The Math of Marshmallows

Purpose: The purpose of this lab is to practice metric measurements and conversions.

Warning:

1. DO NOT THROW anything.
2. DO NOT EAT any of the marshmallows you measure.

Directions: Set up an experiment to determine the weight, volume, and scale of three sizes of marshmallows. Determine the volume of your mouth. Make a hypothesis on how many marshmallows of each size you can fit in your mouth based on your math.

1. \_O\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
2. \_H\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_E\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. Which measurements are you going to do

1.

2.

3.

IV. Data: Make a data table to hold your answers. Be sure to label your table and use units.

Weigh each of the marshmallows in grams. Then convert to milligrams, kilograms, ounces, and pounds. Show your work.

Measure the size of the three marshmallows and convert centimeters to millimeters, meters, kilometers, inches, feet, and miles. Show your work.

Convert into scientific notation.

Determine the volume of each size of marshmallow.

Make a scale/ratio to compare the three marshmallows.

Determine the volume of your mouth by holding as much water as possible and spitting it in a beaker. Then wash it with soap and water.

Determine how many marshmallows you should be able to fit in your mouth USING MATH.

Make six general observations about this experiment.

What factors affected how many marshmallows could possibly fit in your mouth?