Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_ Sub: Science

**Inquiry Report : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

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| **Problem/Question**: (What you are investigating) |
| **Prior Knowledge**: (What you already know about the question and the topics involved) |
| **Hypothesis**: (If….then…. & why) |
| **Independent Variable**: (What is changing) |
| **Dependent Variable**: (The result of your changes) |
| **Controlled Variables:** (Parts of the experiment that are staying the same) |
| **Experimental Control**: (Not exposed to the independent variable – A test without the change) |
| **Materials**: (Include amounts and be specific) |
| **Procedure**: (Step by step instructions. Include diagrams and repeated trials.) |
| **Qualitative Observations & Summary of Results** (Qualities you observe – not numbers – at the beginning, middle, and end of experiment. Summarize your results) |
| **Quantitative Data** (Data Table – includes raw data and units, organized, table labeled, calculations – ex. average) |
| **Graph(s)** (Appropriate graph, title, axes labeled, units, correct scale, trend lines) |
| **Statistics** (Mean, median, mode – Range of data – Best fit line or curve line on graph – other statistics) |
| **Analysis and Interpretation of Data** (Trends in data are pointed out and explained, outliers are addressed, statistics explained) |
| **Experimental Error** (Reasons (2) for errors are given – Effect errors had on data) |
| **Conclusion**:  - **Hypothesis is evaluated according to data** (Include your hypothesis. Tell whether or not your hypothesis is correct/incorrect according to your data.)  My hypothesis stated, if\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  It was correct/incorrect (circle one) because my data shows  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **- Reasons to accept/reject hypothesis** (Use your background knowledge to explain why your data turned out the way it did.)  I know my hypothesis was correct/incorrect (circle one), because  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  **Applications and Recommendations for Further Use**:  **- Explain reasons you may have errors in your experiment.** (What could have gone wrong that made your data incorrect? If you don’t think anything went wrong, explain why.)  - **Explain one way to improve this experiment**. (What other procedures, materials or tools could you have used to make your experiment perform better?)  - **State a testable question for future experiments.** (What question would you like to test if able to do a similar experiment?)  - **Two practical applications given** (Where would this be used in the real-world) |