

# Action and Innovation: Litter Stopper

Teacher Guide



Coastcare Victoria School Kit



**Coastcare**  
Victoria



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## Author

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## Photo credit

Ocean Imaging.

## Acknowledgment

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.



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## Curriculum links

Year 5 and 6 curriculum	Curriculum code	Content description	Topic covered – link to Learning Intentions
<b>Science</b> – Science as a Human Endeavour – Use and influence of science	VC2S6H02	Scientific knowledge, skills and data can be used by individuals and communities to identify problems, consider responses and make decisions	<p>Designing plastic free alternatives to everyday items can be beneficial to the environment.</p> <p>Collecting data on waste problems can be a powerful way to influence policies and drive change.</p> <p>Joining local volunteer groups can be a powerful way to contribute to the liveability of local places and communities.</p>
<b>Science</b> – Science Understanding – Biological sciences	VC2S6U01	Habitats can be described by their physical conditions; changing the physical conditions of a habitat, including by human activity, may affect the growth and survival of organisms	Plastic continues to be a big threat to coastal and marine wildlife.
<b>Science</b> – Science Inquiry – Processing, modelling and analysing	VC2S6I04	Data and information can be organised and processed to show patterns, trends and relationships by constructing representation including tables, graphs and visual or physical models	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Science</b> – Science Inquiry – Communicating	VC2S6I06	Scientific ideas, findings, patterns, trends and relationships can be communicated for a specific purpose and audience, using various presentation formats, scientific vocabulary and digital tools as appropriate	<p>Litter Stopper is an efficient and useful app to use to document waste.</p> <p>Designing plastic free alternatives to everyday items can be beneficial to the environment.</p>

<b>Humanities</b> – Geography – Geographical Knowledge and Understanding – Management of places	VC2HG6K01	How places and environmental are changed and managed by people	Plastic continues to be a big threat to coastal and marine wildlife.
<b>Humanities</b> – Geography – Geographical Skills – Geographical inquiry	VC2HG6S02	Locate, collect and organise information and data from primary and secondary sources, including from fieldwork	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.
<b>Humanities</b> – Geography – Geographical Skills – Geographical inquiry	VC2HG6S04	Interpret and analyse information and data in a range of formats to identify and describe patterns and trends, or to infer relationships	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.
<b>Humanities</b> – Geography – Geographical Skills – Concluding and decision-making	VC2HG6S05	Develop evidence-based conclusions on the management of places using the concepts of place, interconnection, environment and sustainability	Designing plastic free alternatives to everyday items can be beneficial to the environment.
<b>Humanities</b> – Geography – Geographical Skills – Communicating	VC2HG6S07	Develop explanations that draw ideas and findings from sources and use relevant geographical knowledge and concepts	Designing plastic free alternatives to everyday items can be beneficial to the environment.
<b>Digital Technologies</b> – Data, Information and Privacy	VC2TDI6D02	Acquire and manipulate different types of data from a range of sources using software tools, including spreadsheets	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.

<b>Digital Technologies – Data, Information and Privacy</b>	VC2TDI6D05	Select and use appropriate digital tools effectively to share content online, plan tasks and collaborate on projects demonstrating agreed behaviours, supported by trusted adults	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.
<b>Mathematics – Statistics</b>	VC2M5ST01	Acquire, validate and represent data for nominal and ordinal categorical and discrete numerical variables to address a question of interest or purpose using software including spreadsheets; discuss and report on data distributions in terms of highest frequency (mode) and shape, in the context of data	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Mathematics – Statistics</b>	VC2M6ST03	Plan and conduct statistical investigations by posing and refining questions to collect categorical or numerical data by observation or survey, or identifying a problem and collecting relevant data; analyse and interpret the data and communicate findings within the context of the investigation	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Critical and Creative Thinking – Questioning and Possibilities</b>	VC2CC6Q02	The importance of setting aside preconceptions; strategies for setting preconceptions aside	Designing plastic free alternatives to everyday items can be beneficial to the environment.

Year 7 and 8 curriculum	Curriculum code	Content description	Topic covered – link to Learning Intentions
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<b>Science</b> – Science as a Human Endeavour – Use and influence of science	VC2S8H02	Multidisciplinary endeavours to advance scientific knowledge make use of people’s different perspectives and worldviews	<p>Designing plastic free alternatives to everyday items can be beneficial to the environment.</p> <p>Collecting data on waste problems can be a powerful way to influence policies and drive change.</p> <p>Joining local volunteer groups can be a powerful way to contribute to the liveability of local places and communities.</p>
<b>Science</b> – Science Understanding – Biological sciences	VC2S8U04	Matter and energy flow through ecosystems and can be represented using models, including food webs and food pyramids; populations will be affected by changing biotic and abiotic factors in an ecosystem including habitat loss, climate change, seasonal migration and introduction or removal of species	Plastic continues to be a big threat to coastal and marine wildlife.
<b>Science</b> – Science Inquiry – Processing, modelling and analysing	VC2S8I04	Data and information can be organised and processed by selecting and constructing representations including tables, graphs, keys, models and mathematical relationships	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Science</b> – Science Inquiry – Processing, modelling and analysing	VC2S8I05	Information and processed data can be analysed to show patterns, trends and relationships, and to identify anomalies	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Science</b> – Science Inquiry – Communicating	VC2S8I08	Communicating ideas, findings and arguments for specific purposes and audiences involves the selection and use of appropriate presentation formats, scientific vocabulary, models and other representations, and may include the use of digital tools	<p>Litter Stopper is an efficient and useful app to use to document waste.</p> <p>Designing plastic free alternatives to everyday items can be beneficial to the environment.</p>

<b>Humanities</b> – Geography – Geographical Knowledge and Understanding – Landforms and landscapes	VC2HG6K15	The human causes of landform change and ways of managing it, including the study of a local landform	Plastic continues to be a big threat to coastal and marine wildlife.
<b>Humanities</b> – Geography – Geographical Skills – Geographical inquiry	VC2HG8S02	Collect, organise and process information and data from primary and secondary sources, including from fieldwork, and using geospatial and digital tools as appropriate	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.
<b>Humanities</b> – Geography – Geographical Skills – Geographical inquiry	VC2HG8S04	Interpret and analyse information and data to identify similarities and differences and explain patterns, relationships and trends	Collecting data on waste problems can be a powerful way to influence policies and drive change.  Litter Stopper is an efficient and useful app to use to document waste.
<b>Humanities</b> – Geography – Geographical Skills – Concluding and decision-making	VC2HG8S05	Consider ethical values and draw evidence-based conclusions based on the evaluation of the information and data on a geographical phenomenon, issues or challenge using concepts of space, change, interconnection and environment	Designing plastic free alternatives to everyday items can be beneficial to the environment.
<b>Humanities</b> – Geography – Geographical Skills – Communicating	VC2HG8S07	Create and present explanations and responses, using geographical knowledge, concepts and methods, and referring sources	Designing plastic free alternatives to everyday items can be beneficial to the environment.
<b>Mathematics</b> - Statistics	VC2M7ST03	Plan and conduct statistical investigations for issues involving discrete and continuous numerical	Collecting data on waste problems can be a powerful way to influence policies and drive change.

		data, and data collected from primary and secondary sources; analyse and interpret distributions of data and report findings in terms of shape and summary statistics	
<b>Mathematics</b> - Statistics	VC2M8ST02	Analyse and report on the distribution of data from primary and secondary sources using random and non-random sampling techniques	Collecting data on waste problems can be a powerful way to influence policies and drive change.
<b>Critical and Creative Thinking</b> – Questioning and Possibilities	VC2CC8Q02	When and how judgement is suspended to support generating and evaluating alternatives ideas and possibilities	Designing plastic free alternatives to everyday items can be beneficial to the environment.

**Key themes:**

Plastic pollution, plastic free alternatives, using data to drive change, citizen science.

## Lessons overview

Activity	Time	Difficulty	Topic & Skills
1: Quiz	5 min video 15 min quiz	Simple	<p>Beach clean-up, litter data collection, types of beach litter, call to action, citizen science, partnerships between volunteers and government agencies, innovation in fishing practices, art and creativity in conservation, using data for environmental policy and change, and marine stewardship.</p> <ul style="list-style-type: none"> <li>Listening comprehension and understanding.</li> </ul>
2: Litter alter	60 min	Simple	<p>Marine and coastal pollution, human impacts on the environment, waste categorisation, environmental awareness, and call to action.</p> <ul style="list-style-type: none"> <li>Sorting and categorising data, interpreting data for communication, designing a persuasive poster, using digital tools, and raising awareness about environmental sustainability.</li> </ul>
3: Compare the catch	60 min	Simple	<p>Testing sustainable fishing methods, comparing plastics and non-plastic lobster pots, collecting and analysing data, using graphs to show results, and understanding consistency and outliers in data.</p> <ul style="list-style-type: none"> <li>Designing fair tests, recording and graphing data, interpreting results and trends, drawing simple conclusions, and critical thinking.</li> </ul>
4: Plastic free alternatives	60 min	<b>Complex:</b> Using external resources. Independent learning.	<p>Designing plastic-free alternatives to reduce litter, identifying common litter and source, sustainable problem-solving, and applying the 6 D's design process.</p> <ul style="list-style-type: none"> <li>Observing, collecting data, researching existing suitable solutions, creative thinking and innovation, designing solutions, presenting ideas, and reflection.</li> </ul>
Investigation 1: Pinpointing the problem	60 min+	<b>Complex:</b> Using external resources. Independent learning.	<p>Analysing environmental data, identifying sources and types of marine litter, understand the cause and effect in plastic pollution, and investigating potential solutions for litter problems.</p> <ul style="list-style-type: none"> <li>Reading and interpreting spreadsheets, using data to answer guided questions, linking evidence to environmental impacts, problem solving, and critical thinking.</li> </ul>

Investigation 2: Local action 60 min	<b>Moderate:</b> Multiple step activity. Using external resources.	Local environmental and conservation groups, call to action, citizen science and volunteering opportunities. <ul style="list-style-type: none"> <li>• Research skills, using online maps and databases, identifying ways to get involved in conservation, and connecting local actions to global environmental goals.</li> </ul>
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## Learning intentions

Students will understand:

- Plastic continues to be a big threat to coastal and marine wildlife.
- Collecting data on waste problems can be a powerful way to influence policies and drive change.
- Litter Stopper is an efficient and useful app to use to document waste.
- Designing plastic free alternatives to everyday items can be beneficial to the environment.
- Joining local volunteer groups can be a powerful way to contribute to the liveability of local places and communities.

## Success criteria

Students are able to:

- Use data to test the effectiveness of a plastic free solution.
- Design and evaluate the effectiveness of a simple scientific study.
- Use an Excel spreadsheet to calculate averages and compare results from a scientific study.
- Use evidence to investigate the source of marine plastics.
- Visually represent data to communicate a research finding.

## Background

Eco defender Colleen Hughson has been collecting and documenting litter in her area over the past 5 years. It all started when she started finding plastic-stemmed cotton buds washing up on her local Warrnambool shores. By using a data and evidence-based approach to action, Colleen and her team at Beach Patrol 3280-3284 successfully managed to change policy which has resulted in a statewide ban of plastic-stemmed cotton buds - directly as a result of their data.

In recent times, Colleen has shifted her focus to other forms of waste issues in her local area. After looking through her data, it was clear that fishing debris was one of the most frequently washed up materials on the local beach. A lot were hard remnants that were just broken up bits of plastic. Much of this had a distinct red colour. After using her detective skills, Colleen found out that this red plastic was coming from the local rock lobster pots.

So she thought, what could be done? She was introduced to local rock lobster fisher Gary. After sharing evidence in the form of data and imagery, Gary was convinced there was a problem and decided to help out

with a solution. A self-proclaimed tinkerer by nature, Gary looked at designing a new rock lobster pot that was plastic free. The pots are not only better for the environment, but Gary believes also have superior catching capabilities.

In this video students are introduced to Colleen, Gary and the Litter Stopper app that supports groups and individuals to collect data about litter and share it accurately and effortlessly with other interested parties to influence policy makers and ultimately protect the environment we all live in. By recording data, students will develop a better understanding of the litter situation, what needs to be done to control it and increase their awareness of the situation.

Beach Patrol is a network of volunteer groups using the power of community spirit to clean local beaches and streets. The groups have created an app to help people record information from your clean-up activities. By documenting the litter being collected, people are helping to map ocean litter along our coastlines. Ultimately the goal is to stop it at its source.

The Litter Stopper app supports groups and individuals to collect data about litter and share it accurately and effortlessly with other interested parties. This information is incredibly important as it can help to provide evidence to influence policy makers. Litter Stopper records up to 32 of the most commonly littered plastic items. Once the items have been entered, another copy is stored on a common database which can be found on LitterStopper.com. The information on the database is available for anyone to see or download. A summary page on LitterStopper.com also highlights the frequency for which each item is counted.

Four options are available to select from:

- **No sorting clean only** - For this option only count the number of bags of rubbish and how many kilograms were collected.
- **Standard clean** - For this option count how many bags and kilograms were collected and then sort the drink bottles and cans and coffee cups and lids and count those too. This type of data is aimed at supporting container deposit schemes and raising awareness of the high number of littered coffee cups.
- **Full audit clean** - In this option collect the bags and weigh how many kilograms were collected then sort it into the 32 different categories. This can take some time to perform.
- **Partial audit clean** - In this option select a subset of the full audit of 32 items. So, for example, someone may only want to search for bottle tops, straws and plastic bottles. This option allows only those items to be counted. The other non-selected items will be greyed out, not allowing them to be counted and recorded.

## Resources

- Action and Innovation: Litter Stopper video
- Video transcript
- Presentation slides
- Answers
- Quiz
- Litter alter worksheet
- Compare the catch monthly data (January to March) for Reefs 1-4 worksheets
- [Rock Lobster Experiment Visual Data](#) online PDF
- [Rock Lobster Experiment Online Data](#) calculator
- Rock Lobster pot experiment data sheet (blank)

- Plastic free alternatives worksheet
- Pinpointing the problem worksheet
- [Litter Stopper Database](#) (may take some time to load)
- Marine Debris Data spreadsheet
- Review questions
- Glossary

### Other useful links

- [Coastcare Website with Virtual Map](#)
- [LitterStopper Website](#)
- [LitterStopper Guide PDF](#)
- [LitterStopper Full Instructions](#)
- [Video: Beach Patrol - Bottle Cap Audit \(2021\)](#)
- [Notpla: surprising compostable packaging facts](#)

# Lesson plan

## Activity 1: Quiz

Use this 10-question quiz to assess comprehension and understanding of the video. This could be run as a Kahoot quiz, online form or worksheet.

1. Whose Traditional lands was this video filmed on?

- a) Wadawurrung
- b) Maribyrnong
- c) **Peek Whurrong and Gunditjmara**
- d) Wurundjeri

2. What is a problem with plastic on beaches?

- a) It may harm birds and marine life
- b) It keeps breaking down into smaller pieces
- c) It doesn't look nice and can accumulate toxic chemicals
- d) **All of the above**

3. What plastic issue first caught Colleen's attention on local beaches?

- a) Fishing debris
- b) **Plastic stemmed cotton buds**
- c) Red plastic from lobster pots
- d) Cigarette Butts

4. Which app were the students using to document the rubbish?

- a) Rubbish Racer
- b) **Litter Stopper**
- c) Trash Trender
- d) Waste Watcher

5. How many main item categories are on the frontpage of the App?

- a) 15
- b) **20**
- c) 25
- d) 30

6. What did Colleen say were the most common types of plastics found on local beaches?

- a) Cigarette Butts
- b) Fishing Waste
- c) Plastic Bottles
- d) **Hard Plastic Remnants**

7. What was the source of the red pieces of plastic from the video?

- a) Shopping Trolleys
- b) Shopping Baskets
- c) **Rock Lobster Pots**
- d) Fishing Nets

8. What did fisher Gary do with his rock lobster pots?

- a) **Designed new ones with less plastic**
- b) Designed new ones with more plastic
- c) Sold them to other fishermen
- d) Made them cheaper

9. Where does the data from the Litter Stopper app go?

- a) A private secret database
- b) **A public statewide database**
- c) Directly to policy makers
- d) Nowhere, it stays on the app.

10. What is the most powerful way to find out what are the most common litter items in your area?

- a) **Collect data**
- b) Reduce waste
- c) More recycling
- d) Protests

## Activity 2: Litter alert

In this activity, students explore real data from a beach clean-up where 108 kg of litter was collected at tea Tree Bay. Using the litter list on their worksheet, they sort items into categories, a process that builds data interpretation, classification and critical thinking skills. Students then create a poster or digital presentation to communicate their findings clearly, helping them to develop visual communications skills and an understanding of how organised information can influence an audience. An optional video demonstrates how grouping plastics strengthens communication and supports students' learning.

Use slides 5-7. Colleen and her team at Beach Patrol 3280 teamed up with the Victorian Fisheries Authority to clean up Tea Tree Bay. In one day, they removed 108kg of litter. Students can use the litter list in their worksheets to create a poster or presentation that alerts people the types of litter that was found. Students may like to do the poster as a digital image or even a PowerPoint presentation. Encourage them to form categories for the litter to help with the way the items are visually presented in the poster.

Watch the extra video [Beach Patrol – Bottle Cap Audit](#) to see how grouping plastics a strong communication technique can be. NOTE: There is a discussion of seabird deaths due to plastic in this video.

## Activity 3: Compare the catch

In this activity, students investigate whether plastic-free lobster pots are as effective as traditional plastic pots by analysing real experimental data. After brainstorming ways to test the two test pots, students use the worksheet and the data to calculate averages for each pot type. This process develops data interpretation, numeracy, scientific reasoning, and critical thinking skills.

Students then represent their findings by colouring in a bar graph, helping them build data visualisation and science communication skills. Through interpreting the graph, they draw conclusions based on the evidence. Optional extension activities allow students to further apply their analytical skills by comparing individual pots, different reefs, and seasonal patterns in the data.

To begin this activity, brainstorm with your class ways to test if the plastic free pots designed by Rob are as effective at catching rock lobster as the plastic ones [slide 8].

Then students can use the Compare the catch worksheets, Rock Lobster Experiment Visual Data to calculate the average catch of the plastic and plastic free pots. Students can fill in the answers on their worksheets. Have students graph up the results by colouring in the bars of the bar chart in their worksheets [use slides 9-11].

**Is it easy to tell from your graph which trap worked best? *Note the numbers are very close.***

*Essentially the data shows that for the 5 pots tested over 4 reefs over 3 months for both plastic and non-plastic pots - the average rock lobster caught was 1.98 for plastic and 2.08 for non-plastic.*

*Therefore, the conclusion could be made that the non-plastic pots were slightly better at catching the rock lobsters.*

**Students will need to calculate an overall average for plastic pot catches and non-plastic pot catches to tell which one was better.**

Extension 1 - Use the data to find out if any of the individual pots were better or worse at catching rock lobsters than others?

*Answer: Pot 4 plastic was a bit of an outlier with catching just an average of 0.75 rock lobster over the trials. Therefore, arguably the non-plastic ones could be considered more consistent. The best catching pot was Pot 5 non-plastic but only by a small amount.*

Extension 2 - Use the data to find out if any of the reefs seemed to have more rock lobsters than others?

*Answer: Reef 1 was the most productive reef with an average of 2.37 rock lobster per pot. Reef 2 and 3 were very similar with approximately 2.1 per pot and Reef 4 was the least productive with 1.53 rock lobster per pot.*

Extension 3 - Was any month more productive than others?

*Answer: January was the best month with an average of 2.15 rock lobster per pot. March was second best with an average of 2 and February the least successful month with 1.95.*

## Activity 4: Plastic free alternatives

**In this activity, students use the 6 Ds of Design Thinking to create a plastic-free alternative to a common litter item. Building on the crayfish pot case study, they explore what makes an effective sustainable product, examine real examples, and brainstorm ways everyday items could be redesigned. Students then develop a labelled concept drawing, pitch the idea, and reflect on the process. This task builds creative thinking, problem-solving, environmental understanding, design skills, communications and reflection. Resources such as Notpla’s compostable packaging examples can help spark ideas.**

Now that students have learned about the case study of a plastic free solution for crayfish pots, hopefully they feel inspired to come up with ideas to design plastic free alternatives to other common litter. Budget will be no barrier, because they are designing for the world’s biggest plastic companies – helping them to reduce their environmental impact [side 12].

You might use the LitterStopper app to collect data about common plastic litter from around your school.

Use the presentation slides 13-19 and run through the 6 Ds Design Thinking to help students write dot points for each:

1. Define - What is your challenge? Read your brief carefully and write a definition of the tasks and challenges.
2. Discover - What makes a good plastic free alternative? Which other good examples are out there?
3. Dream - What items around the house or school could be designed better?
4. Design - How will the new product work? What materials will you need? How will it be cost effective?
5. Deliver - Draw a plan for your design. Label the sections and describe the features and benefits. Pitch your product to a friend or your teacher.
6. Debrief - What have you learned from this task? How did your creation compare to others?

The [Notpla’s \(Not Plastic\) website](#) ‘Surprising Compostable Packaging Facts’ might help your student dream up plastic free alternative products or materials to make their design out of.

## Investigation 1: Pinpointing the problem

**In this investigation, students will analyse real marine debris data collected in the Warrnambool region. Using the worksheet, they explore patterns in the data by navigating multiple tabs in the**

**dataset and answering guiding questions. This activity supports students to interpret authentic environmental data, recognise trends, and identify key litter issues affecting local coastal areas.**

Students use the *Marine Debris Data* (see resource list) – a list of real data collected from the Warrnambool area from July 2017 to April 2021 to answer the questions from the *Pinpointing the problem worksheet* [slide 22].

NOTE: Students will need to click on the various tabs down the bottom of the excel sheet to access all the data.

## Investigation 2: Local action

**In this investigation, students explore local environmental groups and projects using a curated set of online resources. By researching organisations such as Coastcare, Landcare, and Conservation Volunteers Australia, students build awareness of real opportunities for community involvement. They then choose a project or group they are interested in and write a short report outlining the group's work and why they would like to participate.**

Students will use the following website links to research local groups and projects in their area [slide 23]:

- [Coastcare website with virtual map](#)
- [Landcare Victoria website with more groups](#)
- [Conservation Volunteers Australia project search](#)

Encourage students to find a project or group they would like to join. Then they can write a short report explaining what the group's activities are and why they would like to participate.

## Review questions

1. Describe how plastic may affect marine and coastal animals. (2 marks)

*Animals might confuse plastic for food, plastic may suffocate animals, stomachs may fill animals with plastic, and they starve, plastic may cause entanglement.*

2. A local clean up group were finding lots of plastic toothbrushes on their local beach. Describe what steps could be taken by the group to help drive change in their community. (2 marks)

*Collect data about how many they are finding, find out the common types and where they are coming from, raise awareness about the issue by presenting the data in an impactful way, promote plastic free alternatives such as wooden toothbrushes.*

3. Describe how the Litter Stopper app works. (2 marks)

*Groups clean up an area, categorise the find, use the app to tap on the icon that best represents each category, take a photo of the litter, add details about how many people were involved and how much distance was covered etc. Data goes into a big database.*

4. Describe what happens to a lot of large pieces of plastic over time if they aren't collected. (2 marks)

*The plastic breaks down into smaller pieces of plastic. This makes them harder to find and collect.*

5. Describe an event by a local volunteer group that you could contribute to help make the place more liveable or briefly describe a made-up event that may help make your local place more liveable. (2 marks)

*Answers may vary.*

*Example answer:*

*Event: #SeaToSource, a project powered by Conservation Volunteers Australia*

*Purpose: Conducting monitoring of litter load to find out common items of ocean litter.*

*Date and location: Event on 8th of June, 2pm at Werribee River.*

## Glossary

**Beach Patrol:** A network of volunteer groups using the power of community spirit to clean local beaches and streets.

**Brittle:** Hard but likely to break easily.

**Citizen science:** Scientific work or data collection undertaken by members of the general public.

**Cray pot:** Dome-shaped enclosed basket used for catching rock lobster.

**Database:** Organised collection of data stored.

**Debris:** Scattered pieces of rubbish or remains.

**DEECA:** Department of Energy, Environment, and Climate Action.

**Environment:** The surroundings or conditions in which a person, animal, or plant lives or operates.

**LitterWatch:** A citizen science-based app (similar to Litter Stopper) that aims to help fill data gaps in beach litter monitoring.

**Liveable:** Comfortable or suitable for living.

**Outlier:** A data point that differs significantly from other observations.

**Plastic:** An umbrella term for a wide range of synthetic materials that can be shaped and moulded into a variety of items.

**Pollution:** When the environment is contaminated, or dirtied, by waste, chemicals, and other harmful substances.

**Nurdle:** A very small pellet of plastic which serves as raw material in the manufacture of plastic products.

**Remnants:** Parts that are left over.

**Shorebirds:** Birds that live on or frequent the shoreline.

**Source:** A place, person, or thing from which something originates or can be obtained.

**Sustainability:** Meeting the needs of today without compromising future generations.

**Toxic:** Poisonous or having a harmful effect.