

Recycling and clean water around the world (Year 2)

Curriculum Links:

Geography

- Divisions of the World
- Identifying and describing location

Science

- How to make clean water
- Water and home and at school

Topics Discussed

Recycling around the world

- What is recycling?
- How different countries collect their recycling
- What happens to our recycling when they it gets collected in Australia

Water Collection and Treatment

- Where do you use water at home and at school? I.e. bubblers, fire hoses, toilets, sinks, sprinklers, washing machine, shower etc.
- How could you stop using so much water?
- Other ways to keep water clean for our catchment - no fertilizers, use mulch to stop pesticide run off, keep cattle further away

Before you start the lesson

- Make sure you have Red/ Green and yellow bins for demonstration purpose. Alternatively, use any two bins in the classroom and label it as Red/ Green and Yellow bins
- Gather some display items (example -empty plastic bottles, cans, glass bottles, paper/cardboard)

Lesson Outline/ Teacher Resource

Today we are going to talk about a few different things - we are going to talk about recycling, recycling in different places in the world and also about water and how we use it.

Firstly, let us talk about different coloured bins, recycling and how it is different all around the world.(yellow for recycling, red/ green for rubbish)

So, what is recycling?

Recycling is turning rubbish into reusable items. We taking something that we would normally throw away - plastic bottle (have one on display) and turning it back into its original form of material to make another item.

We can recycle 5 types of items - paper & cardboard, plastic, glass, steel and aluminium

Let us discuss some recycling rules. No lids-lids go into rubbish, rinse it, no plastic bags, no bagging boxing.

Play the "sorting game" -Put a pile of items in a box - students to pick up an item and put into correct bin - make into a relay if enough space

Recycling is different in other countries. We all have our own way of collecting and dealing with recyclable items

(Use Map of the World or a Globe)

Discuss where Australia, America, United Kingdom and Europe is

In Australia and America, we put all of our recycling into one bin (show recycle bin with a yellow lid).

In the UK they put out small bins each day with a different recyclable item i.e. plastic one day, glass the next.

In some countries in Europe, people take their own recycling to collection areas, which can be at supermarkets or other shops. They separate each item into its group and put it into a bin or through a hole in the wall to land into a collection bin

It doesn't matter how the recycling is collected, it all goes to a MRF - Materials Recovery Facility where it is sorted and checked to make sure nothing is mixed up - like glass in the steel - before being sent to the recycling factories.

It is important to reuse and recycle as much as we can. Do you know of the three R's? Discuss Reduce, reuse and recycle is important.

Play the "Beyond the Bin" video

So all the items we put into the yellow recycle bins gets separated at the MRF and gets sent to different recycling factories to get recycled. Eg; paper goes to paper recycling factory, steel to steel recycling factory and so on. Then they get made into new items.

Now, let us talk about water - water at home and water at school. Did you know that the water we have on earth now is the same water we had on earth when the dinosaurs were alive. We do not get new water we just keep going around and around with the water cycle.

Play the water cycle video

When we get thirsty what do we do? We go to the tap and get a drink of water. We use water for many things. What are some of her things we need water for?

- * washing our clothes, the car*
- * brushing our teeth*
- * flushing the toilet*
- * hosing the garden*
- * washing the dishes*
- * having a bath/shower*

Where does this water come from?

If you live in town, you have what we call 'town water'. Some people have rainwater tanks and they capture their water in their own tank, but if you use 'town water', your water comes from Lenthalls Dam (HB) or Tinana Creek (MB).

Read Whizzy's journey/adventure book

Because we have taken our water from a dam/creek, it has dirt and rocks and leaves in it. It can also have run off from the ground near the dam/creek like fertilizer and animal poo.

Therefore, we have to clean and disinfect the water. It goes through a filtration process where we get all of the yukky things out of the water, then we add chlorine, a chemical that kills any germs in the water and then we pump it into big tanks called reservoirs to sit there until we turn on the tap at our house.

Sometimes if it does not rain for a long time, the dam/creek starts to run out of water. Therefore, we need to make sure we do not use too much water, or waste it. What are some ways at home and at school that we can save water? (Use the Water saving Poster)

- * turn off the tap when brushing your teeth*
- * take shorter showers, run a smaller bath*
- * use a water saver in your taps/shower head*
- * wash the car on the grass so that you are watering the grass at the same time*

Play the water saving tips video

Questions for discussion

- Q. Where does our recycling go?
- Q. What items do we put into the recycle bin?
- Q. What are some of the ways we can save water?
- Q. Is the water clean when we get it out of the dam or river?
- Q. Do we need to disinfect water before we drink it?

