



WASTE LESSON PLAN 8

SCHOOL WASTE AUDIT (Garbage Sort)

BACKGROUND: Students will examine school waste to discover if items could be diverted from the waste stream by reducing, reusing, recycling or composting.

TIME: Approximately 20 to 30 minutes.

MATERIALS:

- One bag of school waste for each group. (Keep wet lunch garbage separate. Don't include bathroom waste).
- Rubber gloves.
- Tables or plastic sheeting for each group.
- Five large containers labeled - reduce, reuse, recycle, compost and waste.

PROCEDURE:

1. Review the terms: reduce, reuse, recycle and compost.
 - Reduce- means to consume fewer resources. This can be done by buying used items, borrowing items you don't need to own, and buying good quality products that will last and can be given away when you no longer want them.
 - Reuse- means to use the product over again without any changes to it other than cleaning. A reused item does not change form. Example: using a clean yogurt container to hold leftovers.
 - Recycle -recycling requires an item to go through a series of steps (collection, processing, shipping, manufacturing, etc.) in order for the item to be made into another product. Recycling requires more resources and energy than reusing. Recycled items do change form. Example: glass being recycled into fiberglass.
 - Compost- Items that are organic will decay or decompose over time. Example: apple cores or carrot sticks leftover from lunches. Don't include meats or cheeses – they will rot and smell.
(Adapted from www.recyclesaskatchewan.ca **Consumption and Waste** lesson plan)
2. If a weigh scale is available, weigh each bag of waste and record the weight.
3. Each group spreads their bag of waste on the table and sorts it into the five categories: reduce, reuse, recycle, compost or waste. Students may need to discuss where certain items belong. Discussion may include if the item could be bought in bulk, made at home or made use of in a different way before discarding, etc.



4. When sorting is complete, record the amount of waste that remains. Weigh each container of materials or approximate the percentages of each, to the whole amount of waste.

DISCUSSION:

With the whole group, look at the containers of sorted items and the waste that remains.

- What kinds of waste were in their bags and were students surprised by anything that was in the bag?
- What kind of waste remains unsorted? Are there ways this material could be avoided? Example, small plastic bags with food remains could be replaced with reusable containers.
- How much of the leftover food can be composted? What could be done with untouched foods? (Placed in a “share” basket for others to eat, or ask your parent to send you less?).
- Clothing could be placed in the lost and found or donated to charities.
- Good one side paper could be used in the classroom as scrap or calculation paper.
- Could recyclable items be reduced? (Bring juice in reusable container or bring home made cookies?)
- Why would students be putting non-waste in the garbage? What changes could be made to help students discard items in the “right” container?

WHAT CAN I DO ABOUT THIS? :

Choose one of the issues that came out of the waste audit. Examples: paper only used on one side; lots of untouched food, or food that could be composted; recyclable drink containers discarded.

Using the **Lifestyle Campaign Action Plan Worksheet** as a guide,

<http://environmentalsociety.ca/main/docs/LifestyleCampaignActionPlanWorksheet.pdf>

- Define the change in behaviour you would like to see,
- How will you involve others in the school to make the change?
- What problems or barriers can you see to people changing their behaviour?
- What do you plan to do to help students make this change?
- How you will evaluate if you have been successful, and
- How you will celebrate your success?



ADDITIONAL RESOURCES:

- www.recyclesaskatchewan.ca
- Consumption and Waste lesson plan:
<http://recyclesaskatchewan.ca/school-units/Gr8-consump-waste/Gr8-consump-waste.html>
- Lifestyle Campaign Action Plan Worksheet
<http://environmentalsociety.ca/main/docs/LifestyleCampaignActionPlanWorksheet.pdf>

CURRICULUM CONNECTIONS

<p>Grade 2 Social Studies: Outcome: RW2.3 Contribute to initiating and guiding change in local and global communities regarding environmental, social, and economic sustainability. Health Education: Outcomes: USC2.1 Demonstrate a basic understanding of how thoughts, feelings, and actions influence health and well-being. USC2.4 Examine social and personal meanings of —respect□ and establish ways to show respect for self, persons, living things, possessions, and the environment.</p>
<p>Grade 3 Social Studies: Outcome: IN3.3 Illustrate examples of interdependence of communities.</p>
<p>Grade 5 Science: Outcome: MC5.3 Assess how the production, use, and disposal of raw materials and manufactured products affects self, society, and the environment. Social Studies: Outcome: RW5.1 Explain the importance of sustainable management of the environment to Canada’s future. Health Education: Outcome: AP5.1 Design and implement, with guidance, two five-day action plans that embrace health opportunities or address health challenges related to personal eating practices, changes of puberty, impact of illness/disease, identity and well-being, violence, peer pressure, and self-regulation.</p>
<p>Grade 7 Science: Outcomes: IE7.4 Analyze how ecosystems change in response to natural and human influences, and propose actions to reduce the impact of human behaviour on a specific ecosystem. MS7.2 Investigate methods of separating the components of mechanical mixtures and solutions, and analyze the impact of industrial and agricultural applications of those methods. EC7.2 Identify locations and processes used to extract Earth’s geological resources and examine the impacts of those locations and processes on society and the environment</p>
<p>Grade 8 Health Education: Outcome: USC8.6 Examine and assess the concept of sustainability from many perspectives, and develop an understanding of its implications for the well-being of self, others, and the environment.</p>
<p>Grade 9 Health Education: Outcome: USC9.5 Evaluate a variety of healthy food policies and plan to participate in the development, revision, and/or implementation of a healthy food policy (e.g. fundraising feasts, canteen sales, extra-curricular events) in the community (e.g. home, school, arena, youth center). AP9.12 Design, implement, and evaluate three eight-day action plans that demonstrate responsible health promotion related to comprehensive approaches to safety, non-curable infections/diseases, romantic relationships, healthy food policies, addiction, tragic death and suicide, chronic illness, and sexual health.</p>
<p>Grade 10 Science: Outcomes: SE1 Explore cultural perspectives on sustainability. SE5 Investigate human impact on ecosystems.</p>
<p>Grade 11 Biology: Outcome: 5.4 Discuss the carrying capacity of planet Earth for the human population</p>