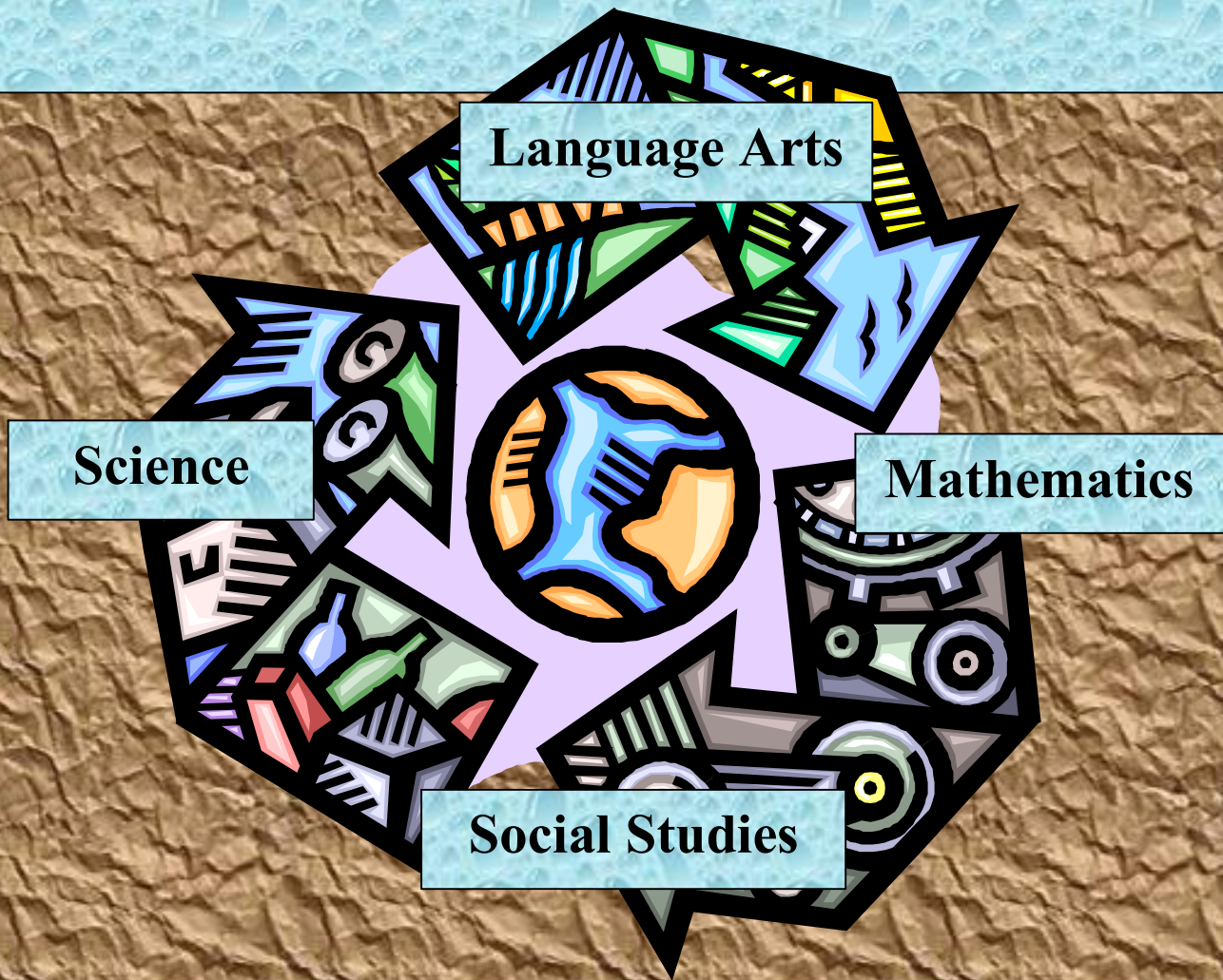


Garbology

A Thematic Unit about Trash

By Nancy L. Wilkinson



Lesson 3 Sorting Through the Facts

Objective:

Students will analyze and sort through the facts on garbage.

Materials:

Worksheet 3 - One for each student or group.

Opening:

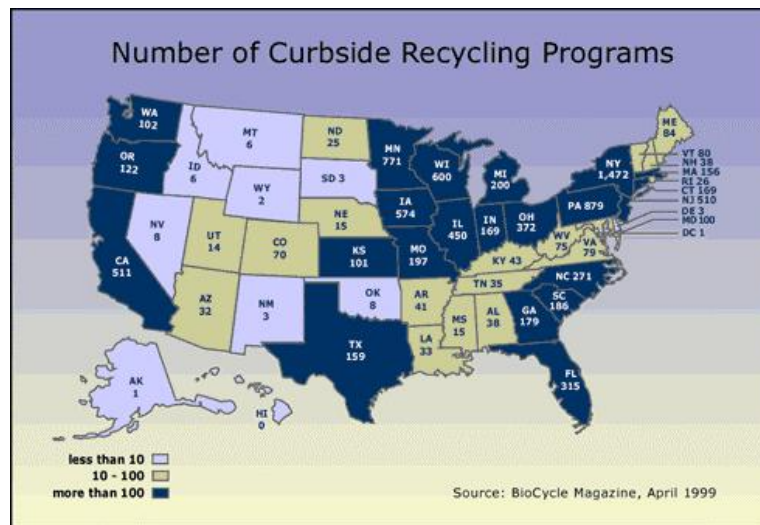
Ask students to give you a fact about trash or give them one. Discuss whether the fact talks about what we throw away, landfills or something else.

Instruction:

- 1) Pass out Worksheet 3.
- 2) The students might want to cut out each fact and sort them into three piles determining if the fact is about landfills, what we throw away or a miscellaneous fact.
- 3) Once each team has sorted through the facts, the class should decide, as a whole, under which category each fact should be placed.
- 4) Students should write down the facts under the correct headings.

Closure:

Ask the students which category had the most facts. Which category had the least facts? What facts were similar?



Lesson 3, Worksheet 3
Statistical Analysis in Mathematics

Name _____ Period _____

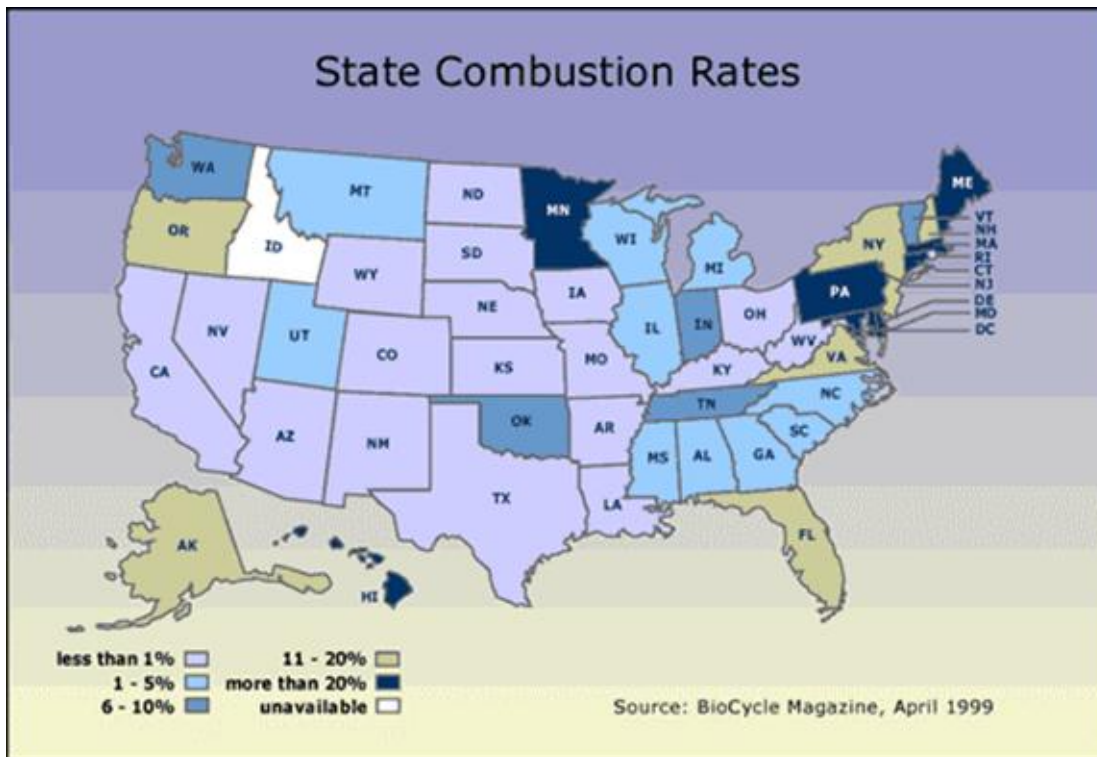
Directions: When collecting facts about a topic, it is important to sort through the facts and categorize them. This makes statistical analysis easier to accomplish. Cut out each fact below and decide if the fact talks about what we throw away or recycling. When you are finished, compare you results with the group.

Facts about Trash

Almost 2/3 of the nation's landfills closed over the last ten years.
Archaeologists from the University of Arizona found landfill debris buried 20 years earlier. They discovered green grass clippings, a T-bone steak and five hot dogs all in excellent condition. Also long buried newspapers could be accurately dated from their perfectly preserved pages.
Recycled newspapers use only 20-30 percent of the energy required to manufacture newsprint from new pulp.
It is estimated that 150 million computers will be discarded in the United States alone. That is enough to fill a hole 1 acre in area and 3.5 miles deep.
Every year, Americans 2 out 24 million tons of grass clippings, leaves and other year waste. This equals 23% of the total solid waste.
Recycling an aluminum can saves enough energy to run a television set for 3 hours.
Recycling and composting recovered 24 percent of our municipal solid waste in 1994. That is around 49 million tons!
Each year, Americans throw away 1.6 million pens, 2 million razors and blades and 200 million tires.
Every Sunday, the United States wastes nearly 90% of the recycle newspapers. This wastes about 500,000 trees. One 35 to 40 foot tree produces a stack of newspapers four feet (1.2 meters) thick.
Each recycled aluminum can saves the energy equivalent to six ounces of gasoline. It takes 95 percent less energy to make a new can from recycled aluminum.
In 1989, 61 percent of the aluminum cans used in the United States were recycled.
Recycling all of your homes' waste newsprint, cardboard, glass and metal can reduce carbon dioxide emissions by 850 pounds a year.

Each of us generates on average 4.4 pounds of waste per day per person.

Up to 50 percent of the four pounds of waste that every person produces per day on average could be recycled, but only 13 percent is currently recycled.



Garbology
Lesson 3, Worksheet 3
Answers

Facts About What we Throw Away:

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Every year, Americans throw out 24 million tons of grass clippings, leaves and other yard waste. This equals 23% of the total solid waste.
It is estimated that 150 million computers will be discarded in the United States alone. That is enough to fill a hole 1 acre in area and 3.5 miles deep.
Each year, Americans throw away 1.6 million pens, 2 million razors and blades and 200 million tires.

Recycling Facts:

Each recycled aluminum can saves the energy equivalent to six ounces of gasoline. It takes 95 percent less energy to make a new can from recycled aluminum.
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