## Summary of Research Progress: A LATEX Template to Help You With Your Quals

Your Name

Professor Sandy Cheeks Research Laboratory

Department of Chemistry, Massachusetts Institute of Technology, Cambridge, MA, USA

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1 Some Simple Commands The text you're reading is contained in the sections/0\_example\_uses.tex file. Separating words, phrases, sentences, etc. by a newline continues the same paragraph. Instead, separate text by two newlines to start a new paragraph.



Figure 1: **This is the top hit for "science" on pixnio.** (They provide free images!)



Formatting is generally easiest if you include figures with the \begin{figure} command, as in Fig. 1. However, as with Fig. 2, you can save space by wrapping text around figures with the wrapfig package. More details about using wrapfig are available here. Captions number correctly regardless of your chosen command.

When formatting text, \textif{} italicizes text, \textbf{} bolds text, and \underline{} underlines text. For more information, overleaf has many high-quality tutorials here, and the answer to nearly any LATEX question can be googled. (Oh yeah, the hyperref package provided that hyperlink functionality via \href{}{}.)

Equations are written like

$$E = mc^2, (1)$$

Figure 2: I guess Edison's and the amsmath (American Math Society) style is used to format equations in the template. Alternatively, math can be written in-text like so:  $E = mc^2$ .

Chemical equations are easy to include thanks to the mhchem package.

$$H_2O + CO_2 \rightleftharpoons H_2CO_3$$
 (2)

If you'd prefer *not* to number an equation (whether mathematical or chemical), use \$\$.

$$A^{+}(aq) + B^{-}(aq) \longrightarrow AB(s)$$

Reference sources *within* the document using \ref{label\_defined\_in\_tex\_file}. This can be done with multiple objects, e.g. Fig. 1, Eq. 1, and Section 3.

Reference outside sources with \cite{name\_in\_refs.bib}. Conveniently, references¹ automatically² number³ according⁴ to⁵ order⁶ of⁵ appearance.<sup>8</sup> Also, if multiple citations are included at once, then sequential articles are formatted with a dash to save space, for example.<sup>1–8</sup> (Note that it also places the citations on the correct side of punctuation marks!) All of these in-text citation rules follow the *J. Am. Chem. Soc.* (with title) formatting guidelines.

You can add subsections to help break up your report. For example, Subsection 1.1 discusses a bit about the formatting of this document.

**1.1** The Formatting Guidelines This document uses letter paper, which has dimensions 8.5"× 11", and it uses 1 inch margins everywhere. All text is single-spaced with 12 point Times Roman font. Page numbers are included in the bottom right and are also shown with 12 point Times Roman font.

In lieu of a cover page, the report's title and your name, lab, department, and oral exam date can be inserted in the header of the file main.tex, and they're displayed as in this Lastname-Firstname-Year.pdf. (Comments walk you through these steps and begin with %.) Similarly, the file will currently save as Lastname-Firstname-Year.pdf, but you can change this to your information by modifying the text on line 39 of main.tex. Otherwise, the only change you should need to make to main.tex is deleting lines 71 and 72, which will remove this tutorial section and its associated references.

Each section of your report should be typed in the corresponding file in the sections folder. Partitioning the information in the different files makes it easier to independently save multiple versions of each section, replace them, rearrange them, etc., rather than always needing to modify the main file. Simply remove the existing \lipsum commands, which insert lorem ipsum text as a placeholder, and get to writing!

Image files can be placed in the figures folder to maintain organization. Replace gantt\_chart.png in that folder with your own, which is probably easiest to make as a table in Microsoft Word.

Place your references in refs.bib using BibTeXformat. This can easily be done with Zotero, which will provide the BibTeXcitation given just the DOI number. Conveniently, Zotero can be directly linked to your Overleaf so that the references are also directly imported, meaning you don't even need to copy/paste the references. If you do this, you'll need to change line 17 of the main text from \addbibresource{refs.bib} to \addbibresource{refs.bib,imported\_file.bib}. NOTE: Only bibliographic items referenced in the text via the \cite{} command will appear in the bibliography at the end of the document.

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- **3 Introduction** Citations<sup>1</sup> automatically<sup>2</sup> number<sup>3</sup> according<sup>4</sup> to<sup>5</sup> order<sup>6</sup> of<sup>7</sup> appearance.<sup>8</sup>
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- 6 Gantt Chart for Future Planning Fusce mauris. Vestibulum luctus nibh at lectus. Sed bibendum, nulla a faucibus semper, leo velit ultricies tellus, ac venenatis arcu wisi vel nisl. Vestibulum diam. Aliquam pellentesque, augue quis sagittis posuere, turpis lacus congue quam, in hendrerit risus eros eget felis. Maecenas eget erat in sapien mattis porttitor. Vestibulum porttitor. Nulla facilisi. Sed a turpis eu lacus commodo facilisis. Morbi fringilla, wisi in dignissim interdum, justo lectus sagittis dui, et vehicula libero dui cursus dui. Mauris tempor ligula sed lacus. Duis cursus enim ut augue. Cras ac magna. Cras nulla. Nulla egestas. Curabitur a leo. Quisque egestas wisi eget nunc. Nam feugiat lacus vel est. Curabitur consectetuer.
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I thank Greg Schuette for providing the LATEX template I used to format this report.9

## 8 Gantt Chart

Month	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr
Oral Exam			,									
Synthesize X												
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