

# Teacher Resource

## Balloon Ban

Episode 5  
7<sup>th</sup> March 2017

### FOCUS QUESTIONS

1. Briefly explain the BTN *Balloon Ban* story.
2. How far can a helium balloon travel?
3. Explain the impact the balloons are having on marine animals.
4. The animals often mistake the plastic for \_\_\_\_\_.
5. What did researchers find in the seabirds at Lord Howe Island?
6. Why is the rubbish bad for seabirds?
7. The CSIRO found that balloons were the \_\_\_\_\_ most harmful pollutant for marine wildlife.
8. What is the Zoos Victoria campaign asking people to do?
9. What alternatives to balloons do they suggest?
10. Do you think helium balloons should be banned? Explain your answer.

### ACTIVITY

#### Class Discussion

Discuss the BTN *Balloon Ban* story as a class. What questions were raised in the discussion (what are the gaps in their knowledge)? The following KWLH organiser provides students with a framework to explore their knowledge on this topic and consider what they would like to know and learn.

<i><b>What do I <u>know</u>?</b></i>	<i><b>What do I <u>want</u> to know?</b></i>	<i><b>What have I <u>learnt</u>?</b></i>	<i><b><u>How</u> will I find out?</b></i>

Students will develop their own question/s for inquiry, collecting and recording information from a wide variety of sources (internet, books, newspaper and magazines). Possible questions to investigate include:

- How much plastic goes into the ocean?
- How long does plastic last in the ocean?
- What impact does plastic have on marine animals?
- What can be done about it?

### KEY LEARNING

Students will develop a deeper understanding of the impact plastic debris has on marine animals.

### AUSTRALIAN CURRICULUM

#### HASS – Year 4

Reflect on learning to propose actions in response to an issue or challenge and consider possible effects of proposed actions ([ACHASSI081](#))

#### Science – Year 4

Science knowledge helps people to understand the effect of their actions ([ACSHE062](#))

#### Science – Years 5 & 6

Scientific knowledge is used to inform personal and community decisions ([ACSHE083](#)) ([ACSHE100](#))

#### Science – Year 7

Interactions between organisms, including the effects of human activities can be represented by food chains and food webs ([ACSSU112](#))

Solutions to contemporary issues that are found using science and technology, may impact on other areas of society and may involve ethical considerations ([ACSHE120](#))

## ACTIVITY

### Six Hat Thinking

As a class, use Edward De Bono's *Six Hat Thinking* to explore the impact of plastic debris on marine animals. Make your own coloured hat cut-outs and place on the floor.

Students will take it in turns answering questions in relation to what they already know about the issue, what they have learned from the BtN *Balloon Ban* story and what they want to learn further about the topic.

[Download this worksheet](#) for students to respond to a range of questions about plastic pollution and marine life.



#### Six Hat Thinking

As a class, use Edward De Bono's *Six Hat Thinking* to explore climate change. Make your own coloured hat cut-outs and place on the floor. Take it in turns answering questions in relation to what you already know about the issue, what you have learned from the [BtN Balloon Ban](#) story and what you want to learn further about the topic. Respond to the following questions:



How did the [BtN Balloon Ban](#) story make you feel?



What have you learnt about the impact plastics have on marine life?



What are some of the positives that you learnt from the story?



What are some of the challenges that you learnt from the story?



What can we do to help reduce the effects of marine pollution?



What do you want to learn further about this topic?

## ACTIVITY

### Impact of marine debris

Students will investigate how seabirds and other marine animals are affected by plastic debris in the oceans.

- What harm can plastic do to animals in the ocean? (Directly and indirectly)
- Which marine animals are affected? Choose a species to research in more depth.
- What can you do to raise awareness of how plastics can harm marine life?



Short-tailed Shearwater

## ACTIVITY

### Seabird Safe Events

As a class, think about ways you can make your next school event seabird safe by switching balloons with wildlife-friendly alternatives. [Zoos Victoria](#) has some ideas on their website including:

- Bubble blowing
- Bunting
- Tree Planting
- Paper Balloons
- Flags or banners

Hold a meeting with school leadership or take the issue to SRC to discuss ways school events can have minimal impact on the environment.



## ACTIVITY

### Poster design

In small groups think about the effect that plastic pollution in our oceans has on people, animals and the environment. Record your responses in a mind map, with the sentence *“Plastic pollution in our oceans is...”* written in the middle. Use the following statements to help guide the brainstorming process:

- Difficult to clean up because it breaks down into really small pieces (micro plastics)
- Kills marine life – species are getting tangled in plastic and are eating the plastic
- Threatens marine ecosystems
- Costs a lot of money to clean up
- Affects the food we eat and our health
- Makes our beaches and oceans dirty which may affect tourism



Design a poster which illustrates one or more of the ways that plastic pollution in our oceans affects people, animals and/or the environment. Students can use [Glogster](#) if they want to create an interactive poster

## ACTIVITY

### Recycled Art

Students will explore ways to reuse plastic to create a piece of art or something useful.

Discuss with students the benefits of reusing plastic to create objects. Here are some suggestions:

- Reduces the amount of waste and therefore landfill
- Reduces the need for production using new or raw materials
- Saves money

Below are examples of ways plastic bottle tops can be used to create a mosaic artwork or soft drink bottles can be transformed into a vertical garden. For more great ideas for reusing plastic bottles, go to the [deMilked website](#).



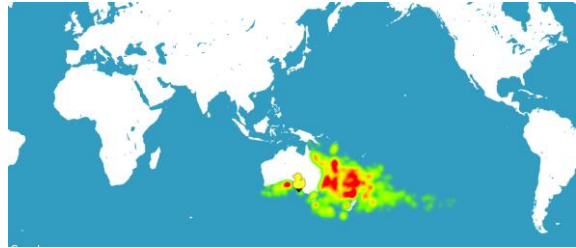
Source: [deMilked](#)



Source: [deMilked](#)

## ACTIVITY

The [Adrift Marine Plastics interactive](#) shows the spread of marine plastics over time. Choose a location on the world map and see how far plastic pollution spreads.



## ACTIVITY

Watch the BTN [Microplastic Oceans story](#) then answer the following questions:

1. What are microplastics? Give some examples.
2. What are microbeads and in which products might you find them?
3. About how many microbeads are there in a bottle of face scrub?
4. What percentage of plastic in the environment is microplastic?
5. Describe the impact they can have on marine animals.
6. What are some Australian supermarkets doing to help tackle the problem?



Watch the BTN [Ocean Rubbish story](#) then answer the following questions:

1. How many pieces of plastic end up in the world's oceans every day?
2. How does plastic get into the ocean?
3. What can happen when plastics stay in the water for a long time?
4. What is the Great Pacific Garbage Patch?
5. Explain Boyan Slat's idea to clean up the garbage patch.



## USEFUL WEBSITES

Zoos Victoria – When balloons fly, seabirds die  
<https://www.zoo.org.au/get-involved/act-for-wildlife/balloons>

ABC Science News – Plastic and how it affects our oceans  
<http://www.abc.net.au/news/2017-02-27/plastic-and-plastic-waste-explained/8301316>

BTN - Microplastic Oceans  
<http://www.abc.net.au/btn/story/s4425888.htm>

BTN – Ocean Rubbish

<http://www.abc.net.au/btn/story/s4301070.htm>

Adrift - Marine Plastics Interactive

<http://www.adrift.org.au/map?lat=-19&lng=-71.4&center=133.3&startmon=Jan>

CSIRO – Sources, distribution and fate of marine debris

<https://www.csiro.au/en/Research/OandA/Areas/Marine-resources-and-industries/Marine-debris>