



# Journey to the sea

*Around the world, plastic pollution has become a growing plague, clogging our waterways, damaging marine ecosystems and entering the marine food web. Much of the plastic rubbish we generate on land flows into our oceans through stormwater drains and watersheds. It falls from garbage and container trucks, spills out of rubbish bins or is tossed carelessly.*



## Orientation:

T asks Ss: 'How does rubbish end up in the ocean?' Elicit ideas from Ss. Continue to ask Ss questions that get them thinking beyond the rubbish and recycle bin, e.g. 'What happens to the rubbish that gets left on the ground?', 'Where does rubbish go when it can't be recycled?', 'What elements might cause the rubbish to travel to the ocean?', 'Do you think rubbish that floats on the surface of the water will travel faster than rubbish that sinks?' Introduce the idea that all drains lead to the ocean. Write all Ss' ideas on the whiteboard.

## Plastic bag mockumentary:

Recap on Ss' knowledge from previous lessons that all stories have a beginning, a middle and an end. Let them know they are going to watch a video clip about a plastic bag making its way to the ocean. Play the video clip for Ss. <http://www.youtube.com/watch?v=GLgh9h2ePYw>

At the end of the video clip, ask Ss: 'What activity were people doing that caused the bag to go into the natural environment?', 'What elements helped the bag get into the waterway?', 'What happened to the bag along its travels?', 'How did it get into the ocean?', 'What happened to the bag once it was in the ocean?', 'What would happen if a marine animal ate some of the plastic floating in the ocean?'.

## YEAR LEVEL

Years 4 – 6

## MATERIALS

Plastic bag mockumentary video clip

Equipment for Ss to view video clip on

Old plastic bottle with a message inside it

Map of local waterways leading to the ocean

Board game, game pieces, dice

Role play cards

## KEY WORDS

- Landfill
- Recycle
- Migration
- Pacific Ocean
- Role play
- Community
- Float
- Sink





# Journey to the sea

## Message in a bottle:

Introduce a character to the class, e.g. a plastic water bottle, give it a name and spend a moment describing it. Tell Ss that the bottle was found on the beach with a message inside it. Have a map of the nearest river to your local area prepared or put it on the whiteboard for Ss. Make the story of your water bottle localised by including areas on the map in the story. Read the letter inside the water bottle to your Ss.

What you decide to write will be up to you. One idea is to model the story around the bottle hitting its head and not being able to remember how it got into the water, who it met along the way and how it ended up on the beach – it wants to find its mum or home! Model some language for short stories in the letter. Refer Ss to the map. Ask Ss if they can see the river on the map. Follow the river to the ocean and make a note of which towns or landscapes the bottle passed through to get to the ocean. Then elicit ideas from Ss about how the bottle made its way into the waterway linking this to human activity. This may include, what may have happened along the way, who the bottle met and maybe something even took a bite out of the bottle.

Talk about the possible journey of the bottle at the end of the brainstorm. There should be lots of ideas for Ss to then individually make a story based around an incident that led the water bottle to the beach. Some Ss may want to write the beginning of the story, some a middle part and some the ending. Ss can draw pictures and write captions underneath. Model the language you want Ss to use for their story so that each section can be easily connected together.

## Gallery walk:

Gallery walk as a class to share each idea and see what everyone has drawn and written, all ideas should be read. As a class, select an order for where each incident goes on the journey along your waterway.

After allowing students to edit and make a final copy of their writing for the display, assemble all the incidents onto a board showing the class their own version of the story.

## Board game:

In small groups, Ss can play the board game to help consolidate their understanding of how rubbish ends up in the ocean and what type of effects it has on the environment (see resources at the end of this lesson).

## Role play:

Use the Role Playing Cards at the end of the lesson plan to create scenarios for Ss to act out. Ss take turns acting the different roles related to the marine debris issue and come up with an impact and solution for each scenario. Ss may like to sit in a circle and then go in the middle to act out the scenarios, or they might like to do it in groups. Depending on what facilities are available at your school, you might like to film the role play for Ss to view later.



# Role Playing Cards

## FISHERMAN

Fisherman digs holes in the creek banks to catch worms.

Leaves fishing line in the water.

Leaves plastic bait bags behind.



## PICNICKERS

Picnickers put rubbish in an overflowing bin.

Some rubbish falls on the ground next to the bin and gets left behind.



## SWIMMER

A swimmer leaves a plastic bag behind on the beach.



## TRIATHLETE

A runner drinks some water from a plastic cup and throws it on the ground during the race.

The race officials don't organise anyone to clean it up.



## TRUCK

A truck driver doesn't tie their load down properly and plastic gets blown off the back whilst they are driving.



## BIRTHDAY PARTY

Some kids have a birthday party down by the river and leave the popped balloons on the river bank.





## Game instructions

### YEAR LEVEL

Foundation – Year 6

### MATERIALS

Dice

Counters

Game board printouts

### Objective:

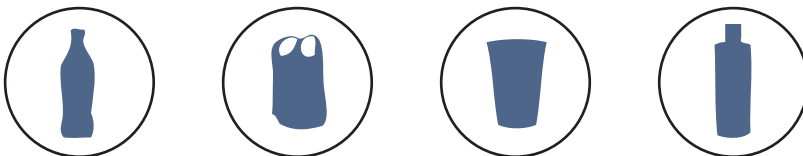
To learn how trash/rubbish that is not properly disposed of on land can become marine debris and how marine debris can find its way back onto land.

### How to play

- The game can be played with groups of three or four students.
- Cut out the rubbish icons (the water bottle, the plastic bag, the plastic cup and the plastic bottle) and tape them to a counter.
- The game board is divided into two sections: the land section and the sea section. The object of the game is to be the first piece of rubbish that makes it to the rubbish bin at the end of the land section.
- All players start on the 'Land Start' space. Each player takes a turn rolling the die. The player with the highest number goes first and the others follow in a clockwise fashion. In turn, each player rolls the die and moves the number of spaces indicated. If the player lands on a space without written instructions, the player remains on that space until their next turn. If a player lands on a space with instructions, the player must follow those instructions. If the player is on the land section of the game board and instructions indicate they have been washed out to sea, the player moves their game piece to the 'Ocean Start' space. If the player is in the ocean section of the game board and the instructions tell the player to move back to the land, the player moves their game piece to the 'Land Start' space. The game continues until one of the players arrives at the rubbish bin.

### Game pieces:

Bottle lids to represent rubbish



**START**



*Left in  
underwater  
cave*

**LOSE A  
TURN**

*Carried  
towards land  
by current*

**ROLL  
AGAIN**

*Carried by  
swimmer back  
to shore*

**GO TO LAND**

**BLOW ONTO  
LAND**

*Caught in  
a propeller*

**LOSE A TURN**

*Disturbed someone's  
ocean view*

**LOSE A TURN**

*Caught on surfboard  
carried to land*

**ROLL AGAIN**

*Picked up in  
beach clean-up*

**GO TO LAND**

*Fishing net pulled  
you close to shore*

**ROLL AGAIN**

*Tangled around  
a seal*

**LOSE A TURN**

*Fishing net pulled  
you close to shore*

**GO TO LAND**



**TRASH  
TRAVELS  
OCEAN**

*Washed ashore  
by wind*

**GO TO LAND**

*Left in  
underwater  
cave*

**LOSE A  
TURN**

*Carried  
towards land  
by current*

**LOSE A  
TURN**

*Caught on  
fishing line  
and pulled in*

**GO TO LAND**

**START**



*Left on river bank*

**LOSE A TURN**

*Blown near rubbish bin*

**ROLL AGAIN**

*Washed into the sewer*

**GO TO OCEAN**

**FINISH**



*Caught on a turtle*

**GO BACK 3**

*Carried to sea by a seagull*

**GO TO OCEAN**

*Fallen through a crack in the pier*

**GO TO OCEAN**

*Picked up in beach clean-up*

**MOVE AHEAD 3**

**TRASH TRAVELS LAND**

*Picked up and put in the bin*

**ROLL AGAIN**

*Thrown into the water by a child*

**GO TO OCEAN**

*Carried to sea by a seagull*

**GO TO OCEAN**

*Caught on a seagull's beak*

**GO BACK 3 SPACES**

*Put in recycle bin*

**MOVE AHEAD 3**

*Buried in the sand*

**LOSE A TURN**

*Washed out to sea by waves*

**GO TO OCEAN**