

How to Write a Lab Report

The following 7 sections are required on all lab reports:

1. **DATA TABLE**: Staple your yellow copy from your lab notebook of the original, teacher-initialed data sheet to the front of your report.
2. **TITLE**: Copy from lab sheet.
3. **PURPOSE**: State in ONE complete sentence the main purpose for performing the lab. Must be a declarative statement.
4. **MATERIALS**: This is a list of the all apparatus, reagents and other materials used. Do NOT include goggles, gloves or apron.
5. **SAFETY**: In your own words, explain what safety precautions were necessary for this lab. You need two complete sentences. One sentence about personal safety equipment (*what you wore*) and another sentence about safety precautions (*what you did or did not do for safety*).
6. **PROCEDURE**: Write a SUMMARY of the procedure steps in a paragraph or two. This condensed procedure should include enough detail so that someone can repeat the experiment. Be sure to include any necessary information such as safety precautions, temperatures, times, quantities etc. Use passive past-tense. For example: *The Bunsen burner was lit. Use your own words – do not just copy from the lab sheet. Do NOT plagiarize. You will get a zero (0). Plagiarism is the presenting of the words and/or ideas of someone else as your own. Do not copy anyone even your lab partner.*
7. **CALCULATIONS OR CONCLUSION**

CALCULATIONS:

- ✿ Show ALL work complete with labels and units.
- ✿ Be sure to round correctly.
- ✿ Calculations are to be neat and in a single column.
- ✿ If there are multiple trials of the same procedure, these calculations may be next to each other (side-by-side aka horizontal) with the subsequent calculations in columns below.
- ✿ If there is a graph, it is stapled to the back of the lab report. Real graph paper must be used – no “homemade” graph paper

CONCLUSION:

- ✿ Answer the lab question(s) fully and completely.
- ✿ The conclusion must be high quality work.
- ✿ Grammar and spelling count.
- ✿ Use many details from the experiment, but do not just merely restate the data table.
- ✿ Explain your answer – use logic and reasoning.

Use your own words. Do NOT plagiarize! You will get a zero (0). Plagiarism is the presenting of the words and/or ideas of someone else as your own. Do not copy anyone even your lab partner. Do not copy from a book or the internet. The substitution of words with synonyms, the addition or subtraction of a few words and the rearrangement of sentences is still plagiarism.

General instructions:

1. Maybe typewritten OR printed in blue or black ink pen.
2. Impress me. These lab reports are to be your finest work.
3. Make sure it is neat and clean.
4. Lab reports are due the FIRST FIVE (5) MINUTES on the due date. After the FIRST FIVE (5) MINUTES of the due date, the lab report is LATE.
5. If there is a graph, it must be “real” graph paper. No hand-drawn graph paper.

Rubric for lab reports with a written conclusion or calculations only or graph only:

Section	Total Points possible	Points earned			
Overall	10 points	messy, missing labels and written in pencil 0 pts		messy, missing labels or written in pencil 5 pts	
Title	1 point	no title 0 pts			
Purpose	5 points	no purpose 0 pts		purpose incorrect and/or not written as complete sentence in statement form 2 pts	
Materials	10 points	no materials 0 pts	missing many materials 5 pts		missing one or two materials 9 pts
Safety	4 points	no safety 0 pts		only one safety sentence 2 pts	
Procedure	20 points	no procedure 0 pts	procedure incomplete and not written in passive, past tense 5 pts		procedure incomplete or not written in passive, past tense 10 pts
Calculations or	50 points	no calculations or not showing work 0 pts	many instances of incorrect calculations, missing units, incorrect rounding and/or not showing work 20 pts	several instances of incorrect calculations, missing units, incorrect rounding and/or not showing work 35 pts	few instances of incorrect calculations, missing units, incorrect rounding 45 pts
Graph or	50 points	no graph 0 pts	axes not equidistant and/or misnumbered, data points misplotted and/or many instances of missing title, missing axis labels with units, poorly drawn line 20 pts	several instances of missing title, missing axis label with unit, poorly drawn line 35 pts	few instances of missing title or axis label with unit or poorly drawn line 45 pts
Written Conclusion	50 points	no conclusion or does not answer lab question 0 pts	many instances of “filler words” and/or inaccuracies and/or incoherent statements and/or lack of specifics from lab and/or grammar and spelling errors 20 pts	several instances of “filler words” and/or inaccuracies and/or incoherent statements and/or lack of specifics from lab and/or grammar and spelling errors 35 pts	few instances of “filler words” and/or inaccuracies and/or incoherent statements and/or lack of specifics from lab and/or grammar and spelling errors 45 pts

Rubric for lab reports with calculations AND graph:

Section	Total Points possible	Points earned			
Overall	9 points	messy, missing labels and written in pencil 0 pts		messy, missing labels or written in pencil 5 pts	
Title	1 point	no title 0 pts			
Purpose	2 points	no purpose 0 pts		purpose incorrect and/or not written as complete sentence in statement form 1 pts	
Materials	8 points	no materials 0 pts	missing many materials 4 pts		missing one or two materials 6 pts
Safety	2 points	no safety 0 pts		only one safety sentence 1 pt	
Procedure	8 points	no procedure 0 pts	procedure incomplete and not written in passive, past tense 2 pts		procedure incomplete or not written in passive, past tense 4 pts
Calculations	35 points	no calculations or not showing work 0 pts	many instances of incorrect calculations, missing units, incorrect rounding and/or not showing work 15 pts	several instances of incorrect calculations, missing units, incorrect rounding and/or not showing work 25 pts	few instances of incorrect calculations, missing units, incorrect rounding 30 pts
Graph	35 points	no graph or drawn on "home-made" graph paper 0 pts	axes not equidistant and/or misnumbered, data points misplotted and/or many instances of missing title, missing axis labels with units, poorly drawn line 15 pts	several instances of missing title, missing axis label with unit, poorly drawn line 25 pts	few instances of missing title or axis label with unit or poorly drawn line 30 pts