

Bottled Garden

OBJECTIVE: To demonstrate how compost helps plants grow.

MATERIALS: compost, sand, seeds, two 2-litre plastic bottles, HANDOUT: **The Good Gardener** (E33)

VOCABULARY: chemical fertilizers, comparison, compost, landfill, organic, overuse, seeds, soil

BACKGROUND:

Abuse and overuse of soil causes the minerals and nutrients in the soil to become depleted. Chemical fertilizers do not help soils. While they are beneficial in the short term, over time fertilizers harm soil because increasing amounts are required to achieve the same results.

Compost is a natural soil conditioner. Rather than put organic waste, and the minerals and nutrients it contains, into a landfill, composting uses waste to replenish soil.

This activity will show the children how good soil can help plants grow. The activity will also teach the students comparison skills.

PROCEDURE:

1. Distribute a copy of the HANDOUT: **The Good Gardener** (E33) to show an example of the plant holder to be created. Each child is to bring two 2-litre plastic soft drink bottles to class. The tops of the bottles should be removed so approximately the bottom 10 cm of the bottle remains.
2. Using paint, wallpaper, string, macaroni and other materials, the children should decorate their bottles.
3. Now explain to the class the benefits of composting. Tell them they are going to see how compost helps plants to grow.
4. Have each child fill one of their decorated bottles with sand and the other with compost.
5. Plant several radish seeds in each bottle. Add water on a regular basis until the seeds germinate.
6. Continue to water both bottles until a complete plant appears.

COMPOST - PRIMARY ACTIVITY 2

Bottled Garden (cont.)

EXTENSION:

1. Try different types of seed in the compost. Have the children guess to see which type of seed would grow best.
2. Decorate a bottle and fill with compost. Plant flowers in the bottle. After the plants have grown, allow the children to take them home for gifts.
3. Keep a pictorial diary of the plant growing.

EVALUATION:

1. Ask the children to decide which of their bottles produced a better plant.
2. Ask the class if they think composting is a good idea.
3. Ask the children how compost is made.