

Waste and Waterways Lesson Plan

Hunting for Homes and Mapping Habitat



years
5 and 6

AUSTRALIAN CURRICULUM LINKS:

Year 5

- HASS: Work in groups to generate responses to issues and challenges ([ACHASSI102 – Scootle](#))
- HASS: The environmental and human influences on the location and characteristics of a place and the management of spaces within them ([ACHASSK113 – Scootle](#))

Year 6

- HASS: Work in groups to generate responses to issues and challenges ([ACHASSI130 – Scootle](#))
- HASS: The effect that consumer and financial decisions can have on the individual, the broader community and the environment ([ACHASSK150 – Scootle](#))

Objectives:

Students will be able to:

- Analyse the impact of plastics on marine bird life
- Make connections between global impact of plastics on ocean life and their own consumer choices
- Articulate strategies for reducing the impact of plastics on the marine environment

POST & PRIOR LEARNING:

Students will have basic knowledge of marine ecosystems, including marine bird life

TIME REQUIRED:

2 x 45 minutes plus additional time to discuss home reflections

Resources Required

- YouTube videos & audio-visual equipment – NOTE: the United Nations video ‘Plastic Ocean’, included in this lesson plan contains footage of biologists carrying out autopsies on dead seabirds at minutes 3:24 and 5:55. While the footage contains no animal suffering, you may wish to inform your class that there will be some graphic images of dead animals in the video and explain that often scientists have to carry out investigations on dead animals to better protect living creatures and to reduce death and suffering.
- You will need to bring in some samples of plastic waste such as a straw, a plastic spoon, a plastic bag, a takeaway container, a plastic bottle cap, a toothbrush, a balloon.

TEACHING AND LEARNING STRATEGIES:

1 Introduction (10 minutes)

- Set up mixed ability group tables – place one or two items of plastic waste on each group table
- Ask each group to share what they have found on their tables
- Ask each group to discuss what all the items in the class have in common
- Possible answers: all items are rubbish, all items are made of plastic etc.
- Share with students the perspective that all items are made of plastic and all of them have been found in the stomachs of animals living in the ocean

2 Body (25 minutes)

- Introduce today's lesson & share the learning objective:
 - To understand some of the impacts that human use of plastic has on marine ecosystems
- Bring up Greenpeace YouTube video on plastics entering waterways: 'Three Ways Plastic gets into the Sea':
 - <https://youtu.be/Our5CZz5qoU>
- Ask students to share the 3 main ways plastic ends up in the ocean. Discuss.
- Ensure to prepare the students for scenes of deceased sea birds. Share second video from United Nations, 'Plastic Ocean':
 - https://youtu.be/ju_2NuK5O-E
- Ask students to make notes to answer a range of questions while watching the video (you can use the included worksheet to support student's note taking):
 - What makes plastic wonderful?
 - What makes plastic horrible?
 - What are some of the problems with plastic?
 - How much human food is the equivalent of the amount of plastic consumed by sea birds?
 - What does President of the UN General Assembly, Peter Thomson propose as one important way to solve the problem of plastic in the ocean?
 - How much plastic ends up in the ocean every minute?
- Lead a class discussion on what students found out during the video and answer any outstanding questions they may have.
- Conclude the discussion by asking students:
 - How do you think all the plastic ends up in the ocean?
 - Students discuss in groups and share ideas.

3 Conclusion (10 minutes)

- Reflect on today's learning. What are some of the main problems with plastics today? What are some of the ways this affects animals living in the ocean?
- Link the learning back to student's own experiences. If plastics are so bad for the environment, why do you think we keep using them? Where do you use plastics in your own life? Can you think of some examples?

4 Further Reflection / Homework (optional)

- Ask students to monitor all the different types of plastics they throw out in one day. How many times did they use them? What were they used for?
- Ask students to bring in one or two (clean) samples of plastic waste they or their families have produced.

TEACHING AND LEARNING STRATEGIES LESSON 2:

1 Introduction (5 minutes)

- Sit students in the same groups from the previous lesson
- Reflect on the previous lesson's learning:
 - What were some of the main problems with the way humans currently use plastics?

2 Body (30 minutes)

- Introduce today's lesson & share the learning objective:
- To think of ways that we can minimise the impact of our use of plastics
- Ask some students to share some information about their item of plastic waste brought in from home:
 - What was this plastic used for?
 - Did you use it more than once?
- In each group, challenge children to discuss the item they have brought in:
 - How could we avoid this plastic from ending up in the ocean?
 - Are there any alternatives to using plastic?
- Students discuss ideas in their groups and share them with the class
- Scribe student's ideas on the whiteboard
- Introduce and explain the waste reduction concepts of REFUSE, REUSE, RECYCLE
- Bring up slide and explain that not all plastics can be recycled – only those with the right kind of plastic can be recycled. Use the slide to explain the plastic recycling symbols.
- Explain that for those plastics that cannot be recycled we need to use different strategies to avoid them ending up in the ocean such as **refusing** to use them (when they are not necessary such as plastic straws) or **reusing** them as much as possible (such as plastic lunch containers)
- Challenge students to pick an item of plastic waste and to come up with a range of strategies or avoiding these ending up in the ocean using the refuse, reuse, recycle framework (students will need to check if their plastic can be recycled by investigating the plastic recycling symbols)
- In pairs, students create posters that show the refuse, reuse, recycle

3 Conclusion (10 minutes)

- Students present their posters to the class and discuss the various strategies for minimising the impact of plastic use in their families
- Extend the discussion by asking students to think of commitments they can make in their everyday life to reduce the use of plastics

REFERENCES

1. United Nations: Plastic Ocean [web streaming video]. The United Nations: Youtube; 2017. Available from: https://youtu.be/ju_2NuK5O-E
2. Greenpeace UK: How does plastic end up in our ocean? [web streaming video]. Greenpeace UK: Youtube; 2017. Available from: <https://youtu.be/Our5CZz5qoU>
3. Buloke Shire Council: Recyclable Product and Materials. Buloke Shire Council [Internet]. Buloke VIC: Buloke Shire Council; 2015. Available from: <https://www.buloke.vic.gov.au/recycling-collection>