



## WASTE AUDIT

## STUDENT READING 2

No matter who we are or where we live, we create waste. It is a normal consequence of day-to-day life, and it has been that way since people populated the planet. From medieval Europeans, tossing their rubbish out a window to modern waste-to-energy plants, people have treated their waste differently depending on their lifestyle and the technology available.

Waste is continually created and thrown away; this is known as the “waste stream.” The waste stream begins with the creation of a product and continues through the separation and collection of the waste to the final disposal. The waste stream begins with each and every one of us.



Many people feel they can have no effect on the amount of waste generated by society. Environmental problems such as global warming, hazardous waste, and the municipal waste crisis can seem out of our control. But each of us can make a difference. It's easy if we remember the 'three Rs' – reduce, reuse and recycle.

### You can make a difference!

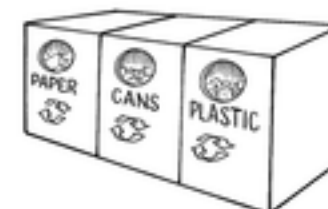
Your challenge is to conduct a waste audit to find out what kind of waste and how much of it is being disposed of at your school. When we know more about the waste we generate, we can take action to reduce the waste. Reducing wastes has many benefits including reducing costs for new materials and promoting better use of limited natural resources.

### Did you know?

- When we recycle large amounts of newsprint, office paper, and mixed paper, we can save millions of trees!
- Recycling paper also cuts energy usage in half.
- Every pound of steel recycled saves enough energy to light a 60-watt bulb for over 26 hours.
- Recycling a ton of glass saves the equivalent of nine gallons of fuel oil. Recycling used aluminum cans requires only about five percent of the energy needed to produce aluminum from bauxite.
- Recycling just one aluminum can saves enough electricity to light a 100-watt bulb for 3.5 hours.

Waste audits are carefully planned and the safety of people conducting the audit is very important. When conducting your waste audit remember...

- Sort wastes using tongs or gloves, not your bare hands.
- Sort the wastes in ventilated areas with fresh air circulating.
- Protect the confidentiality and privacy of documents or personal information you find. No documents or school papers can be read or removed from the sorting area.



**WASTE AUDIT****SCHOOL WASTE AUDIT FORM**

**SCHOOL NAME:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**STUDENTS INVOLVED IN AUDIT:**

\_\_\_\_\_

We will collect wastes from: [check one]

Classroom (grade \_\_\_\_ )    Office    Cafeteria    Staff Room    School Yard

**Our Hypothesis:** \_\_\_\_\_

\_\_\_\_\_

Recyclables	Mass (kilograms)	Volume (liters)
Plastic Bottles		
Aluminum Cans and Other Metal		
Glass (jars or bottles)		
Recyclable Paper		
Food Packaging (cereal boxes, cookie packages, candy wrappers, etc.)		
Yard Trimmings		
Food waste		
Other		



Additional Observations:

Based on the data we collected, we can infer that (finish this statement)...

Was your hypothesis supported by your data? Explain.

**WASTE AUDIT****REFLECTION****LEARNING LOG 3**

NAME \_\_\_\_\_

DATE \_\_\_\_\_

In this lesson we have:

- Developed hypotheses and collected and sorted the school's trash for one day
- Graphed the waste produced in different parts of the school and the school as a whole
- Made inferences about the school's population based on the data we collected

To assess your learning, write a two-paragraph reflection.

- First paragraph – discuss the process of conducting a waste audit. What did you learn from it? What was surprising to you about the data that we collected? Did the data your group collected support your hypothesis? Why or why not? What were some inferences we could make from the data we collected?
- Second paragraph – discuss the potential impact on the 'āina of the waste that we generate. What would happen if we did not responsibly manage our school waste stream? What are some suggestions you could make based on the data we collected to improve our waste management at our school
- Paragraphs should be written below or word processed.

Grading will be as follows:

Mechanics: Spelling, neatness, punctuation and grammar \_\_\_\_\_/5

Content: Clearly address the topics, include hypothesis, and have supporting details.

Paragraph 1: \_\_\_\_\_/10

Paragraph 2: \_\_\_\_\_/10

Total \_\_\_\_\_/25

- To help organize your thoughts you can refer to your data table and graph and use the inferences we discussed in class. Use the back of this page (or work on a computer) to continue your reflection.

**My Reflection**





# 1

# PLASTIC

# BOTTLES





# 2

# ALUMINUM AND OTHER METAL





# 3

# GLASS





# 4

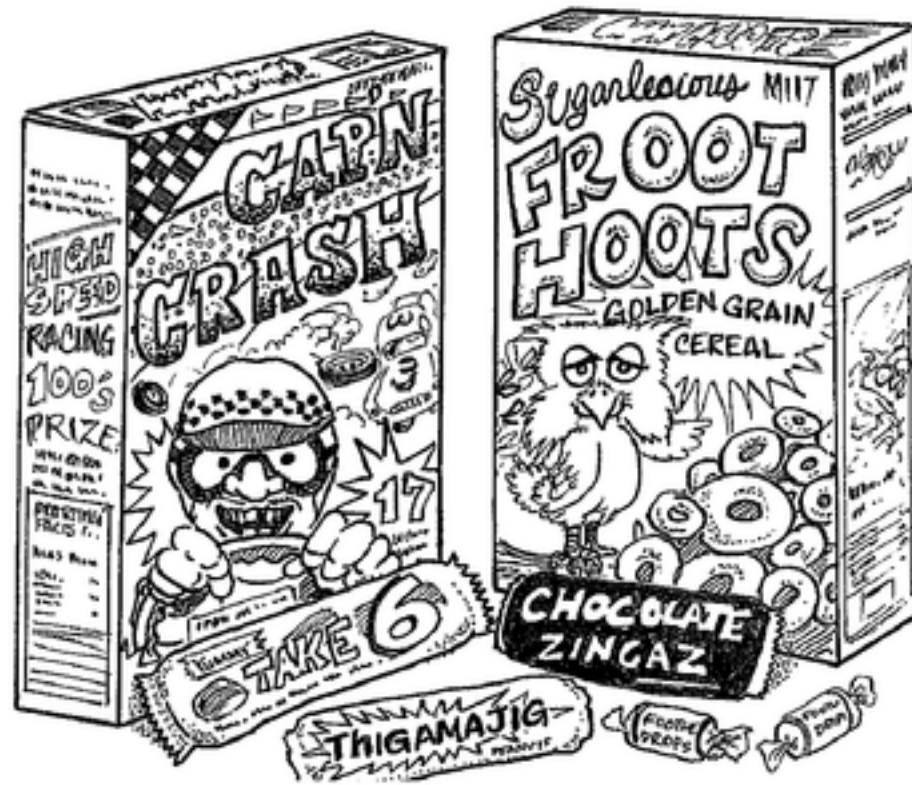
# RECYCLABLE PAPER



# 5

# FOOD

# PACKAGING



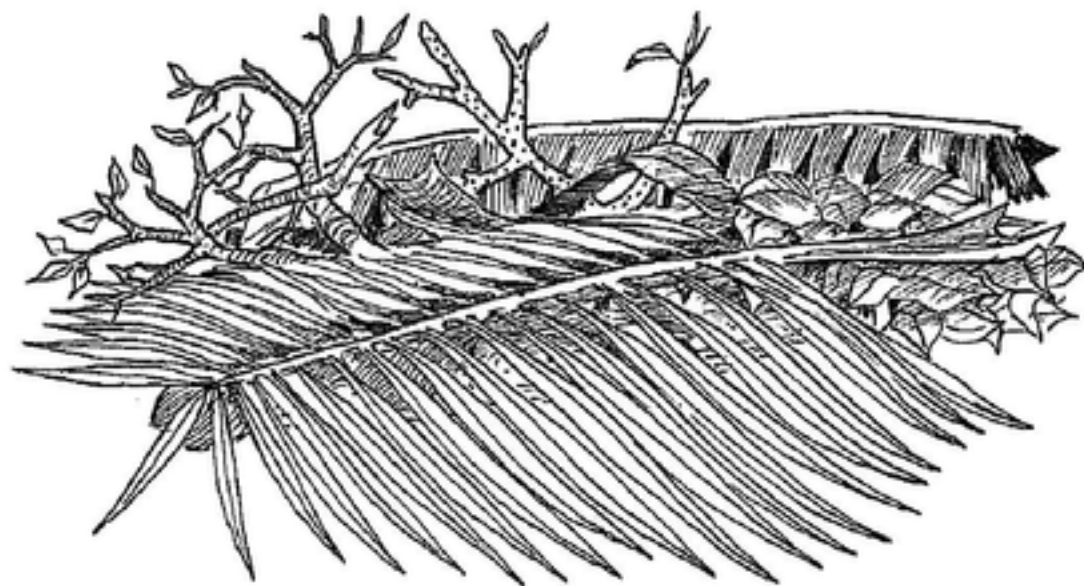




# 6

# YARD

# TRIMMINGS





# 7

# FOOD WASTE





# 8

# OTHER

