

Single-Use Plastics Student Workbook



Name: _____

Class: _____

What is litter?

Litter. This is probably a word you are very familiar with, but how would you define it? In the space below, record some words that you associate with litter.

Brainstorm: "Litter"

Topic 1: Litter

Definition:

Working with a partner, write a short and simple definition of litter.

Litter is _____

Prediction:

Where do you think the most litter would be found around your school? Name 2 places.

1: _____

2: _____

Why do you think litter would be found in these areas?

What kind of litter would be found in these areas? Make a list below.

Results:

After going outside to check and take photos, were your predictions correct, partly correct, or wrong? Explain your answer below.

Topic 1: Litter - continued

Research Do's and Don'ts

Don't limit yourself to one or two key words.

Do ask questions.

Don't just read the first few lines.

Do take notes.

Don't get all your information from one source.

Do try to find out if a website is trustworthy, or if it's known for making things up.

Don't copy anything directly from a website.

Do use your own words to explain what you have found out.

Research Notes:

Have you found information from more than one website? YES / NO

What were the websites you used?

What search-terms did you use?

The Impact of Litter:

Litter can affect the **Environment**, the **Economy**, and **Society**.

Circle one of those three and find at least three ways that litter can have an impact upon it. You can use the internet and/or the library. Explain those three impacts below:

1: _____

2: _____

3: _____

Topic 2: Single-Use Plastics (SUPs)

What are SUPs?

Single-use plastics are plastic products, or plastic packaging of products, that are used once or very briefly and then disposed of as waste.

In the space below, brainstorm some examples of SUPs that you have used or seen.

Brainstorm: “SUPs”

Collaboration:

Did **everyone** in your team have a chance to **contribute** to this list?

Which SUPs do you use?

Which SUPs do you (or your family) commonly use? Do you buy bottled water? Does your family use plastic shopping bags? Do they buy chips in small plastic packets? In the table, record SUPs that you might use in a week.

Single-use plastic item	What is it used for?	How many each week?

SUPs – Why are they a problem?

You may wonder why SUPs are such a problem. Here are some reasons:

- Most plastic never breaks down into simpler natural molecules. Instead, it breaks up into smaller pieces including microplastics.
- In landfill, plastic can take up to 1000 years to break down! A single plastic water bottle can take 450 years (www.kesab.asn.au/litterless/). Think about that: a bottle you drink from today could still exist in four centuries.
- Plastic in the ocean can harm or kill marine life. Animals become tangled in the plastic or ingest it making them vulnerable to predators and unable to breathe.
- Plastic can leak chemicals into the environment, ruining habitats and water supply.
- Approximately eight million tonnes of plastic end up in the ocean each year (www.coolaustralia.org). Eight million tonnes! Can you even imagine how much plastic that is?

Topic 2: Single-Use Plastics (SUP's) – continued

Comparisons

8 million tonnes of plastic is a lot, but can you actually imagine what that looks like? What are some things in our world that weigh approximately one tonne? Make a list, add some photos or draw pictures below:

SUPs – why are they a problem?

Answer the following questions to explore exactly how much 8 million tonnes is:

Show the number 8 million in numerals _____

How many thousands in 1 million? _____

How many thousands in 8 million? _____

How many kilograms in a tonne? _____

How many kilograms in 8 million tonnes? _____

If 8 million tonnes of plastic enter the ocean each year, how much is this in:

5 years? _____

10 years? _____

50 years? _____

How many single-use plastic items weigh a total of 8 million tonnes?

Select one SUP item (e.g., a fork, plastic bag or straw) and weigh it. How many of those would equal 8 million tonnes? There is space to show your working out.

SUP Item chosen	
How much the SUP weighs	
How many of the SUP item (approximately) equal 8 million tonnes?	

Topic 2: Single-Use Plastics (SUPs) – legislation

Notes

When talking with a classmate (see below) about the reading you have done, use the space below to take notes about any agreements or differences in your understanding.

Now it's legislated

What does it mean if something is legislated? Record your initial understanding below.

Can you think of anything else that is legislated?

Read the information about SUP legislation on the fact sheet (ask your teacher) and also view information at

WWW.REPLACETHEWASTE.SA.GOV.AU/LEGISLATION-EXPLAINED

Don't worry if it is difficult to understand at first, you will re-read it several times and work through some of the tricky words.

After your first reading, chat to a classmate about your understanding of the legislation. Make notes about agreements and differences in the space to the left.

Record any difficult words/phrases below:

Topic 2: Single-Use Plastics (SUPs) – legislation

Now it's legislated – important vocabulary

Below you will see five important words from those facts. Understanding these words will help you comprehend the information. Find and record a sentence with this word, and then look up a definition that helps you understand the term better in its context. There are spaces for you to add other words that you found.

Word	Sentence it appears in	Definition
Legislation		
Restricts		
Prohibited		
Distribution		
Oxo-degradable		

Now that you have expanded your vocabulary, re-read the information about SUP legislation and record three to five key points about SUP legislation below:

Now it's legislated – what I know:

Topic 2: Single-Use Plastics (SUPs) – alternatives

SUP alternatives:

Let's make a change!

Did you know that there are many alternatives for our everyday single-use plastic items?

Go to the 'replace the waste' website:

[HTTPS://WWW.REPLACETHEWASTE.SA.GOV.AU/](https://www.replacethewaste.sa.gov.au/) to find alternatives for as many SUPs as you can, and list them and any others you think of in the space to the left.

In the table below list the alternative items that you would prefer to use for each of the single use items below:

Single-use plastic item	Alternative item/s
Plastic straw	
Plastic take-away cup	
Plastic shopping bag	
Plastic cutlery	
Plastic food container	

Re-visit the SUP table you created earlier on page 3 (listing the SUPs you or your family uses regularly). What alternatives could you use?

Single-use plastic item	What I used it for	Alternative I can change to

Topic 2: Single-Use Plastics (SUPs) – quiz

SUP Quiz

You have learnt a lot about SUPs. Let’s see how much your classmates have learnt!

Using the information on the SUP fact sheet and the ‘Replace the Waste’ website (WWW.REPLACETHEWASTE.SA.GOV.AU) write a 5-question quiz to give to a classmate.

Write the answers **upside down** in the **green box** at the bottom of the page, cover them with a piece of paper, and give your quiz to a classmate. They can write their name in the space below and try to answer your questions in each box.

This quiz was answered by: _____

Q1: _____

Q2: _____

Q3: _____

Q4: _____

Q5: _____

My answers:

Topic 2: Single-Use Plastics (SUPs) – persuasion

Persuasive Text Tips:

A persuasive text is a form of non-fiction writing that aims to convince the reader of a certain point of view.

A great persuasive text convinces others to change their behaviour through:

- well-developed arguments with a logical flow
- supporting facts and/or statistics that strengthen the argument.
- use of **persuasive language** such as:

Emotional Language

“...the devastating earthquake wreaked havoc...”

Language that Evaluates

“...the inefficient use of scarce resources...”

Language that Judges

“...the hard-working ant and the lazy grasshopper...”

Language that Intensifies

“...this was extremely concerning...”

Single-use plastic persuasive text

Your final task for this topic is to create a persuasive text to let others know how important it is to avoid SUPs and start using alternative products.

Use the space below to plan your work, recording some persuasive argument ideas for your text.

Argument ideas:

Evidence to include:

Beginning:

Middle:

End:

Topic 3: Reduce, reuse, recycle, compost

Lunch boxes

Let's think about what we are putting in our lunch boxes.

Draw a picture or take a photograph of what's in your lunch box and add below.

What's in your lunchbox?

Did you bring your lunch from home today? What's in your lunch box? Write down what you have, and how it is packaged:

Lunch box audit - personal



Look at what you have in your lunch box. For each item you have, put a **tally mark** in the box that describes it or its packaging. For example, if you have a banana, the skin is its packaging and can be *composted*; if you have a chip packet, that goes to *landfill*; if you have brought your own cutlery, they are *reusable*; if you have a Juicebox the carton is *recyclable*, but a plastic straw would go to *landfill*.

Reusable	Recyclable	Compostable	To landfill

Lunch box audit - whole class

Now collect data from the lunchboxes of your whole class. Tally the results below:

Reusable	Recyclable	Compostable	To landfill
Total:	Total:	Total:	Total:

Topic 3: Reduce, Reuse, Recycle, Compost – nude food

Creating a Nude Food lunchbox

What is Nude Food?

Nude Food = food without excess packaging, or with packaging that is re-usable.

For example:

Instead of buying lots of small yoghurts in individual plastic pots, what about buying one large yoghurt and spooning some into a reusable plastic pot with a lid? The pot can be cleaned and used again and again, you'll save money on yoghurt, and you'll use less plastic.

In the space below, brainstorm some other ideas to make a Nude Food lunchbox and then compare your list to others in your team.

Sometimes we can't avoid packaging completely, but we can reduce the amount that needs to go to landfill. Work with a partner to create three Nude Food lunchboxes. If there is packaging or cutlery it must be reusable, compostable or recyclable. Write your partner's name below and describe the three lunches you invent together.

My partner is: _____

Lunchbox 1:

Lunchbox 2:

Lunchbox 3:

Topic 3: Reduce, Reuse, Recycle, Compost – separation

Waste or Resources?

Watch the video to see why it is important to know what should go to landfill and what can be recycled or composted:

WWW.ABC.NET.AU/BTN/CLASSROOM/RECYCLING/10532554

In the space below, write your thoughts about this information. How well do you think you know what goes in each bin? Was anything in the video new, or surprising?

Which Bin?

Let's see where items belong. There are some items listed below the table. Try to write them in the correct 'bin' column:

Recyclable	Compostable	Landfill

- Empty lemonade bottle Half of a pencil Zip-lock bag
- Chip packets Used sticky tape Plastic straw
- Plastic wrap (cling film) Leftover sandwich crust
- Paper straw Aluminium foil Juice box
- Banana peel Bamboo cutlery Uneaten apple
- Paper used on one side Fruit Roll-Up wrapper

Some of the items above could have gone elsewhere instead of the bins.

Perhaps something was worth money? Perhaps something could be re-used? Circle the items above that you think could go elsewhere and explain your thinking below:

Topic 3: Reduce, Reuse, Recycle, Compost – communication

Design Do's and Don'ts

Do make text easy to read.

Don't just use text.

Do make your images informative.

Don't overcrowd your poster.

Do keep text short and simple.

Don't use long sentences.

Collaboration:

How can you make sure **everyone** in your team has a chance to **contribute** to the poster design?

Is everyone being heard, or are some people talking over others?

Which bin to use

Work with your team to create posters that can go with each bin in your classroom. These posters will let others know which items can go in each bin. Your posters can even be shared with other classes. Your poster should have:

- A picture of the bin.
- A list and images of the items that can go into that bin.
- Clear, easy-to-read font or handwriting – make sure it is big enough to read from a distance.
- Colour coding that reflects the standard colours in your local council.

Check with your teacher to see what else might be required and then start gathering information for your poster below:

What colours are the bins in the local council area?

What kinds of items can go into each bin?

What kind of items cannot go into each bin?

Which are the most important to include on your poster? If you try to include everything will your poster be effective?

Apart from your posters, what could you do to help other people put things in the right bins and reduce waste?