Make a Mini Landfill



Goal: To have kids examine the materials that comprise the products they use, describe whether these materials are renewable or nonrenewable resources, observe what happens to materials when placed in a landfill and decide whether they should be disposed of in a different way.

Materials: 4 Large clear jars, soil, miscellaneous solid waste like (an apple core, a toothbrush, a soda can or juice box, a carton), crayons and masking tape.

1. Choose one item you threw away today. What is your item made of? Into which of the following four categories of solid waste does your item fit?

a) organic (vegetable or fruit peels)

- b) renewable resource/recyclable (newspaper, cardboard paper)
- c) nonrenewable resource/recyclable (aluminum cans, juice boxes)
- d) nonrenewable resource/hard to recycle (plastic toothpaste tube, plastics)

Notes: What happens to the item you threw "away"? Discuss, where is away? What is a landfill? How might the material that a piece of trash is made of determine how you should dispose of it? List ways you can avoid disposing of your item in a landfill.

2. With crayons and masking tape, label each glass jar with the four category headings above.

3. Fill each jar about half full with soil and sort miscellaneous solid waste items into its proper category (a-d). Cover with soil and keep damp with water. Leave tin lid off and place the jar on a shelf away from people and out of direct sun. Shake occasionally.

5. Predict what you think will happen to the solid waste in each jar. Record your predictions.

6. Observe and record what changes occur during a 1-month period, if any.

Discuss: What happened to the items made of organic and renewable resources? What happened to the items made of nonrenewable resources? How did what happened compare with your predictions? What comparisons can you make between your mini-landfill and a real landfill?