

Lower Primary Lesson Ideas

Below you will find a selection of Australian curriculum-aligned lesson ideas and accompanying activity sheets relating to the topic of waste and recycling. They are written for lower primary students, but can easily be modified to suit other year levels.

Adult supervision is recommended for all activities.

Please note: There may be some variation in the waste disposal and recycling regulations and services between local councils. Please check with your council and make the necessary adjustments to the lessons.

In addition to these lesson ideas, KESAB *environmental solutions* offers a number of 'hands-on' excursion and incursion programs and options to complement students' learning. For details, simply download KESAB's latest '**Waste and Recycling Education**' information brochure.

Go to www.kesab.asn.au ('Schools' > 'Classroom sessions').

Broad learning outcomes

Using this curriculum material will assist students in achieving the following learning outcomes:

- Students will understand the importance of correct waste disposal and that waste products need to be disposed of carefully into different bins.
- Students will discover the terms reduce, reuse, recycle.
- Students will consider ways to reduce waste.

Humanities and Social Sciences

Geography

In addition to the Geography lessons below, there are further comprehensive lessons based on food waste and practical solutions for reducing food scraps on the KESAB website:

www.kesab.asn.au ('Schools' > 'Education microsites' > 'Food scraps to compost' > 'Schools' > 'Teachers').

- As a class, or in pairs, students to play the '**Thumbs up or down?**' game (cards have been provided). Students must think about each statement as it is read, then show whether they think the answer is true or false by putting their thumbs up (for true) or down (for false).

- Students to complete the **'Ways to reuse it!'** activity sheet (provided). Students to think of an everyday item or material that gets disposed of regularly. Using the brainstorm activity sheet, students can record their ideas on the different ways they could reuse that item.
- Students to play the **'Bin bingo!'** game (provided). They must move around the classroom and find names of classmates to put into the appropriate boxes. Explain that they can only use names once. The first person to fill in all the boxes wins.
- Students to complete the **'Which bin?'** activity sheet (provided) to show what they know about putting waste in the appropriate bin. They will need access to the 'Which bin' website www.whichbin.sa.gov.au/a-z-items to complete this activity.

- As a class, first read the student facts about household waste and recycling on the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsites'>'STUFF AT HOME – put it in the right bin'>'Student facts').

Then, explore the **'STUFF AT HOME – put it in the right bin'** interactive house on the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsites'>'STUFF AT HOME – put it in the right bin'>'Interactive') to see which household items belong in each bin.

This link also leads to 'Curriculum support' resources consisting of more lesson ideas and activity sheets to support the interactive.

- Set up a 'pretend play' corner in your classroom with a pretend recycling station or waste collection 'truck' where students can role play the waste management process.

For more information, and to download a series of printable big books on the topic, go to the 'Wipe out waste' website:

www.wow.sa.gov.au ('Resources'>'Early Years Big Books').

- Students to complete the **'Feed the kitchen caddy!'** activity sheet (provided) to display the types of kitchen scraps that belong in the kitchen caddy. For further information about organics disposal (including fast facts for students and the journey of food scraps from bin to compost) visit the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsites'>'Food scraps to compost'>'Schools'>'Students'>'What goes in my green organics bin?').

History

- Students to interview an older person about how waste was managed in his or her life. How does this differ from how waste is managed now both at home and in the community? Students to draw pictures to record their findings.

Science

- As a class (with an enlarged copy), or on individual copies (depending on the age and capabilities of your class), students contribute ideas about waste and recycling (what they know about managing waste, what they want to know and what they are learning) to the '**KWL chart**' activity sheet (provided).
- As a class, students to discover the words, 'Greenhouse gas' and 'methane'. Explain to students that when food rots in the landfill bin, it gives off the greenhouse gas, 'methane'. Discuss the effects of methane on our environment. Prior to this activity, you might like to conduct an internet search for images and simple explanations relating to these terms.
- Teachers to conduct an experiment to find out how quickly a type of food decomposes under various conditions.

Note: the use of gloves, masks and tongs and other appropriate safety equipment is recommended for both teachers and students involved in this activity.

For example, take several pieces of bread and place one, uncovered, under a window, one inside a paper bag, bury one underground (or cover it in dirt in a plastic container), and seal one in a plastic bag. Encourage students to make predictions, draw pictures and reflect on their observations. Other readily available materials such as food scraps, paper, cardboard, etc could also be used. Students can use the '**Watch it waste**' activity sheet (provided) to record their results.

- As a class, students to play the '**Litter break down drag and drop**' interactive to test their knowledge on how long some common litter items take to break down. To access the interactive visit the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsities'>'Litter Less'>'Interactives').

Students to then use the '**Litter break down cards**' to attempt to match-up the common litter items with their break-down times to reinforce learning.

To access the 'Litter break down cards' visit the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsities'>'Litter Less'>'Unit of work'>'Lesson 7').

- Students to test their knowledge of composting with the '**What goes in your kitchen caddy? Drag and drop**' interactive. To access the interactive visit the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsities'>'Food scraps to compost'>'Schools'>'Students'>'Fun activities').

- Students to show how much they know about 'food scraps to compost' by completing the '**Food scraps for compost true or false quiz**' interactive. To access the interactive visit the KESAB website:
www.kesab.asn.au ('Schools'>'Education microsites'>'Food scraps to compost'>'Schools'>'Students'>'Fun activities').

Technologies

Design and Technologies

- Using provided materials, students to design and create their own 'recycled bottle planters'. Ask students to think about what plants or herbs they might like to put in their planters. Perhaps suggest plants or herbs that they could take home for long-term use. Students will need teacher assistance with the construction stage.
- Students to construct their own 'waste management collection truck' using reused materials. Possible materials could include tissue boxes, shoe boxes, lids, etc.
- Students to design a different-looking kitchen caddy.
- Students to complete the '**Packaged products**' activity sheet (provided). Students will need to cut out images from supermarket catalogues to complete this activity. Once finished, ask students to identify the most common type of packaging. Ask, "Can it be recycled?" If not, students to think of some alternative packaging for the product.

Digital Technologies

- With the help of an adult, students to use a recording device/camera to video or take photos of themselves putting waste into the correct bins. Share these images with your class.

Health & Physical Education

- In groups, students to create an obstacle course or game out of clean, reusable materials. They could use old boxes, cartons, clean containers, string etc.
- Students to complete the '**My nude food lunchbox**' activity sheet (provided). They must include recess, lunch, healthy snacks and can not include any wrapping or packaging.

- Even though food can be disposed of in the organics bin, we still waste a huge amount of edible food in Australia. Students to discuss how we can reduce this. Students to complete the **'My favourite healthy foods'** activity sheet. To access the activity sheet, visit the KESAB website:
www.kesab.asn.au ('Schools'>'Education microsites'>'Food scraps to compost'>'Schools'>'Teachers'>'Lesson 3').

Mathematics

- In groups, students to use various reusable materials to create patterns. Some materials may include lids, bread tags, craft materials, buttons, etc.
- Students to complete the **'Waste audit'** activity sheet (provided) to collect data about the type of waste they throw out in their household.
- Students to create a 'Waste and Recycling' boardgame. They must use recycled or reused materials for their game, such as bottle tops for counters and cereal box card for the game base. Students should include directions such as 'move back 3 spaces' for incorrect waste disposal, or 'move forward 3 spaces' for using the correct bin.
- Ask students to put up their hands if they recycle cans and bottles at a depot. Explain that whilst items such as soft drink cans and plastic bottles can go in the recycling bin, they can also be taken to special recycling depots where you get money back for those items. Explain that for each bottle/can you receive 10 cents. Show some examples of cans and bottles that have the 10c refund message.

Watch the 'Recycling Makes Cents' video about 'Canny' the can (5 minutes, 22 seconds) to learn more. To view the video, visit the KESAB website homepage www.kesab.asn.au

Students to then explore play money, using 10 cent pieces to count to certain amounts.

English

- Students to create a class information book about waste and recycling. They should include important tips and pictures about ways they reduce waste or recycle. Consider using recycled paper or scrap paper to construct the information book.
- Create a 'waste and recycling' word wall in your class. Continue to add to the wall as new words arise. Consider using the cardboard from old cereal boxes or any other packaging that could easily be cut up into cards and reused for students to write their words on.

- Students to use individual letters cut out from old newspapers or magazines and stick together to create words relating to 'waste and recycling'. As an extension, students could challenge themselves by putting a whole sentence together using the cut-out letters.
- Students to start a waste management key words dictionary with the '**Waste words**' activity sheet (provided).
- Students to view the recycling symbol. Ask students to look for the symbol on packaging in the classroom and/or at home. Students to practise drawing the symbol on their own. Discuss why symbols are important.
- Students to complete the '**Waste management truck talk**' activity sheet (provided) to imagine and then create some funny conversations that waste management trucks might have if they could speak.
- Students to view, and listen to, the '**Larry Litter**' story book interactive. To access the story book, visit the KESAB website:
www.kesab.asn.au ('Schools' > 'Education microsites' > 'Litter Less' > 'Interactives').
After viewing, students to complete the '**Larry Litter story sequence**' activity sheet (provided).
- Students to view 'The Amazing Journey of your Recyclables' big books (including stories about plastic, paper, steel, aluminium and glass). The big books can be downloaded from the 'Wipe out waste' website:
www.wow.sa.gov.au ('Resources' > 'Big Books - The Amazing Journey of your Recyclables').

The Arts

Visual Arts

- Students to create a 'waste and recycling' collage using only reused and/or recyclable materials.
- Students to research the lid colours of the waste bins in their local council area. Students to then design and create A4 posters using only these colours to put on their school or home bins to send the message about what waste belongs in the appropriate bin.
- Students to complete the '**Decorate and colour the waste management truck**' activity sheet (provided).

- Students to complete one or more of KESAB's '**Junk Craft™**' activities to combine the use of common classroom resources with recycled materials and objects from nature to create interesting craft items.

To access the activities, visit the KESAB website:

www.kesab.asn.au ('Schools'>'Education microsites'>'Junk Craft').

Languages

- Students to discover the top five languages, other than English, spoken in their school/community, then design a simple 'reduce, reuse, recycle' poster using one of the languages. Students could also produce a 'reduce, reuse, recycle' poster that uses pictures only (no language).