

Name _____ Date _____ Period _____

Bubbles!

Question: Which brand of dishwashing soap makes the biggest bubbles?



Hypothesis:

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Materials:

Dishwashing Soap Brand A	Dishwashing Soap Brand B	Dishwashing Soap Brand C
Straws	Water	Metric ruler
Beaker	Plastic Spoon	Graduated Cylinder
Glycerin (optional)		

Procedure:

1. Bubble Solution: In a beaker, add 400 mL of water, 100 mL of dishwashing soap, and 10 mL of glycerin. Stir.
2. Prepare the table surface by wetting it with the bubble solution.
3. Dip a straw into the bubble solution and blow a bubble onto the wet surface.
4. Practice blowing bubbles until you can blow a large bubble without it popping.
5. Blow a bubble until it pops. The popped bubble will leave a ring on the table.
6. Measure the diameter of the bubble in cm. Record your data.
7. Repeat 4 times.
8. Repeat steps 1 - 7 with each brand of dishwashing soap.

Data Table:

	Bubble Diameter in centimeter (cm)

Dishwashing Soap Brand	Trial 1	Trial 2	Trial 3	Trial 4
Ajax				
Palmolive				
Sun				

VARIABLES

1. What is the **INDEPENDENT VARIABLE (IV)** in this investigation?
2. What is the **DEPENDENT VARIABLE (DV)** in this investigation?
3. What are the **CONTROLLED VARIABLES** in the investigation?

Graph:

Make a **BAR GRAPH** to show your data. Remember to title and label your graph. (Note: You may use Google Sheets to create your chart.)

Title: The Effect of _____(IV)_____ on _____(DV)_____.

(Insert Bar Graph Here)

Data Analysis:

Why is a **BAR GRAPH** the best choice for this kind of data?

What does the data tell you about the three different kinds of dishwashing soap and bubbles?

Conclusion: Write a short paragraph describing what you have learned about soap bubble solutions. Answer the original question, explain why your hypothesis was supported or not supported by the data, and use actual data (specific numbers) to provide evidence for what you say.