

Activity. (For additional office hours on Mon, 11/19.) Read through these questions and verify that your formal report addresses them. Choose the section(s) that you're least confident about and think about how you would grade that section if you were me. Make a rubric delineating key information that you would look for on the back of this sheet of paper or otherwise. Grade your report. Trade reports with a partner and grade the section(s) that you made your rubric for. Did you identify new criteria to add to your rubric? Discuss. Repeat with new sections or new partners.

1. INTRODUCTION

This is a new addition to this formal report. Follow what was discussed in lab lecture and in the template. Also, look at `Guide to the Introduction.pdf` on Canvas. (12+3) pts.

- ☞ Do you start with a broad overview of the subject?
- ☞ Do you contextualize your experiments?
- ☞ Do you describe your experiments?
- ☞ Do you explain why your experiments are important?
- ☞ Do you have a few references, and do you cite them properly?

2. PROCEDURE AND METHODS

The Methods section is a new addition to this formal report. Describe, either within your procedure or separately, how and why your procedure works to give the results you want. Look at `Guide_to_Procedure.pdf`. (12+3) pts.

- ☞ Does your procedure cover all the salient points of the experiment?
- ☞ Is your procedure descriptive?
- ☞ Is your procedure overly detailed? (Pretend that you're writing this procedure for a scientist who has no idea what your experiment is about. Can that scientist replicate your experiment from your procedure? Are there superfluous details that the scientist would not need?)
- ☞ Do you explain why your procedure works?
- ☞ Do you record all masses and measurements?
- ☞ Do you indirectly describe the appearance (sound, smell) of your solution? Does it change color? Does it fizz? Does it pop? Does it evolve heat? Does it smell bad?
- ☞ Does your procedure mention taking observations? (It shouldn't.)
- ☞ Does your procedure mention, implicitly or explicitly, the stockroom, an instructor, or a laboratory course? (It shouldn't.)
- ☞ Is your procedure written in the third-person passive?
- ☞ Are units properly typeset? Are chemical formulae properly typeset? Are there significant figures?

3. RESULTS

Look at `Guide_20to_20Results_20and_20Discussion.pdf` and `Results Section-formatting guide.docx`. (10+3) pts.

- ☞ Do you list all important tables and figures? Note that there's no list that tells you what figures and tables to include this time! You have to figure it out on your own. (What data have you been collecting in your lab notebooks?)
- ☞ Do you label your tables and figures appropriately?
- ☞ Do you have descriptive captions? Explain your figure or table. Provide context from the experiment. What data did you use to make your figure? Is there important information that should be obtained from the picture?

- ☞ Do you contextualize your figures and tables in the text?
- ☞ Do you appropriately reference your figures and tables in the text?

4. DISCUSSION

Look at Guide_20to_20Results_20and_20Discussion.pdf. (26+3) pts.

- ☞ Does your discussion flow well?
- ☞ Does your discussion address the key questions to be addressed in your template?
- ☞ Does your discussion fully address all your figures and tables?
- ☞ Does your discussion interpret your results?
- ☞ Does your discussion provide reasonable explanations for any observed trends or data?
- ☞ Does your discussion talk about significant sources of error in detail? Does your discussion explain how these sources of error will affect your results? Do you propose modifications to your experiment to reduce this error?
- ☞ Does your discussion properly reference and quote data from your results?
- ☞ Do you cite sources to back up specific assertions?

5. REFERENCES

This is a new addition to this formal report. Look at JACS papers for examples. These should be easy points. 8 pts.

- ☞ Do you cite your sources appropriately? I want ACS citations.