

Name _____
Integrated Science Block ____
Lab _____
Due Date _____

Lab Report Worksheet

This worksheet is to help you create a ROUGH DRAFT of the formal laboratory report. You will type a formal lab report (double spaced in 12 point Times New Roman font) to be handed in on the due date. Use **bold** section headers! DO NOT include the information I have given to you in parenthesis!

- I. **Problem Statement:** (What question are you trying to answer? Be sure to include BOTH your independent and dependent variables in the question!) _____

- II. **Purpose:** (Paragraph 1: What is the purpose of this lab? What are you going to do in order to investigate? Give a brief overview of the experiment.)

- (Paragraph 2: Explain the concepts we have learned in class that are relevant to this experiment.) _____

III. **Hypothesis:** (Your educated guess. Remember, it must be a SPECIFIC guess as to how the independent variable will affect the dependent variable with scientific reasoning!) Ex: If pectinase, cellulase, a combination of cellulase and pectinase, and water are used, then cellulase will produce the greatest amount of apple juice because cellulase breaks down cellulose, a major component in plant cell walls.

If _____
then _____
because _____

IV. **Variables:**

Independent Variable (What is different between your setups): _____

Dependent Variable (What you measured for results): _____

Control Group: _____

Factors Held Constant (List AT LEAST THREE things you kept consistent throughout the experiment or between your different setups): _____

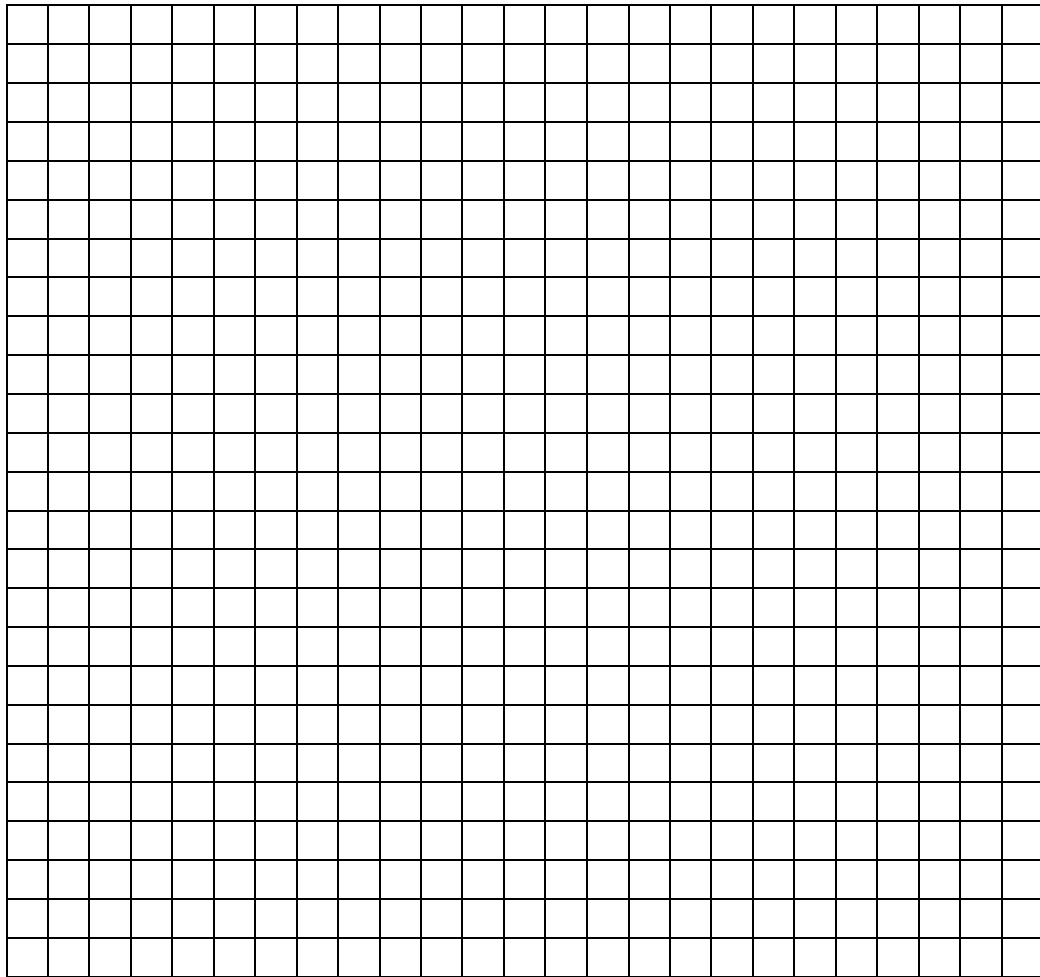
V. **Materials:** (BULLET THIS SECTION! List all equipment used, including quantities and sizes.)

VI. **Procedure:** (Step by step instructions numbered, in complete sentences and passive voice. Don't forget to include specific details and UNITS!)

1. _____
 2. _____
 3. _____
 4. _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____
- _____

VII. **Results:** (Create a table to record all results. Remember to include a TITLE, LABELS and UNITS for each table.)

(Create a graph to show the results clearly. Remember to assign a TITLE, LABEL each axis, and to include UNITS. A variety of graphs can be created or used to show the analysis of the data. Be sure to choose the most appropriate tables and graphs to best represent your data.)



*You may, if necessary, attach a table or graph at the end of a lab report. IF YOU ATTACH THE DATA AT THE END OF THE REPORT you must still use a bold section header that says **Results:** Please see attached.)

VIII. **Discussion:**

(Paragraph 1: State any pertinent observations. You must have at least 3!)

(Paragraph 2: Restate your data. If you measured an initial, a final, and the change then you ONLY need to state the change for each. If you used multiple trials to calculate an average, you ONLY need to state the averages.)

(Paragraph 3: State your conclusion. Was your hypothesis correct? What do the results and conclusion tell your reader? How does it relate to daily life?)

(Paragraph 4: State at least 3 sources of error and explain how each would affect your results. Consider if you held all the factors constant. If not, you have found a source of error! NEVER say that you held all factors constant!)

(Paragraph 5: What can you do to improve the experiment? Consider this: Did you repeat the experiment to ensure accurate results? Even if you repeated it 3 times, you should suggest repeating the experiment to further ensure that the results are accurate!!! Could you fix any of your sources of error? Tell SPECIFICALLY how you could fix them. Could you expand the experiment to include more materials being tested?)

(Paragraph 6: What additional experiments would you perform in the future to give you more insight as to your conclusion? What insight would this give you?) _____
