

Start with a Waste Audit

The purpose of a waste audit is for students to look at the different types of waste generated at the school, where it comes from and how it can be reduced.

Why do a waste audit?

- Reducing waste is a simple way of making our resources last longer
- Transporting waste is costly and waste in landfill generates methane, a potent greenhouse gas.
- The hands-on auditing experience is a memorable and effective way of raising awareness of waste issues.
- Schools can save money by reducing the number of skip bins of waste that they send to landfill.

Preparing for a waste audit

- Seek parental permission for students to participate in a waste audit.
- Make prior arrangements with cleaners to collect the day's rubbish in labelled garbage bags. Don't choose to do the audit on a Monday because waste would have to be kept over the weekend. Choose a typical day, not one when a year group is away on excursion.
- Provide marker pens and labels. Make sure waste from different areas (playground, classrooms, offices, canteen etc) is kept in separate bags. In a large school consider sampling. i.e. only take waste from half the classrooms and half the playground.
- Store the bags near where you will be sorting and weighing the next day. This location should be comfortable, sheltered and fairly close to the skip bin pickup site.
- 5. Arrange for a number of class groups to participate. e.g. one class at a time for about 30 to 40 minutes.

You will need: scales, kitchen tongs, gloves, labelled sorting buckets, ground sheets, data collection sheets and clipboards.

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Conducting a waste audit

- Prepare the sorting area: a large groundsheet surrounded by sorting buckets. Bigger schools may use 2 or 3 sheets to accommodate more sorting teams.
- Prepare the weighing and recording area: a desk for the scales and chairs for recorders.
- 3. When the class arrives:
 - I. Explain the purpose of the waste audit.
 - II. Demonstrate the process (empty a bag of rubbish onto the groundsheet and sort individual items of rubbish (using gloved hands/tongs) into the buckets. Ensure students understand each of the categories:
 - Office white paper = office paper, black & white photocopies, pale colours/pastels.
 - Recyclable paper/cardboard = newspapers, magazines, paper bags, milk cartons.
 - Food and garden waste = lawn clippings, fruit and veg, tea bags, bread.
 - Recyclable containers = plastic containers, P.E.T. bottles, metal cans such as aluminium or steel cans / bottles (not window glass).
 - Mixed waste (non recyclable)= small bits of paper, dust, chips packets, plastic lunch wrap/clingwrap, poppas, styrofoam cups etc.
 - III. Explain health and safety precautions.
 - IV. Allocate equipment and jobs: recorders (2), weighers (2), carriers (4) and sorters (remainder).
 - V. Weighers provide a net weight (contents only) and a co pressed volume estimate. Waste should be measured by both weight and volume (volumes are more difficult to estimate but are important because they relate to the number of skip bins that the school pays for).
 - VI. Carriers bring the bags to be sorted and ensure that waste from different collection areas doesn't get mixed. Carriers also take the sorting buckets to be weighed. They tell the recorders where the waste came from e.g. playground. Carriers also take waste to the skip bin after weighing and return to the sorting area.
 - VII. Recorders sit near the weigher and make sure all results get recorded.



Completing the waste audit

- 1. Record all the data onto a waste summary sheet.
- 2. Chart the results from the summary into a spreadsheet and create a chart e.g. as pie graphs
- 3. Analyse results e.g. compare:
 - · Weight / volume of each category
 - · Weight / volume for each area of the school
 - Create Waste Pie Graph for a visual which should include categories for office whites, recyclable paper and cardboard, organics, recyclable containers (plastic/metal/glass) as well as mixed waste.
- Calculate how much waste is generated per year and how much waste is generated per person per year? Students could also calculate the amount of waste generated per week, per month and per term.
- Find out how much your school spends on waste disposal per year by looking at your school's waste disposal bills.
 Analyse the cost benefits of recycling all waste.
- 6. Discuss ways of reducing waste e.g. provide labelled recycling bins, set up a compost or get a worm farm, encourage low waste lunches, recycling or repairing computers etc.
- 7. Write a Waste Action Plan to reduce waste in your school.
- 8. Consider encouraging waste free lunches at your school.

Other ideas to reduce waste at school

Composting and worm farming

Why compost or have a worm farm: On average, 30% of waste coming from the school is organics. Having a worm farm onsite or compost bins allows that waste to be diverted out of landfill (which produces methane a potent greenhouse). In return the organics can be turned into rich soil that could be used to nurture a garden onsite at the school. Here are some online resources to inspire your school:

Costa's guide to composting for schools
Composting, It's Easy
How to manage (organic) waste at school
Worms, worms, worms
Scraps to Soil

Recycling

Why recycle: On average, 30% of waste coming from the school is organics. Half your school can reduce the amount of waste it produces and implement recycling, not only will your actions have an environmental impact, it creates a positive school image and it's more cost effective saving your school money.

Check out these resources to help inspire your school to do more:

https://www.terracycle.com/en-AU/https://www.recyclesmart.comhttps://returnandearn.org.auhttps://kimbriki.com.au

Get your school going nude!

Why promote nude lunches: Durable, reusable containers are a great way for students to bring food into school and may last them from pre-school through to highschool. There are long term cost savings and the environmental benefits are off the charts. Using a bento box style reduces the need for plastic packaging and the amount of "stuff" that can go into bins and landfill. Some of our favourite places to shop for durable bento style lunch boxes are:

https://www.hellogreen.com.au/ https://bentoland.com.au/ https://seedsprout.com.au/ https://www.kitchenware.com.au/

Educating Students:

There are lots of online resources available to educators to help students understand the importance of less waste. You can help them understand the difference between waste, waste avoidance and recycling. Educate about the impact waste has on our environment and measures they can take to reduce waste at school and home.

Cool Australia
Waste-free lunch challenge
Litter free schools
Growing up Greener
Beeswax wraps
Wipe Out Waste learning resources