

Lesson Activity Bank

Lesson Title: Where Does the Garbage Go?

Rationale:

One of the most important parts of maintaining a planet that is healthy for all life forms is reducing the amount of waste that is created by humans. This waste has a huge negative impact on the natural environment. Recycling waste and reducing the waste produced is important for conserving raw materials, reducing pollution, conserving energy, and preserving natural resources.

Goals:

- Environmental Literacy Scope & Sequence benchmark: Social and natural systems may not function as well if parts are missing, damaged, mismatched, or misconnected.
- Key systems concepts and supporting concepts: interactions and relationships (cause and effect, ecosystem, population, reciprocity), subsystems (community, economics), inputs and outputs (innovation and invention, resources, waste), change over time (innovation and invention, population)

Teacher Resources:

Community POWER – www.rethinkrecycling.com

Recycling Association of Minnesota – www.recycleminnesota.org

Earth 911 – www.earth911.org

MN Pollution Control Agency – www.pca.state.mn.us

National Geographic's *The Green Guide* – www.thegreenguide.com

Carver County Environmental Center – www.co.carver.mn.us/departments/LWS/env-svc/envirocenter.asp

Handouts and flyers from the Carver County Environmental Center about recycling

For the Love of Our Earth by P.K. Hallinan

Just a Dream by Chris Van Allsburg

The Wartville Wizard by Don Madden

How Spider Stopped the Litterbugs by Robert Kraus

Recycle Everyday by Nancy Elizabeth Wallace

Where Does the Garbage Go? By Paul Showers

Reducing and Recycling Waste by Carol Inskipp

The Environment: Saving the Planet by Rosie Harlow and Sally Morgan

Shelburne Farms Project Seasons by Deborah Parrella

50 Simple Things Kids Can Do to Save the Earth by The EarthWorks Group

Earth Book for Kids by Linda Schwartz

Recycling by Rhonda Lucas Donald

Accommodations for Learners:

Buddies

Books in native languages about recycling and reducing waste

Read along tapes
Group work
Parent supervisors/volunteers
Allow more time
Shorter lengths of assignments

Field Trip/Guests:

Visit a dump or landfill
Visit the Carver County Environmental Center and Rain Garden (Contact: Bill Fouks, (952) 361-1842 or visit www.co.carver.mn.us/departments/LWS/env-svc/envirocenter.asp)
Complete a community trash pick up (vests and bags can be obtained from Carver County Public Works by calling (952) 466-5200 or visiting www.co.carver.mn.us/departments/PW/)
Invite a community elder to your classroom to talk about waste reduction, reuse, and recycling in the past

Student Reading/Literature:

Textbooks (Social Studies/Science)
National Geographic
Websites

Storybooks on the 3 R's:

- *For the Love of Our Earth* by P.K. Hallinan
- *Just a Dream* by Chris Van Allsburg
- *The Wartville Wizard* by Don Madden
- *How Spider Stopped the Litterbugs* by Robert Kraus
- *Recycle Everyday* by Nancy Elizabeth Wallace
- *Where Does the Garbage Go?* By Paul Showers

Oral Language:

Students tell stories and experiences
Sing
Poetry
Daily P.A. announcements

Written Language:

Letters to the principal or school board
Letters to the editor
Poems
Songs
Campaigns
Stories
Journal Entries

Social Skills:

Group work

Pair share
Presentations
Debates

Social Studies:

What is *recycling*? What does it mean to *reduce*?
How does it affect our environment?
How has technology changed the meaning of reduce, reuse, and recycle? Do you think it is the same or different than 150 years ago? 100 years ago? 50 years ago? 10 years ago?
How does our population affect the amount of waste we produce?
What are the recycling statistics for Carver County?
How does recycling affect the environment?
How can we encourage more people to participate in the 3 R's?
What different things can we recycle? What ways can you think of to reduce what you already use or buy each day?

Art:

Posters
Collages
Brochures
Book illustrations
Draw pictures about what the world would look like if we didn't recycle and don't reduce the amount of waste we produce

Music:

Put on Your Green Shoes CD by Various Artists
Mother Earth CD by Tom Chapin
Songs about our world/the United States/communities
Songs about nature
Have the students write their own words to *Frere Jacques* or another children's song, but relate them to recycling and/or waste reduction

Science:

Environmental effects
How can we use science to help us recycle?
How does this affect our ozone layer?
How does this affect our water?

Math:

Statistics
Computing averages
Reading charts/graphs/maps

Physical Education/Movement Health:

If we stopped recycling, would it affect our physical and mental health? Why or why not?

What human effects would there be of not taking care of the planet and continuing to produce waste in such vast quantities (i.e. drinking polluted water, not replacing downed trees, etc.)?

How does human recycling affect an animal's health and survival?

Technology:

Go to websites on recycling

Watch videos

Assessment:

Peer assessment review

Read journals

Reflect on lesson plans and make modifications

Use a rubric

Observe students and record actions

Tests

KWL chart understanding

Have students explain and respond

Follow-up activity #1

Recycling Chart

(Handout: Residential Curbside Recycling Guide or similar literature, copies of blank recycling chart, magazines w/ kitchen/housewares photos, glue, & crayons)

Help the students cut out photos from magazines or draw pictures of the items that can be recycled in their community. Paste the pictures onto a blank piece of paper or the blank Recycling Chart Activity and post the recycling chart in the kitchen or near the garbage/recycling area.

Follow-up activity #2

***Just a Dream* by Chris Van Allsburg**

Just a Dream has proven to be a very valuable book in terms of providing inspiration for this project. There are many resources available online to help you use this book in your classroom, as well as other Chris Van Allsburg books. Here are a few of the sites to check out:

Houghton Mifflin's Teacher Guide to *Just a Dream*:

www.houghtonmifflinbooks.com/features/thepolarexpress/tg/dream.shtml

http://www.kidseconbooks.com/html/just_a_dream.html

Chris Van Allsburg Teacher Resource File: <http://falcon.jmu.edu/~ramseyil/allsburg.htm>

Students can also research the author and his other works and can compare and contrast the writing style, artwork, and other aspects of his works.

Follow-up activity #3

The Garbage Diet: A Skit

This skit can be found at

<http://cwmi.css.cornell.edu/TrashGoesToSchool/GarbageDiet.html>. Have your students

complete the skit, using recycled materials as props. You can also have the students write their own skits and perform them for other grade levels or classrooms. Explain to the students that they've been learning all about the environment but they have to do more than just learn about it – they have to tell others too! If they really want to make a difference and protect the environment, it's important to teach other what we learn. They can do that by writing a short play, called a *skit*, about what they are learning in their lessons and will perform this skit for others in the school. A play is a story that is written to be acted on a stage or in a theater. A skit is a short play that is usually performed in a more informal setting like a club meeting or a classroom. Skits are often funny. The written text for a skit or play is called the script. Students will work in small groups to write a script and perform the skit. They can get a box of props – all recycled materials, of course – that they will have to use in the skit as well as some art supplies and costumes. Students may bring recycled objects from home to use in your skit, but they CANNOT be new, and they cannot be used for their original purpose. For example, if you need a lamp in your skit to talk about energy conservation, you can't bring a lamp from home. You can, however, bring a burned out light bulb, an empty laundry detergent container, and a toilet paper roll to build a lamp yourself. You will have to approve them before the students can use them in the skit. Skits can be no shorter than 5 minutes long and no longer than 10 minutes. See the attached *Lesson 3 Skit Writing Worksheet* for a good resource for getting the students started on their skits.

Follow up activity #4

Oral history project

You will have to contact some community elders who would be willing to come in and sit with your students for 20-30 minutes and discuss waste reduction in the past. Because this is an activity we did this summer, I do have some contacts that you may be able to use. Contact Erin at (952) 442-4234 if you need help finding elder volunteers. Also, CCHS owns 6 digital tape recorders that can be borrowed from the museum for this project.

“One of the most important parts of learning about history is talking to people. This is called *oral history*. *Oral* means something that is spoken. Oral history is a tool for collecting and preserving history. It allows people to tell their stories as they talk, prompted by questions from an interviewer. Today, you are going to learn how to be the interviewer. As historians, it is our job to make sure that all the information that people keep within themselves – their own personal historic record – is recorded. Oral history is easily lost – if someone passes away or loses their memory, all their stories and recollections are gone too. Oral history is also important because it helps preserve the history of everyday people who may have experienced things differently than what is recorded in the history books. Oral history helps us to find and discover all the different sides of a story that needs to be told. An *oral historian* is someone who interviews people and records what they say. Today we're going to learn how to become oral historians – and it's not always easy. Sometimes people don't want to talk to you at all, or sometimes people don't want to talk about a certain subject that you are researching. If someone doesn't want to be interviewed for history, then you are probably better off asking someone else for an interview than trying to convince him or her to talk to you. Sometimes people need time to think over a decision before they volunteer information to

you – they might not want to share personal stories or things they think might get them or someone else in trouble, even if it is years later. It’s important to remember that oral history is not a private conversation – you intend to use it for others to learn about the past – and some people are not comfortable with that idea. Oral history is more than just showing up and asking questions, although sometimes that happens. Usually you have to plan ahead and answer a few questions yourself. What do you want to talk to this person about (*your goals for the project*)? In this case, we want to talk to our interview subjects about what it was like to reduce, reuse, and recycle in the past. Next you need to do some background research about the topic you want to interview on. You don’t want to go into an interview knowing nothing about the time period or the topic. I’ve already asked several people who are willing to be interviewed for our project. They are willing to answer your questions, and they know that you are first time, and very brave, interviewers, so you don’t need to be nervous. The people we are going to interview are here to help you as well answer questions for you. You are going to work in pairs, and each pair of students will have one *elder* to interview. What’s an *elder*?” (Someone who was born before you were – usually refers to someone who is respected for his or her age and plays a big role in the community) “You will meet with the same elder two times this week to discuss different topics. Before each session, I’ll let you know what topic you should discuss with your elder first, and we’ll take time to brainstorm some questions.”

Oral History How To

(“Oral History How To,” in Minnesota’s Greatest Generation Teacher Tools, (Minnesota Historical Society, 2006), < <http://stories.mnhs.org/stories/mgg/lesson.do?id=2>>, accessed 26 February 2008.)

“Today the topic we’re going to discuss the environment with our elder partners. Let’s brainstorm some questions that we will want to remember to ask our guests when they get here. What things do you think are the most important to ask them? We want to find out some things about them, but we also want to know what some of the environmental problems were when they were growing up. Did they recycle? Were they faced with any major environmental problems (i.e. the drought in the 1930s)? What do they think are the problems now? How have they changed? Do you see any similarities between then and now?” Lead the students through a discussion of the “Oral History Do’s and Don’ts” worksheet. As you address and explain each item on the list, ask the students why the things on the list are important to remember. Break students into pairs, dedicating one as the recorder and one as the reporter. Have students use the “Oral History Dos and Don’ts” (See *Lesson 3 Oral History Do’s and Don’ts* handout as a guide to devising questions to ask their elder.) Make a copy for each student and send it home with them at the end of the day, so that they can use the pointers to practice with their parents.

Students should develop 20 questions about reuse, recycling, and environmentalism in the past and at least 10 questions (if not more) about their elder’s childhood and early life. As you circle the room, ask students to share their proposed questions with you, and check that they have phrased open-ended, thought provoking questions. You might also ask what responses they expect to receive. Students should familiarize themselves with the tape recorders during this practice time as well as practice questioning techniques. I went around to each pair and showed them how they worked and did a demonstration recording. Encourage them to practice with them in their groups. Ask groups to select

their best questions and have one representative from each group read the questions while you write them on the board. As a class, remove redundant questions and rephrase others as needed, to create a comprehensive set of questions. Encourage students to ask questions about the historical context of the elders' youth, so that they have something to draw upon when composing a larger story.

First Intergenerational Meeting

When elders arrive, introduce them and pair each elder up with a group of two or more students. Remind the student pairs to turn on their tape recorder and say the date, their names, and the name of the person that they are interviewing. Students are to use the questions on the board, as well as other questions they may have brainstormed in their small groups to conduct the first interview. Remind students and elders that the theme for the day is "Environmentalism in the Past." Walk around the room so that you can help guide the interviews when they stall, or encourage more open-ended questions. As the interviews wind down, ask students to wrap up any last questions they may have and then shut the recorders off.