Scenario 1: Food cans, glass bottles and cardboard, inside a neatly tied plastic bin bag.

- a) This is perfect!
- b) Not ok, because there are different types of materials inside the bin bag.
- c) Not ok, because the plastic bag cannot be recycled at all.
- d) Not ok, because the plastic bag cannot be recycled in the co-mingled bin.

Scenario 2: An unwashed steel dog food can.

- a) This is perfect!
- b) Not ok, because the can is unwashed and will contaminate the recycling.
- c) Not ok, because the steel will be mixed with other metal and cannot be separated.
- d) Not ok, because the label will contaminate the metal recycling.

Scenario 3: An old, 100% cotton t-shirt.

- a) Not ok, because the shirt is an entanglement hazard for the recycling machinery.
- b) Not ok, because cotton isn't compostable.
- c) This is perfect!
- d) Not ok, because old T-shirts are high fashion and should not be thrown away.

Scenario 4: A clean but broken glass pasta sauce bottle.

- a) Not ok, because the broken glass now has a different melting point to unbroken glass.
- b) Not ok, because the broken glass is an injury hazard during manual sorting.
- c) Not ok, because the broken glass damages the machinery.
- d) This is perfect!



## Scenario 5: An empty spray paint can.

- a) Not ok, because the can is made of silver and cannot be recycled.
- b) Not ok, because there is plastic on the inside of the can that cannot be recycled.
- c) This is perfect!
- d) Not ok, because the left over paint fumes are a chemical hazard.

#### Scenario 6: A greasy, cheesy pizza box.

- a) This is perfect!
- b) Not ok, because the grease changes the density of the cardboard making it float.
- c) Not ok, because this should be composted.
- d) Not ok, because carboard cannot be recycled with paper.

#### Scenario 7: A broken dinner plate.

- a) Not ok, because ceramic cannot be recycled and will contaminate the waste stream.
- b) Not ok, because ceramic is clay and compostable.
- c) This is perfect!
- d) Not ok, because ceramic has the same melting point as glass.

Scenario 8: An empty plastic drink bottle with the lid screwed on.

- a) Not ok, because there are different types of plastic with different melting points.
- b) Not ok, because the lid is magnetic and it will contaminate the metal recycling.
- c) Not ok, because the bottle will explode and damage the machinery.
- d) This is perfect! The plastic will be shredded and separated later.



## Scenario 9: An unused can of fly spray.

- a) Not ok, because the chemicals will damage the machinery.
- b) This is perfect!
- c) Not ok, because the spray top of the can is plastic and contaminates the metal recycling.
- d) Not ok, because the can is pressurised and will explode in the machinery.

## Scenario 10: A broken remote control car.

- a) Not ok, because e-waste has many different components, and some of them are harmful.
- b) Not ok, because toys get sad when you throw them away.
- c) This is perfect, so long as you take the battery out.
- d) This is perfect!

#### Scenario 11: A burnt out light bulb.

- a) Not ok, because the recycling process uses light to identify material types.
- b) Not ok, because light bulbs need to be returned to a specific facility to be recycled.
- c) This is perfect!
- d) Not ok, because these just need a new filament and can be used again.

**Scenario 12:** The paper wrapper from fish and chips.

- a) Not ok, because the grease makes the paper shiny and it gets mixed in with the plastic.
- b) Not ok, because the grease makes the paper stick to the machinery.
- c) Not ok, because this should be composted.
- d) This is perfect!



# Scenario 13: An empty 3L milk bottle.

- a) Not ok, because you can return it for a 10 cent deposit.
- b) This is perfect!
- c) Not ok, because the green glass cannot be recycled.
- d) Not ok, because the bottle is too big to fit in the recycling system.

# Scenario 14: A non-stick frying pan

- a) This is perfect, it is mostly steel and very easy to recycle.
- b) Not ok, because there are many different types of materials present in a frying pan.
- c) This is perfect, as long as it doesn't have any plastic parts.
- d) Not ok, because the frying pan is too heavy and will damage the machinery.

#### Scenario 15: The remains of a roast chicken.

- a) Not ok, because this contaminates the recyclable material.
- b) Not ok, because this should be composted in your home compost bin.
- c) This is perfect!
- d) This is perfect, and the organic material will be turned into bioplastic.

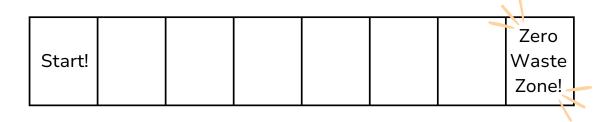
Scenario 16: A blow up PVC swimming pool that has popped.

- a) This is perfect, PVC is easy to recycle.
- b) Not ok, because PVC releases toxic chemicals and is difficult to recycle.
- c) Not ok, because the plastic is an entanglement issue for the machinery.
- d) Both B and C.



# **Zero Waste Zone**

Can you make it to the zero waste zone? This recycling game helps students to test their understanding of the recycling process, including the physical and chemical properties of the recyclable materials.



#### How to Play:

Draw the above game board where students can see it. Divide your class into teams of 3 or 4 and assign a runner for each team. Choose a Zero Waste Master and provide them with the answers and scenario cards. This could be you as the teacher! Set the marker for each team at the start.

Explain to students that each scenario card has a type of waste that is being put in the co-mingled recycling bin. They will need to decide if that's 'Not ok', or if 'lt's perfect!'

The team runners will need to come to the front, get a scenario card, and take it back to their team. Once the team has decided on the answer, the runner returns to the Zero Waste Master. If the answer is correct, they can move their marker forward one square. If it is incorrect they move their marker back one square (you can't go further back than the start!). The runner then gets a new scenario card and returns to their team. First team to make it to the Zero Waste Zone wins!

Note: The answers below are set to comply with Visy recycling. If you would like to align the answers to your area check these items types at recyclemate.com.au. The cards have been written in a way that your options should still be available on the card, but the letter that is correct will change.



# **Answers**

Scenario 1: Food cans, glass bottles and cardboard inside a neatly tied plastic bin bag.	d) Not ok, because the plastic bag cannot be recycled in the co-mingled bin.
Scenario 2: An unwashed steel dog food can.	a) This is perfect!
Scenario 3: An old, 100% cotton t-shirt.	a) Not ok, because the shirt is an entanglement hazard for the recycling machinery.
Scenario 4: A clean but broken glass pasta sauce bottle.	b) Not ok, because the broken glass is an injury hazard during manual sorting.
Scenario 5: An empty spray paint can.	c) This is perfect!
Scenario 6: A greasy, cheesy pizza box.	a) This is perfect!
Scenario 7: A broken dinner plate.	a) Not ok, because ceramic cannot be recycled and will contaminate the waste stream.
Scenario 8: An empty plastic drink bottle with the lid screwed on.	d) This is perfect! The plastic will be shredded and separated later.
Scenario 9: An unused can of fly spray.	d) Not ok, because the can is pressurised and will explode in the machinery.
Scenario 10: A broken remote control car.	a) Not ok, because e-waste has many different components, and some of them are harmful.
Scenario 11: A burnt out light bulb.	b) Not ok, because light bulbs need to be returned to a specific facility to be recycled.
Scenario 12: The paper wrapper from fish and chips.	d) This is perfect!
Scenario 13: An empty 3L milk bottle.	b) This is perfect!
Scenario 14: A non-stick frying pan	b) Not ok, because there are many different types of materials present in a frying pan.
Scenario 15: The remains of a roast chicken.	a) Not ok, because this contaminates the recyclable material.
Scenario 16: A blow up PVC swimming pool that has popped.	d) Both B and C.

