

Liang-Genetics Laboratory 2202
Laboratory Notebook
10 pts per lab

Guidelines for Laboratory Notebook

You should keep a laboratory notebook to record everything that you do for this course. This laboratory notebook is the same as we use in the research laboratory to keep track of all of our data and to record our progress on our experiments. It does not have to be fancy or formal or typed, but needs to be well organized and accurate and complete. Because information for the same experiment will likely be gathered over several days, it is best to use a three ring binder. If you are working in a group-you can make photocopies of data you gather together and share with all group members-but everyone should have their own notebook.

Components:

1. Date (0.5 pt)

2. Name (0.5 pt)

3. Experiment Title - You should write your own title-don't use the one on the handout or syllabus. Data gathered for the same experiment/laboratory, even if it spread over several weeks, should have the same experiment title. (1 pt)

4. Hypothesis - State the hypothesis you are testing in your experiment. (1 pt)

5. Methods - The methods should be described completely enough that you could do it the same way again if you went back to it a year later. In your notebook, your methods might be the laboratory handout for the experiment with your notes on any modifications that you made (including any errors). (1 pt)

6. Observations and Results - This should be a careful recording of all data you collect during the experiment-this could be quantitative data, observations, or even problems you notice during the experiment (ex. spilled sample three, solution was the wrong color, embryo was smashed). This should be complete and clear enough so that if you went back to it a year later you could understand it, and even more importantly, I can understand it. (4 pts)

Note: Often data for the same experiment is gathered at different times. They should still all be included under the same experiment name or number, but the date each piece of the data was gathered should be noted.

7. Short conclusion - A few sentences at the end to remind yourself of the main outcomes of the experiment. For example, was the experiment technically successful? Was the hypothesis supported or not supported? What would you do differently if you repeated the experiment? What did you learn about genetics from doing this experiment? (2pts)