



ACTIVITY BOOK

## WHAT CAN WE DO WITH ALL THIS PLASTIC?

NAME: \_\_\_\_\_

CLASS: \_\_\_\_\_

SCHOOL: \_\_\_\_\_

TEACHER: \_\_\_\_\_

# REPLACE THE WASTE

[REPLACETHEWASTE.SA.GOV.AU](http://REPLACETHEWASTE.SA.GOV.AU)



Government of  
South Australia



# REPLACE THE WASTE

Produced by Green Industries SA in partnership with Adelaide Festival

Photo credits - The Plastic Bag Store

Cover image: Robin Frohardt 2018 - courtesy of the artist

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# HELLO

This book is about the impact of single-use plastics on our environment.

There are facts and activities which aim to challenge your thinking and help you to discover something new.

Imagining a world without plastics is nearly impossible - but do we need all this plastic?

Plastic is an amazing material and plays an important role in our daily lives.

It's cheap to make and it has many uses. When used in packaging, plastic helps to keep food fresh, stay longer on shelves and ensure that food doesn't go to waste.

But there is one big problem ...

- more than half the plastic produced is designed to be used just once and then thrown away
- packaging represents 26% of the total volume of plastics used globally
- there are over 150 million tonnes of plastics in the ocean today
- 80% of marine litter is from land-based sources

... causing pollution, litter and harm to wildlife, including marine life.

***Waste is something that we do, not something that we have...***

**THINK ABOUT IT -**

how much plastic have you seen today that you know is only going to get used once and then thrown away?



# WHAT CAN WE DO WITH ALL OF THIS PLASTIC?



Robin Frohardt's *The Plastic Bag Store* artwork recreates a supermarket where thousands of plastic bags were collected to make everyday products.

In this store, open in Rundle Mall from February 23 to March 14 as part of the Adelaide Festival, the shelves are stocked with hand-made items, from cartons of ice cream and whole rotisserie chickens to deli items, mixed salads, fruit, vegies and cleaning supplies.



This supermarket explores our culture of spending money and convenience and what the lasting effects of single-use plastics are on our environment.



Through the 'foreverness' of plastic, Robin's work also asks us to think about not just the next two weeks, but also the next two decades, and the next two centuries.

What will future generations think about the huge amounts of plastic waste we have left behind?



***I thought I would make a grocery store where everything was made out of plastic bags and packaging, sort of to highlight the ridiculousness and the absurdity of how much packaging is being used and thrown away.***

Robin Frohardt

## WHAT DO YOU THINK?

Did you visit the The Plastic Bag Store? What did you think about when you saw all these items made from plastic? Write down your thoughts here:

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Do you think about what will be left behind for years to come when you see something made of plastic?

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## TURN PLASTIC INTO ART - GET MAKING!

Create your own artwork that tells a story about single-use plastics:

- What do you see?
- What can you find to make an installation?
- What could you do?
- Does your installation have a message for others?

# WHAT CAN WE DO WITH ALL OF THIS PLASTIC?

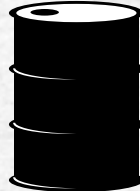
Plastics play an important role in our daily lives. When used in packaging, plastics help ensure food safety and reduce food waste. But too often, the way plastics are produced, used and discarded harms our environment. Plastic can take thousands of years to decompose. Plastic doesn't biodegrade it just breaks down to smaller and smaller and smaller pieces.

**311**  
million  
tonnes



Plastic production has risen from 15 million tonnes in 1964 to 311 million tonnes in 2014. This is almost the same weight as the entire human population and is expected to double over the next 20 years.

**6%**  
of global oil  
consumption



The majority of plastics are produced from fossil fuels, representing around 6% of global oil consumption. This is equivalent to the global aviation sector.



At least 8 million tonnes of plastics end up in the ocean each year. This is equivalent to dumping the contents of a garbage truck each minute and if current trends continue, by 2050 there will be more plastics in the ocean than fish.

## PLASTIC IS A MAJOR SOURCE OF LITTER<sup>1</sup>

- Snack bags and confectionary wrappers
- Food containers, including fast food packaging
- Drink stirrers
- Drink bottles, caps and lids
- Cotton bud sticks

<sup>1</sup> Facts on this page are from the *Turning the Tide Discussion Paper* at [https://www.replacethewaste.sa.gov.au/resources-page/single-use-plastics-discussion-paper-\(2019\)](https://www.replacethewaste.sa.gov.au/resources-page/single-use-plastics-discussion-paper-(2019))

## LEADING THE WAY

In 2020, South Australia became the first state in Australia to pass a law to ban the sale, supply and distribution of single-use plastic products such as straws, cutlery and beverage stirrers.

**From March 1, 2021**, single-use plastic straws, cutlery and stirrers will be banned. These single-use items can be replaced with reusable and compostable (and non plastic) alternatives. Exemptions apply for single-use plastic straws.

**From March 1, 2022**, expanded polystyrene cups, bowls plates and clamshell containers will also be prohibited from sale, supply or distribution in South Australia.

**Oxo-degradable plastic products** will be banned from manufacture and production in South Australia. These products have additives which enable the plastic to break down into tiny fragments ('microplastics') rather than completely decompose.



# BANNED

## SINGLE-USE PLASTIC DRINKING STRAWS

Any straw made from, or comprising, fossil fuel derived plastic and/ or compostable plastic which is designed to be used once, or limited number of times, before being thrown away.

**Exemptions (a legal term for exceptions) will apply for people who require single-use plastic straws due to a disability or health need. Exemptions will also apply to pre-packaged and attached products such as plastic straws attached to juice or milk boxes.**

### **Fossil fuel derived plastic include:**

e.g. Polypropylene (PP), Polyvinyl Chloride (PVC)

### **Compostable (bioplastic) plastic includes:**

e.g. Polylactic Acid (PLA).

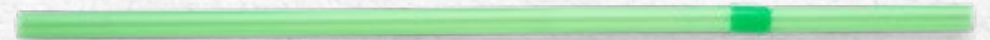
Bioplastics are not a suitable alternative for single-use straws, cutlery and stirrers. While compostable plastic products can break down in industrial composting facilities, they can cause litter, pollution and harm to wildlife, including marine life in the same way as conventional, fossil fuel plastic products when not composted.



Plastic straws with a scoop



Regular plastic straws



Flexible plastic straws



Regular and cocktail plastic straws



Bubble tea straws

Samples of single-use plastic drinking straws, which will be prohibited, are pictured above.

# SINGLE-USE PLASTIC STIRRERS

Any stirrer made from, or comprising, fossil fuel derived plastic or compostable plastic which is designed to be used once, or a limited number of times, before being thrown away.



Plastic and compostable plastic (PLA) beverage stirrers



Plastic ice cream spoons

# SINGLE-USE PLASTIC CUTLERY

Any utensil that can be used to eat food. This includes spoons, forks, knives, sporks, splayds and chopsticks which are designed to be used once, or a limited number of times, before being thrown away. Exemptions will also apply to cutlery that is attached as part of a pre-packaged product e.g. a plastic spoon attached to a yoghurt tub.



Compostable plastic [PLA] cutlery

Plastic cutlery

# ALTERNATIVES

TO SINGLE-USE PLASTICS

## AVOID WASTE

Consider whether you absolutely need to use a disposable straw, stirrer or cutlery!

## REUSABLE

More and more products are being developed from reusable materials such as glass, silicone, bamboo, rye, titanium, stainless steels, ceramics and robust reusable plastics.

Here is a sample of alternative reusable products.



A sample of alternative reusable products is pictured



Glass straws



Bamboo straws



Metal straws



Silicone straws



Metal straws with silicone attachments



Bent metal straws



Reusable wooden cutlery



Reusable chopsticks



Reusable plastic cutlery



Metal cutlery



## DISPOSABLE

If disposable alternatives must be used, compostable products that do not contain plastics are a good option.

Compostable products can be placed in the green bin to enable effective composting at a commercial facility.

Alternatives includes straws made from paper, bamboo or by-products like sugarcane.

Cutlery and stirrers can be made from wood or bamboo.



Wheat straws



Paper straws



Disposable wooden cutlery



Disposable wooden chopsticks



A sample of alternative disposable items is pictured

## QUIZ

- Q** How many straws do you think are used every day in Australia?
- A** Australians use around **10 million straws** a day, equal to **700,000** everyday in South Australia. Do you really need a straw? Or how about BYO straws?



# BE PART OF THE SOLUTION

## Say NO to single-use plastic products!

Disposing of your packaging thoughtfully doesn't mean the packaging isn't a problem. You might be surprised how much plastic you use even if you are good at recycling.

Can you go completely plastic free for a week or maybe even a day OR can you avoid single-use plastic packaging altogether?

## QUIZ

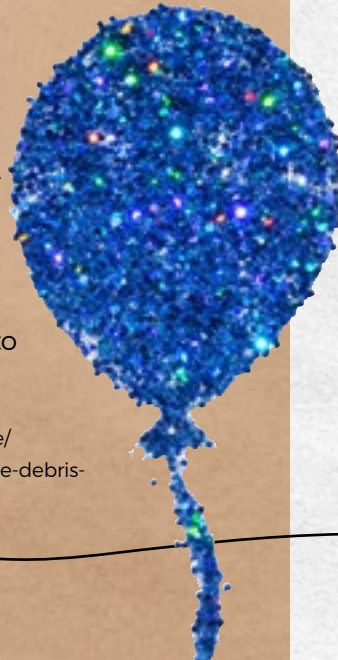
**Q** What is better than having to think about reusing or recycling something?

**A** Avoiding it! If you're asked if you need it and you answer is 'not really' then avoid it.

**Q** What is something that is harmful to marine life but lots of people think a party isn't a party without them?

**A** Balloons! The CSIRO<sup>2</sup> has identified balloons among the top three pollutants harming marine wildlife. Just another little thing - glitter is made from little bits of plastic and it's contributing to microplastics in the environment. Sorry - you have to say no to glitter.

2. <http://www.australasianscience.com.au/article/issue-mayjune-2019/balloons-number-1-marine-debris-risk-seabird-mortality.html>



# THE SINGLE-USE PLASTIC FREE CHALLENGE

## Step 1

Make a record of your waste for one week. Don't forget to bring home your waste from school. At the end of the week have a look at your record and think about where you could improve by reducing what you are creating.

## Step 2

Here is where you decide on your challenge. Be realistic. What can you do? Maybe you could decide to for one week.

## Step 3

Check [whichbin.sa.gov.au](http://whichbin.sa.gov.au) for information about what goes in which bin and then double check your family waste is going in the right bin. For example, did you know that soft plastic is NOT fantastic in your recycling bin? Instead these can be dropped off at many supermarkets for recycling.



## CREATE A JINGLE!

Do you have the words to write a jingle that changes everyone's behaviour about single-use plastic?

Think of words and actions to change the habit we have with single-use plastics. These words need to get people to do things differently and be words that are a call to action! Your jingle needs to be:

- easy to understand
- short and punchy
- a call to action! (what do others need to do?).

Now that you have written the words see if you can come up with a tune to go with the words. Make it simple but something catchy that will stick in people's minds.



# SPREAD THE MESSAGE

How will you spread the message about avoiding waste and finding alternatives to single-use plastic products?

Why don't you make a bookmark with a message about single-use plastics so that you can use it yourself, give it to a friend, or leave it in a book in your library.

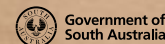
MAKE YOUR OWN BOOKMARK 



WASTE NOT,  
WANT NOT

REPLACE  
THE WASTE

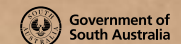
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# DO YOU WANT TO KNOW MORE?

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