

Gummy Worm Lab

Elasticity/Scientific Method

Introduction: Using a gummy worm investigate properties of elasticity, measurement and the scientific method. Once you're finished and lab is checked consume your lab specimen! Good Luck!

Review:

Elasticity - the amount of force added to your gummy worm to "stretch" it out and remain deformed

Elongate - to lengthen or draw out

Strain - the amount of change in length your gummy bear experiences due to stretch

Problem: _____

Observations

Make three observations and three inferences about your gummy worm

I

<u>Observations</u>	<u>Inferences</u>

Directions:

1. Make an initial measurement of your gummy worm. Record in data table below.
2. Stretch out your gummy worm between 5 - 10 centimeters. What do you observe about its' shape, length, circumference?
3. Stretch out your gummy worm as far as you can without breaking it. Measure and record in data table below.
4. Lay your gummy worm out on your desk and see if it will return your gummy worm to its' original shape. What do you observe?

Data/Analysis

	<u>Your Gummy Worm (GW)</u>	<u>Partner#1 GW</u>	<u>Partner #2 GW</u>
<u>Initial (cm)</u>			
<u>Stretched (cm)</u>			
<u>Difference (cm)</u>			
<u>Return Length (cm)</u>			

Analysis

1. After collecting your data and partners' data, create a double bar graph in your INB that shows the original length and stretched out length of your gummy worms.

2. What are the variables in your graph?

What is independent (x - axis)? _____

What is dependent (y- axis)? _____

Questions

1. Describe how your gummy worm showed elasticity?
2. Why would you rather measure in (mm) or (cm)? Defend your answer.
3. What are other objects that you're familiar with show properties of elasticity?
4. How does this lab activity relate to earthquakes and the movement of tectonic plates?
5. How does this lab activity relate to buildings or roads during earthquake movements on the crust?