



Litter Garden

Grade Level : 2

Subjects:

Science 2.1, 2.2, 2.7, 2.9
 Communication Skills 4.1
 Math 3.2, 6.2, 6.3, 6.4

Time:

two month time span,
 forty-five minutes at the
 beginning and end

Setting:

classroom

Materials:

two 6"-8" deep waterproof
 trays, samples of several
 different solid wastes, soil
 (not potting soil) and
 spray bottle

Skills:

sorting, predicting, ob-
 serving, recording, and
 interpreting data

Vocabulary:

decomposition
 litter
 natural
 human-made
 environment
 biodegradable

Sources:

*AVR Teacher's Resource
 Guide*
 Association of Vermont
 Recyclers.

*Pennsylvania Recycling
 and Waste Reduction*
 Pennsylvania Department
 of Education and Office of
 Environmental Education

Summary: Students will collect and place objects in soil. Water will be added and results recorded over a two month period.

Objective: Students will observe and compare decomposition rates for objects in a composting environment. They will discuss the effects of littering on the environment.

Background: Some of the packaging we use today, though convenient and useful for a short time, cause environmental problems because it depletes our natural resources and is not biodegradable. Some substances even poison the environment.

Leading Question: What happens to our trash after we put it in a composting facility?

Procedure:

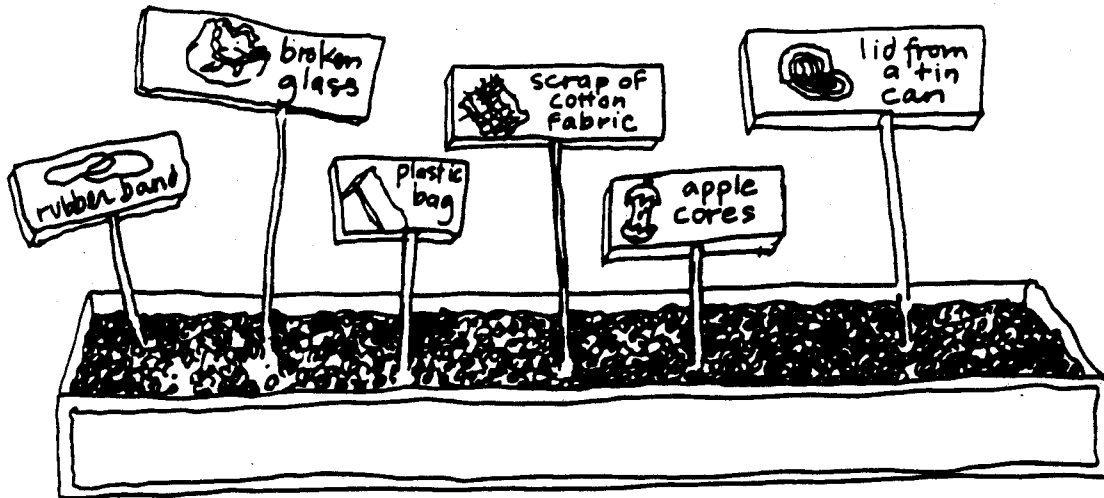
1. Collect samples of litter. Review the difference between natural and human-made materials. Develop a definition of decomposition.
2. Use worksheet with students to predict which kinds of materials will decompose and which will not.
3. Put two to four inches of soil in trays. Arrange samples so there is space between each one. Make a marker to identify each one. Cover samples with two to four more inches of soil. Add enough water to moisten. Add a little water daily.
4. After a two month period, uncover and check progress.
5. Discuss results.
6. What do our results tell us about handling wastes? Were our predictions correct?
7. How are landfills different from composting facilities?

What Now?

1. Chart decomposition rates of different human-made litter on a timeline or bar graph.
2. Record possible solutions to help reduce the amount of waste we use.
3. Draw pictures of different litter objects. Sequence which will decompose first, second, third.
4. Write stories or epitaphs for each object buried. Tell where it came from, its purpose, and how it became trash.
5. Make a large kite with a sad face on it. Tell the students that the kite is sad because from up in the air it sees many things that make it unhappy. They are to write a story explaining what would make it happy again.

Name:

Date:



1. Which objects do you think will decompose first?
2. Which will take the longest to decompose?
3. Which might never decompose?
4. Which will be the best for the soil?
5. Which might harm the soil?