



# What is Solid Waste?

## Activity M.a./H.a. Handout 1

Name: \_\_\_\_\_

### **Defining Solid Waste**

There are many ways to define solid waste. When you read news articles or hear people talk about solid waste, you might hear terms such as “garbage,” “refuse,” “waste material,” or “trash” to describe what we throw away. Two important terms to understand in learning about this issue are total solid waste and municipal solid waste.

### **Total Solid Waste**

Total Solid Waste (TSW) means everything that our nation throws away each day. Each year in the United States, we throw away about 21 tons of garbage for every person living in the country. This amounts to about 115 pounds per person per day. Who creates all this material?

The following table shows you where our total solid waste comes from:

51%	agriculture
38%	mining
8%	industry
3%	municipal solid waste

Together these sources of waste create a problem for people in the U.S.: what do we do with all this waste?

### **Municipal Solid Waste**

Municipal Solid Waste (MSW) is the garbage that Americans produce in their homes and where they work. The word “municipal” means anything that is operated and controlled by elected local officials such as city or county governments. Usually MSW refers to what we throw away each day in our cities and towns. MSW contains all kinds of garbage including newspapers, yard waste, old appliances, household garbage, used furniture and just about anything you can think of that people throw away at home, schools, and businesses.

Americans generate more than 180 million tons of MSW each year. This is about 1,300 pounds for each person each year. It means that on average, each of us creates a little over 4 pounds of garbage every day.

What goes into our nation's MSW? This table shows you the components of what we throw away by weight: \*

40% Paper  
17.6% Yard Waste  
8.5% Metals  
7.0% Glass  
7.4% Food  
8% Plastics  
11.6% Miscellaneous

(\* Percentage does not total 100% due to rounding)

Together, these components create a lot of trash that must be disposed of each day. This problem will increase in the years ahead. According to the Environmental Protection Agency (EPA), Americans will be throwing away 25% more garbage by the year 2000. That's 45 million more pounds of MSW for disposal.

### **Disposing of MSW**

Where does all the garbage go? Over 72% of all our MSW goes into the ground in landfills. About 15% is burned and only 13% is recycled or reused.

Landfills have been the method most societies have used to get rid of garbage. A landfill is a special pit that has been dug in the ground to hold garbage. Once the pit is full, dirt is used to cover the trash. The landfill becomes a place where MSW will be kept for hundreds of years.

For many reasons, fewer landfills are being built today as older landfills close. There are about 5,000 landfills left in the United States and half of these will be closed by the year 2000.

### **The Future of MSW**

Population growth has had the largest impact on the solid waste stream. Americans continue to create more MSW. Since 1865, when the total U.S. population was 35 million, the number of people living in the United States has grown to 250 million. As the number of people grew, so did the total amount of trash produced. At the same time, available landfill space has been shrinking.

These facts create a problem for all of us: what will we do with all the MSW we produce?

# WHAT IS SOLID WASTE?

Handout 2

Name: \_\_\_\_\_

What is Solid Waste? Answer these questions in the space provided.

1. Write a definition for the term “Total Solid Waste” (TSW).
2. Describe the contents of the United States’ TSW. What makes up the majority of TSW?
3. What does the term “Municipal Solid Waste” (MSW) mean?
4. How much MSW is created each year in the U.S. and by each person?
5. Describe the components of MSW in the U.S.

6. Picture the components of MSW in the U.S. as a bar graph, by weight and by volume.

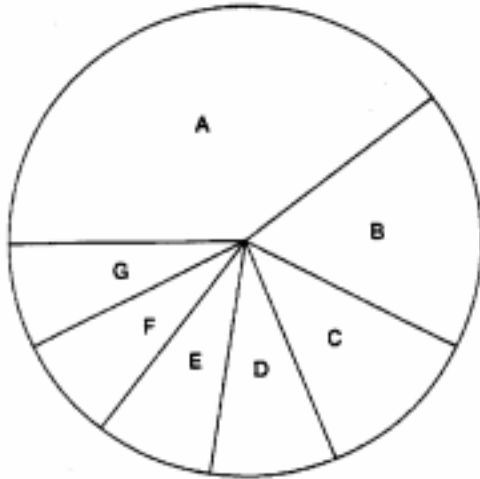
7. Why is there a problem about managing MSW?

# WHAT IS SOLID WASTE?

Handout 3

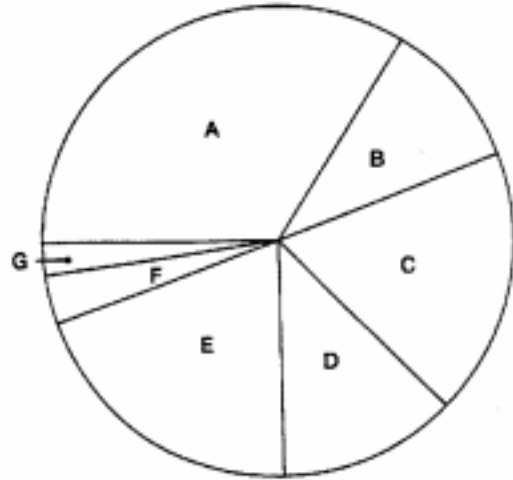
Name: \_\_\_\_\_

Materials Generated in Municipal Solid Waste, by Weight:



- A. Paper 40%  
*(including newspaper, phone books and computer print-outs)*
- B. Yard Waste 17.6%  
*(including leaves and grass clippings)*
- C. Miscellaneous 11.6%  
*(including construction debris and used tires)*
- D. Metals 8.5%  
*(including appliances, cans, and automotive parts)*
- E. Plastic 8.0%  
*(including household items, toys and garbage bags)*
- F. Food Waste 7.4%  
*(including meat and vegetable trimmings and unused and spoiled food)*
- G. Glass 7.0%  
*(including beverage containers and drinking glasses)*

Materials Generated in Municipal Solid Waste, by Volume:



- A. Paper 34.1%
- B. Yard Waste 10.3%
- C. Miscellaneous 18.3%
- D. Metals 12.1%
- E. Plastic 19.9%
- F. Food Waste 3.3%
- G. Glass 2.0%

WHAT IS SOLID WASTE?  
Handout 4

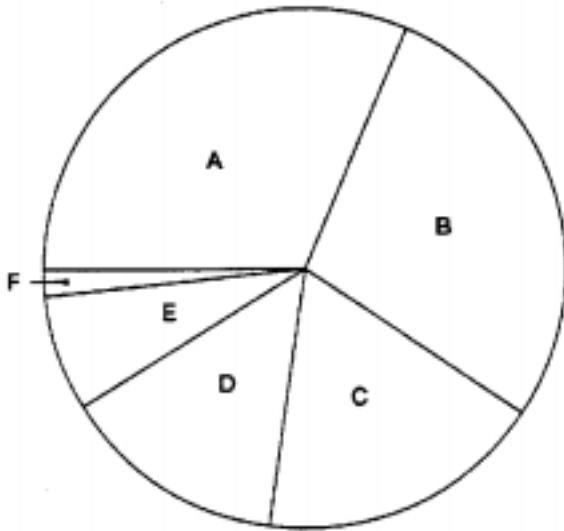
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# WHAT IS SOLID WASTE?

Handout 4

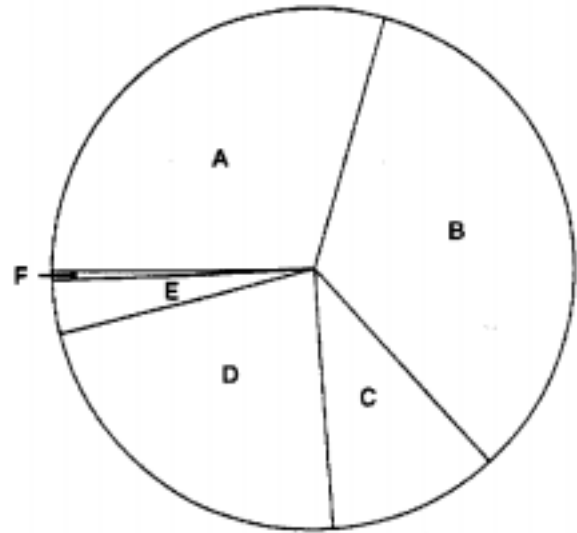
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Product Types Generated in Municipal Solid Waste, by Weight:



- A. Containers and Packaging 31.6%
- B. Nondurable Goods 28.1%  
*(newspapers and magazines, disposable products, etc.)*
- C. Yard Waste 17.6%  
*(including construction debris and used tires)*
- D. Durable Goods 13.9%  
*(appliances, automobiles, furniture, etc.)*
- E. Food Waste 7.4%
- F. Other 1.4%

Product Types Generated in Municipal Solid Waste, by Volume:



- A. Containers and Packaging 29.6%
- B. Nondurable Goods 34.0%
- C. Yard Waste 10.4%
- D. Durable Goods 22.2%
- E. Food Waste 3.3%
- F. Other 0.5%

