

## AP Biology Lab Notebook Guidelines

Your lab book is a written record of all your scientific work. It is a work in progress used to document and communicate your data and ideas. All work must be done in **blue** or **black** ink. If an error is made, don't erase or use Write-Out. Simply draw a single line through the mistake and rewrite the correct information. Write your name and block on the front of the book. On the page with the "Table of Contents", record each lab (using an appropriate title) and the page numbers for the lab.

Your lab reports will be graded on the following rubric:

		Points
1. Title & Date	State the <u>title</u> of the lab at the top of a new page and the <u>date</u> it is conducted. Make sure your lab is entered in the Table of Contents as well.	1
2. Problem	Stated as a question. This is either from the lab manual, posed by your instructor, or developed by your own lab group.	1
3. Hypothesis	An "If..., then...because..." statement that answers the question. <ul style="list-style-type: none"> <li>• If [independent variable], then [dependent variable] because [scientific explanation].</li> </ul>	3
4. Experimental Design	Strategies for testing hypothesis, using appropriate controls and variables <ul style="list-style-type: none"> <li>• Include: IV, DV, control, constants, # trials, etc.</li> </ul>	5
5. Materials	A list of materials needed	2
6. Procedure	A flow chart of 5-7 steps. Summarize the procedures in your own words. Be complete, yet concise. Diagrams (pictures) of set-ups and data collection methods are often helpful.	3
7. Data	Observations (senses + measurement). Include data tables, charts, and diagrams.	5
8. Analysis	Present your results using text, graphs, and tables. Discuss trends, similarities, correlations, etc. Also include statistical tests (ex. Chi-Square test). <i>Be sure to label all parts of your graphs clearly!</i>	10
9. Conclusion	Do the results <u>support</u> your hypothesis?  Use the Explanation Tool as a guide to write the conclusion. Attach any separate sheets to your lab notebook.  <i>(If your experiment completely failed, list possible obstacles or errors, discuss what changes you would make to the experiment, and where you would go from here.)</i>	10
10. Post-Lab	Discuss class results. Answer assigned questions from lab manual.	10
<b>TOTAL POSSIBLE POINTS</b>		<b>50</b>

### Remember:

- Your labs are NOT a venue for opinion. Stick to the data/facts!
- Do NOT use personal pronouns such as "I", "we", "you", etc. I will deduct points for this!
- If you want to add a personal note to me, you may write it on a sticky note placed in your lab notebook.