## Waste Hierarchy Activities

These lessons involve sequentially watching the 4 videos on the Waste Hierarchy and completing the outlined activities associated with each video. The activities are broadly aimed to primary school students. The level of complexity can be managed through the discussion points.

There are two activity options the teacher can choose from - a low preparation activity sheet, or hands on activities that require more planning.

The low preparation option involves using the activity sheet on page 2 . The teacher would play video 1 , and then get the students to complete the activities associated with video 1 (there are teacher notes for discussion on page 3). The same process is then followed for videos 2,3 and 4 .

The suggested hands-on activities require more preparation however could be more engaging for the students. These can be found on page 4. These activities involve group work, role plays, games, and crafts. The activities would require the teacher/students to source some materials. This option also requires you to play each video before completing the relevant activity.

## Video Links:

Video 1 - The Waste Hierarchy
Video 2 - Refuse
Video 3 - Reuse or Repurpose
Video 4 - Recycle


Teacher notes and discussion points for activity sheet (Note: If possible, activity sheet could be printed on scrap paper and/or students could work in groups to use less paper)

| $\mathbf{1}^{\text {st }}$ - The Waste Hierarchy |
| :--- | :---: |
| Discussion |
| What are the four sections of the waste hierarchy? |
| Why are some parts of the pyramid larger than other parts? |
| What do you think the different colours mean? |
| Task |
| Teacher writes the words 'refuse', 'reuse', 'recycle' and 'landfill' on |
| the board in any order. |

Ask students to label the waste hierarchy pyramid and colour it in.

## Discussion

Why is refuse the top priority?
Answer - because waste is never created when we refuse

Why is reuse (or repurpose) second best?
Answer - because you extend the life of something, delaying the time it becomes waste. This also reduces new items from being made which will also eventually become waste. However as it will eventually become waste this option is not as good as refusing in the first place.

Why is recycle better than landfill?
Answer - Because the waste will be transformed into something else, whereas if it goes to landfill it will slowly release harmful chemicals into the earth.

## $3^{\text {rd }}-$ REUSE or REPURPOSE

## Discussion

What does reuse mean? Using an item again in the same capacity (eg using a bag again as a bag) What does repurpose mean? Using an item again in a different capacity (eg cutting up the bag and using its pieces in arts and crafts)

## Task

Ask students to write down ideas of how they could reuse certain items.
(bread bag, glass jar, old towel)

## Some possible answers

Bread bag - storage for tomatoes, carrots, broccoli etc, sandwich storage, rubbish bags
Glass jar - vase for flowers, pantry sorting (spices, seeds, grains), toothbrush holder
Old towel - pet blankets, cleaning rags, bath mat

## Discussion

Why is reusing things good for the environment?
Answer - because you extend the life of something, delaying the time it becomes waste. This also reduces new items from being made which will also eventually become waste.

Can you think of other items that should be reused or repurposed?
Possible answers - Giving clothes or toys to other people, egg cartons for growing seedlings, scrap paper for crafts

## Discussion

What does refuse mean?

What sort of things should we be refusing?
Possible Answers - packaging that will become waste is the focus of the video however other options include clothes you don't need (fast fashion), promotional giveaways such as plastic clappers at sporting events, and bags offered to you when shopping.

What have you refused before when at the shops, a café or somewhere else?

## Task

Ask students to circle the items they could refuse because of their single-use packaging.

## Answers

cucumber in plastic - cucumbers can be bought without plastic carrots in plastic - same reason
pasta in plastic - package free pasta exists in bulk food stores zip lock bag - they could use a tupperware container or beeswax instead plastic straw - straws are not a necessity

## Discussion

Discuss each item one at a time. Ask students what they will try and refuse from now on. $4^{\text {th }}$ - RECYCLE

## Discussion

What does recycling mean? Processing the materials of an item and turning them into something else What items do we recycle at school?
What items do you recycle at home?

## Task

Teacher writes down the bin options available in the school classrooms or in the school's council area. Examples are: paper/cardboard, soft plastics, compost, recycling or landfill.
Students look at the images on their sheet and write down which bin they think they belong in.

## Discussion

Recycling is important and better than sending things to landfill but it has its downsides. What do you think the downsides of recycling are?
Answer - fossil fuels are burnt to produce the energy used in the recycling process, contamination is common and therefor a lot of things in recycling bins end up in landfill anyway, plastic can only be recycled a few times before it has to go to landfill
Do you know of any items that are made from recycled material?
Now that you've seen all of the waste hierarchy videos, what is the most important action you can take in your life to reduce waste?
Answer - refuse anything that you will likely end up throwing away. The key here is to remind students that refusing is the most preferred option as they will not end up with potential waste.

## The Waste Hierarchy

Teacher gathers a range of items to be sorted into the sections 'refuse', 'reuse', 'recycle' and 'landfill'. Some examples of what you could collect:
plastic straw, empty carrot bag, zip lock bag, glass jar, take-away container, paper napkins, pencil that's, paper with one side still blank, paper with both sides used, apple core, empty yogurt tub, empty chip packet, old towel or clothing that is very worn/has holes

Teacher writes 'refuse', 'reuse', 'recycle' and 'landfill' on 4 separate pieces of paper. Place them on separate tables or spread them out on the ground.
In groups or individually, students choose items laid out the front and place those items with the labelled piece of paper they believe it belongs at (eg. a plastic straw at the refuse piece of paper). Note: write these on scrap paper to model 'reusing' if you can.

Discuss how some items can go in multiple sections, eg. bread bag could be refused at the shops, reused for vegetables in the fridge and recycled as a soft plastic. Also discuss why refusing it in the first place is the best option. I.e. we should refuse it if we can. If we can't refuse it then we should reuse it. If we can't reuse it anymore then we should recycle it.

Teacher may like to have a visual of the waste hierarchy displayed/drawn for this session.

## REUSE OR REPURPOSE

## Use recycled materials in art projects

Recycled materials can make beautiful art projects such as jewellery, planters, and bird houses.
Incorporating materials that would otherwise be thrown away into art projects can show your students how to find new uses for these items.

## Examples:

-old glass jars could be used as a planter, decorated vase, decorated storage jar
-milk bottle plastic rings, old scraps of material or lolly wrappers for jewellery

## REFUSE

Students role play scenarios where they are refusing certain things.

## Examples of this could be:

-Students go to a café and are offered something like disposable cutlery but they refuse it and say they will use their own cutlery they brought with them.
-Students could be at the supermarket and looking at the carrots and go to buy the packaged ones then decide to refuse the packaging and buy the loose carrots.

Different groups of students can be given different scenarios and props.

## Scenarios:

-Café
-Clothes shop
-Sporting event (free promotional give-aways)
Some prop examples of what you could collect (otherwise students can just pretend):
Plastic straw - silicone and/or metal straw, plastic sandwich bag - container or beeswax, disposable plastic utensils - reusable utensils, plastic bag - reusable bag, plastic bottle - reusable bottle, disposable cup - reusable cup, disposable coffee cup - reusable coffee cup (they can tell their parents about it), promotional give-aways such as plastic clappers, flags, toys, paper napkins, a receipt.

## RECYCLE

## Recycle sorting race

Play a game with students where they need to sort a pile of rubbish into the correct bins. Each group gets the same amount of rubbish (ideally with the same or similar items) and the same bin options (try to have a range of options like soft plastics, recycling, compost, landfill - if you don't have a range you may like to use this as an opportunity to introduce a new bin or two).
Students are given a certain amount of time to sort, they can talk to their teammates to decide where the items go. When time is up, teacher can check how accurate the groups were.
You could also play this as a whole class where you discuss items altogether if preferred.
*The bin options should reflect how the school/council area recycle. If you google your council's name and 'recycling guide' you should be able to find a list or document that highlights where things need to go.

