AMI Study Final Report

Field Ecology

This report is an individual assignment. It should be written in the PAST TENSE (because you are writing this report after your project is complete). When you are done, e-mail your work to dan.bregar@corvallis.k12.or.us with the subject line "per *X your name* AMI report".

Introduction:
This section of your report consists of a description of your question and background information about your project. You should revise the information you wrote in your proposal – AMI Study Proposal.

Methods:
This section of your report will describe how you collected your data. Your methods should take the form of four step-by-step lists. The first list should describe how you measured AMI's using a dipnet; the second list should describe how you measured AMI's using a brick pack; the third list should describe how you measured turbidity; and the fourth should explain how you calculated diversity.

Make sure that your instructions are clear, detailed, and describe the actual steps you took to make your measurements and calculations.

Results:
This section of your report will describe the information you found and should include a data table (NOT a graph!) that summarizes the measurements and calculations you made.

Your data table should be formatted in a professional-looking way and include proper column headings.

Your data should include at LEAST 6 pairs of diversity and turbidity data from EACH of your AMI collection methods (dipnet and brick pack). You can use measurements from your class period or include measurements from the other classes. Extra credit will be given if you have 20 or more data points for each type of collection method.

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

Your graphs should be two x-y scatterplots that include a trend line and an R^2 value. They should be neat and professional-looking, with appropriate titles for each graph and axis.

For your written analysis, answer the following questions (in paragraph form) for EACH graph – you are answering these questions separately for the dipnet and brick pack data:

1. What was the correlation that your data shows – positive (up and to the right); negative (down and to the right); or none (more-or-less horizontal line)?
2. What does this correlation tell you about the answer to your question?
3. What does your R^2 value tell you about your confidence in this answer (the closer to 1, the more confident you are that your data really shows this trend)?
4. What ecological factors do you think might have influenced the correlation (or lack thereof) that you see?

Your response to questions 1-3 should be one or two sentences long at most. Your response to question 4 should be about one paragraph in length.