

# Reduce, Reuse, Recycle

Materials: Station 1

**Consumable**

none

**Nonconsumable**

1 paper lunch bag

an assortment of trash items such as: aluminum foil, 1 plastic straw, 1 craft stick, 1 foam cup, piece of string, 1 empty aluminum can, 1 baby food jar, 1 metal jar lid, 1 paper napkin, 1 plastic sandwich bag, 1 tree leaf, 1 plant stem

Materials: Station 2

**Consumable**

none

**Nonconsumable**

1 pan balance and set of masses

1 paper lunch bag

an assortment of trash items such as: aluminum foil, 1 plastic straw, 1 craft stick, 1 foam cup, piece of string, 1 empty aluminum can, 1 crumpled sheet of white paper, 1 baby food jar, 1 metal jar lid, 1 paper napkin, 1 plastic sandwich bag, 1 tree leaf, 1 plant stem, 1 old potato

Materials: Station 3

**Consumable**

none

**Nonconsumable**

1 paper lunch bag

an assortment of trash items such as: aluminum foil, 1 plastic straw, 1 craft stick, 1 foam cup, piece of string, 1 empty aluminum can, 1 crumpled sheet of white paper, 1 baby food jar, 1 metal jar lid, 1 paper napkin, 1 plastic sandwich bag, 1 tree leaf, 1 plant stem, 1 old potato

Additional materials to set up the Stations

none

# How to Set Up

## Station 1

### Materials

1 paper bag

an assortment of trash items such as:

aluminum foil

1 plastic straw

1 craft stick

1 foam cup

piece of string

1 empty aluminum can

1 baby food jar

1 metal jar lid

1 paper napkin

1 plastic sandwich bag

1 tree leaf

1 plant stem

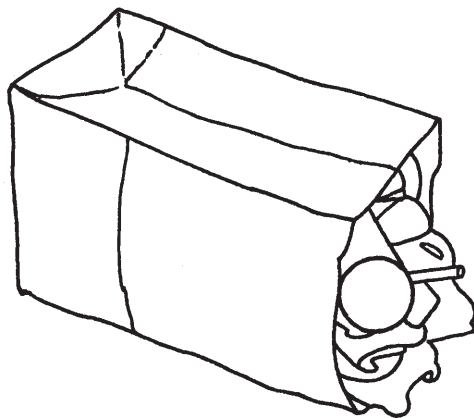
### Preparation

1. Check items for sharp edges, points, and so on. Remove any unsafe items.
2. Use an assortment of clean paper, plastic, metal, and glass items.

### Helpful Information

- The types of materials accepted as recyclable may differ from community to community.
- Alert students to the presence of the recyclable logo on items.

### Setup



Be sure that the materials are set up like this before you leave this station.

# How to Set Up

## Station 2

### Materials

- |                                       |                        |
|---------------------------------------|------------------------|
| 1 pan balance and set of masses       | 1 paper bag            |
| an assortment of trash items such as: |                        |
| aluminum foil                         | 1 baby food jar        |
| 1 plastic straw                       | 1 metal jar lid        |
| 1 craft stick                         | 1 paper napkin         |
| 1 foam cup                            | 1 plastic sandwich bag |
| piece of string                       | 1 tree leaf            |
| 1 empty aluminum can                  | 1 plant stem           |
| 1 crumpled sheet of white paper       | 1 old potato           |

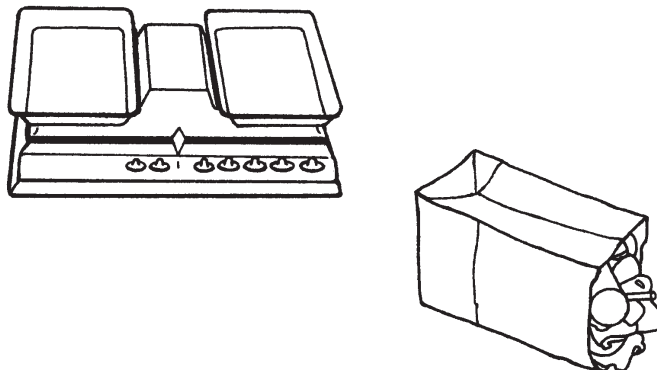
### Preparation

1. Check items for sharp edges, points, and so on. Remove any unsafe items.
2. Check periodically to make sure that the pans of the balance are balanced.
3. For your own reference, find the mass of the bag of trash. You can record this mass in the Evaluation guide, page 84E.

### Helpful Information

- Make sure students include the paper bag in their assessment.
- Check with your community to find out which items are accepted as recyclable. Also find out how the community handles plant materials. Students can use this information to sort the trash.

### Setup



Be sure that the materials are set up like this before you leave this station.

# How to Set Up

## Station 3

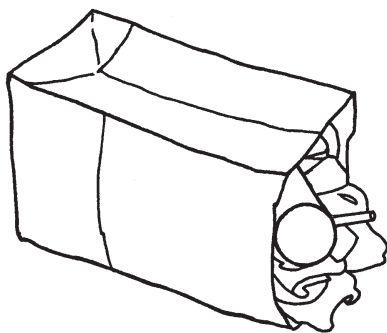
### Materials

- 1 paper bag
- an assortment of trash items such as:
  - aluminum foil
  - 1 plastic straw
  - 1 craft stick
  - 1 foam cup
  - piece of string
  - 1 empty aluminum can
  - 1 crumpled sheet of white paper
  - 1 baby food jar
  - 1 metal jar lid
  - 1 paper napkin
  - 1 plastic sandwich bag
  - 1 tree leaf
  - 1 plant stem
  - 1 old potato

### Preparation

1. Check items for sharp edges, points, and so on. Remove any unsafe items.

### Setup



Be sure that the materials are set up like this before you leave this station.

# Evaluation Guide

## Station 1

### **Purpose**

To evaluate a student's ability to devise and record a classification system relating to reducing, reusing, and recycling trash.

### **Criteria**

- 3 points = Student recorded two or more classification systems relating to reducing, reusing, or recycling trash.
- 2 points = Student recorded one classification system relating to reducing, reusing, or recycling trash.
- 1 point = Student recorded no classification systems relating to reducing, reusing, or recycling trash.

## Station 2

### **Purpose**

To evaluate a student's ability to classify and measure the mass of recyclable, nonrecyclable, and plant material trash items.

### **Criteria**

- 3 points = Student recorded a list of classified items and the mass measurement for each category of items.
- 2 points = Student partially accomplished the tasks of recording a list of classified items and the mass measurement for each category of items.
- 1 point = Student did not record a list of classified items and the mass measurement for each category of items.

## Station 3

### **Purpose**

To evaluate a student's ability to determine which trash items could be used and in what ways.

### **Criteria**

- 3 points = Student identified reusable items and listed ways to reuse the items.
- 2 points = Student identified reusable items but did not list ways to reuse them.
- 1 point = Student did not identify reusable items or ways to reuse them.

# Data Analysis

## Purpose

To evaluate a student's ability to report ways to reduce, reuse, and recycle trash.

## Criteria

3 points = Student records two or more ways to reduce, reuse, and recycle trash.

2 points = Student records one way to reduce, reuse, and recycle trash.

1 point = Student does not record ways to reduce, reuse, and recycle trash.

## Performance Activity Scoring Guide

<b>Points</b>	<b>% equivalent</b>
12	100
11	92
10	83
9	75
8	67
7	58
6	50
5	42
4	33
3	25
2	16
1	8

*Imagine that you are the environmental reporter for a local television show. Your assignment is to prepare a television news segment describing how everyone can reduce, reuse, and recycle.*

## My Data Collection

### Station 1

*Use the card at the station to correctly set up the equipment.*

#### Trash Classification

Empty the bag of trash and study its contents. Think about how the amount of trash might have been reduced if reusable items were used. Decide which items could be reused, recycled, or used as mulch. Classify the items as many different ways as you can.

- Record your classification system and list the items in each category.

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### Station 2

*Use the card at the station to correctly set up the equipment.*

#### Trash measurement

Find the mass of the entire bag of trash. Then sort the trash into three piles: recyclable, nonrecyclable, and plant material. Find the mass of each pile.

- Record the total mass. Then list the contents and record the mass for each category.

Masses			
Total	Recyclable	Nonrecyclable	Plant Material

Recyclable items: \_\_\_\_\_

Nonrecyclable items: \_\_\_\_\_

Plant material: \_\_\_\_\_

## Station 3

*Use the card at the station to correctly set up the equipment.*

### **Reuse Suggestions**

For those items that you classified as reusable or recyclable, describe or draw a way that each item could be reused.

- Record your descriptions and drawings.

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### My Data Analysis

You have completed your study of the trash. Use the data you have collected and what you know about conservation to answer the following questions.

What would you say on the television show about ways to reduce, reuse, and recycle trash? What would you say about using plant materials to make compost?

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