

Waste Audit – Teacher Information

Why do a Waste Audit?

A waste audit helps us to work out how much waste we create in our school, and what type of items make up our waste stream.

It's like a survey, collecting information on the amount and type of waste, which will allow us to look at ways in which we can reduce the amount of waste leaving the school and going to landfill.

You can also use audits to measure other resources like water and electricity use.

By conducting this audit, you can estimate the weight, volume and type of waste produced by your school, and can look at ways to better manage this waste.

This activity can be run in the morning, using waste collected and stored from the previous day, or in the afternoon using waste collected from the start of the day. Try and select a calm day, wind can result in waste littering the school grounds.

Health and Safety

Students are to wear gloves at all times when handling waste, and wash hands thoroughly at the end of the activity.

Sharp objects should be handled with care, using the safety equipment supplied (litter pickers and tongs).

Students are to wear fully enclosed shoes.

Equipment:

- Full garbage bins
- Gloves
- Litter pickers or tongs
- Tarps
- Record sheet
- Buckets
- Clip board and pen
- Calculator
- Electronic scales (can be loaned from Council)

Method:

1. Divide the class into groups (groups of 4-5 work best).
2. Nominate a team leader, scribe, weigher, sorter and monitor in each group.
3. Collect all the necessary equipment and gloves.
4. Using a selection of bins from the school grounds (i.e. staff room, canteen, playground etc.), appoint a group to each bin.
5. Spread out the plastic tarp, or use a grassy area and pour out the contents of the bin.
6. For the purposes of this audit, the waste will be divided into three waste streams:
 - Food
 - Recyclables
 - General waste
7. Separate the waste out into the three streams using the tools and gloves.
8. Once the waste is separated into the three piles, place the contents of the food waste into the bucket provided.
9. Using the electronic scales, weigh the food waste recording the weight on the record sheet.

Environmental Audit – Waste

10. Record the volume on the record sheet. Eg: if the bucket is half full, put $\frac{1}{2}$ in the volume column.
11. Empty the bucket back into the bin and do the same for the two remaining waste streams.
12. At the bottom of the record sheet, calculate the total weight of recyclables and food (compostable) waste.
13. Calculate the total waste weight (add together the recyclables, food and general waste).
14. Finally calculate the total tonnes of waste your school generates a year. It might be useful to compare this to the weight of a car (or similar). The average family car weighs around one tonne.

Extra Activities:

Create a PowerPoint report or poster based on the information you have collected from the audit, identifying ways to reduce and recycle your waste and present this to the class or the school.

These ideas might include:

- Increasing the schools paper reuse (duplex printing, re-using exercise books)
- Participating in Council's free school recycling program;
- Composting or wormfarming food and garden scraps or;
- Adopting a low waste lunch policy.

Start a class discussion, which may include:

- Landfill size and location- what happens when we run out of space?
- Who is responsible for the waste that we generate? Us, Council, or the manufacturers?
- What can we do to reduce the amount of packaging going to landfill? What items should we buy at the shops?

Write some hints and tips for recycling, reducing and re-using items and print them in your school newsletter.

Do another audit after you have started recycling or composting/wormfarming. Compare the results to your first audit. Have the kilos for the food scraps changed? What has happened to the overall waste kilos?



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Group _____ Date _____

Bin location _____

Record the volume and weight of the three waste streams in the table below.

Waste Audit	Food Scraps	Recyclables	General Waste
Volume (Buckets)			
Weight (kg)			

A) Calculate the total amount of food, recyclables and paper waste. This is all the waste that could be kept out of the landfill if we recycle and compost.	A) _____ kg
B) Calculate the total amount of all the three wastes.	B) _____ kg
C) Work out how many school days are in a year and multiply the total amount of waste by that number. This will give you an estimate of the kg of waste your school makes in a year.	C) _____ kg
D) Calculate the tonnes of waste your school makes by dividing the answer you had for C) by 1000.	D) _____ T

For any further information please contact Council's Waste Education Officer on **02 4974 2848**.

