Bio150 Cellular Respiration Lab Report

Format is very important in scientific writing. Therefore, it is absolutely imperative that these guidelines are strictly followed. The report will be graded based on content, an understanding of the lab exercise, accuracy, format, grammar, clarity and organization of writing. Any tables must be done digitally and cannot be hand drawn. They must be inserted into the data section of the report, not attached at the end of the paper. Figures can be hand drawn or computer-generated. Do not write in the first person. It is about the experiments, not about you. (WRONG: “I incubated the tubes . . .” CORRECT: “The tubes were incubated . . .”) The report must be typed and double-spaced. There is no minimum or maximum length of the report. Being clear and concise is very important in scientific writing. The lab report should only include information on Tubes # 1-5 of the cellular respiration experiment concerning the effect of different substrates. Include the following:

Name:
Date of submission:
Class: Bio150
Instructor: Dr. Kenny

Title: A short, informative description of your lab report

Abstract: (<200 words) A concise summary of the entire report. It should include a short introduction (purpose of experiment), summary of methods, and a brief summary of the results/conclusions.

Introduction: (<1 pg.) Introduce the experiment that will be performed. Give an overview of cellular respiration. Focus on the overall purpose of cellular respiration and why it is important, not on the detailed steps. I am not interested in how well you can copy from Wikipedia or your textbook. Put it in your own words. Do not plagiarize. The final part of the Introduction should clearly state your hypothesis.

Materials & Methods: (<1 pg.) This section should be written in the past tense. Enough information should be included so that another individual could reproduce your experiment. No results belong in this section.

Results: (<1 pg. plus any tables and figures) This section should be written in past tense. Describe the experimental results and refer to any figures or tables. Do not provide an explanation of why the results occurred. You will do that in the Discussion section. Any tables and figures must be labeled (Figure/Table number and title) on the top, left with a short description. Do not put conclusions in the Results section!

Discussion: (<1 pg.) Briefly summarize the results and make your conclusions. This is where you explain and analyze your results. You may want to use any “substrate” related “analysis” questions from the lab manual for ideas of discussion topics. Be sure to state any possible errors or issues with your experiments that may have affected data outcome (e.g., you added the wrong reagent to a tube, you did not measure the size of the initial bubble, etc.). In addition, you could state additional steps that could have been done to improve on the results obtained. State how your results relate to your original hypothesis. Do you accept or reject the hypothesis?
**Literature Cited:** Include any references cited such as your textbook, lab manual, other books or web pages.

**Remember:** Do not put information in the wrong section.

**Plagiarism:** Do not copy information word for word. This is plagiarism and is a serious offense. If you feel that you need to briefly quote something, use quotation marks and identify the source. Otherwise, put the information in your own words and also reference the source of the information.