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| **Category** | **Minimal**  **1 Point** | **Basic**  **2 Points** | **Proficient**  **3 Points** | **Advanced**  **4 Points** |
| **Title** | Present but not focused |  |  | Describes focus of the lab |
| **Purpose-** Describes what you are trying to demonstrate or why you are doing the lab. May begin with “To determine…” if it is a purpose. If it is a problem, it must be in the form of a question. | Problem unclear | Clear but many details missing | Clear but some details missing | Clear with details listed. |
| **Pre lab questions** | Needs to be relevant to the lab | Only partially relevant | Relevant with some detail | Relevant using proper vocabulary and details |
| **Hypothesis**  Make a prediction using an “If…, then…” statement. | Needs to be stated as a hypothesis | Needs to relate to problem more directly | Directly related to problem, needs back-ground information | Directly related to problem, and has back-  Ground information |
| **Procedures**  List the materials and procedures. The procedures should be numbered in a step by step sequence. | Listed but not appropriate for the lab  No logical sequence | Listed, but procedure is not complete | Listed and complete, but procedure is not in a step by step format | Listed and complete |
| **Independent and**  **Dependent variables** | Both need to be identified | One identified or,  both  identified but mixed up |  | Properly identified |
| **Constants** | No constants identified | One constant properly identified | Two constants properly identified | All constants properly identified |
| **Results**  Describe what happened or what you observed; may include data tables and/or drawings. Remember – tables and drawings should be labeled with a title. | Includes a data chart or graph that doesn’t follow the rubric |  |  | Includes a data chart or graph that follows the rubric |
| **Analysis**  Analyze the data; what do the observations mean, and what relationships are shown. This should be an explanation in paragraph form. This is also where any graphs of the data will go. Remember – graphs need to have a title, both axes labeled, and units labeled. All graphs will be done by hand on graph paper. | No data analysis | Needs to explain trends and oddities in the data. | Explains the trends and oddities in the data. Need to explain error source | Explain the trends and oddities in the data. Explain sources of error. |
| **Conclusion**  This should be a statement of conclusion that relates directly to your purpose or hypothesis. Your hypothesis is **never** proven correct or wrong. Instead, you must state that your data did or did not support your hypothesis. What is your explanation for this? What did you learn? May also include your mistakes and how you might correct or change the lab for future use. | Conclusion does not restate the hypothesis | Conclusion restates the hypothesis, but does not accept or reject the hypothesis. | Conclusion restates the hypothesis and accepts or rejects the hypothesis.  No discussion of what was learned is included | Conclusion restates and accepts or rejects the hypothesis  Discussion of what was learned is included |
| **Post lab questions** | (4 points)  Less than half the questions answered | (8 points)  ¾ questions answered | (12 points)  All of the questions answered but less than ½ answered correctly | (16 points)  All of the questions answered correctly |
| **Mechanics/Grammar** | Word-processed with many grammatical errors. | Word-processed with a few grammatical errors. | Word-processed with no grammatical errors. | Word-processed, with no grammatical errors. Includes graphics. |
| **Lab Performance** | Demonstrated unproductive or unsafe behavior. |  |  | Demonstrated productive, safe, cooperative and orderly behavior. |