

Solid Waste and Recycling

by Bernita Robinson

Lesson I - Litter Activity:

Introduction: Litter, especially paper, is our greatest source of waste.

Objectives: Students will:

- discover how much waste is generated in class
- offer some solutions to cutting down on waste in class

Time Allotment: several days to a week

Materials: Litter activity sheet, large bins to collect litter

Advanced Preparation: None

Procedure:

Prior to lesson the students will apply the KW (prior knowledge and what they want to know) of the KWL method.

- Introduce the lesson
- Class will do hands-on activity and discuss results connecting lesson to everyday examples.

Summary:

Have the students apply the L (what they have learned) of the KWL method.

Safety: No hazards.

Clean-Up: Recycle as much as possible

Home Activity:

Have students discuss the lesson with someone at home.

Lesson Assessment:

Based on participation in activity and what they have learned (L).

Additional Activities:

Students will create sculptures, jewelry and collages (sort and disinfect litter first). All art projects in solid waste and recycling lessons will be presented in a school wide art exhibit.

Lesson II - Paper Recycling Activity

Introduction: Paper is our greatest source of waste. We can cut down on paper waste by recycling our paper waste.

Objectives: Students will:

-Learn how to recycle newspaper waste

Time Allotment: 2 days

Materials: old newspaper, starch, beater or blender, large bowl, screen to hold paper fiber, sheet of plastic, block of wood, paper recycling activity sheet

Advanced Preparation:

-Collect old newspaper

Procedure:

-Prior to lesson the students will apply the KW (prior knowledge and what they want to learn) of the KWL method.

-Introduce the lesson.

-Class will do hands-on activity and discuss results connecting lesson to everyday examples.

Summary:

Have the students apply the L (what they learned) of the KWL method.

Safety: Make sure the students' clothes are covered with plastic or aprons.

Clean-Up: None.

Home Activity:

Have students discuss the lesson with someone at home.

Lesson Assessment:

Based on participation in activity and what they have learned (L).

Additional Activities:

Students may want to include leaves or other flat objects on their paper fibers.

Lesson III - Main Kinds of Solid Waste

Introduction:

Solid waste is a very serious problem. Americans throw away valuable waste products which can be recycled and used again. There are other kinds of solid wastes which help to destroy our environment.

Objectives: Students will:

- discover some of the main kinds of solid waste
- offer solutions to some of the solid waste problems

Time Allotment: 40 minutes

Materials: Main kinds of solid waste, activity sheet, pencil

Advanced Preparation: None

Procedure:

Prior to lesson the students will apply the KW (prior knowledge and what they want to know) of the KWL method.

-Introduce the lesson

-Class will do hands-on activity and discuss results connecting lesson to everyday examples.

Summary:

Have the students apply the L (what they have learned) of the KWL method.

Safety: No hazards.

Clean-Up: None.

Home Activity: Have students discuss the lesson with someone at home.

Lesson Assessment:

Based on completion of activity and what they have learned (L).

Additional Activities:

Students may wish to recycle cans, plastics and glass.

Lesson IV - Canned Pencils

Objective: Students will :

- recycle cans using various "waste" materials

Time Allotment: 30 minutes

Materials:

-old cans with clean edges, fabric scraps, old magazine pictures, glue, scissors, string and ruler for measuring distance around can and length of can, canned pencil direction sheet.

Advanced Preparation:

Have students bring in materials prior to activity.

Procedure:

Prior to lesson the students will apply the KW (prior knowledge and what they want to know) of the KWL method.

-Introduce the lesson

-Class will do hands-on activity and discuss results connecting lesson to everyday examples.

Summary:

Have the students apply the L (what they have learned) of the KWL method.

Safety: Remind students to only bring in cans with clean edges.

Clean-Up : None

Home Activity:

Have students discuss the lesson with someone at home.

Lesson Assessment:

Based on completion of activity and what they have learned (L).

Additional Activities:

Students may make several more to sell or give as gifts.

Lesson V - Plain Plane

Introduction:

One solution to cutting down on waste is to recycle. We have an abundance of plastic waste which cannot be recycled into the earth. Our landfills are few and are filling up fast.

Objectives: Students will:

-learn how to recycle materials that we ordinarily "throw away".

-find economical ways to make toys

Time Allotment: 1 week (30 mins./day)

Materials:

-plastic bottle with top, kitchen, 3 plastic tops (same size), 2 pipe cleaners, large plastic lids, 1 brass fastener, Plain Plane direction sheet.

Advanced Preparation:

Have students bring in materials prior to activity.

Procedure:

-Prior to lesson the students will apply the KW (prior knowledge and whatthey want to learn) of the KWL method.

-Introduce the lesson.

-Class will do hands-on activity and discuss results connecting lesson toeveryday examples.

Summary:

Have the students apply the L (what they learned) of the KWL method.

Safety: Teachers may have to solicit parent volunteers because scissorsare sharp.

Clean-Up: None.

Home Activity:

Have students discuss the lesson with someone at home.

Lesson Assessment:

Based on participation in activity and what they have learned (L).

Additional Activities:

Students may wish to decorate their planes. Students will have a recycledart display for the entire school.

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