

South Miami Senior High – Science Department

Lab Report Format

Adapted from: M-DCPS Power Writing and the Art of Scientific Conclusions

- Title:** The title says what you did. It should be brief (aim for ten words or less) and describe the main point of the experiment or investigation.
- Group Members:** List the names of the members of your lab group.
- Benchmarks Covered:** Provided by instructor and summarizes the main concepts learned by conducting the experiment.
- Problem Statement:** Identify the research question/problem and state it clearly.
- Introduction:** An introduction states the concept, what is already known about the lab and the objectives of the lab. One or two paragraphs is usually sufficient to explain each of these ideas.
- Potential Hypothesis(es):** If (state the independent variable) is (choose an action), then (state the dependent variable) will (choose an action).
- Materials:** Record precise details of all equipment and chemicals used in a list format.)
- Procedure:** Do not copy the procedure from hand-out, summarize it and provide accurate and concise details about materials and apparatus used.
- Variables & Control Test:** Identify the dependent, independent, and constant variables.
Note: Independent variable (also known as the manipulated variable): The factor that can be changed by the investigator (the cause). Dependent variable (also known as the responding variable): The observable factor of an investigation that is the result or what happened when the independent variable was changed. Constant variable: The other identified independent variables in the investigation that are kept or remain the same during the investigation. Control Test – separate experiment that serves as the standard for comparison.
- Data:** Design your own data table and record all data carefully.
Graph data.
- Results:** Ensure that you have used your data correctly to produce the required result. Include any other errors or uncertainties that may affect the validity of your result.
- Conclusion & Evaluation:** A conclusion statement answers the following seven questions in at least three paragraphs.
Introduction - What was investigated? Was the hypothesis supported by the data? What were your major findings?
Middle Paragraphs - These paragraphs discuss the major findings of the experiment, using data. How did your findings compare with other researchers?
Last Paragraph - What possible explanations can you offer for your findings? What recommendations do you have for further study and for improving the experiment? What are some possible applications of the experiment?

South Miami Senior High – Science Department Lab Report Grading Rubric

A: 100 – 90

B: 89 – 80

C: 79 – 70

D: 69 – 60

F: 59 – below

	Maximum Points	Full Credit	Half Credit	No Credit
Organization and Purpose	10	Included title that describes experiment in ten words or less. All group members name included. Included benchmark code and benchmark. Included statement thoroughly explains problem presented.	Completed 2 out of the 4 requirements	Did not follow requirements
Introduction	15	Shows proper explanation of concepts Includes facts from previous research No plagiarizing	Completed 2 out of the 3 requirements	Did not follow requirements
Hypothesis (es)	10	Provided a “If.. then...” statement that includes the independent and dependent variable.	“If.. then..” statement is not correctly written.	Did not follow requirements
Materials	5	Provided list with all used materials Stated quantities needed	Missing some materials in list	Did not follow requirements
Procedure	5	Did not copy procedure from handout. All steps are numbered Clearly gives a detailed step-by-step account of procedure	Completed 2 out of the 3 requirements	Did not follow requirements
Variables & Control Test	10	Correctly identified the following: independent variable, dependent variable, constant variable and control test.	Completed 2 out of the 4 requirements	Did not follow requirements
Data	10	Includes data table & graphs Table & graphs are properly labeled (axis' units & titles) Independent variable is on x-axis, dependent on y-axis Written observations are provided Both qualitative and quantitative data was collected Computer generated data provided.	Completed 3 out of the 6 requirements	Did not follow requirements
Results	15	Data from tables and graphs was summarized Discusses errors which were relevant to experiment Analyzes & interprets results	Completed 2 out of the 4 requirements	Did not follow requirements
Conclusion & Evaluation	20	3 paragraphs Introduction includes, what was investigated, if data supports hypothesis and the finding of the experiment Middle Paragraph(s) includes a discussion of the major finding of the experiment, supported with data, if possible comparison of other researchers Last paragraph provides possible explanations for findings, includes recommendations for further study and applications of experiment.	Completed 2 out of the 3 paragraphs.	Did not follow requirements