**Chemistry IA Feedback**

**Name** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Assignment Title** \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Personal Engagement**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Missing** | **Needs Work** | **Yes** |
| Independent Thinking/ Creativity |  |  |  |
| RQ Justified/ Personal Link given |  |  |  |
| Independent Design |  |  |  |
| In-text referencing |  |  |  |
| Images Labeled  |  |  |  |
| **Additional Comments** |
|  |

**Exploration**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Missing** | **Needs Work** | **Yes** |
| RQ clear/sharply focused |  |  |  |
| RQ refers to Independent and Dependent Variables |  |  |  |
| Background information supports investigation |  |  |  |
| Independent Variable stated including units  |  |  |  |
| Dependent Variable stated including units  |  |  |  |
| Method shows all steps |  |  |  |
| Size of equipment used given |  |  |  |
| Images/Photos of Lab set up (Labelled) |  |  |  |
| Safety Instructions given |  |  |  |
| Controlled variables explained  |  |  |  |
| Controls referred to in method |  |  |  |
| Sufficient trials  |  |  |  |
| At least five changes of independent Variable  |  |  |  |
| Method collects data to answer RQ |  |  |  |
| **Additional Comments** |
|  |

**Analysis**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Missing** | **Needs Work** | **Yes** |
| Observations made |  |  |  |
| Raw data table present |  |  |  |
| Raw data has uncertainties |  |  |  |
| Decimals consistent for Raw Data |  |  |  |
| Sample calculations shown |  |  |  |
| Averages have uncertainty (std dev if suitable) |  |  |  |
| Decimals of averages consistent  |  |  |  |
| Processed data table present |  |  |  |
| Anomalous data clearly identified |  |  |  |
| Evidence of processing present  |  |  |  |
| Decimals match least certain measurement |  |  |  |
| Graph has labeled axes |  |  |  |
| Graph has uncertainties for both variables  |  |  |  |
| Line of best fit present  |  |  |  |
| Line equation referred to in report |  |  |  |
| Graph trend line explained  |  |  |  |
| Conclusion refers to the precision of the data  |  |  |  |
| Conclusion refers to the accuracy of the equipment  |  |  |  |
| **Additional Comments** |
|  |

**Evaluation**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Missing** | **Needs Work** | **Yes** |
| Effect of error referred to  |  |  |  |
| Limitations of Experimental Procedure discussed  |  |  |  |
| Literature value or trend referred to |  |  |  |
| Conclusion refers to graph |  |  |  |
| Conclusion refers to size of uncertainties |  |  |  |
| Research Question referred to |  |  |  |
| Percent discrepancy calculated (if applicable) |  |  |  |
| Systematic errors identified |  |  |  |
| Random errors identified |  |  |  |
| Sufficient weaknesses/errors identified |  |  |  |
| Evaluation based on data collected |  |  |  |
| Improvements on identified weaknesses |  |  |  |
| Improvements/Modifications specific and significant |  |  |  |
| **Additional Comments** |
|  |

**Communication**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Missing** | **Needs Work** | **Yes** |
| Lab Structure followed |  |  |  |
| Spelling correct |  |  |  |
| Clear and concise conclusion |  |  |  |
| Graphs and images labeled |  |  |  |
| Graphs and images referred to by label |  |  |  |
| superscript/subscript used when applicable |  |  |  |
| MLA bibliography |  |  |  |
| **Additional Comments** |
|  |