

## 99. Composting and the Decomposer Chart

*Contributed by Peace Corps/Armenia*

**Objective:** To learn why composting is important and how to do it



**Ages:** Middle, older



**Materials:** 2-liter plastic bottles cut in half (use bottom half), soil, garbage, chart, writing utensil, marker, masking tape, plastic wrap to cover the plastic bottles, rubber bands



**Time:** 45 minutes to begin, and then 5-10 minutes weekly for observations

### Procedure:

This activity illustrates the different rates at which various substances decompose. The activity can lead to discussions about composting and solid waste disposal.

Ask the kids to bring in a variety of different garbage items (food scraps, paper, plastic, wrappers, leaves, feathers, etc.). Fill each of the cut plastic bottles with 10 cm of soil, and set it on your windowsill. Put one or two pieces of trash in each bottle (depending on the size of the trash), on top of the soil. Add a little more soil on top, and moisten with water. With a marker, write on each bottle, perhaps on a piece of masking tape, the trash item it contains. Cover each bottle with plastic wrap held with a rubber band, and wait.

Over the next several weeks/months, have the kids note what happens to the trash, keeping a record in a chart, such as the one below (Idea for a Journal). During every meeting, ask a kid to remove the cover to let each bottle get some air and to observe how each item has changed. Continue to add water and let the sun shine into your bottles. Otherwise, keep the lid closed for warmth and humidity. Make sure to ask the students for their responses to the changes.

You can do this project for four weeks or longer. At the end of a month, imagine how long it will take plastic bottles and glass containers to disappear. Some items will remain longer than we do. Some items will disintegrate within a month.

**Note:** If composting is occurring, this activity should not smell.

### Idea for a Journal

Name of item: \_\_\_\_\_ Date: \_\_\_\_\_

First noticeable change: \_\_\_\_\_

When can you not recognize it? \_\_\_\_\_

When does it disappear? \_\_\_\_\_

Is it food or garbage? \_\_\_\_\_