Aquatic Macroinvertebrate Study Final Report

Field Biology

This report will summarize the study you are carrying out involving the aquatic macroinvertebrates that live in Jackson Creek. This is an individual assignment, although you will use the class data to answer your question. It is due AFTER we have collected all of the data for the project; send your completed work to dan.bregar@corvallis.k12.or.us with the subject "per *X your name* AMI report".

Use the following format to type your final report:

Question: In "what is the relationship between" form, write the question that you are trying to answer. In 2-3 additional sentences, explain your question in more detail so that someone unfamiliar with the field biology course and CV's campus would understand what you are studying.

Background Information: Take the information you found in the "AMI Research" assignment and rewrite it in paragraph format. Add transition words and phrases so your sentences and paragraphs flow together more smoothly.

Methods: In a step-by-step format, describe how you collected or will collect the data for both parts of your WITRB question. Use enough detail that there are 5-7 steps explaining how you will collect data for the macroinvertebrates and 5-7 steps explaining how you will collect data for your second factor.

Results: After you have entered your individual data in an Excel spreadsheet, your instructor will compile that data and post it to the web site. You will need to reformat this data, summarize it in smaller tables, and include it in this section of your report.

Discussion: In this section of your report, you will use your data to answer your question. This section will include graphs that show the trends in your data along with your interpretation of those graphs and an overall critique of your study.

You will need to use an x-y scatterplot to graph your results. Make sure to add a trend line to your graph so you can easily see if there is a correlation between the two factors we studied. If you have two data tables in your results, you can make two graphs.

For your written analysis, answer the following questions (in paragraph form) for EACH graph:

1. What was the correlation that your data shows – positive (up and to the right); negative (down and to the right); or none (horizontal line)?
2. What does this correlation tell you about the answer to your question?
3. What ecological factors do you think might have influenced the correlation (or lack thereof) that you see?

Your response to these questions should be about one paragraph in length for each graph in your report.