



# SCIENCE AT O'BRIEN GROUP ARENA

## Grades 5 & 6

O'Brien Group Arena has not used any water from Melbourne's main water supply since we opened in 2010! How, you ask? We recycle our water!



Clouds form and it rains



The roof of O'Brien Group Arena acts as a big catchment and funnels the rain into water tanks



The stored water is laid down and frozen on the rinks



As the Ice Cat lays down a layer of fresh water to freeze and smooth the ice, it scrapes the top layer of ice from the rink and transports it to be recycled



Snow transported by the Ice Cat is dumped into a melting pit where any solid matter is filtered out



Melted snow is then put through filters to be cleaned and stored ready for use again!



SUSTAINABILITY

What are some uses for water at home and at school?



What are some ways you can recycle water at school or at home?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_



## WATER SAVING EXPERIMENT



Like O'Brien Group Arena, you too can help the sustainability of our Earth's water by recycling used water!

### Aim:

Find out how much water you use washing your hands per year, and discover other uses for the recycled water

### Materials:

- 💧 Sink
- 💧 Hand soap
- 💧 Bucket
- 💧 Scales

- 💧 Worksheet
- 💧 Pencil or pen
- 💧 Calculator

### Method:

1. Weigh your empty bucket and then on table below, record your results.
2. Place the bucket in the sink under the tap which you will use to wash your hands
3. With soap, wash your hands. Make sure you catch all of the water!
4. Re-weigh your bucket with the water in it and record your results
5. Calculate how many litres of water are in the bucket (1 kg of water = 1 L of water)
6. Estimate how many times you wash your hands a day on average, then complete the rest of the worksheet.

### Hypothesis:

How many litres of water do you expect to collect in your bucket?



## Results:

	Empty Bucket	Bucket and water	Water only
Weight			

If one litre of water equals one kilogram of water, how many litres of water did you catch in the bucket? \_\_\_\_\_

Were these results what you expected? Why? Why not?

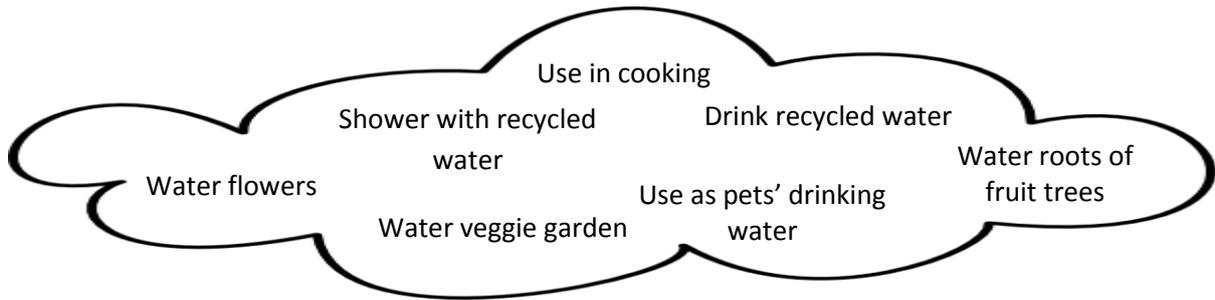
On average, how many times a day do you wash your hands? \_\_\_\_\_

Use your answers above to calculate how many litres of water you might use washing your hands

- a. Daily \_\_\_\_\_
- b. Weekly \_\_\_\_\_
- c. Monthly \_\_\_\_\_
- d. Yearly \_\_\_\_\_

Add the following uses for recycled to the do's and don'ts list below!

Not sure? <http://www.recycledwater.com.au> can help you find the answers!



Do	Don't