



# What is Solid Waste?

Activity M.a./H.a.

GRADE LEVELS: 7 - 12

## OVERVIEW:

This introductory lesson provides background on solid waste, helping students to understand the dimensions of the solid waste management problem. It distinguishes between the concept of “Total Solid Waste” (TSW) and “Municipal Solid Waste” (MSW). The difference between these two concepts is often overlooked. Significantly, TSW has far greater dimensions than MSW. Despite this fact, MSW is the subject of most discussions about solid waste, perhaps because it is the area of solid waste management over which individuals have the greatest control. Because of this focus, the terms “solid waste” and “municipal solid waste” are used interchangeably in this activity.

This lesson is important to the overall curriculum because it provides the foundation—the information essential to making responsible decisions about solid waste management.

## OBJECTIVES:

Upon completion of this lesson, students will be expected to be able to:

- Identify the components of the total solid waste stream in the United States
- Identify the components of the municipal solid waste stream
- Describe the amount of municipal solid waste discarded annually in the United States
- Explain the problems associated with municipal solid waste management in the United States

## PROCEDURE:

Distribute and discuss Handout 1.

Distribute and have students fill out Handout 2 to evaluate their current understanding of solid waste. Handouts 3 and 4 provide pie charts that characterize MSW for comparison with the student graphs in Handout 2.

## EXTENDED LEARNING:

### Your Family’s Trash

Ask your students to make a list of the amount and kinds of trash that they and their families generate in one week and classify it according to the categories listed in the pie charts. Handout 5 is a worksheet for your students to use as they compile their lists.

Students should then examine their families’ contributions to the municipal solid waste stream. How does what they produce differ from the percentages listed in the pie charts? How does the amount compare with the national average of over 4 pounds per person per day?

### A Solid Waste Bulletin Board

Use a bulletin board to create a solid waste display. Build a seven-column grid out of colored construction paper. Label each column with a type of solid waste, for example, “paper,” “yard waste” or “plastic.” Ask your students to bring in photos clipped from magazines of materials that are representative of their families’ trash. This bulletin board can be used to illustrate future lessons as well.

## RESOURCE:

“Characterization of Municipal Solid Waste in the United States: 1990 Update,” United States Environmental Protection Agency.

Source: Kraft General Foods Environmental Institute Solid Thinking About Solid Waste