**Formal Lab Report Grading Rubric/2011updated 10-25-11**

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| ***HEADING*** | - lists name, date, title on top left corner | /2 |
| ***PLANNING*** |  |  |
| ***Purpose*** | -provides a rational explanation of why performing the lab | /4 |
| ***Hypothesis*** | -writes a reasonable prediction formed from research question (quite acceptable to include paragraph following) | /4 |
| ***Variables*** | -Independent variable is properly identified  -Dependent variable is properly identified  -Controls are properly identified with a sufficient description of effort to control | /10 |
| ***Materials*** | -provide a complete list of equipment and chemicals used  -uses proper terminology  -lists proper sizes of glassware | /5 |
| ***Methods*** | -procedure is written in a manner the experiment could be reproduced (describes how data was collected)  -written in third person passive voice  -detail number of replicates and describe sufficiency | /10 |
| ***DCP*** |  |  |
| ***Data Collection*** | -Sufficiently describe where/when the data was collected | /10 |
| ***Data Presentation*** | -clearly identified tables  -tables are numbered and titled  -units and uncertainty included  -complete/accurate/sufficient presentation of data  -brief description of results under each table | /10 |
| ***Calculations*** | -showed one calculation of each type used in interpreting the results (generic followed by specific)  -data was processed correctly  -SF/precision were considered with measured data | /10 |
| ***Graphs*** | -If applicable (type, axies, etc.)  -must be correct type to best describe data |  |
| ***DEC*** |  |  |
| ***Discussion*** | -introduction  -summarizes of data trends (how did independent variable affect the dependent)  -explains how data was analyzed to form conclusion | /10 |
| ***Evaluation of Method or Procedure*** | -discusses confidence or lack of  -evaluates method/suggesting weaknesses  -explains errors or losses  -results should be compared to literature values, or accepted scientific understanding  -provide a statistical analysis if applicable(% yield or error)  -includes suggestions as to what to do differently if the lab were to be repeated | /10 |
| ***CONCLUSION*** | -answers if the purpose was achieved or if hypothesis was validated | /5 |
| ***SOURCES*** | -properly cites all sources used |  |
| ***OVERALL IMPRESSION*** | -entire lab written in proper tense  -clearly written and articulate  -proper formatting  -gave an organized best effort | /10 |

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