### LAB REPORT RUBRIC

Reports must be typed (1-inch margins, single-spaced, 12-pt font, Arial or TNR) or very neatly written.

For each section, include headers and spacing between them.

## Question

* What are you doing this lab for? What is the main point of the lab?
	+ Ex: Do all macromolecules react the same to iodine?
* You can have more than one question.

## Hypothesis

* Use your inferences to make a hypothesis about your question. MUST include a “what” and “why.”
	+ Ex. I believe that bread will turn purple when testing for simple sugars because it is a commonly known carbohydrate.
* You can have more than one hypothesis.

## Procedure

* Step by step process of what you did in the lab.
* Use numbered bullets, not paragraphs.
* I should be able to read your steps and complete the lab without having to look at a manual.
	+ More detail = More precise

## Data

* Charts, tables, graphs, and information you collected
* All charts/tables/graphs should have headings, titles, legends (for graphs), and captions.
	+ Ex.

Figure 1: Biuret Test for Proteins

|  |  |  |
| --- | --- | --- |
| Sample | Color Change | Positive or Negative |
| 1 | Blue 🡪 Blue | - |
| 2 | Blue 🡪 Purple | + |

* + - * + This table is used to indicate the presence of proteins in the tested samples.
				+ A positive reaction would involve the color change of blue to purple.
* If a table layout has been provided, follow the guidelines precisely!
* Use rulers and neat handwriting.

#### Analysis

The most important part of your lab!

* Detailed paragraphs
	+ Minimum 3 paragraphs (5-7 sentences!)

Break down your lab into understanding:

* **Variables**
	+ Independent (what you changed)
	+ Dependent (what changed because of this)
	+ Control (what was never changed/had no reactions)
* **What happened? Did you notice any trends (similar results)?**
	+ Why did certain things react and not others? Were any results difficult to clarify?
* **Errors: what could have gone wrong that might have skewed the results?**
	+ Ex: Due to having inconsistent drop size between each tester, one sample received more of the chemical.
	+ Ex: The mixture was not hot enough, slowing the reaction.
* **Outliers and Surprises**
	+ Did any of the information surprise you? Were some results extremely different from the others (outlier)?
	+ Explain why and how
* **Improvements: what could be done to improve the lab/results?**
	+ Ex: More samples, more foods, etc.
* **Application: How can what you learned in this lab apply to your outside life?**

## Conclusion

* A concise 1-2 paragraph summary of the lab
	+ What you did, what you learned, hypothesis confirmed/rejected, main point of analysis
	+ DO NOT end your report with anything along the lines of “I really enjoyed this lab” or “I hope you enjoyed my report.” I hope you enjoyed it, and I’ll have enjoyed your report if it’s done well, don’t try to skimp a sentence.