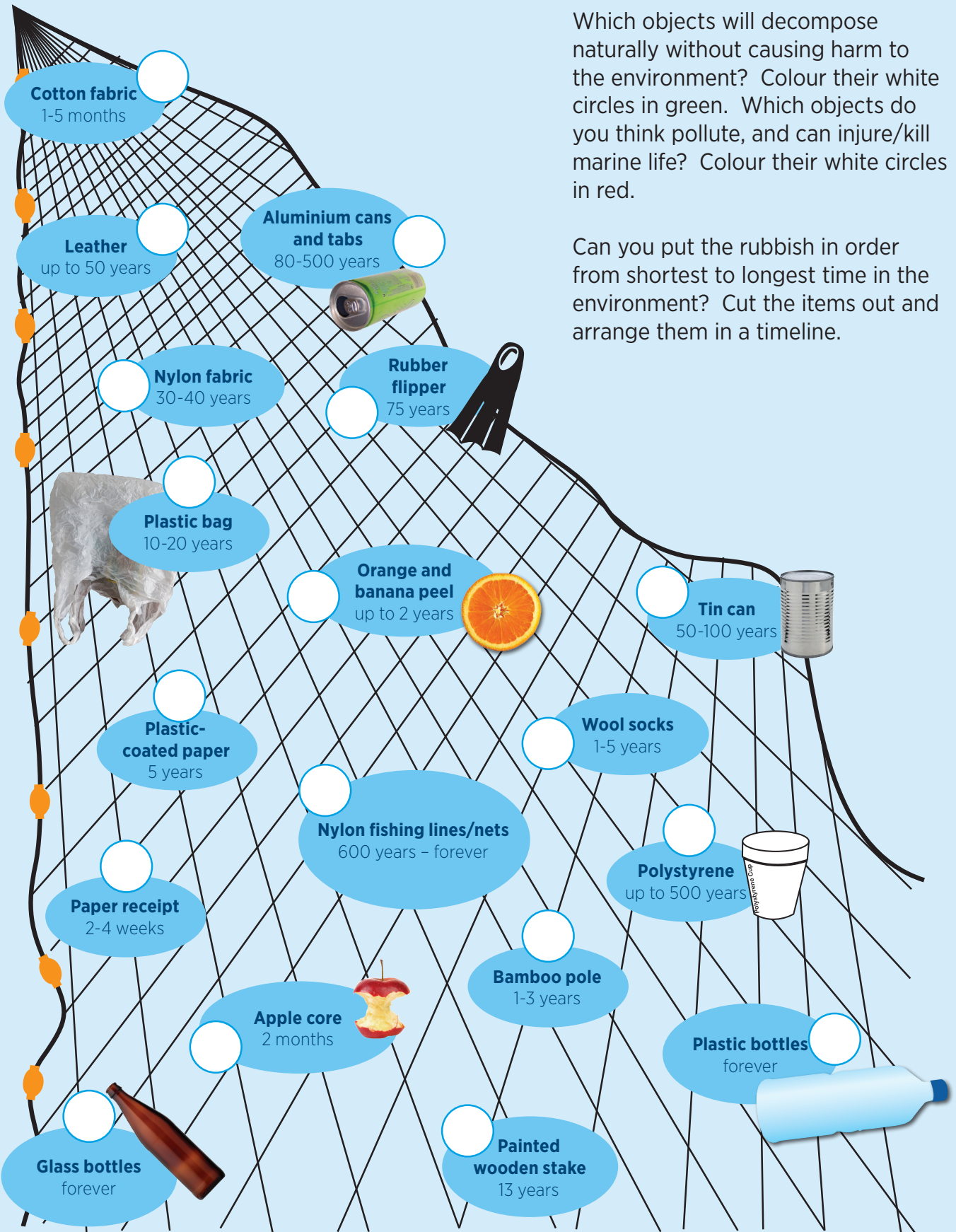
Page 10

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How long does litter stay in the sea?*



Which objects will decompose naturally without causing harm to the environment? Colour their white circles in green. Which objects do you think pollute, and can injure/kill marine life? Colour their white circles in red.

Can you put the rubbish in order from shortest to longest time in the environment? Cut the items out and arrange them in a timeline.

* these are ESTIMATED decomposition times.

Global problem: Plastic

Plastic - it's everywhere, how many plastic things can you see right now?

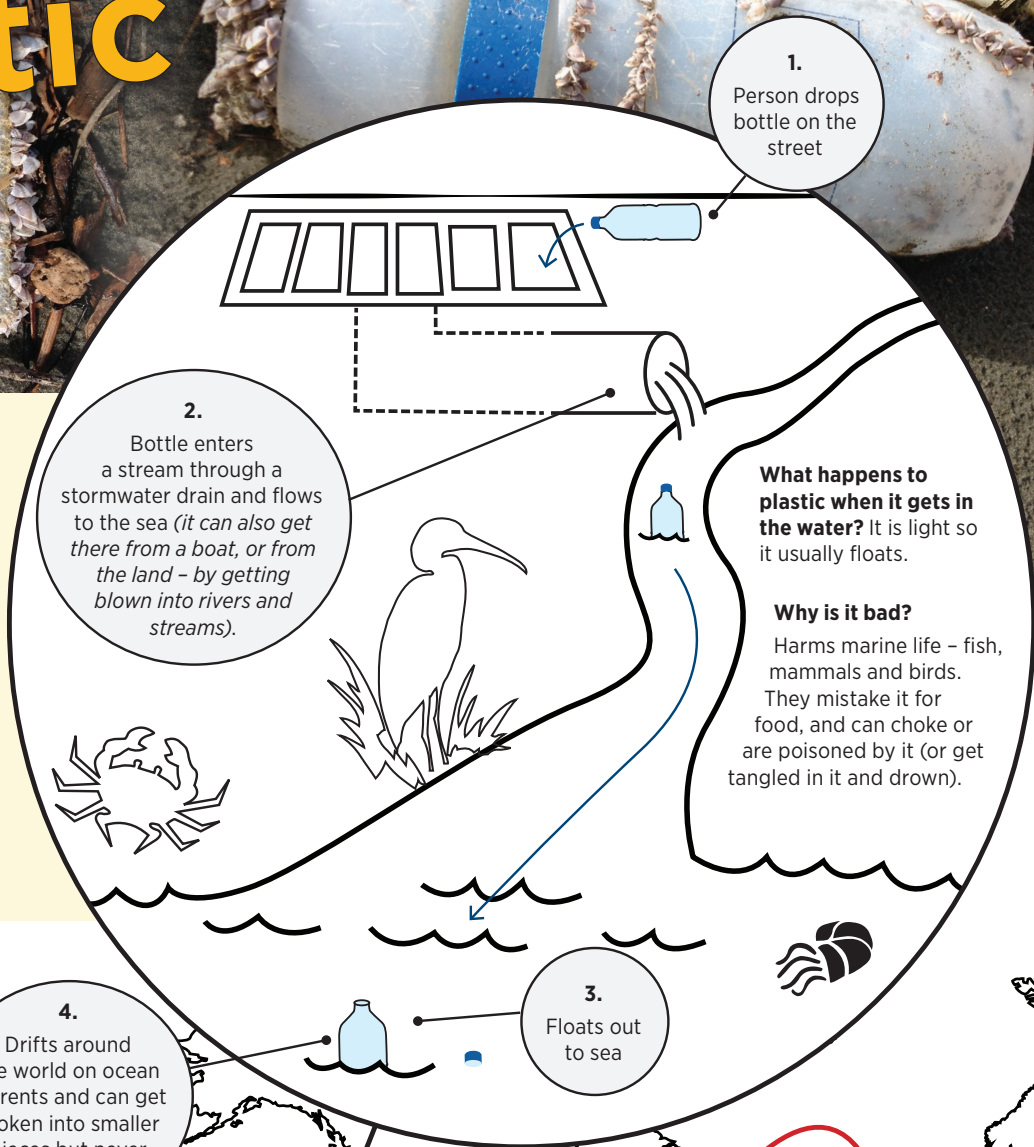
Have you been walking on the beach after a big storm and seen plastic and rubbish washed up on the beach? Look at the rubbish BuzzBOP found above.

Where did it come from?

How do you think it got there?

Where do you think it goes if no one picks it up?

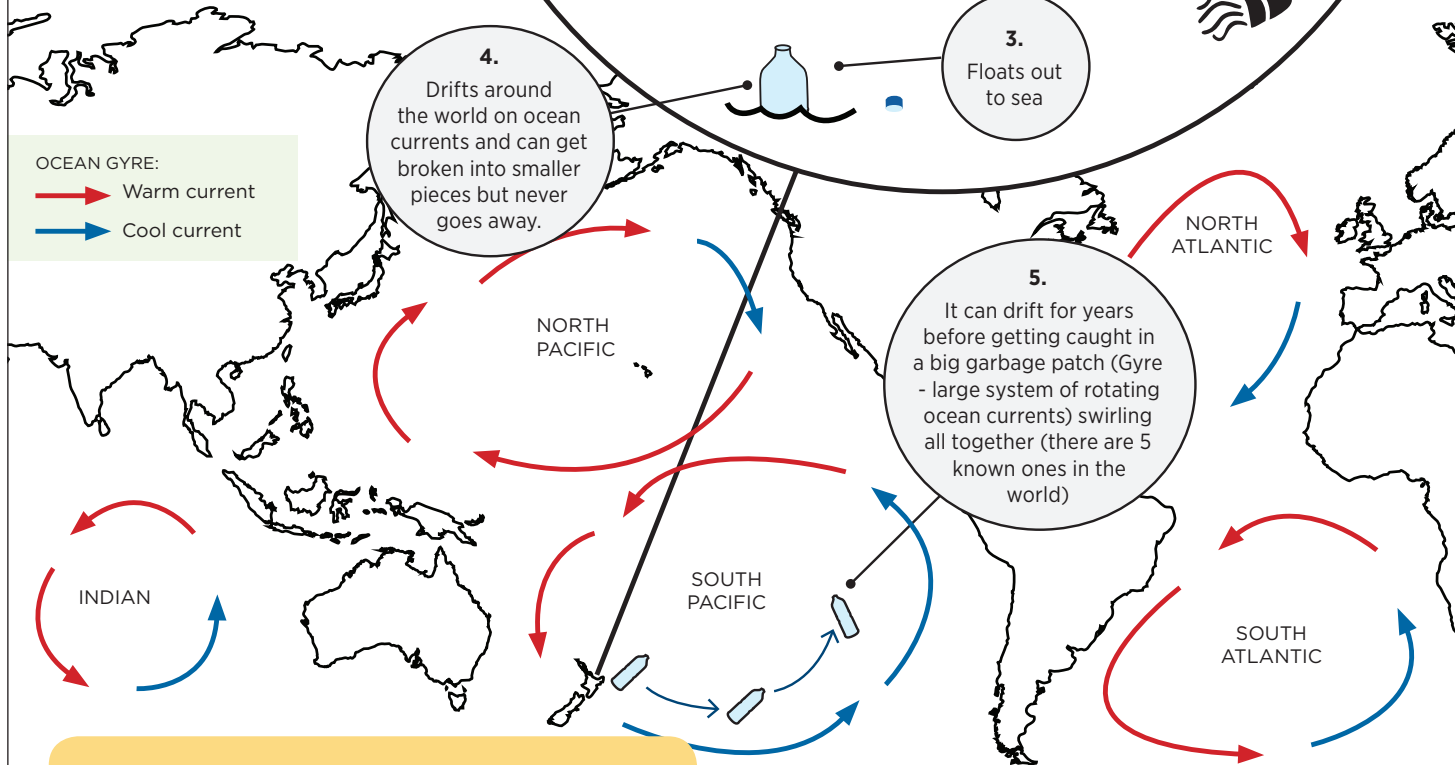
Take the plastic journey (right) and learn all about it. Colour it in too!



What happens to plastic when it gets in the water? It is light so it usually floats.

Why is it bad?

Harms marine life - fish, mammals and birds. They mistake it for food, and can choke or are poisoned by it (or get tangled in it and drown).



What can you do about this global problem?

Act local - stop it in your home, use reusable drink bottles, recycle or upcycle plastic products.

To learn more about plastic in our oceans visit this cool interactive website <http://plastinography.org>