**Sugar Cube Lab Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Block \_\_\_\_\_**

In this laboratory activity, you will be analyzing the factors that can affect the dissolving of a sugar cube.

1. Formulate an experimental question. Factors that can affect the rate of dissolving include: amount of stirring, water temperature, water vs an acidic solution (vinegar), crushing the cube, or any other factor that you can control (consult your teacher).
2. Formulate a hypothesis.
3. Briefly describe your procedure.
4. Identify your IV and DV.
5. Identify your control.
6. Name at least 3 constants in your experiment.
7. Perform experiment and record data. Create a data table here.
8. Graph your results. Follow all graphing guidelines.

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1. Make at least 3 observations (using at least 2 senses).
2. Post lab questions:
   1. Was your hypothesis correct? Why or why not?
   2. Were your measurements precise? Support your answer.
   3. Were your measurements accurate? Support your answer.
   4. What could you have done to improve your experiment?
3. Homework. Write a conclusion to your experiment. This should be a minimum of one typed page long (double spaced) and should include at least 4 paragraphs. The conclusion needs to include the following:
   1. Restate experimental question. (In this experiment, we tested…)
   2. Summarize data, include numbers.
   3. Indicate whether your hypothesis was correct or incorrect.
   4. Describe the validity of your results (do you think they are believable? Why or why not?)
   5. What improvements could be made to the experiment to improve the results?
   6. How do the results relate to class material.