

Lesson 2 **EXPLORE**

What is it made of?

Just a generation ago, we packaged our products in reusable or recyclable materials – glass, metals and paper, and designed products that would last. Today, our landfills and beaches are awash in plastic packaging and expendable products that have no value at the end of their short lifecycle.

Orientation:

School walk: Take the Ss on a walk to look at what different buildings and items are made out of in the school. Have a discussion about why the items are made out of this (e.g. the roof is made of plastic/or metal because it is waterproof and stops us from getting wet). Ask Ss 'What would happen if...?' type of questions to help with understanding (e.g. What would happen if the roof was made out of paper?). Ss can also pick up rubbish from around the school while they are walking. You could also discuss what the rubbish is made out of e.g. plastic. Ask Ss why they think the items are made out of plastic. Ss can sort the rubbish into categories of what they are made out of. Years 2 & 3: Ss could put this information into a table.

Letter from the toy:

T reads Ss the second letter from Malmo which is included in the **Lesson 2 - What is it made of?** PowerPoint presentation.

Short video clip:

Ss watch 'A Litre of Light' video clip showing how plastic bottles can be used as lights. This is embedded in the PowerPoint presentation and can be played at the end of the lesson.

http://www.youtube.com/watch?v=o-Fpsw_yYPg

Plastic research:

Use some of the extra resource suggestions in the Tangaroa Blue Marine Debris Education Kit for students to research some other interesting things that are being made out of recycled materials. Ss could share their ideas with the class, make a poster labelling different parts, or create a class picture board to be near the vocabulary wall.

YEAR LEVEL

Foundation – Year 3

MATERIALS

PowerPoint presentation
F-3 Lesson 2.ppt
(includes letter no.2 from toy)

Equipment for students to view
PowerPoint presentation

Gloves (if Ss are picking up
rubbish and sorting)

Rubbish Traits table

Foundation Year:

Different coloured bags

A selection of everyday items
made from a variety of materials

Blindfold

Year 1:

Objects of different materials
e.g. sticks, pipe cleaners, pieces
of plastic

Some cardboard for the Ss to
stick their display on

Years 2 & 3:

Bucket filled with water

Everyday items made of different
materials

Rubbish Traits table

KEY WORDS

- Manipulate
- Buoyant



AUSTRALIAN
MARINE DEBRIS INITIATIVE





What is it made of?

Foundation

Feely bags and the five senses: T has different coloured bags with a different everyday object inside each bag (make sure you have a selection of items made out of different materials, such as plastic or wood, and that they have different aspects about them that can be covered by the five senses (e.g. a smelly item). Take some time speaking about the different colours of the bags and shapes/sizes of them: 'What does it look like?' (seeing). Explain to the Ss that they are going to take turns being blindfolded and come up and guess what is inside the bag. Types of questions to ask the Ss when they come up to discover what is inside the bag include: 'What does it feel like?' (touch) - elicit words such as hard, soft, rough and smooth; 'What does it smell like?' (smell) - get Ss to smell the bag and elicit vocabulary to do with smell; 'What does it taste like?' (taste) - make sure at least one item is something the Ss can taste, e.g. fruit or salt, elicit vocabulary such as sweet, sour, salty.

Spend some time discussing with Ss what do they think plastic might taste like and if it's something they would want to eat. Ask Ss what might happen to a marine animal if they ate plastic. See if Ss can remember any of the marine animals from the different videos and PowerPoint presentations that have eaten plastic and what happened to them.

Year 1

Objects are made from different materials: Prepare some objects made from different materials e.g. clay, paper, pipe cleaners, pieces of plastic and sticks. Explain to Ss that they are going to look at what happens when you try to manipulate the object. As you are explaining, show the class what you mean and check for understanding of the word 'manipulation'. Give Ss two of each item so they can make a display of what it looked like before it was manipulated and after. Ss could stick the items to some heavy cardboard to make the display e.g. old packing boxes cut up. Discuss results as a class. See if the results were similar to what the Ss thought would happen.

Spend some time discussing with Ss about how some of the different items may affect marine life once in the ocean. E.g. what do they think plastic might taste like and if it is something they would want to eat. Ask Ss what might happen to a marine animal if it ate plastic. See if Ss can remember any of the marine animals from the different videos and PowerPoint presentations that have eaten plastic and what happened to them. Ss may like to draw a picture to represent their ideas.

Years 2 & 3

Rubbish Traits: Have different items of rubbish or objects made from a variety of materials e.g. paper, plastic, metal, wood and glass. If using everyday objects, emphasise to Ss the connection that the objects will end up being rubbish one day. Get Ss to name the different items of rubbish and write them on the table 'Rubbish Traits'. Fill a bucket of water and ask Ss which items they think may float and which ones they think will sink. Then test each object out and see if the results are the same as what the Ss thought would happen.

Discussion: Ask Ss what might happen to buoyant items when they get into the ocean? What could be the problem with buoyant marine debris? What will happen to items that don't float when they get into the ocean? See if Ss can remember any of the marine animals from the different videos and PowerPoint presentations that have eaten rubbish and what happened to them. Ss may like to draw a picture to represent their ideas.





Rubbish Traits

Name: _____

Item	Float	Sink

