



A Mini Landfill*

Activity P.t

GRADE LEVELS: K - 3

OBJECTIVE: To observe the difference between degradable and non-degradable wastes.

MATERIALS:

- large glass or plastic jars, or aquarium
- various pieces of garbage to bury (small food scraps, bones, metals, cardboard, paper, plastic)
- soil from garden or other outdoor area (not sterilized potting soil)
- water
- plastic wrap
- worksheet: Where Does This Trash Belong?

VOCABULARY: degrade, landfill, decompose, compost

BACKGROUND:

Landfills have changed a lot over time. In the 1700s people threw their garbage in the street and pigs and other animals ate it. We make much more garbage today than they did then. If we threw our garbage in the streets today, we would be buried in it!

Today most of our garbage goes to a landfill; some is burned and some recycled. Sending most of our garbage to a landfill is becoming a problem because we are running out of spaces. Where would a city put a landfill?

We have to start looking at our garbage in a different way. In our garbage, there are many resources that should not end up in a landfill. We need to:

1. Reduce the amount of waste we produce,
2. Recycle all that we can,
3. Compost all organic material,
4. Incinerate what is left if that option is feasible and/or available, and
5. Landfill the leftover material.

PROCEDURE:

Follow the directions below to make your own mini-landfill.

1. Fill the jar about half full of soil. Add 4 or 5 different pieces of garbage. Keep a list of all the things you put in.
2. Cover the garbage with more soil. Sprinkle the soil with water and cover the top of the jar with plastic wrap.
3. Place the jar in a warm place for about ten days.
4. Then empty the contents of the jar onto a newspaper and examine the bits of garbage. Record any changes that you see. Repeat several times to record changes.

Type of Garbage
(date:)

Changes Observed
(date:)

What Else Could Be
Done With This Item?

FOLLOW-UP:

Based on your observations, which materials do you think would naturally decompose? Should they be sent to a landfill, or should they be composted?

*Source: Cornell Waste Management Institute Trash Goes to School