



What is marine debris?

Consumption - everyday items are made up of different materials all of which last for varying time frames. We live in a throwaway culture and once disposed of some of these discarded items can make their way into our waterways and cause cause problems for the environment.

This rubbish is called marine debris

Orientation:

The teacher (T) has a number of different daily items at the front of the class, e.g. a toothbrush, plastic bag, plastic bottle or plastic straw. T asks students (Ss): 'What do these items have in common?' Elicit answers and guide Ss to the understanding that all the items will end up being thrown away (become rubbish) one day. Have a quick discussion on how long each item will be used before it gets thrown away. Cover the concept of single-use plastics. What would the world be like without any bins? After eliciting some ideas, T can let Ss know that there are some places in the world without bins. Elicit the general idea that not all rubbish ends up in bins. Marine debris comes from human consumption patterns.

Visual inspiration:

T shows the What is Marine Debris? PowerPoint presentation. Have Ss watch the 4 minute video clip 'Plastic gets there first' – a short clip about the surfing Molloy Brothers and the marine debris they have found in remote areas. http://www.youtube.com/watch?v=GFSmnWyjVgc&list=UUBpIShXI_KHhwUdup_yHoVg&index=32&feature=plcp

Elicit key concepts from Ss to check for understanding and have a short discussion extending on any questions.

You may also want your students to view the Tangaroa Blue video clip on 'What is Marine Debris?' Visit the following link for access to all of Tangaroa Blue's 'How to' videos.

<http://www.tangaroablue.org/resources/how-to-manual.html>

YEAR LEVEL

Years 7 - 10

MATERIALS

A selection of everyday items

PowerPoint presentation
7-10 Lesson 1.ppt

Equipment to display the PowerPoint presentation to the class

KEY WORDS

- Marine debris
- Entanglement
- Ingestion
- Single-use plastics
- Rubbish
- Litter
- Trash
- Validity
- Secondary sources
- Critically analyse





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Affected marine life: entanglement and ingestion

Using pictures of affected marine life or a discussion (refer to the What is Marine Debris? PowerPoint presentation for some pictures) elicit some ideas from Ss about how marine life is affected by marine debris. Cover concepts such as entanglement and ingestion.

Marine life investigation:

Ss can complete a short research task using the web to show their understanding of how marine debris can affect marine life. Ss may want to pick one specific animal to focus on or show a few. Use diagrams, words, pictures and include cause and effect. There is an opportunity to include this in Lesson 9 Combating marine debris, where Ss use a Cause and Effect Chart to help create a Source Reduction Plan. Research from this first lesson could help with that task. There is also a section in Lesson 6 Plastic in our food, where Ss can do a research project on a specific marine animal and how it is affected by plastic, linking this to human behaviour and effects on humans. You may want to use the research they do in this first lesson as a building block for the next component in the Plastic in Our Food lesson.

When Ss are conducting any research, help them to use scientific knowledge to back up or accept any claims, explanations or predictions. Also encourage your Ss to critically analyse the validity of information in secondary sources.

Take an online quiz

The Tangaroa Blue website has an online quiz by Quizlet that your students can try. You may want to do it as a whole class, or enable your students to try it on their own. Take some time to have a look at the quiz and find the time frame that would best suit you and your students. Some educators decide to do the quiz at the start of the lesson series and others prefer to do it at the end of the lesson series.



Volunteers on a beach clean-up day. Snapper Island - FNQ

