

Formal Lab Checklist

General Formatting

- Is the lab type written?
- Are the sections of the report given in the proper order?
- Are spelling and grammar correct (i.e. is it clear that the student proof-read their lab)?
- Is the lab titled and does the student provide class information consistent with the MLA heading?
- Is the text of the lab easy to follow?
- Is text single spaced and are sections separate from one another and clearly labeled?
- Are personal references avoided (i.e. "we did this or that")

Introduction (Purpose/Background)

- Are the concepts/theories behind the lab (not procedures) explained.
- Does the student adequately convey that they understand how the lab works and why it works?
- Are the goals and objectives of the experiment clearly stated?
- Is the reference experiment cited?

Methods (Procedures)

- Does the student give a clear and comprehensive summary of the procedures (i.e. what was done) in the lab?
- Are procedural summaries written in past tense (The solution was poured vs. pour the solution or we poured the solution)
- Are step by step procedures included for formal or original research labs?

Data

- Are data tables included and correctly labeled and formatted?
- Are tables and figures properly referenced in the text of the report?
- Are any pertinent observations included?

Analysis and Calculations

- Are all formulas and equations identified and are sample calculations given?
- Are calculation and measurement units included and determined to the correct significant digits?
- Are equations formatted properly using an equations editor and are superscripts/subscripts correctly formatted?
- Are error percentages calculated where possible?
- Has a statistical analysis been done where appropriate?

Results and Conclusions

- Are the results of the lab clearly stated?
- Are reasonable conclusions drawn from the results of the lab?
- Are sources of error identified and reported clearly? (Refraining from terms like "human error" and "proved")
- Are any "in lab" questions included and correctly answered?
- Are suggestions for changes, improvements and areas of further study included?
- Are outside references cited where appropriate?