



Give It Back*

Activity P.w

GRADE LEVELS: K - 3

OBJECTIVE:

The child will be able to 1) recognize a change in natural and human-made items buried in the soil over time, 2)

identify, sort and classify recyclable human-made items, and 3) understand the recycling process for natural and human-made materials.

METHOD:

The child buries natural and human-made items in a waste garden to observe changes, sorts cans using a magnet, stomps a pile of leaves to demonstrate nature's recycling, and begins to recycle at school and at home.

BACKGROUND:

Nature conserves its natural resources quite well. For example, twigs, leaves, and food that fall on the ground all break down into soil, which helps plants and animals grow. This is a natural cycle. Some of nature's resources are renewable, like trees and wildlife. These natural things can reproduce and grow again in a relatively short period of time. Nature's automatic "recycling" aids this process. Nature also has non-renewable resources which take millions of years to reproduce. Examples of these items are petroleum, gas, coal, and minerals. From these resources, people have manufactured hundreds of products that are used every day. Most of these human-made items, such as steel and plastic, can be recycled just as nature recycles its twigs, leaves, and other natural materials. Since nature takes such a long time to re-make items like iron and petroleum, recycling these resources will conserve the resources for many future generations.

The major purpose of this activity is to show the child how natural and human-made items are recycled and used again to conserve natural resources.

MATERIALS:

- Natural and human-made items
- Drawing materials
- Sticks and cards for signs
- Two boxes
- Magnets
- A bag of full aluminum beverage and steel food cans (full cans are recommended so there will be no rough edges)
- A bag of leaves
- Large piece of plastic or paper

PROCEDURE:

Waste Garden

1. Collect waste materials, both natural (leaves, twigs, slice of apple, bread, feathers) and human-made (glass, marbles, steel food can, aluminum foil, newspaper, plastic bags).
2. Make a tracing of each item, recording its size, shape, color, and texture. In a shoe box or

area outside, plant these items in soil and mark the spot where each item is buried.

3. In a week, dig up the items and observe how the waste materials have changed (size, shape, texture, color, etc). Compare with original tracings or with “new” waste items. Discuss the need to recycle and conserve human-made items that do not change quickly.

Cans are Attractive

1. Label two boxes, one for steel cans and one for aluminum cans.
2. Have the children use magnets to sort the bag of steel and aluminum cans. The magnets will stick to the steel cans but not to the aluminum cans. Count the number of cans in each box and determine which box has more or less.
3. Use these boxes to start a school multi-material recycling center, adding boxes for newspaper, plastic and other items used at school. Collect only items which are recyclable in the community. Send a note such as the sample in this activity to parents encouraging recycling at home. Take a trip to a recycling center.

Leaf Stomp

1. Demonstrate recycling of natural materials by reducing the volume of a bag of leaves by stomping.
2. Measure the size of a full bag of leaves. Cut a length of yarn placed around the fullest part of the bag.
3. Dump the leaves on a sheet of plastic or paper. Allow each child to stomp the leaves.
4. Pour the leaf parts back into the bag. Measure the bag (volume reduced) by cutting a new length of yarn. Compare the yarn length from the reduced and full bags. Observe the stomped leaves and discuss natural recycling.

*Source: Nature’s for ME, a preschool learning program distributed by the Steel Recycling Institute