Lab Preparation Guide - A Plan to Help You Better Prepare for Lab

1. What is the overarching research question that this week's lab addresses? Think about the general area of inquiry that your very focused work in lab will address.

2. What are the specific questions or hypotheses we will try to answer via the experiments or other lab activities?

3. What is the approach, i.e., primary methodology, you will use to answer the question(s)?

4. What are the data you will collect? What will be the final form of the data to be used for analysis (e.g., sometimes the raw numbers are used to calculate a derived value such as a rate)? If a data table is not provided in the lab manual, create one before lab.

5. What are the major tasks (i.e., usually demarcated by subheadings in a protocol) your group will perform to carry out the experiment(s)?

    a. _____

    b. _____

    c. _____

    d. _____

    e. _____

    f. _____ (More? Use back)

6. Identify any steps in each task protocol that you do not understand and flag them for clarification during the prelab OR have them addressed beforehand with your instructor.

7. If there are calculations to be performed before the experiment can be run, e.g., making dilutions, do them before coming to lab. The more you can plan your work in advance, the more efficient you will be in lab.

8. When applicable, consider how your data will be presented in your paper or report. Table? Graph? Sketch a mock-up of what the table or graph should look like.

9. When applicable, consider how the data will be analyzed. What is your Null hypothesis? Will a statistical hypothesis test be used? Which one(s)?