

# Water Quality Project Research and Proposal

## *Field Biology*

For this project, you will investigate one of two parameters of the water quality of Jackson Creek. Your goal will be to evaluate the correlation between these parameters and one other measureable abiotic or biotic factor of the creek. The document you create today will be a proposed plan for your study. You should work individually on this assignment. When you are done, please e-mail your work as a Microsoft Word attachment to dan.bregar@corvallis.k12.or.us with the subject line “per *X your name* WQ project proposal”.

### Proposed Water Quality Study:

1. Brainstorm five biotic (living) factors and five abiotic (non-living) factors that might affect or be affected by the water quality of Jackson Creek. List and describe these factors below:
  - a. Biotic Factors
    - i. \_\_\_\_\_
    - ii. \_\_\_\_\_
    - iii. \_\_\_\_\_
    - iv. \_\_\_\_\_
    - v. \_\_\_\_\_
  - b. Abiotic Factors
    - i. \_\_\_\_\_
    - ii. \_\_\_\_\_
    - iii. \_\_\_\_\_
    - iv. \_\_\_\_\_
    - v. \_\_\_\_\_
2. Pick ONE biotic or abiotic factor that you feel would be the most interesting and reasonable to study for your project. Make sure that this is a factor that you will definitely be able to observe and measure during the timeframe of the project (for example, “snow” would not be a good factor to look at because we can’t guarantee that it will snow next week). List this factor here: \_\_\_\_\_
3. Pick EITHER pH or turbidity to investigate. These parameters are the most reasonable ones to measure but also will allow you to demonstrate your mastery of the equipment and techniques we’ve developed in the class so far. List the water quality parameter you are choosing here: \_\_\_\_\_
4. In “what is the relationship between” form, write a question that examines the interaction between the water quality parameter you listed in question 3 and the biotic or abiotic factor you listed in question 2. Make sure that you include a good measuring word or phrase for the biotic or abiotic factor. Write your question here: What is the relationship between the \_\_\_\_\_ (*water quality parameter*) of Jackson creek and \_\_\_\_\_ (*measuring word*) of \_\_\_\_\_ (*biotic or abiotic factor*)?