



## Waste Audit

The aim of the waste audit is to find out how much waste (weight) and identify the different types of waste your school is producing. You can conduct this activity for one day.

When to conduct a Waste Audit

A waste audit should be conducted as early as possible when a school begins the Green-Schools programme as part of their Environmental Review. The data collected will allow the school recognise their initial situation regarding waste in the school and this will provide the school with a benchmark against which they can measure their progress.

The Waste Audit can be repeated periodically as an effective method of monitoring and evaluation of the Green-Schools programme.

### Learning Objectives

- Investigate categories of school waste.
- Learn sampling techniques to monitor waste volume.
- Record and analyse waste data.

### Curriculum Links

- Mathematics, Science, Citizenship

### Seven Steps Applications

- Step 2 Environmental Review
- Step 3 Action Plan
- Step 4 Monitoring and Evaluation
- Step 5 Curriculum Work
- Step 6 Informing and Involving

### Materials

- Bagged waste
- Old bins or boxes (eight for each group)
- 10-20 large bin bags
- Spring balances or scales
- Ground sheets
- Clipboards with copies of the Waste Audit Worksheet (below)
- Rubber gloves (one pair for each participant)

## Preparation

- Identify an 'average' school day on which you will audit your school's waste (not during special events, the end of term, or when groups are out of school). Let all staff know when the audit will take place.
- Carry out a risk assessment for the activity.
- You may want to send a letter home to parents to inform them about the activity, to ask them to provide clothing, and possibly to request adult volunteers.
- Ask the relevant person to save one day's waste (both landfill and recycling) from the entire school, including non-teaching areas such as staff rooms, offices and the exterior.
- Ensure to look through the bags to remove sharp objects and label each bag with the area of the school it came from, such as classroom number, cafeteria, or playground. Store all bags of waste safely overnight.

## The Audit

- Explain health and safety issues to the students. Gloves must be worn before touching any waste, and students should call an adult if they see any sharp objects.
- Weigh all bags containing food waste; log the results in kilograms on the recording sheet and dispose of the waste in the usual manner.
- Divide a class into three to four groups. Each group should have a ground sheet, a recording sheet and pencil, and a set of spring balances or scales. Each student should wear protective rubber gloves.
- Each group should empty the contents of one bag of waste at a time onto the ground sheet and sort it into the different types of waste shown on the recording sheet.
- Groups should have a separate carrier bag or box for each waste type. They will sort the waste into these bags or boxes, weigh them and log the results on the recording sheet.
- Once the contents of the carrier bags in each group have been weighed and recorded, empty them into larger bin bags and re-use the carrier bag.
- When all bags have been sorted and the data has been recorded, dispose of the waste and recyclables in the usual manner.





## Follow up

- The next time the group meets, calculate the daily, weekly and annual waste totals for the whole school. Multiply daily totals by five for the weekly results, and the weekly totals by 38 weeks (the average number of weeks per year spent at school). Work out the percentage of different types of waste produced.
- Compare waste data from different areas around your school and identify waste 'hot-spots.'
- Discuss your findings. What are the most common types of waste? Is anything currently being thrown away that is recyclable? Which type of waste would make the biggest difference if recycled?
- Use the information from your waste audit to create your Action Plan and to increase recycling and decrease the amount of waste being sent to landfill.

## Extensions

- Instead of sorting the waste, you could attach recording sheets to each bin on the evening before the audit. Get everyone to tally what they throw in the bin. This avoids the need for sorting the waste by hand and is particularly suitable for smaller schools. The tallies can be used to estimate the relative proportions of materials in each area.
- While sorting the waste, ask students to note the most common waste items. How could you reduce this type of waste?
- Present your findings to the rest of the school through an assembly or newsletter. (Step 6 Informing and Involving)
- Repeat your audit after you have set up a waste reduction scheme. This will show if your recycling system and action plan is effective. It will also identify areas which require further work. (Step 5 Monitoring and Evaluation)



## Pupil Worksheet – Waste Audit

Date(s) of Audit: \_\_\_\_\_

Area of School	White Paper	Coloured Paper	Cardboard	Plastic	Metal	Glass	Food Waste	Other	Total
e.g. Classroom 1	200g	140g	80g	40g	0g	0g	100g	40g	600g
<b>Total Material</b>									

Material	School Total(kg) per day	School Total (kg) per week (x5 days)	School Total (kg) per year (x38 weeks)	%
White Paper				
Coloured Paper				
Cardboard				
Plastic				
Metal				
Glass				
Food Waste				
Other				
<b>Total</b>				<b>100%</b>