BIO11-12 Lab Report Grading Rubric:

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|  | Emerging (1) | Developing (2) | Proficient (3) | Extending (4) |
| Format  *Typed/ 1.5spacing, complete,*  *Images*  *Title Page* | More than two sections are missing and spelling, grammar and neatness makes lab difficult to interpret. | Not more than two categories missing or out of sequence or more significant problems with spelling and grammar. | Not more than one section missing or out of sequence or some minor problems with neatness and spelling. | Contains all sections, properly labeled in the correct sequence. Neat, correct spelling and grammar. Data tables and graphs are neat and made with a ruler. |
| Hypothesis  *One hypothesis (If…then)* | Incomplete hypothesis | Hypothesis is limited | Hypotheses is appropriate | Hypothesis is detailed |
| Purposes *One purpose per experiment + Lab safety/* | Not all purposes are stated; no lab safety | Not all purposes are stated; lab safety included | All purposes are stated; lab safety included | All purposes are clearly stated; includes lab safety. |
| Procedures *Complete materials list and methods (point form is ok)* | Information is limited and reproducing this lab would be impossible | Information is missing that would make it difficult to carry out the laboratory successfully. | The materials and methods steps are clearly laid out so that experiment could easily be recreated. NOT Referenced | The materials and methods steps necessary to carry out the experiment are clearly laid out so that experiment could easily be recreated. Referenced |
| Data & Observations *Images: labelled data tables:* | Minimal and incorrect data. Table messy and missing units, headings etc. No images included. | Some errors in measurements and descriptions.  Significant lack of detail and organization of data. No images included. | Information in data table is correct but lacking detail, units, neatness, or labels. Few images included. | Correct units and relevant detailed qualitative and quantitative observations. Detailed images included. |
| Analysis  *Analyze data*  *Answer Questions: include scientific language* | Irrelevant and does not relate to the experiment. Hard to understand or incorrect information. | Still demonstrates a connection to the purpose but lacks any understanding of the science. Errors in graphing do not allow the trend to be demonstrated. | Some understanding is evident but there are some minor misinterpretations. There are minor errors in graphing, but trend in data is still apparent. | Demonstrates a complete understanding. of observations. Sample calculations and relevant formula are presented in a clear and logical fashion including unit. Graphs contain all necessary components. Referenced |
| Discussion  *Discuss results, Sources of error* | Discussion does not demonstrate understanding. | Discussion demonstrates a simplified or misinterpreted understanding. | Discussion demonstrates a good understanding, but scientific terms are underused. | Discussion demonstrates a deep understanding and is enhanced through scientific terminology. Sources of error are relevant to your observations and are accounted for. Referenced |
| Conclusion *Addresses each of the Purposes. The hypothesis is proven/ disproven. Ask further questions.* | Conclusion is off topic and much too short. | Conclusion somewhat refers to the purpose & hypothesis but is lacking detail. | Conclusion refers to the purpose & hypothesis and is relevant but is lacking in detail or sources of error and further questions. | Conclusion refers to the purpose & hypothesis and is detailed. Includes detailed sources of error and further questions. |
| Safety and  Participation *Lab safety practice* | Does not treat others with respect or makes major procedure or safety errors. | Student is not efficient with time, makes more than one procedure or safety error. | Student mostly follows procedure and safety rules but makes a minor error. | Student is on task, follows procedure, safety  recommendations, and works well with lab partner. |