

****PLEASE DO NOT WRITE ON THIS PAPER****

LW—DESIGNING AN EXPERIMENT

INITIAL WONDERINGS: *(you should have at least 5 listed)*

PROBLEM: How does the type of soap (all-natural, degreaser, and soap with lotion) affect the size of the soap bubble?

HYPOTHESIS: If I use the 3 brands of soap, then *(fill in the blank)* _____, *because (fill in your reasoning)* _____

MATERIALS: 3 pre-mixed beakers of soap, pipette, ruler, straw

PROCEDURES:

VARIABLE YOU ARE CHANGING (MANIPULATED)	VARIABLE YOU ARE MEASURING (RESPONDING)	VARIABLE YOU <u>WILL NOT CHANGE</u> (CONTROL)
<i>(Write a step by step plan for how to test your hypothesis)</i>		

DATA & RESULTS: *(you must include the data you collected in the form of a data table)*

ANALYSIS:

1. Why is it important to conduct multiple trials for each soap?
2. Why is it important to make sure you manipulated **ONLY** the soap types and not any other variable (straw size, surface, etc)?
3. Why is it helpful to also collect qualitative data during an experiment?

CONCLUSION:

Write a conclusion PARAGRAPH that includes the following:

- Summarizes what the experiment was about
- Answers the testable question (the “problem”)
- Uses evidence from your data table to support your claim