

**PHYSICAL SCIENCE LAB #3**  
**Gummy Bear Density Lab**



***Gummy Bear Lab***

Name \_\_\_\_\_

**Hypothesis:** What do you think will happen to a gummy bear when you put it in water over night?

**Part A:** Choose one gummy bear from the container on your table. Use the equipment available to measure your gummy bear and record the data in the chart for Day 1.

**Measurements:**

- The length of your gummy bear should be measured from the top of its head to the bottom of its feet to the nearest tenth of a centimeter.
- Measure the width at the widest point across the back of the bear to the nearest tenth of a centimeter.
- Measure the thickness from the front to the back at the thickest point to the nearest tenth of a centimeter.
- Calculate the volume by multiplying the length, width, and thickness. Round to the nearest hundredth.
- Measure the mass using a triple-beam balance or other scale to the nearest tenth of a gram.
- Calculate the density by dividing the mass by the volume. Round answer to the nearest hundredth.

**Part B:** Put the bear in a cup labeled with your name and class period. Add 50 ml of water to the cup and allow it to sit overnight. On Day 2, remove the gummy bear from the cup of water and use a towel to dry it off to prevent it from dripping all over the place. Repeat the measurements from Part A and record your data in the correct portion of the chart. Determine the amount of change for each measurement and record in the chart.

**Experiment Data:**

Day	Bear Color	Length	Width	Thickness	Volume	Mass	Density
1							
2							
Amount of change							

**Questions:**

1. Was your hypothesis correct? Why or why not?
  
2. Which change is greater - volume or mass? Explain.
  
3. Was there a change in density? Why?
  
4. How do your results compare to those of your classmates?