Lab Report Format: Chemistry II - APA Format

- Title Page
- Abstract Page
- Introduction (Theory)
- Methods (Procedure)
- Results (Data & Data Reduction)
- Discussion (Connecting the results to the theory and Errors)
- Conclusion
- References

Use the Owl Website: <u>http://owl.english.purdue.edu/owl/resource/560/01/</u> (Check here for more examples as well as on the title page and header.)

Some tips for writing the lab report:

- 1. Numbers 1-10 are spelled out in a paragraph.
- 2. Never begin a sentence with a numerical value write it out!
- 3. When using abbreviations or chemical formulas you must first write out the full word or name followed by the symbols Eg: hydrogen peroxide, H₂O₂,
- 4. Theory content must include all relevant chemical explanations, i.e. chemical reactions, what the chemicals used are, chemical theory.
- 5. Procedure must be written in past tense, using full sentences and written in third person.
- 6. Data should not be split between two pages.
- 7. Discussion is a chemical explanation of the results, it should refer your data to your theory.
- 8. Conclusion answers the purpose
- 9. Abstract is a one paragraph summary of the lab i.e. the experiment used, reaction or chemicals involved and the result.
- 10. Label everything on a graph, axis and graph!

APA

In-Text Citation: When using APA format, follow the author-date method of in-text citation Ex: (Jones, 1998), and a complete reference should appear in the reference list at the end of the paper.

All sources that are cited in the text must appear in the reference list at the end of the paper.

Unknown Author: If the work does not have an author, cite the source by its title in the signal phrase or use the first word or two in the parentheses. Titles of books and reports are italicized or underlined; titles of articles, chapters, and web pages are in quotation marks.

A similar study was done of students learning to format research papers ("Using APA," 2001).

References:

Single Author:

Berndt, T. J. (2002). Friendship quality and social development. Current Directions in Psychological Science, 11, 7-10.

Two Authors:

Wegener, D. T., & Petty, R. E. (1994). Mood management across affective states: The hedonic contingency hypothesis. Journal of Personality & Social Psychology, 66, 1034-1048.

Three to Seven Authors:

Kernis, M. H., Cornell, D. P., Sun, C. R., Berry, A., Harlow, T., & Bach, J. S. (1993). There's more to self-esteem than whether it is high or low: The importance of stability of self-esteem. Journal of Personality and Social Psychology, 65, 1190-1204.

Unkown Author:

Merriam-Webster's collegiate dictionary (10th ed.).(1993). Springfield, MA: Merriam-Webster.

Online Article:

- Author, A. A., & Author, B. B. (Date of publication). Title
 of article. Title of Online Periodical, volume
 number(issue number if available). Retrieved from
 http://www.someaddress.com/full/url/
- Bernstein, M. (2002). 10 tips on writing the living Web. A list apart: For people who make websites, 149. Retrieved from http://www.alistapart.com/articles/writeliving

Nonperiodical Web Document, Web Page, or Report:

List as much of the following information as possible (you sometimes have to hunt around to find the information; don't be lazy.

Author, A. A., & Author, B. B. (Date of publication). Title of document. Retrieved from http://Web address

Angeli, E., Wagner, J., Lawrick, E., Moore, K., Anderson, M., Soderland, L., & Brizee, A. (2010, May 5). General format. Retrieved from http://owl.english.purdue.edu/owl/resource/560/01/

Score		0	1	2	3/4/5
	Abstract 2/2	Not present	Present but missing methods or conclusion	Present with topic, methods and conclusion	
	Introduction 5/5	Not present	Incomplete content present	Some content present but it does not relate to the chemical topics used.	(3) Content is developed and relates to two chemical topics; (4) relates to all chemical topics but lab experiment is not explained; (5) lab experiment is completely explained according to all chemical content that is relevant.
	Methods 2/2	Not present	Can be followed but steps missing or not written in past tense, passive voice	Can be followed and written in past tense, passive voice.	
	Results (Data) 2/2	Not present	Present but not clearly presented, some data missing or incorrect	Present and conclusive	
	(Data Reduction) 2/2	Not present	Present but does not show all calculations in a logical order	Present and all calculations are able to be followed to result in the final calculation	
	Discussion 2/2	Not present	Some thoughts are present but do not relate to the chemistry involved.	Thoughts are conclusive and proper chemical terms are used and explained.	
	Conclusion 1/1	Not present	Conclusion is precise.		
	References 2/2	Not APA	Minimum of two references used and follow APA	Minimum of three references used and follow APA	
	Internal Citations 1/1	Not APA	Citations follow APA format		
	APA Cover Page 1/1	Not APA	Cover page is according to APA		
Total :					

Some Comments on Writing Lab Reports

Reason: Your goal is to communicate what you tried to do, how you tried to do it, and how well it worked. Knowledge is useless until it has been communicated to the wider scientific community. Reports and research papers are the medium used.

Style: Lab reports are the formal system of communicating results throughout science. It is important (and not necessarily simple) to learn to read and write in this style. The most obvious convention is that they are written in the passive voice, and the past tense. Personal pronouns are generally avoided. For example, to describe an action:

I dropped the beaker! Drop the beaker! The beaker was dropped.

Only the third is proper in formal scientific writing. Write in complete sentences in connected paragraphs.

Reports are also written in a compressed style. Don't beat about the bush; get to the point. They are evaluated in their content of ideas, not their length.

Level: Your target audience should be your peer – someone who knows about as much chemistry as you do, but hasn't done this particular experiment. Do not try to "write up" to impress the teacher – it won't work.

Practical hint: Write the first draft the same day as you did the experiment. You will be surprised at how quickly details fade from memory. Then return a few days later to rewrite it. You will also be surprised at hoe badly you did the first draft.