IB LAB GRADING CRITERIA

\*How the labs and portions of the labs will be evaluated and broken down for the IA

IA Scoring

Aspect /Option Additions Key Points

|  |  |  |
| --- | --- | --- |
| Personal Engagement | **2 – 1 – 0** | (How you make it your own):  \*Does the report show any personal significance. interest, curiosity, and independent thinking?  \*provide evidence of personal input & initiative you have put into the report |
| Exploration (Design) | **6/5 – 4/3 – 2/1 – 0**  Addition:  \*Materials list/sketch/Photos showing the setup that aids in supporting the procedures  \* Raw Data Table: variables Identified with column headings, units, and uncertainties | \*RQ is to the point and testable (IV & DV).  \* background info is scientific, appropriate, relevant, and correct.  \*Variables to be kept constant/controlled are identified and explained how they’ll be kept constant.  \*Procedure is detailed, specific, calls for collection of sufficient relevant data, and considers important safety and environmental issues/concerns. |
| Analysis (Data Collection and Processing) | **6/5 – 4/3 – 2/1 – 0**  Addition:  \*Data Tables (Raw & Processed) include column headings, units, & uncertainties | \*Sufficient and accurate raw and calculated data which can be used to support a conclusion of the lab.  \*Sample calculations show how raw data was processed, including propagation of uncertainty  \*Uncertainty is described correctly mathematically and/or in paragraph format, discussing the impact of uncertainties on the results of the lab  \*Graphs include error bars, 3 lines of best fit(min., max., and average best fit), and a mathematical equation for average line of best fit, showing trends or patterns from the data.  \*Short descriptive discussion interpreting the processed data/graphs, explaining any trends or patterns. |
| Evaluation (Conclusion) | **6/5 – 4/3 – 2/1 – 0** | \* Conclusion statement succinctly and accurately answers the RQ.  \*Conclusion statement is supported by sufficient and relevant evidence (processed data and graphs).  \* Conclusion statement is compared to scientific background and justified  \* Error discussion evaluates weaknesses and limitations, that relate to your specific procedure, data range, and/or results, supported with evidence from your data.  \* suggestions for the improvement and extension of the investigation are realistic and relevant, addressing the weaknesses/limitations identified above |
| Communication | **4/3 – 2/1 – 0** | The presentation (your report) is clear, well-organized/structured, relevant, concise, and well thought-out and written. Any errors present (science, terminology, conventions) are minor and do not detract from the findings of your report. |