**Lab Rubric**

**\*\*For this assignment, your scores for each section will be averaged to calculate your total EKS 1 lab score. The Data section and Analysis and Conclusions section are weighed x2 in the calculation.**

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|  | **4** | **3** | **2** | **1** |
| **Abstract** | Summarizes each section of the lab (intro, methods, data, analysis and conclusions) accurately and concisely.  | Abstract summarizes 3 sections of the lab accurately and concisely.  | Abstract summarizes 2 sections of the lab accurately and concisely. | Abstract is missing or off topic. Abstract accurately summarizes less than 2 sections of the lab. |
| **Introduction** | -Includes research-based background information on the topic, with APA citations from credible sources. -Discusses real-world applications/ importance of why we are doing the experiment. -Ends with “If\_\_\_\_, then\_\_\_\_” hypothesis. | Introduction is missing one of the components required for a 4. | Introduction is missing two components required for a 4. | Introduction is missing more than two components required for a 4/ Introduction is missing or off topic.  |
| **Methods** | -Accurately and concisely summarizes the procedure of the lab. -Includes information on the # of trials conducted- describes lab equipment used (including glassware w/ size in mL)-explains independent, dependent, and controlled variables.  | Methods section includes some unnecessary details, or not enough detail. OR Section is well-written, but missing 1 of the components required for a 4.  | Methods section includes excessive amounts of unnecessary detail, or is extremely broad. OR Methods section is missing 2 of the components required for a 4.  | Methods section is missing or off topic. Methods section does not accurately summarize the procedure, or is missing more than 2 of the components required for a 4.  |
| **Data (x2)** | -Includes a written explanation of qualitative and quantitative data.-Compares data among experimental groups, and/or compares experimental groups to the control. -Includes an excel chart of raw data for all trials. -Includes an appropriate excel graph with descriptive title and correct axis labels.  | Data section is missing one of the four components required for a 4.  | Data section is missing 2 of the components required for a 4.  | Data section is missing, off topic, or lacks more than 2 of the components required for a 4.  |
| **Analysis and Conclusions (x2)** | - Topic sentence discusses whether the data agreed or disagreed with the hypothesis. -Discusses unexpected results/ possible sources of error BEYOND just human error. - Gives suggestions for how to improve upon the lab in the future -Cites current literature (compares results to similar, credible studies, with APA citations). -Explains big picture applications of your findings (why should we care about your results?).  | -Topic sentence discusses whether the data agreed or disagreed with the hypothesis.-discusses unexpected results/ possible sources of error-cites current literature, but sources are not credible--Explains big picture applications of your findings (why should we care about your results?). | -Analysis section is missing one of the components required to earn a 3. | -Analysis section is missing more than one of the components required to earn a 3. OR data section is missing/ off topic.  |
| **Scientific Literacy** | -Includes APA title page -Includes references page with correct citations for all credible resources-Includes APA style parenthetical citations for all outside research-Each section includes a properly formatted title-Content is appropriately organized into the correct section-All sections are written in complete, mechanically correct sentences | Lab is missing 1 criterion required for a 4.  | Lab is missing 2 criteria required for a 4. | Lab is missing more than 2 criteria required for a 4. |