Lab Preparation

Name _____   Date: _____.

Lab Problem: _____   Section _____

I. Solve the problem yourself by answering the warm-up questions. Then read the **Lab Instructor's Manual**. Finally, grade the Warm-Up Questions for this section.

II. Answer the following background questions.

❶ When is session scheduled?	❷ Which session is it in the Lab topic sequence?	❸ What is the lab problem type?	❹ How difficult is the lab problem?
☐ Early in Week ☐ Later in Week	☐ 1st Lab Session ☐ 2nd or 3rd Lab session	☐ Qualitative ☐ Quantitative	☐ Easy/Medium ☐ Difficult

❺ Which of the WUQs did your students have the most difficulty answering? Common alternative conceptions? Which ones?	Warm-Up Questions: _____
❻ Count the number of students who were able to solve the problem (even if the solution was incorrect). Is this the majority of the students?	____ students solved the problem out of ____.
❼ Look at the students' final solution (Prediction). How many students got the right answer for the wrong reasons?	____ students got the right (or close to right) answer for the wrong reasons.

III. Based on the answers to these questions, make the following decisions about opening moves and the end game for the lab session.

Opening Moves		
1. Which WUQs should I assign groups answer on board?	Use answer to Question ❺:	Warm-Up Questions: _____
2. Do groups need extra time to solve the problem before they start collecting data?	Use answer to Question ❻, taking into account Questions ❶ to ❹	☐ YES ☐ NO because:
3. If YES, then how much time extra time and how should I structure this extra time?	Use answers to Questions ❶ to ❹	Plan:
4. What do I need to discuss/tell students about how to check their solution before they start?	Use information in *Lab Instructor's Guide* and your own experience	Discuss:

End Game		
5. (Besides corrected answers to assigned WUQs), do we need to spend extra time discussing how to solve the problem?	Use answer to Question ❼ and your previous decisions 2 & 3	☐ YES ☐ NO because:
6. If YES, then how much time and how should I structure this extra time?		Plan:

IV. List some possible questions to ask groups during whole-class discussion (opening moves and/or end game) that you think would promote a discussion.

a.
b.
c.
d.
e.
f.
g.