**Bubble Gum Lab**



**Materials:** 3 brands of bubble gum, ruler, paper clips, balances, calculators

**Part I: Who blows the biggest bubble?**

1. Make the **bubble measurer**.
2. Blow. Measure. Record.

|  |  |
| --- | --- |
| **Name** | **Bubble Size (centimeter)** |
| **1** | **2** | **3** | **4** | **5** | **Average** |
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**Purpose:** The purpose of this lab is to determine which of 3 bubble gum brands produces the largest bubbles.

**Brands to compare**: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Prediction/Hypothesis**: Determine which of the brands you think will produce the largest bubbles and explain **WHY** you think it will.

**Variables:**

 Independent Variable (what are you changing?): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Dependent Variable (what are you measuring?): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 Controls (what do you need to keep the same?): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Part II Best Bubble Blower blows each brand!:**

1. The best bubble blower will blow 5 bubbles with each brand of gum. Record the data in the table chart on the next page.
2. Report your data where the leader indicates the **group data** is being collected.

**Table Data:**

|  |  |
| --- | --- |
| **Trial** | **Brands of Bubble Gum** |
| **Bazooka** | **Dubble Bubble** | **Super Bubble** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **Ave.** |  |  |  |

**Group Data:**

|  |  |
| --- | --- |
| **Tables** | **Brands of Bubble Gum** |
| **Bazooka** | **Dubble Bubble** | **Super Bubble** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **6** |  |  |  |
| **7** |  |  |  |
| **8** |  |  |  |
| **Ave.** |  |  |  |

**Part III: Graphing Data**

1. Organize your data using Excel or Google into the following types of graphs
	* Graph 1: A bar graph that shows the average size of bubbles from your data.
	* Graph 2: A bar graph that shows the average size of bubbles from the class data.
	* Graph 3: A line graph that shows the diameter of the 10 different bubbles for each brand of gum.
2. What can you learn from the graphs?

**Discussion Questions:**

1. Why was it important to test each brand of bubble gum at least 5 times?
2. How did your data compare to the rest of the group?
3. What were the controls in the experiment? Why did these factors need to be controlled? Were there any other variables that could have been controlled?