



Clean-Up Campaign facts:



- First Clean-Up organized by Meewasin in 1981
- Tens of thousands of volunteers have removed tonnes of waste from parks, riverbanks, and neighbourhoods of Saskatoon
- Affinity Credit Union (nee: Saskatoon Credit Union & FirstSask Credit Union) has been the title sponsor of this event since 2000

Why an organized Clean Up?

- Organized clean up campaigns bring awareness and help to create an awareness and appreciation for the environment that we live in
- Help to minimize amount of garbage that is carried by run off water (storm drains etc) directly into the river
- Cleaner storm sewers make for better flow, which in turn can help minimize residential flooding
- Achieve immediate environmental benefits
- Improve living conditions and general appeal of our neighbourhoods

Who benefits:

- We all do!
- Animals and plants
- Everything along and in the South Saskatchewan River, and the larger Saskatchewan River Basin, all the way to the Ocean!

Where can I get more local information?

- The Meewasin Valley Authority – www.meewasin.com
- City of Saskatoon - www.saskatoon.ca
- Saskatchewan Environment: www.environment.gov.sk.ca
- Government of Canada - ecoENERGY: www.ecoaction.gc.ca
- Saskatchewan Environmental Society: www.environmentalsociety.ca
- Saskatchewan Waste Reduction Council: www.saskwastereduction.ca
- Saskatchewan Environmental Industry and Managers Association: www.seima.sk.ca
- Saskatchewan Eco-Network – www.econet.ca
- Earth Day Canada's website - <http://www.earthday.ca>
- Earth Day Canada's Teachers and Kids website - <http://www.ecokids.ca>
- Environment Canada Events page (Youth Zone) - <http://www.ec.gc.ca/sce-cew/>
- Loraas Community Relations Coordinator **Ryan Buhay** (306) 242-2300
ryan.buhay@loraas.ca
 - **For tours of the recycling facilities, or to book waste diversion education for all grade levels for classroom visits or school assemblies.**

Lesson Plans & Ideas for Teachers

Clean-up day activity:

Curricular connection – (data management, averaging, geometry, decision making, citizenship, environmental education, logical / creative thinking):

- Have students in groups measure out 100 square meters of park before they begin cleaning. Have them record the amount of garbage, either by number of items, or by weight, and compare them with other groups to create an average amount of garbage per 100 meters
- Follow the garbage trail. Have the students brainstorm the path that garbage would follow if not picked up and propose options and/or different solutions. The flow chart is infinite based on student choices.

Examples:

- Garbage not picked up → leeches into ground → worms eat → animals eat worms with toxic chemicals → animal population suffers →
- Garbage not picked up → wind carries it to street → ends up in storm drain → goes into river → follows the river system to Hudson Bay and eventually the ocean → water quality and the animal population suffers →
- Be creative! It gets picked up and made into birds nests; ducks get caught in it; clogs up the eavestroughs of the school and the roof starts to leak... etc etc...

Attached lesson plans

- How long does trash last?
- Junk Mail Overload!

Online student activities – Webquest:

[What is the Most Serious Problem Facing Earth?](#)

In this special Earth Day WebQuest, student teams vie for funding from the fictional Help Our World (HOW) Foundation. Each team builds a case for a critical environmental concern. Which threat is the most critical?

http://www.educationworld.com/a_lesson/lesson/lesson307.shtml

How Long Does Trash Last (A Cooperative Learning Activity)

Subjects

- Arts & Humanities:
Language Arts
- Arts & Humanities:
Visual Arts
- Educational Technology
- Mathematics:
Measurement
- Mathematics:
Statistics
- Science: Physical Science:
Environmental

Grades

- 3-5
- 6-8

Brief Description

Students learn how long trash lasts in landfills in this cooperative activity.

Objectives

Students will:

- Work together in groups to formulate their best estimate of how long some trash items might last in a landfill.
- Learn about environmental consequences of not recycling.
- Use a graph-making tool to create a graph. (Optional)

Keywords

Trash, recycle, biodegrade, longevity, garbage, landfill

Materials Needed

- aluminum can (soda pop can)
- banana
- cigarette butt
- cotton rag
- glass bottle
- leather boot
- paper bag
- plastic 6-pack rings
- plastic jug
- rubber sole of the leather boot (above)
- Styrofoam cup
- tin can (soup or vegetable can)
- wool sock

Write the above list of items on a chalkboard or chart.

Lesson Plan

Before the Lesson

Display for students the materials you have collected (see Materials section above). Provide a chart on which you have written the names of those materials.

Draw students' attention to the items you have gathered. You might ask, *What do all the items have in common?* If your students are too young to figure out the answer to the question, you can share with them that each of the items will likely end up in a landfill one day.

Next, ask *What will happen to these items when they end up in the landfill? How long do you think they will last there? Do they disappear/disintegrate/degrade immediately? Or will they continue to take up space in the landfill?* Let students freely discuss those questions.

Draw students' attention to the list on the board or chart. Ask students to copy the list. Then ask them to

- Think *on their own* about how long each of the items on the list might last when buried in a landfill.
- Recreate the list by writing each item in order according to how long they think it might last in a landfill. Students should start their lists with the item they think will degrade fastest and end with the one that will last the longest.

Next, arrange students into small groups. (Groups of 4 to 5 students will work best.) Let students share their lists and discuss what they believe to be the correct sequence. Ask each group to come to a consensus about the correct order of the items.

Now it is time for the groups to share their lists. Call on one group to share their answers first. Have them tell you the sequence they decided on. As they call out "sheet of paper -- number 1," write a number 1 on the chart next to the words *sheet of paper*. Do the same for the other groups. When that activity is completed, draw students' attention to the discrepancies on the chart. For example, *why did some people include the sheet of paper before the banana?* At the conclusion of the discussion, reveal to students the best estimates of scientists, who say the following is the correct sequence:

- Banana
- Paper Bag
- Cotton Rag
- Wool Sock
- Cigarette Butt
- Leather Boot
- Rubber Sole of the Boot
- Tin Can (soup or vegetable can)
- Aluminum Can (soda pop can)
- Plastic 6-pack rings
- Plastic Jug
- Styrofoam Cup
- Glass Bottle

Point out to students that conditions could result in some items degrading more or less quickly than the list indicates.

Now, turn the assignment back to students. Now that they know the correct order, ask them to brainstorm in their groups how long (how many weeks, months, or years) each item will last. Repeat the procedure above as groups discuss, then share, their best guesses about how long items will last. Then share scientists' approximations listed below:

- Banana -- 3 to 4 weeks
- Paper Bag -- 1 month
- Cotton Rag -- 5 months
- Wool Sock -- 1 year
- Cigarette Butt -- 2 to 5 years
- Leather Boot -- 40 to 50 years
- Rubber Sole (of the boot) -- 50 to 80 years
- Tin Can (soup or vegetable can) -- 80 to 100 years
- Aluminum Can (soda pop can) -- 200 to 500 years
- Plastic 6-pack rings -- 450 years
- Plastic Jug -- 1 million years
- Styrofoam Cup -- unknown? forever?
- Glass Bottle -- unknown? forever?

Note: The data above was gathered from sources such as the Bureau of Land Management and the Oregon Department of Environmental Quality.

After you have provided students with data about the longevity of the displayed items, discuss the following questions: What does the data tell you about landfills? Do items continue to degrade and make room for new garbage? Or will those landfills eventually fill up? Do those trash life spans say anything to you about the importance of recycling? Why or why not?

Extension Activities

- Have students use a graph-making software program to create graphs that illustrate the lifespan of trash items discussed in the activity. If students do not have access to such a program, introduce them to the free and easy-to-use online Create a Graph tool.
- Have students create posters to encourage recycling the items listed on the chart. Display those posters where students in the school will see them or in prominent public places, such as the library or a grocery store.

Assessment

Have students write a paragraph explaining what they learned about landfills or recycling from the activity.

Lesson Plan Source

Education World - http://www.education-world.com/a_lesson/03/lp308-04.shtml

Junk Mail Overload!

Note: Not everyone sees direct mail as "junk mail." In fact, if people didn't find useful things to buy in response to direct mail, obviously, the direct-mail business wouldn't exist. For companies large and small, direct mail has many advantages over other kinds of advertising. In response to environmental concerns, national direct mail organizations offer tips to help consumers participate in environmental protection.

Subjects

- Arts & Humanities
Language Arts, Visual Arts
- Mathematics
Arithmetic, Measurement, Statistics
- Science
Physical Science, Environmental
- Social Studies
Civics

Grades

- 3 - 5
- 6 - 8
- 9 -12

Brief Description

Students track the amount of junk mail received at their homes in one week and use the collected data to estimate how much junk mail would accumulate in a year. Then they explore ways to solve the junk mail problem.

Objectives

Students will:

- Enlist the help of their families to collect and track the amount of junk mail that arrives in the course of one week;
- Use the data collected to complete a chart that estimating the amount of junk mail the family will throw away in a month and a year;
- Use the class data set to figure the average amount of junk mail a family receives;
- Use that data to estimate how much junk mail the entire community throws away in a week, a month, and a year;
- Explore ways of cutting back on the amount of junk mail;
- Create brochures to share what they have learned about cutting back on junk mail;
- Do a follow-up activity in several months to see whether what they do to cut back on junk mail has had an impact in the community.

Keywords

Trash, recycle, landfill, conserve, letter, chart, data, statistics, average, estimate, mail, junk

Materials Needed

- Paper
- Pencils
- Postage scale or another scale that weighs small units

Lesson Plan

Most junk mail goes from the mailbox to the trash can. Much of it is never even opened! Talk with students about the junk mail nuisance. Then ask, "Why do people call unsolicited mail 'junk' mail? Do you think junk mail is an environmental problem?"

Encourage students to involve their families in this activity by asking them to collect all the junk mail they receive in a week. At the end of the week, the students will bring in the bag of junk mail their families collected. Provide a simple chart on the board for students to copy; have them use the chart to figure out how much junk mail their families contribute to landfills each year.

| FAMILY JUNK MAIL | | |
|----------------------|------------------|--------------|
| | Number of Pieces | Total Weight |
| One Week | | |
| One Month (4 weeks)* | | |
| One Year (52 weeks)* | | |
| *Estimated | | |

When students have completed the first part of the chart (above), ask: How might you use the information above to help you figure the *average* amount of junk mail received by families in the class? How might you use that information to figure the amount of junk mail tossed out by an entire community in one week, one month, and one year?

One possible solution: After computing the average amount of trash for a family (by adding all the junk mail figures and dividing by the number of families), students might estimate the number of families in the community by figuring the average family size among students in the class and dividing the population of the community by that number. (The number of families in the community figured in this way will be a low estimate because many families in the community will be smaller than the average family size in the class.) Then multiply the average family's junk mail amount (quantity and weight) by the estimated number of families to figure the total of junk mail for the community. Fill in the chart below to reflect those numbers.

| COMMUNITY JUNK MAIL | | |
|----------------------|------------------|--------------|
| | Number of Pieces | Total Weight |
| One Week | | |
| One Month (4 weeks)* | | |
| One Year (52 weeks)* | | |
| *Estimated | | |

After completing the charts, discuss the following questions with students: How much trash does junk mail add to your town's landfill? (Or how much might junk mail add to the town's trash hauling fees?) What might be done to cut down the amount of junk mail thrown away by families in your area?

Next, the teacher might share some methods of reducing the amount of junk mail from Web sites such as [Do-It-Yourself: Stop Junk Mail ...](#) and [Consumer Assistance from the Direct Marketing Association \(DMA\)](#).

Extension Activities:

- Students might create brochures to take home or pass out in the community that provide the eye-opening data they collected/estimated as well as some pointers for reducing the amount of trash generated by junk mail.
- Students can write letters to companies that produce catalogs and other junk mail their families don't use or want.

Assessment

Repeat the activity later in the school year to learn whether the junk mail reduction tips have had any impact on the amount of junk mail families receive.

Lesson Plan Source

Education World - www.education-world.com