

## Lab Report Self-Evaluation Form

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Report author(s): \_\_\_\_\_

1. Does the title give you an idea of the paper's topic?

\_\_\_\_ Yes, the subject of the paper is clear

\_\_\_\_ The title is somewhat informative

\_\_\_\_ No, the title is vague (such as "Lab Report #5")

\_\_\_\_ The title is missing

2. Does the Abstract

a) Provide a concise description of the experiment? \_\_\_\_\_

b) Include results and/or a brief conclusion? \_\_\_\_\_

c) Correctly use standard form? \_\_\_\_\_

Additional Comments regarding the Abstract

3. Introduction

a) Does the report tell us the purpose of the experiment before anything else? \_\_\_\_\_

b) Are the key science ideas summarized? If not, what do you think is missing?

Additional Comments regarding the Introduction

#### 4. Methods

- a) Are the essential parts of the apparatus described? \_\_\_\_\_
- b) Is the schematic clear and well-labeled? \_\_\_\_\_
- c) Does the schematic communicate the author's understanding of the main physics? (Note that a photocopied diagram cannot communicate the author's understanding.) \_\_\_\_\_
- d) Do the authors tell you what they did? \_\_\_\_\_
- e) Is the procedure presented in a narrative, story-telling, format? (Remember that we should avoid bullet-point lists and commands.) \_\_\_\_\_
- f) Are references to the lab handout cited? And we don't want the reader to have to pull out the lab handout, so is the necessary information stated in the author's own words? \_\_\_\_\_
- d) Based on the description of the procedure, could you set up the equipment and collect the needed data? \_\_\_\_\_

Additional Comments regarding the Methods

#### 5. Results and analysis (also called Data and calculations)

- a) If there are tables, do they have clear labels (including units and uncertainty)? \_\_\_\_\_
- b) If there are graphs, are they labeled and easy to read? \_\_\_\_\_
- c) For any calculated quantities, are examples shown? \_\_\_\_\_
- d) Do calculated quantities include uncertainty? \_\_\_\_\_
- e) Do all plotted datapoints include error bars (if appropriate)? \_\_\_\_\_

- f) If there is a main result, is it provided in standard form, and is it the same in the abstract and the conclusions? \_\_\_\_\_
- g) Are the calculations correct?

Additional Comments regarding Results and analysis

#### 6. Discussion and Conclusions

- a) Do the authors talk about their tables and/or graphs? \_\_\_\_\_
- b) Are the data compared to expectation (maybe with reference to the introduction section)? \_\_\_\_\_
- c) Do the authors put together a cohesive description of what they observed and what it means? \_\_\_\_\_

Additional Comments regarding Discussion and Conclusions

#### 7. Throughout

- a) If equations are presented, are all of the terms defined? \_\_\_\_\_
- b) Are figures (including graphs, schematics, pictures) numbered?  
\_\_\_\_\_
- c) Do figures have captions? \_\_\_\_\_
- d) Does the main text tell you when to look at a figure, referencing it by number? \_\_\_\_\_

- e) If there are tables, are they numbered “Table 1” “Table 2” ? \_\_\_\_\_
- f) If there are tables, does the main text tell you when to look at the table<sup>1</sup>, and reference it by number (not just “the table”)? \_\_\_\_\_
- g) Do tables have titles or captions? \_\_\_\_\_
- h) Is every mathematical symbol (constant or variable) defined by name the first time it appears? \_\_\_\_\_
- i) Are units included on every numeric value? \_\_\_\_\_
- j) Is every numeric value clearly identified by name? \_\_\_\_\_
- d) If needed, are specialized vocabulary words defined the first time they appear? \_\_\_\_\_

Additional Comments

## 8. Comments regarding Spelling, Grammar, and Formatting

## 9. Anything else

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<sup>1</sup> The reason Tables and Figures must be referenced by numbers is that publishers need to move them around so that they fit on the page nicely. Webpage style is different, you can say “in the figure below”, but in formal writing you don’t know where the publisher will put the figure. Equations are small enough that the publisher doesn’t move them around, so they only need numbers if you want to refer to them later.