

Weighing In

OBJECTIVE: To illustrate the burden waste places on society and to explore methods of lessening this burden.

MATERIALS: garbage bag, air tight container (ice cream tub), weigh scale, rubber gloves, **HANDOUT: Waste in Ontario (A45)**

VOCABULARY: landfill, hazardous waste, tipping fee

BACKGROUND:

Canadians are the number one waste producers in the world, generating 30 million tonnes of garbage annually. Seventy-five percent of this waste is buried in landfills. Landfilling is the least desirable form of waste management; burying waste out of sight does not teach people to be responsible for their own waste. Reduction, reuse and recycling (the 3 R's) allows a person to take an active roll in managing his/her garbage. The 3 R's can divert nearly 75% of garbage from landfills. When an individual understands the components of waste they will understand that only a small portion of waste is truly garbage.

PROCEDURE:

1. Distribute the **HANDOUT: Waste In Ontario (A45)** to the class. Lead a discussion, asking the students to describe typical items that might be found in each waste category (i.e. used batteries are considered hazardous waste).
2. Ask the class if they think the **HANDOUT** is an accurate reflection of their personal waste production. Tell the students they are going to conduct an experiment to test their answer.
3. Each student is to collect the waste he or she produces over a period of one week. Any waste whether it is produced at home, school or even the mall is to be gathered. Some students may practise reduction, reuse, recycling or composting at home but for this activity all of their waste should be collected. Hazardous waste makes up only 1% of total waste production and for safety reasons it should not be included. Food and other organic kitchen waste should be kept in an air tight container such as an empty ice cream tub. The container should be weighed when empty to ensure accuracy later in the activity. All other items are to be placed in a garbage bag. As an option you may wish to have each student actually carry their garbage bag with them everywhere they go during the week. This may provide the students with a better understanding of the quantity of waste they produce.
4. After a week each student is to bring their garbage to the class. The students weigh their bags and record the weight. The container full of organic waste is weighed and the weight of the empty container should be subtracted. By adding the weight of the bagged garbage to the weight of the organic waste the student can total the amount of garbage he or she has generated.