OBJECTIVES: The students will identify the various waste materials generated in the school. They will describe the sequence of collection and the destination of the materials identified.

RESOURCES: Classroom wastebasket, maintenance personnel, area road map, chalkboard.

PROCEDURE:

1. Separate the class into three groups.

2. Have group one examine the contents of the classroom wastebasket. Ask the group to identify the various types of waste materials generated in the classroom. Categorize the waste materials as paper products, glass, metals, plastics, organic wastes, etc. Record the findings on the chalkboard.

3. The second group should examine the flow of the waste materials after they are collected from the classroom. This may require an interview with maintenance personnel. Are the wastes consolidated with other classroom's wastes? Why? Are the wastes transferred to a large capacity receptacle? Are any wastes burned in a school incinerator? Are any waste materials recycled? If wastes are collected from the school by the municipality or a commercial disposal firm, where are the wastes disposed?

4. Have the third group determine the types of wastes generated in special subject areas of the school (arts and crafts, gym, home economics, industrial arts, etc.), the school cafeteria, the office, the maintenance area. Are these wastes handled in the same manner as classroom wastes? Determine what other wastes are generated by the school. Where do these wastes go?

5. Regroup the class. Have a member or members of each group report the group findings, beginning with group one. Create a diagram or a flowchart on the chalkboard to outline the reports of groups two and three, indicating the steps between waste generation and waste disposal.

6. Ask whether any members of the class live near or have visited a landfill, an incinerator, a recycling center, or a sewage treatment plant. Ask for descriptions and impressions of the facilities. Determine whether any of these facilities are located near the school. You may need to contact your county planning department for the locations. Plot the facility locations and the school location on the road map. Calculate the distances that waste materials must be transported to each facility. List the type of wastes generated by the school which are managed by each facility and the distance of each facility from the school.

7. (Optional) Arrange a class field trip to one or more waste management facility. Create a class record for each facility. Include photos, drawings, essays, and audio or video tape recordings.

What Happens to Trash?

Kindergarten students will learn the reason we recycle through this hands-on science experiment.

Materials: Collect some garbage to bury (an apple core, an egg shell, a piece of lettuce, a piece of a candy wrapper, a piece of Styrofoam and a piece of small newspaper). Create garden tags from a piece of paper and a craft stick. Draw a picture of the object that you will bury on the tag, laminate and staple to the stick. Small hand shovel. Prepare tree journals and write Experiment 2 on the top of the page, or label it with the title, "What Happens to Trash".

Prior Knowledge: Who has seen trash on the side of the roadways or streets? What happens to trash that is discarded in this manner? Today we will start a science experiment with trash. We will learn why it is important to recycle.

Teach: We need trees. Trees help us in many ways. Each time we use paper we are using a tree. Trees take a long time to grow. The number of trees cut down every year worldwide for paper is nearly 4 billion. Each person in the United States uses 749 pounds of paper every year. Ask who knows what recycling is? Define (to process and refine to make use again for human use) and post vocabulary.

Learn more here at ecology worldwide.

Procedure:

Get permission from the grounds keeper and principal at your school to do this science experiment.

Show the class the trash that we will be burying. Ask the students to predict what will happen to the items. Chart this information.

Find an inconspicuous place outside the classroom to do this project. Make sure that is a place that will not be disturbed by traffic (walking).

Go outside with the class.

Dig six small holes in the ground.

Bury each item in a separate hole, cover with dirt, and mark each spot with the tags you have created prior to the lesson.

Mark your calendar for four weeks from today. In four weeks dig up each item and see what happened. Journal what happened and why you think that that happened.

This is what happens to our trash in the garbage dump.

Assessment: Journal- can the students display the information in picture form and label what happened? Is the journal entry complete? Is the journal entry readable? Does the journal entry tell someone who picked up that journal what happened?

Celebrate: Have students decorate a recycle crate for paper in the classroom. Reward each student with recycle badge or sticker in their journal.

Get your school involved in an earth day project where students "borrow" grocery bags, decorate them for earth day and return them to the store for use. Learn more here.

Paper Retriever Program

If your school is not already involved in a paper recycling program, then please contact Paper Retriever, your school can even earn money (prizes) by recycling through this program! Type in your city under the "cities served" link to reach the contact person in your area.

Read more: http://www.brighthub.com/education/k-12/articles/6679.aspx#ixzz0hE3DHKzD