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| --- | --- | --- | --- | --- | --- | --- |
|  |  | **Exceeds**  **4pts** | **Meets**  **3pts** | **Partially Meets**  **2pts** | **Does not meet**  **1pts** | **Points earned** |
| *INTRODUCTION* | **Purpose of the Lab** | The reason for the investigation is concisely, accurately, and thoroughly stated. | The reason for the investigation is accurately and thoroughly stated. | The reason for the investigation is incorrectly or only partially stated. | Missing, academically dishonest, or does not partially meet. |  |
| **Background information** | All relevant information on the variables, the known relationships between them, and all pertinent definitions are thoroughly and accurately described and connected. | Information on variables, the known relationships between them, and definitions are accurately stated. Key concepts are present but only one or two may not be thoroughly connected or described. | Information on the variables, the known relationships between them, and the definitions are only partially stated, key concepts are missing. | Missing, academically dishonest, or does not partially meet. |  |
| **Hypothesis** | Predicted relationship between variables and expected outcomes is concisely communicated. | Predicted relationship between variables and expected outcomes is stated. | Predicted relationship between variables and expected outcomes is only partially stated. | Missing, academically dishonest, or does not partially meet. |  |
| **Scientific Reasoning** | The logic behind the hypothesis is thoroughly and concisely supported by research discussed in the background information. | The logic behind the hypothesis is supported by research discussed in the background information. | The logic behind the hypothesis is only partially supported by research discussed in the background information. | Missing, academically dishonest, or does not partially meet. |  |
| *METHODS* | **Materials** | Listed materials are correct and complete. All details, such as quantity, size, and appropriate units for each piece of equipment used are included. | Listed materials are correct and complete to the extent that the reader can easily duplicate the experiment. | Listed materials are partially complete or incorrect to the extent that the experiment cannot be easily duplicated. | Missing, academically dishonest, or does not partially meet. |  |
| **Procedure** | Procedure for both set-up and data collection are correct, complete and concise to the extent that the reader can fully duplicate the experiment. | Procedure for both set-up and data collection are correct, and complete to the extent that the reader can fully duplicate the experiment. | Procedure for both set-up and data collection are not correct, and complete to the extent that the reader cannot fully duplicate the experiment. | Missing, academically dishonest, or does not partially meet. |  |
| *RESULTS* | **Data reporting** | Quantitative and qualitative data are clearly and concisely reported. Units and precision are correct based on the instruments used. No errors in rounding or significant figures present. | Quantitative and qualitative data are reported. Units and precision are correct based on the instruments used. Only minor errors in rounding or significant figures present. | Significant errors made in reporting data; inappropriate units or levels of precision are used. Errors in rounding or significant figure usage are common. Some data are missing or incomplete. | Missing, academically dishonest, or does not partially meet. |  |
| **Data Explanation** | Narratives thoroughly and concisely highlight key information presented in all included data tables, graphs, and diagrams. | Narratives highlight key information presented in all included data tables, graphs and diagrams. | Narratives highlight only some of the key information or do not highlight (over-include) data presented in included data tables, graphs or diagrams. | Missing, academically dishonest, or does not partially meet. |  |
| **Graphs, Tables & Diagrams** | All illustrations are accurate, purposeful, well designed, and include a descriptive title, appropriate labels (axes, headers, etc.), and units. | All illustrations are accurate, purposeful, and usable and include a title, appropriate labels, and units. | Insufficient illustrations to support the report. Those used may be incomplete or inaccurate, and haphazard in design and execution. | Missing, academically dishonest, or does not partially meet. |  |
| *DISCUSSION* | **Hypothesis Outcome** | Thoroughly and correctly restates hypothesis and correctly concludes whether original hypothesis is supported or rejected. | Correctly restates hypothesis and correctly concludes whether original hypothesis is supported or rejected. | Incorrectly restates hypothesis or does not correctly state whether original hypothesis was supported or rejected. | Missing, academically dishonest, or does not partially meet. |  |
| **Description and Connection of Results** | All key patterns, principles, and relationships shown in the results are correctly and concisely described and connected to the purpose and background information. | Most key patterns, principles, and relationships shown in the results are correctly described and connected to the purpose and background information. | Some key patterns, principles, and relationships shown in the results are described and partially connected to the purpose and background information. | Missing, academically dishonest, or does not partially meet. |  |
| **Error Analysis** | All significant sources of error are identified and correctly explained. | The most significant sources of error are identified and correctly explained. | Significant sources of error are missing or incorrectly explained. | Missing, academically dishonest, or does not partially meet. |  |
| **Summary – Next steps** | Insightful follow-up question (next steps) and final conclusions are thoroughly and concisely discussed. | Follow-up questions and final conclusions are discussed. | Follow-up questions or final conclusions are not appropriately identified. | Missing, academically dishonest, or does not partially meet. |  |
| *WORK CITED* | **Citations** | Research is compiled from multiple (3 or more) reputable sources that are scientific. | Research is compiled from 1 to 2 reputable sources that are scientific. | Some research is compiled from sources that not scientific or not reputable. | Missing, academically dishonest, or does not partially meet. |  |
| **Formatting** | Citations follow the provided format. No errors occur. | Citations follow the provided format. One or two minor errors may occur. | Citations are not done using the proper format. | Missing, academically dishonest, or does not partially meet. |  |
| *6+1 WRITING TRAITS* | **Word Choice** | * Powerful and engaging words * Artful use of figurative language and/or sensory detail | * Some active verbs and precise nouns * Effective use of figurative language and/or words that enhance meaning | * Generally correct words * Attempt at figurative language and/or words convey general meaning | * Vocabulary is limited/used incorrectly * No figurative language; words do not convey meaning |  |
| **Sentence Fluency** | * All sentences are clear * Variety of sentence structure is used * Run-ons and/or fragments are not present | * Most sentences are clear * Some sentence variety is used * Run-ons and/or fragments are rare | * Some sentences are clear * Sentence variety used rarely * Some run-ons and/or fragment are present | * No sentences are clear * No variety in sentence structure * Frequent run-ons and/or fragments are present |  |
| **Conventions** | * Few errors in grammar, punctuation, capitalization and/or spelling. | * Errors in grammar, punctuation, capitalization and/or spelling are present but don’t distract from meaning. | * Errors in grammar, punctuation, capitalization and/or spelling are present and some distract from meaning. | * Many distracting errors are present in grammar, punctuation, capitalization and/or spelling. |  |
| **Presentation & Format** | * Final draft is typed, double-spaced, and neatly presented. * All text and visuals are of high quality and easy to read. | * Final draft is neatly presented. * Most text and visuals are easy to read/see. | * Parts of the final draft are not neatly presented. * Some text and/or visuals are broken up or not logically placed on pages. | * Submitted work is not in final draft quality. A significant amount of text and/or visuals is illegible. |  |