

SCHOOL WASTE AUDIT:

A visual investigation of school waste

Waste is defined as:

- the **garbage** we send to landfill and
- the **recycling** we re-process into useful materials

3 Steps to conducting an audit

This waste audit offers both elementary and secondary students an opportunity to investigate the waste generated in the school and create strategies to minimize waste:

1 STEP Conduct a Visual Garbage audit of the contents of all the garbage cans

2 STEP Conduct Visual Recycling audit of the contents of all the recycling bins

3 STEP Plan a Waste Minimization Action Plan

- **Optional:** If your school collects organic waste, you can also complete a visual audit of the contents of all the organic/green bins

Safety First!

Health and Safety tips while conducting the visual waste audit

- Do not open bags of garbage or recycling!
This is a visual audit using clear bags and visual estimation.
- Have some extra bags on hand in case of a tear in collection bags.
- Do not eat or drink while conducting the waste audit.
- Have some hand sanitizer available.

Waste Audit Tips

Start off your school year with a waste audit

- Do both Step 1: Visual Garbage Audit and Step 2: Visual Recycling Audit on the same day. This will save set up time.
- Choose a 'typical' school day for your audit—not one that has any special events.
- Don't tell people about the garbage audit. You'll get more accurate data.
- Complete a second audit in the spring and compare the results.

Ontario EcoSchools Certification 2010-11:

Points can be claimed in Ontario EcoSchools certification 2010-11 Part III: Waste Minimization - Q 3.12 for conducting and completing all 3 steps of the School Waste Audit.

1 STEP

Visual Garbage Audit

In order to assess your school's garbage, you will need to gather all the garbage for a 24 hour period, then:

a. Weigh the garbage (do not empty liquids)

b. Perform a visual audit of the contents of the bags of garbage

MATERIALS NEEDED

- **Clear plastic garbage bags** to hold the entire school's garbage for a day. Make sure you have enough bags so that the bags will be only half-full. This makes it easier to weigh and estimate the contents.
- **Garbage** – It may be easiest to schedule your audit the day after your school's garbage pickup so only one day's worth of garbage has accumulated. For example, if the garbage pickup takes place on Tuesday morning, designate Tuesday's garbage as your audit material and begin your audit Wednesday morning.
- **Hanging spring/digital scale** – Your board's waste coordinator, the custodian or the science dept may have some.
- **Reference sheet** of what is recyclable in your board. Ask your custodian or principal for the official list/poster.
- **Worksheet** – Visual Garbage Audit Worksheet(s) (available below)
- **Clipboard**
- **School Enrollment Data** – Number of full time equivalent students in the school (ask the Principal)
- **Pen**
- **Camera** to record your audit (optional)

INSTRUCTIONS

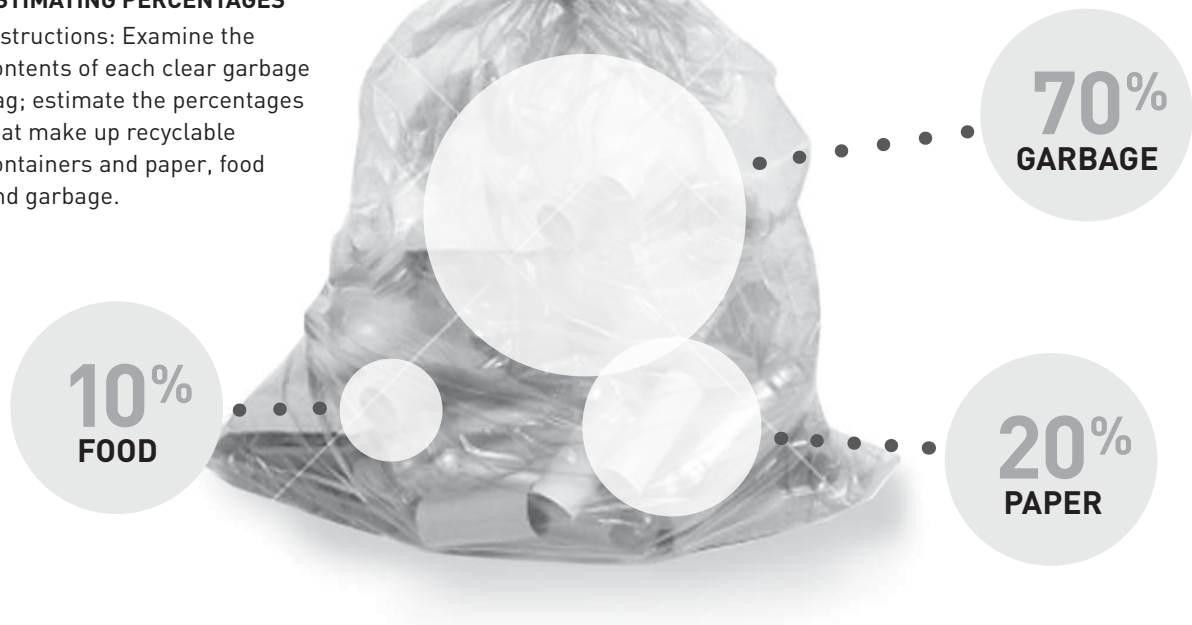
1. Gather your school's garbage for a 24 hour period. Make sure the garbage is put into clear plastic garbage bags. The bags should only be half-filled because this will make it easier to assess the contents of the bags.
2. Weigh each bag and record the mass on the worksheet.
3. Complete a visual audit by examining the contents of each bag. You are looking for 5 categories of waste (See the *Estimating percentages* for instructions). Carefully roll the bag around, talk with your fellow auditors about the contents and estimate the percentages of the contents!
4. For each bag, estimate the volume in percent of each of the different waste categories. Record your estimates and observations.
5. When you have assessed all of the bags calculate the average volume for each of the 5 categories.
6. Calculate the *Amount of garbage per student per school year* using the worksheet.
7. When you have completed the audit make sure the garbage gets put where it will be picked up.
8. Communicate your results and reduction strategies with the whole school community. Present information at an assembly, announcements, posters and info in front foyer of the school.

MODIFIED SAMPLE AUDIT FOR SCHOOLS WITH 500+ STUDENTS

Collect a day's worth of garbage per above. Count the total number of bags collected, then select a minimum of 7 bags to be audited. Try to select bags from different areas of the school (i.e., different departments, cafeteria, office, library, computer lab). Use the same selection process for both the garbage and recycling samples. Once you have conducted the Garbage and Recycling audit on the sample, multiply the sample results by the % it represents to get the total waste results. Use the total garbage results to calculate kg/student/year. Ex: the sample=20% of total garbage produced in a 24hr period; $20\% \times 5 = 100\%$; multiply sample garbage audit results by 5 to calculate total garbage results.

ESTIMATING PERCENTAGES

Instructions: Examine the contents of each clear garbage bag; estimate the percentages that make up recyclable containers and paper, food and garbage.



STEP 2

Visual Recycling Audit

Repeat the Garbage Audit instructions using all the recycling collected over a 24 hour period.

STEP 3

Waste Minimization Action Plan

1. Based on your data and observations from the Garbage and Recycling Audit Worksheets, identify the most common items found in the waste produced by your school.
2. Identify items in the waste and recycling stream that can be targeted as items to be reduced and brainstorm strategies to accomplish this goal. It is often easiest to target items that can be replaced by a reusable container or that are highly visible. (e.g., single use water bottles).
3. Record your strategies in the Waste Minimization Action Plan or refer to your board's master Waste Reduction Plan if available. See sample plan at www.ontarioecoschools.org/forms&resources/waste_forms.html
4. Communicate the results of your Waste Audit and the strategies from your Waste Minimization Plan to the school. This can be done by hosting an assembly the day after your audit and displaying the results, creating posters depicting the results, launching a campaign to reduce a specific item in the waste stream. Post your waste audit data and waste minimization action plan where everyone can see it.

What's Important?

- Reduction! Doing a waste audit can help identify what your school can target to reduce its overall waste. Finding out what contaminates your recycling stream can also help to improve efficiency and effectiveness of your recycling efforts.