



Eco-Schools USA Consumption and Waste Audit



Learning Objectives

- To investigate categories of school waste.
- To learn sampling techniques to monitor waste volume.
- To record and analyze waste data.

Curriculum Links

Mathematics, Science, and Citizenship

Eco-Schools USA Pathways

Consumption and Waste, Energy, and Climate Change

Background

The aim of the waste audit is to measure the weight and types of waste produced by your school in one day. It is an integral part of a school waste reduction campaign. Waste is collected, sorted and weighed by students, teachers and other helpers. The data collected will help you measure the effectiveness of your campaign. The audit should be carried out prior to the implementation of a school action plan to reduce waste and again afterward, in order to measure the reduction levels achieved.

This waste audit is adapted from www.recyclenow.org.

Materials Needed for this Audit

- School trash from classrooms, common areas, and lunchrooms
- Recycle bins and trash bags
- Spring scales or other scales
- Ground Sheet -tarps or some sort of floor covering in which to spread out waste per group
- Rubber gloves

Procedure

1. Collect all trash and recycling in teams from throughout the school – remember to enlist the help of the custodial staff. Safety is of utmost importance.
2. There are two worksheets to complete, the waste audit recoding worksheet and the waste audit school total worksheet.
3. Analyze the results and report the findings to the school community.
4. Formulate an action plan and be sure to monitor and evaluate along the way.
5. Keep this report with your records. This information will be needed when responding to periodic Eco-Schools USA surveys, when applying for awards, and when communicating with the community and members of the media.

Important 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 this activity.
- It is highly encouraged 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 custodial staff** to save one day's waste (both trash and recycling) from the entire school, including non-teaching areas, such as staff rooms, offices, and the exterior.
- **Ask the custodial staff** 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. Ensure that bags of food waste are clearly labeled and kept separate. Store all bags of waste safely overnight.

Important Audit Tips

- 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 pounds 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 for each waste type**. They will sort the waste into these bags, 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.

1. Students have the opportunity to recycle paper.	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Students have the opportunity to recycle plastic and aluminum.	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Students have the opportunity to recycle other items.	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Our school uses <i>Recycle Across America's</i> standardized recycling labels	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. We participate in recycling campaigns and/or contests during the school year. i.e. <i>Green Starts Here, Recycle Bowl, Recycle Mania, America Recycles Days, Wrigley's Litterless Campaign</i> , local and/or state contests, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. By recycling different products we make some money for our school? i.e. through <i>Terracycle</i> , local hauler incentives, etc.	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. Students participate in waste free lunch days.	<input type="checkbox"/> Yes <input type="checkbox"/> No
8. Our school composts.	<input type="checkbox"/> Yes <input type="checkbox"/> No



Eco-Schools USA Waste Audit School Total Worksheet

Material	School Total (lbs) per day	School Total (lbs) per week (x 5 days)	School Total (lbs) per year (x 38 weeks)	%
White paper				
Colored paper				
Cardboard				
Plastics				
Metal				
Glass				
Food waste				
Other				
TOTAL				100%

NOTES:

Summarize the results from data collection: