

# Waste Sort

## Teacher Notes

Secondary (7-10)

### ACTIVITY DESCRIPTION

The Waste Sort activity raises awareness about the effects of the production of materials and disposal of goods on our environment. Students are invited to investigate the properties and characteristics of different materials, and to sort a range of 'waste' materials in various ways: renewable/non-renewable, recyclable/non-recyclable, biodegradable/non-biodegradable, etc. The activity supports knowledge of the alternatives to landfill, including recycling and reusing, and invites investigations into design solutions.

### INSTRUCTIONS

#### 1. Waste Sort

Empty out the various waste items onto the table. Look through and explore different and similar characteristics of the various items. You need to decide on an approach to sorting these materials. How could you categorise them into different groups?

#### 2. Discussion

1. How did you choose to categorise the items? Why?
2. Which of these materials are derived from renewable or non-renewable resources?
3. What are the impacts on our environment of the disposal of these items to landfill?
4. Chose one of the items sorted and suggest a design solution or alternative that would minimise resource use and waste

### SUGGESTIONS FOR ASSESSMENT

#### Formative

1. Participation in the Waste Sort activity
2. Participation in the Discussion questions above

## BACKGROUND NOTES

By making thoughtful behaviour and consumer choices, we can reduce our waste to landfill. The 5Rs (Rethink, Refuse, Reduce, Reuse and Recycle) – also known as the waste hierarchy – provides a methodical approach to minimising waste to landfill. It prioritises the elimination of disposable waste items through consumer choice (Refuse), the repurposing of items (Reuse) and, where possible, recycling of items.

Victorians are great recyclers but there is still room for improvement. Our household rubbish bins still contain items that could have been recycled. According to the [Victorian Government's 'Get It Right on Bin Night' website](#), this equates to around 450,000 wheelie bins full of recycling ending up in landfill each week (of which Metropolitan Melbourne is responsible for 300,000 of these bins).

Waste education is vital. Understanding the types of waste materials we generate and the alternatives (guided by the 5Rs) can significantly inform habits that minimise waste to landfill.

## MATERIALS REQUIRED

For this activity you will need a range of collected and cleaned waste materials for sorting. Below are some suggestions:

- Paper and cardboard
- Hard plastic (plastic bottles, yoghurt and milk containers, old shampoo bottles, etc.)
- Soft plastics (chip packets, glad wrap, etc.)
- Aluminium foil and cans
- Steel cans
- Glass (or pictures of glass if safer)
- Electronic items (old phone cords, keyboards, batteries, etc.)
- Cloth (old clothing, etc.)
- Think broadly too about things we throw out – stationary, grass cuttings, jewellery, make up, etc.

## ACCESS THIS ACTIVITY

Visit the [CERES School of Nature and Climate website](https://sustainability.ceres.org.au/education-resources/curriculum-activities/) to download the activity - <https://sustainability.ceres.org.au/education-resources/curriculum-activities/>

# Curriculum and RSS Links

## KEY CONCEPTS

5Rs (Refuse, Rethink, Reduce, Reuse, Recycle) Plastics, Landfill, Design Solutions, Resources

## KEY LEARNING INTENTIONS

1. Sort and categorise materials on the basis of observable properties such as texture and flexibility
2. Identify materials that can be reused or recycled into new products
3. Investigate design solutions to minimise resource consumption and waste

## VICTORIAN CURRICULUM

### Science

7 - 8

Some of Earth's resources are renewable, but others are non-renewable ([VCSSU100](#))

### Geography

9 - 10

Effects of the production and consumption of goods on places and environments throughout the world and including a country from North-East Asia ([VCGGK142](#))

### Design & Technologies

7 - 8

Examine and prioritise competing factors including social, ethical, economic and sustainability considerations in the development of technologies and designed solutions to meet community needs for preferred futures ([VCDSTS043](#))

9 - 10

Critically analyse factors, including social, ethical and sustainability considerations, that impact on designed solutions for global preferred futures and the complex design and production processes involved ([VCDSTS054](#))

## SUGGESTED RESOURCESMART SCHOOLS MODULE LINKS



Undertaking the activity as described above links to the *ResourceSmart Schools Waste Module - actions B1.2, B1.3*

Below is a list of extension activities that link to additional actions of the Waste module:

1. Students create easy-to-follow bin signage to encourage correct waste sorting and recycling at school (*ResourceSmart Schools Waste Module - actions A2.6, A7.7*)
2. Students undertake a bin audit of the school. Students report back to the whole school on contamination and opportunities for reducing waste going to landfill (*ResourceSmart Schools Waste Module - actions A1.1 C2.1, C2.2*)
3. Students run an upcycling competition where commonly discarded waste items are repurposed in a creative and/or functional way (*ResourceSmart Schools Waste Module - action B1.3*)
4. Students run a Nude Food lunch day at school to raise awareness around packaging and waste. Follow up with a whole school community survey to investigate opportunities to hold these on an ongoing basis (*ResourceSmart Schools Waste Module - actions A3.1, A3.2, B1.4, C1.2, C1.4, C2.1*)
5. Invite local indigenous group/s to share their perspectives on waste from an environmental and historical point of view (*ResourceSmart Schools Waste Module - actions B1.5, B1.6*)
6. Students write a learning story about key findings of the activity and share in your school's newsletter and website (*ResourceSmart Schools Waste Module - actions C1.1, C1.3*)

Speak to your CERES ResourceSmart Schools Facilitator about further links to the Waste Module.