



Gummy Bear Lab



Using the Scientific Method

SWBAT: apply the scientific method and the SI system of measurement to investigate a problem.

Ask a Question:

What will happen to a gummy bear when it is soaked in water over night?

make a Hypothesis:

Test the hypothesis:

Materials:

1 gummy bear, 1 small cup and lid, ruler, triple beam balance, worksheet

Procedure: Day One

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

Measurements: *(Use Metric Measurements)*

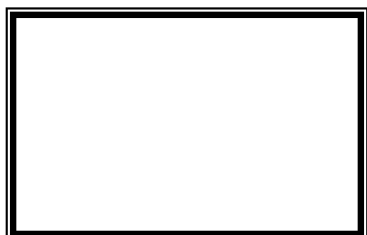
- The length of your gummy bear should be measured from the top of its head to the bottom of its feet.
- Measure the width at the widest point across the back of the bear.
- Measure the thickness from the front to the back at the thickest point.
- Calculate the volume by multiplying the length, width, and thickness.
- Use the triple beam balance to measure mass.

Data:

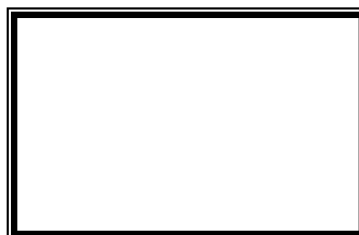
Day	Color	Length mm	Width mm	Thickness mm	Volume mm ³	Mass g
One						
Two						
Amount of Change						

Part B: Draw an illustration of your gummy bear on *Day One*.

Day One



Day Two



Part C: Put the bear in a cup. Fill cup just over half way with water. Put on the lid with your number on it. Place on tray on front table. Allow gummy bear to sit overnight.

Procedure: Day Two

Part A: Remove the gummy bear from the cup of water. Use a paper towel to dry it off. Be careful when drying off your gummy bear and pat gently. When your gummy bear is dry, repeat the measurements from *Part A* and record your data in the *Day Two* portion of the chart. Determine the amount of change for each measurement and record in the chart.

Part B: Draw an illustration of your gummy bear on *Day Two*.

Analyze the results:

Write a detailed analysis of what happened to your gummy bear after soaking in water over night. Describe what happened to the size, volume, and mass of the gummy bear after it sat in water overnight. Use your data to explain how the gummy bear changed. Support your statements with proof from your data.

Make a conclusion:

1. Was your hypothesis correct? Why or why not? _____

2. Was there a change in size or mass? What caused this change? _____

3. How do your results compare to those of others in your class? _____

Publish the results:

Create a poster about the experiment. Summarize your experiment. What did you learn? What were the results? Your poster should be detailed and neat.