



(D) Designing the Investigation: Design safe and ethical scientific investigation to gather data to respond to a question/hypothesis.				D
	6 5 (Exceed)	4 (MEET)	3 2 <> 1 0	Yours:
<b>4. Procedures</b>	Logical procedures in a precise and efficient design that maximize resources which contribute to the outcome	Logical procedures that can be easily and accurately followed. <b>Tells how to set up, run tests, and what to record.</b>	Partially logical procedures with some or minor errors <> Illogical procedures that are difficult to follow; some errors.	
<b>5. Procedures Organization</b>	Thoroughly identifies variables (including controls); defines a systematic process.	<b>Identifies variables</b> and controls relevant to the procedures.	Partially defines variables and controls. <>Variables not present or not defined.	
<b>6. Quantity and Quality of Data</b>	Design calls for data of exceptional quality and quantity to address question/hypothesis	Design calls for appropriate resources and <b>materials</b> to collect relevant data ( <b>that will answer question</b> ).	Design calls for insufficient resources, materials and techniques to collect relevant data.	

Variables: \_\_\_\_\_

Independent /Manipulated Variable: \_\_\_\_\_

Dependent/Responding Variable: \_\_\_\_\_

Variables to Control (or Control Group): \_\_\_\_\_

Procedures (Numbered List):

- 1 \_\_\_\_\_
- 2 \_\_\_\_\_
- 3 \_\_\_\_\_
- 4 \_\_\_\_\_
- 5 \_\_\_\_\_
- 6 \_\_\_\_\_
- 7 \_\_\_\_\_
- 8 \_\_\_\_\_

Illustration: \_\_\_\_\_



(A) Analyzing & Interpreting Results: Analyze results and develop conclusions. Include what you found and your errors.				<b>A</b> _____
	<b>6 5 (Exceed)</b>	<b>4 (MEET)</b>	<b>3 2 &lt;&gt; 1 0</b>	<b>Yours:</b>
<b>10. Results and Analysis Paragraph</b>	Analyzes relevant data, including patterns and trends; relates the results to other scientific information.	Analyzes relevant data with evidence based explanation of the results. <b>Uses numerical summary of data to explain.</b>	Partially analyzes data with a general explanation of the results. <> Inaccurately analyzes data with a simplistic explanation.	
<b>11. Conclusion and Error Review</b>	Clearly communicates conclusions including magnitude and sources of error and possible affect on results.	Clearly communicates conclusions <b>including possible sources of error and possible effect on results.</b>	Communicates general conclusions; sources of error irrelevant or formulaic <> Incomplete conclusions and sources of errors.	
<b>12. Conclusion</b>	Relates detailed results to question or hypothesis. Suggests and outlines further investigations, based on results.	<b>Relates results to question or hypothesis. Suggests relevant revisions or further investigations</b> based on results.	Partially relates results to question. Suggests relevant revisions; no justification<> Results not related to question. Revisions irrelevant.	

Analysis with Evidence:

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Error Sources:

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Conclusion Using Numerical Summary:

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Revisions Or Further Investigations:

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