**Formal Lab Report Grading Rubric**

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| ***2*** | ***HEADING*** | - lists name, date, title, name of lab partners | /2 |
|  | ***INTRODUCTION*** |  |  |
| ***10*** | ***Background*** | -describes what lab will be about  -provides general information  -describes instructions given | /10 |
| ***2*** | ***Purpose*** | -provides a rational explanation of why performing the lab | /2 |
| ***2*** | ***Prediction*** | -writes a reasonable prediction formed from research question | /2 |
| ***4*** | ***Variables*** | -selects relevant variables (dep. and indep.)  -accurately describes what is held constant | /4 |
|  | ***METHODS AND MATERIALS*** |  |  |
| ***5*** | ***Materials*** | -provide a complete list of equipment and chemicals used  -uses proper terminology  -lists proper sizes of glassware | /5 |
| ***10*** | ***Methods*** | -procedure is written in a manner the experiment could be reproduced  -written in third person passive voice  -detail number of replicates and describe sufficiency | /10 |
| ***10*** | ***DATA*** | -clearly identified tables  -tables are numbered and titled  -units and uncertainty included  -brief description of results under each table | /10 |
| ***20*** | ***DATA ANALYSIS*** | -one example of each calculation is shown  -graphs (if applicable with axies labeled correctly)  -summarizes of data trends (how did independent variable affect the dependent) | /20 |
| ***20*** | ***ERROR ANALYSIS*** | -evaluates method/suggesting weaknesses  -explains errors or losses  -provide a statistical analysis (% yield or error) | /20 |
| ***5*** | ***CONCLUSION*** | -answers if the purpose was achieved or if hypothesis was validated  -results may be compared to literature values | /5 |
| ***5*** | ***SUGGESTIONS FOR IMPROVEMENT*** | -reflects what could be done differently to improve lab  -Presents any new questions that might be posed | /5 |
|  | ***SOURCES*** | -properly cites all sources used |  |
| ***5*** | ***OVERALL IMPRESSION*** | -entire lab written in proper tense  -clearly written and articulate  -proper formatting (double-spaced/heading id)  -gave an organized best effort | /5 |

c = aspect fulfilled completely p = aspect partially fulfilled n = not at all NA = not assessed