

Lab Report Checklist

Title:

Accurately describes the content of the lab in the fewest words possible but with enough detail to get the main ideas across to the reader.

Abstract:

- Summarizes the gist of each section of the report in a sentence (or two for an especially complex section).
- Arranges the sentences in the order the sections are presented in the report, from Introduction to Conclusion.

Introduction:

- Starts out by stating (in a sentence or two) the scientific concept the lab is about.
- Sets down in sentence form the main lab objective(s).
- States the hypothesis (if required).
- Includes a brief summary of the procedure.
- Science concepts relevant to the lab are explained.

Methods and Materials:

- Procedure is written in narrative paragraph format (using past tense and passive voice).
- The materials used are mentioned within the context of the procedure and not listed in a separate section.
- Provides a concise, easy-to-follow description of the specific procedures followed in the lab.
- Complete sentences are used and any non-standard abbreviations used are defined.
- Gives enough detail of the materials and procedure used so the experiment may be repeated by someone else.
- The procedure is NOT to be an exhaustive description containing minute details. It should omit information that can be assumed by peers.

The Results (data and analysis):

- Contains visuals (tables or graphs or other figures) that are appropriate to the data and are arranged in an order that best tells the "story" of the data.
- Graphs and tables are numbered and titled.
- Sample calculations are correctly solved and shown in a logical, step-wise fashion with one complete calculation for each type utilized.
- All answers contain the correct units and significant figures. If appropriate, percent error is calculated.

Discussion/Conclusion:

- Includes a restatement of the purpose of the lab.
- Explains how the findings link to the scientific concept, the objectives and the purpose of the lab.
- Refers to, and cites specific numerical data from the findings as evidence to support the conclusion.
- Addresses other appropriate issues such as (1) questions from the Introduction that remain unanswered; (2) sources of uncertainty in lab methods, other than human error, that may have led to unclear answers; (3) how findings compare to the findings of other students in the lab and an explanation for any differences; (4) suggestions for improving the lab.

References:

- Includes all the sources used, such as the lab manual, the textbook, and any reference books or articles cited.
- Uses the appropriate documentation style for citations and references (MLA, ACS, etc.).

Mechanics:

- Uses the appropriate formatting (titles, captions, fonts, etc.) for the tables, graphs, text and drawings.
- Is written in a scientific/technical writing style- clear and concise.
- Is clear of spelling and grammatical errors.
- Includes all the necessary headings (each section of the report should have a heading).