





Full of facts and games for primary school students



How to recycle right at home

What can we do to recycle more?



Tips on reducing your waste

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QUICK QUIZ

20. Recycling activities

Using a pencil, draw a line to match some of the words used in this book to their meaning							
Landfill	Items that are made into new products						
Rubbish	Items of rubbish left in an open or public place						
Recyclable materials	Gets buried in landfill						
Kerbside collection	Bins at the front of your house						
Resource recovery	Saves useful resources from going to landfill						
Contamination	Can go in your food & garden organics bin or compost bin						
Food scraps	Items that do not belong in a bin						
Litter	Where rubbish is buried						

LET'S GET RECYCLING!

Recycling uses what we already have to make new Products, over and over again, using less energy and saving natural resources.

Recycling is a great way for us to do something good for the environment

We come in contact with recyclables each and every day so it's important to know how to get recycling right. We can recycle at school, home and at work and if we can teach others how to get it right, we can have a really positive impact on the environment.

RECYCLING AT HOME

Keep a **recycling checklist** in the house which tells you which items belong in the recycle bin. Put the checklist somewhere your family can see, like your fridge or on a wall.



RECYCLING AT SCHOOL

Collect items you can recycle. Check you can recycle them in your classroom bin or ask your teacher for your school's recycling point, otherwise take them home for recycling.





Always put used paper in your classroom paper bins so they can be **recycled**.



Remember to collect your recyclables in a bin **without using** a plastic bag.



In this book we use these **icons** and **colours** to represent each recycling type. Using a pencil, draw a line to match them to their recycling name.









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Choosing items at the supermarket that are packaged using recyclable materials means you're an expert recycler!

Cardboard

Steel

Plastics

Aluminium Glass

WHY IS RECYCLING MPORTANT?

DID YOU KNOW?

The choices we make today will have a big impact on the world we live in so it's up to us to recycle right and reduce the amount of waste we create. About **20 million tonnes** of rubbish is sent to Australian landfills each year?*

Recycling is a great way to protect our planet! It helps make new things without using up natural resources like trees, water, and minerals.

When we recycle more, we reduce the amount of waste that ends up in landfill. Rubbish in landfills rots and makes harmful gases like methane, as well as a liquid called leachate, which can pollute the environment.

RECYCLING REDUCES THE NEED FOR LANDFILLS

By sending less waste to landfill, we can reduce the amount of methane and leachate produced.



What you put in your rubbish bin will be sent to landfill and be buried underground, never to be used again!

RECYCLING PROTECTS OUR ENVIRONMENT

The more we recycle, the less natural resources we need to make new products. Check out the natural resources needed to make new products:



Paper and cardboard is made from trees

Apart from trees, all these **raw materials** come from **'non-renewable'** resources - a resource that cannot be replaced after it has been used.



Plastics are made from crude oil



Aluminium is made from bauxite



Steel is made from iron ore



Glass is made from sand, limestone and soda ash

RECYCLING GOOD Recycling right saves useful resouces from going to landfill.

At home you are provided with two recycling bins. One with a blue lid that is for paper only, and one with a yellow lid for all other accepted recyclables.

The items collected from your recycling bins will be recycled - it's called 'Resource Recovery'.



Write the name of each type of recyclable that belongs in your yellow lid recycle bin



Write the name of each type of recyclable that belongs in your blue lid recycle bin



What goes in your blue lid recycle bin?

PAPER AND CARDBOARD

Paper and cardboard are such a big part of our households. You can recycle cardboard and paper found in the kitchen, bathroom and laundry.

All these paper and cardboard products **belong in** your blue lid recycle bin



Newspapers, junk mail & magazines

Tissue boxes



Food boxes







Pizza boxes (with no pizza left inside!)



Egg cartons

Envelopes (even with windows) If one household recycles **1kg of paper and cardboard per week**, how many kilograms would they recycle **every**

year?

QUIZ

DID YOU KNOW?



ARAGARA. ARAAAAAAAAAAAA

You don't need to remove sticky tape from boxes when you put out for recycling as it comes off when the cardboard is washed. Just make sure the boxes are flattened

Wire bound books are also recyclable

DO YOU REUSE PAPER IN YOUR CLASSROOM?

To save resources at school, why not reuse single-sided paper when writing or drawing?

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EVEN PAPER TAKEAWAY BAGS ARE RECYCLABLE!



These paper and cardboard products do not belong in your recycle bins



Tissues & napkins



Waxed or food soiled cardboard

Paper towel



Receipts



Milk

Juice & milk cartons

What goes in your yellow recycle bin?

LASTICS Hard plastic bottles and containers

Plastics are such a big part of our households. You can recycle plastic bottles and containers found in the kitchen, bathroom and laundry.

All these plastic products **belong in** your yellow lid recycle bin





What goes in your yellow recycle bin?

Bottles and Jars

HANDY HINT

Bottles and jars don't need to be completely spotless. Just make sure to remove as much food as you can and rinse them out before placing in your recycle bin.



Glass containers can be re-used many times and recycled indefinitely. The energy saved by recycling a single bottle could power a washing machine for 10 minutes!*

All these glass products **belong in** your yellow lid recycle bin







Drinking glass

Pyrex



Ceramic cups & bowls

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Mirror or window glass



What goes in your yellow recycle bin?



Drink cans, spray cans, trays and foil





DID YOU KNOW?

THE STEE ON INTO A CONTRACT

Used foil can be recycled just scrunch it into the size of a tennis ball



What goes in your yellow recycle bin?

Food and spray cans

DID YOU KNOW?

You can leave the labels on your steel cans!





Steel is a very valuable resource. Making steel cans from recycled material uses 75% less energy than producing them from raw materials.*

All these steel products **belong in** your yellow lid recycle bin



Food cans





Aerosol spray cans





WHAT DOES NOT BELONG IN YOUR RECYCLE BIN?

Lots of things can be recycled, just not in your household recycling bin.



NO RECYCLABLES



NO ELECTRICAL ITEMS



NO SOFT, SCRUNCHY PLASTIC BAGS AND FOOD WRAPPERS



NO GARDEN CLIPPINGS





NO FOOD SCRAPS



NO CLOTHING, SHOES OR FABRICS



NO POLYSTYRENE



NO TOYS



whether something should go in the recycling bin, check with your local council.







NO TAKEAWAY CUPS OR CARTONS

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BATTERIES START FIRES

Batteries and electronic items with batteries should never go into any household waste or recycling bin. When you put batteries in the bin, they can cause fires that pollute the environment and harm workers.



What can happen?

When the collection trucks empty your bins, everything inside the truck is mechanically squashed together to make space for the next collection.

When squashed, the elements that are inside the batteries change in temperature and get hot - so hot that they can start fires.

These fires pose a significant risk to workers, as well as damaging or destroying trucks and infrastructure.

What can you do?



a plastic tub or cardboard box and store away from babies - batteries are very harmful if swallowed.

Collect old household bateries in

Li-ion

Batteries start around 30 fires per day across Australia's recycling and waste trucks and facilities*



To safely dispose of batteries or items containing batteries, you will need to take them to a disposal point. Check with your local council or visit recyclemate.com.au to find one near you.

* Australian Council of Recycling (ACOR) and the Waste Contractors and Recyclers Association of NSW (WCRA) https://mailchi. mp/1ff8adf95488/acor-wcra-batteries

WHAT HAPPENS TO YOUR RECYCLING

STEP 1 COLLECT AND SORT



KERBSIDE PICK UP

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At your home, a **recycle truck** picks up the recycle bin from outside your house and empties it into the truck.



MATERIAL COLLECTION Material is delivered to a Visy Materials Recovery Facility where a front end loader pushes the material onto the conveyor belt.



AIR CLASSIFIER This machine projects a **continuous blast of air** that blows low density, light weight plastics, aluminium and paper up while the bottles fall downwards.



MANUAL SORTING

The material travels along a **conveyor belt**, which passes by a number of **manual sorters** who remove any obvious contamination.



EDDY CURRENT A process called Eddy Current, uses a magnet to eject aluminium such as soft drink cans, by repelling it off the conveyor belt down a chute.

STEP 2 RECYCLING PROCESS

THE MAGNET

A magnet attracts the steel items

such as food cans, and separates

them from the rest of the material.

Once the recyclables are separated, they are sent for recycling. Recyclables can be used to manufacture new packaging and other products.



PAPER REELS



STEP 3 MANUFACTURING PROCESS

New products can be manufactured using recyclables.



New paper and cardboard

New plastic bottles and containers

AFTER YOU PUT THE RECYCLE BIN OUT?*



THE TURNING TUNNEL

It enters a **trommel**, which is like the inside of a constantly turning washing machine with large holes so products such as plastics, glass and metals **drop down** to a lower conveyor belt, leaving paper and cardboard to travel through the trommel.



BOUNCING TRAMPOLINE

The paper passes over an **inclined conveyor belt** that vibrates. The heavy items bounce and fall back down the bouncing trampoline and the paper, which doesn't bounce makes it over the top.



THE PERFORATOR

The plastic containers continue their journey until they reach the perforator - which **punctures and flattens** plastic containers by using a series of spikes and spindles.



OPTI-SORT After being flattened, the plastics travel through **infrared light** to detect the type

of plastic and **a jet of air transports** the plastics into separate streams.



BALES Each stream is compressed and baled into a large cube which is then distributed to various sites to be recycled into new products!



WHAT IS LITTER?

Litter is small items of rubbish which are left in an open or public place. Illegal dumping refers to larger items of waste.

Not everyone intends to litter, for example the waste that is thrown into a public bin might miss and fall on the ground. Other actions are more deliberate, but there are small things that we can all do to reduce littering and dispose of waste correctly, avoiding the cost and damage that litter and illegal dumping cause.

FIVE (NOT SO FUN) FACTS ABOUT LITTER

- People are more likely to litter in areas that are already littered
- 95% of litter on our beaches comes from suburban streets through the stormwater system
- 3. Litter can cause flooding by blocking the stormwater system
 - Litter harms marine life by polluting their habitat, being mistaken for food, and trapping or injuring them
 - Litter can be a fire hazard (e.g. lit cigarettes thrown from vehicles) and a health hazard (e.g. broken glass, needles and syringes)

WHERE DOES LITTER GO?

Litter is washed down storm drains by the rain





Storm drains empty into nearby creeks and rivers

Rivers flow into bays and the ocean





Australians use more than six billion plastic bags per year. Tied together they would stretch around the world 42 times.

HOW LONG UNTIL IT'S GONE?

Wow! Look how long it takes these items to break down in the ocean!



LOOK AFTER YOUR ENVIRONMENT

Any litter you or someone else throws on the ground can end up in our waterways. By keeping the land clean you help keep the ocean clean too.



Put your rubbish in the bin. If the bin is already overflowing, take your rubbish with you.



Safely pick up some rubbish when you go for a walk on the beach, in the park, in your neighbourhood or along waterways.



Reduce, Reuse and Recycle as much as you can!



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LET'S CLEAN UP THIS MESS!

Over 7 million tonnes of plastic enter the ocean every year - that's 8 million pieces per day. This is three times as much rubbish as the annual weight of fish caught.

In Australian waters, you can find anything from a few thousand to more than 40,000 pieces of plastic per square kilometre. Objects of any size can end up in the ocean if not disposed of correctly. Toothbrushes, fridges, shoes, bottles, packaging, furniture, fishing gear, toys and much more have been found.

About three quarters of these objects are plastic, often broken up into small fragments, and some almost invisible. These are called microplastics. Marine animals can eat microplastics, and it can make them very sick.



TOGETHER WE CAN MAKE A DIFFERENCE!

Use a reuseable drink bottle instead of plastic bottles Compost food scraps

Buy recycled and reusable stationery

Bring reusable shopping and produce bags to the supermarket



Buy and store food in glass jars

THE LESS RUBBISH WE PRODUCE THE LESS LITTER IN THE OCEAN

To reduce rubbish avoid buying or using single-use items such as plastic bottles or bags, disposable plates and cutlery or products wrapped in plastic.

Reuse plastic bags or bottles until they wear out and repair broken items instead of buying new ones. Simple alternatives help reduce our plastic consumption. Say no to balloons, blow bubbles instead!

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Bring a reusable lunch box

Use reusable plates and cutlery for picnics

Compost dog waste or put it in the rubbish bin

Get involved

Participate in **Clean Up Australia Day,** regular litter pick up groups such as beach litter patrols, or organise your own clean up day at the school or local area.

Get social

Help educate your friends and family on what happens to litter and how to prevent it, for example through talking to people and social media.

RECYCLING ACTIVITIES

It's time to test what you have learnt!

BIN IT RIGHT! Which bin do these items belong in?



MEMORY TEST

Put a cross through the items below that DO NOT belong in your recycle bins



















QUESTION TIME

1. Do plastic bottles and containers belong in your yellow lid recycle bin?

 \bigcirc Yes \bigcirc No

2. Recyclables placed in plastic bags, when placed in your recycle bins, could end up in landfill?

 \bigcirc True \bigcirc False

3. Which of the following items should we **KEEP OUT** of our recycle bins?

 \bigcirc Plastic bags

 \bigcirc Polystyrene cups and trays

- Garden clippings
- \bigcirc All of the above

4. Lids and labels can be left on plastic bottles when placed into the yellow lid recycle bin?

 \bigcirc True \bigcirc False

5. Aerosol cans must be empty before placing in your yellow lid recycle bin?

 \bigcirc True \bigcirc False

6. Which of the following items belong in your yellow lid recycle bin?

○ Plastic bottles

○ Pizza boxes

○ Plastic bags

- Aerosol cans
- O Paper napkins



WORD FIND

Do you have a keen eye for finding words?

\sim														
D	Н	Ε	V	J	Р	I	G	W	А	S	Т	Е	К	R
S	D	Ν	С	I	L	Т	J	Μ	Ε	J	D	Н	С	Ε
U	В	V	L	Н	Α	F	S	R	Ε	U	S	Е	Ν	D
S	К	I	U	I	S	Т	R	Ε	Ε	S	Y	L	В	U
Т	Ε	R	Ν	В	Т	G	К	С	Х	Ν	R	С	Ρ	С
А	А	0	Р	Т	I	U	Ε	Y	Q	Ε	Е	А	А	Ε
I	L	Ν	F	G	С	S	F	С	Ε	W	Q	R	Ν	D
Ν	U	Μ	0	R	Α	С	F	L	Ζ	S	D	Т	G	Μ
А	Μ	Ε	G	Ν	Т	Α	Ρ	Ε	W	Р	F	0	L	Y
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L	Ν	Т	0	L	R	S	W	Ρ	А	Р	Е	R	S	Т
Ε	I	Y	Н	Т	U	Μ	А	Q	W	Ε	V	I	S	Y
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С	А	R	D	В	0	Α	R	D	С	G	R	Ε	Е	Ν
ENVIRONMENT SUSTAINABLE WATER TREES VISY ENERGY PAPER					BIN PLASTIC CANS CARTON REDUCE CARDBOARD BOTTLE				REUSE RECYCLE ALUMINIUM GREEN WASTE NEWSPAPER GLASS					

DO YOU REMEMBER..?

What are these five recyclable materials made from?

- 2. Plastics are made from ____ oil

_____ is made from **trees**

- **3.** _ _ _ _ _ _ _ _ _ _ is made from **bauxite**
- 4. Steel is made from ____ ore
 - _ _ _ _ _ _ is made from **sand, limestone and soda ash**

ANSWERS – Bin It Right: Steel can to recycle bin/chip package to rubbish bin. Memory Test: Bagged recyclables, baiteries, tood wrappers, truit, light globes, clothing, grass, plastic food wrap, ceramic cups, takeaway cups, drinking glass & paper napkins do not belong in your recycle bin. Question Time: 1-Yes, 2-True, 3-All of the above, 4-True, 5-Flastic bags & paper napkins belong in your rubbish bin. Do You Remember..?: 1-Paper, 2-Crude, 3-Aluminium, 4- Iron, 5-Glass.

1.

LET'S ALL RECYCLE RIGHT!

Let's all recycle right by colouring in the **items that do not belong** in your recycle bins in **red**. You can then colour in the rest of the picture in whatever colours you like.

