**Life Sciences**

**Lab Write Up Guide**

**Mechanics (unless stated specifically for a lab):**

* Labs will be typed (word processed) with a twelve point type and in Times New Roman font. If a lab is turned in hand written, it will be dropped one full grade. If you do not have access to a computer at home, they are available in the school library.
* Lab reports will be due as assigned by the teacher; exceptions will be made only for excused absences and ***must*** be approved by the teacher.
* DO NOT double space! Let’s save some trees! With this in mind don’t be alarmed if your lab seems short once you have it typed. If the format is followed and all guidelines are met then it will be graded accordingly.
* DO NOT use personal pronouns (I…etc)! Stay away from writing the lab in the present tense. You are telling a story about what has been performed not what is currently being performed.
* DO NOT use contractions (don’t, can’t, wouldn’t, etc.). This is ***FORMAL*** writing.
* DO NOT plagiarize. Be sure your lab report is your original work. Please see HK Student Handbook for details on plagiarism.

**Format:**

All labs will have the following sections:

* **Title Page**: This will include the title of the lab, date performed, name of author with class period information and the names of any lab partners.
* **Purpose**: This will state the reason the lab was performed.
* **Hypothesis**: Statement of your, or your groups, hypothesis.
* **Materials**: Include a bulleted list of all materials used in the lab assignment. Include any safety equipment that is necessary.
* **Procedure**: This section will be numbered and will include all the steps that you performed to complete the experiment. You can combine steps that are performed together so as not to have 50 short steps. Do not use “Gather Materials” as a step in the procedure since you have already listed the materials required. Accuracy counts! Remember this process is to ensure that someone can reproduce the results that your experiment achieved.
* **Data**: This section should include any observations and data that is collected during the experiment along with calculations necessary. This can be represented in table format, if a table is used ensure it has a title. Graphs can also be included in the data section, ensure that both the x and y axes are labeled and a title for the graph is included. If an equation is used you must include a sample calculation.

* **Discussion and Conclusion**: Discuss the results of the experiment and how it either supported your stated hypothesis or not. You will also include any errors that were made and how they may or may not have had an effect on the experiment. Remember to use data in your discussion and what it means. A two sentence discussion and conclusion is unacceptable.
	+ **Conclusion A**: Your conclusions from the experiment. Your conclusions must be fully supported by data.
		- Conclusion A must include:
			* An answer to your problem by summarizing all the data.
			* Whether your hypothesis was supported or refuted.
	+ **Conclusion B**: Comments about the validity of your experiment.
		- Conclusion B must include:
			* Your degree of confidence in your results and conclusions
			* Factors the contribute to a gain of confidence in the results and conclusion
			* Error Analysis: Factors that contribute to a lack of confidence in the results and conclusions.
			* Suggestions on how your experiment could be improved if you were to perform it again (adding more trials should be a way to improve your results)
			* Relation of lab results to real world experience