Writing a Conclusion for an Experiment Using the "RECALL" Method

One of the most important parts of an activity is the conclusion. The conclusion allows the scientist (you) to evaluate the activity that is completed. Conclusions can be very easy to write once you know the parts. There are 3 "levels" of conclusion writing. As you improve your writing throughout the year, the "level" that you will be required to use will change. <u>Remember; for **all levels** use complete sentences and do not use the first person (I, We, My, etc.)</u>.

The following are the basic parts of a complete conclusion:

"R" = RESTATE – Restate the question or purpose of the activity

• Why did you do this experiment or activity? What question were you answering? What problem were you solving?

"E" = EXPERIMENT - Explain what was physically done in the lab or activity. Summarize the procedure in 2-3 sentences.

• What did you do?

"C" = CALL BACK - State the results that were obtained. Be specific about data (state the averages and other important numbers). Describe any trends that you see. You do not want to describe every piece of data that you collected, but pick out the important things that led you to your conclusion such as averages, etc.

• Did you see any trends? What were your specific results that are most important? What were your averages?

"A" = ANALYZE - Analyze (examine, interpret) results. Compare your results to the hypothesis. Elaborate about whether you were surprised about your results and why or why not you were. Also, research (if you haven't already) if your results are what would be expected based upon information in the textbook. If applicable, also compare and contrast your results to those of other groups in the class.

• Did your results match your hypothesis (and explain)? Were you surprised at your results (and why or why not)? Do your results match those of other groups in the class and how are they the same or how are they different?

"L" = LAPSES - Describe the error and/or mistakes and/or uncertainty about your results. Remember – <u>all</u> experiments (even those done by famous scientists) have some error. But, is the error so small your results are still good or was the error so great that you are unsure if your results are reliable?

• Were there any mistakes made in your experiment (describe them in detail)? Was there just a small amount of error or a lot of error (and what were the big sources of error it there were any)? Do you think that your results are accurate (and why or why not)?

"L" = LIGHT BULB – Describe any new ideas or anything that you now understand better after completing this experiment. If there were any mistakes or error, describe what you would do next time to improve the experiment. Finally, describe any new questions that you have that you would like to investigate further and what happened during the experiment to create these questions.

• Do you understand anything about science better or about the topic after completing this experiment? What would you do next time to improve the experiment (especially if mistakes were made during the experiment)? What new questions do you have after the experiment (and why)?

LEVEL 1 - Your conclusion should be **no fewer than a 7 sentence paragraph**. It contains at least 1 sentence related to each part of RECALL (except at least 2 for experiment).

LEVEL 2 – Your conclusion should be 3 paragraphs. Use complete sentences including a restatement of the question in accordion paragraphs including topic sentence, reason/detail/fact sentences and a conclusion sentence. The minimum number of sentences is 4 per paragraph. The following are the basic steps to write a complete conclusion:

PARAGRAPH 1

- a. Topic sentence relating the purpose and procedure ("R" and "E")
- b. Reason, detail and fact sentences supporting the purpose and procedure
- c. Conclusion sentence that restates the purpose and procedure

PARAGRAPH 2

- a. Topic sentence relating the results and analysis of results ("C" and "A")
- b. Reason, detail and fact sentences supporting the results and analysis
- c. Conclusion sentence that restates the results and analysis

PARAGRAPH 3

- a. Topic sentence relating the lapses and light bulbs ("L" and "L")
- b. Reason, detail and fact sentences supporting the lapses and light bulbs
- c. Conclusion sentence that restates the lapses and light bulbs

LEVEL 3 – Your conclusion should be 5 paragraphs. The minimum number of sentences is 4 per paragraph. Use this outline as a guide to setting up your paper.

INTRODUCTION

- a. Sentence introducing the information in the study
- b. Needs to include a thesis statement

PARAGRAPH 2

- a. Topic sentence relating the purpose and procedure ("R" and "E")
- b. Reason, detail and fact sentences supporting the purpose and procedure
- c. Conclusion sentence that restates the purpose and procedure

PARAGRAPH 3

- a. Topic sentence relating the results and analysis of results ("C" and "A")
- b. Reason, detail and fact sentences supporting the results and analysis
- c. Conclusion sentence that restates the results and analysis

PARAGRAPH 4

- a. Topic sentence relating the lapses and light bulbs ("L" and "L")
- b. Reason, detail and fact sentences supporting the lapses and light bulbs
- c. Conclusion sentence that restates the lapses and light bulbs

CONCLUSION

- a. Write a brief summary of the preceding "RECALL" paragraphs
- b. Be sure to restate thesis statement