

EXPERIMENT #8:

Comparing Waste from Packaging

PURPOSE:

(this is what the point or goal of an experiment is)

HYPOTHESIS:

(an educated guess as to what will happen in the experiment)

MATERIALS:

(the equipment and other materials you need to do the experiment)

- _____
- _____
- _____
- _____
- _____
- _____

PROCEDURE:

(the steps you took to perform the experiment)

- 1) Bring in 2 products from home that is in its ORIGINAL PACKAGING. One should be a regular or bulk packaged item and one should be a single-serving product. *For single-serving items there are smaller packages inside of larger external packages make sure you bring both.*
- 2) Weigh the product with ALL of the packaging.
Record the mass in the table below.
- 3) For single serving product: Remove ONE of the smaller packages from inside the overall package and weigh this with the product still inside.
Record the mass in the table.
- 4) Remove the product from its packaging. Weigh the product alone without the packaging. Record the mass in the table.
- 5) Weigh both parts of the packaging alone (the external packaging and the single serve packaging) Record the mass in the table below.

OBSERVATIONS & RESULTS

(a record of what you saw and what happened in the experiment)

Name of Product	MASS (g) of Product & Packaging	Mass (g) of External Packaging	Mass (g) of Single Serving Packaging	Mass of Product

CONCLUSIONS:

(a statement of what you determined from your experiment that rephrases your purpose. A statement that supports the previous statement based directly on your results)

ANALYSIS:

(questions that show that you know how to analyze your results and what they mean. Require that you interpret the data you collected)

- 1) Calculate the percent of each product that is packaging.

$$\frac{\text{Mass of packaging}}{\text{Mass of product + packaging}} \times 100 = \% \text{ packaging}$$

- 2) Breakdown the items you tested into a chart that shows the percentage that was product, external packaging and internal packaging. Use a separate page for this.

- 3) Looking at your results, which types of products produce the greatest amount of waste? Explain using quantitative evidence to back up your answer.**
- 4) Do you think it is better for the environment to purchase products in bulk? Why or why not?**
- 5) Does buying in bulk always reduce packaging? Explain the thinking behind your statement.**
- 6) If one brand of product contains the SAME PERCENTAGE of packaging as another, what other factors could a consumer look at to decide which one is actually a more responsible environmental choice? Explain.**