

L. A. City College Laboratory Notebook Guidelines

The following guidelines are provided to acquaint students with the expectations for maintaining a laboratory notebook. Most laboratory activities will include preparation of a pre-lab, gathering of experimental observations and data acquisition, and submission of a report form after completion of each lab. The carbon copy of the pre-lab is due at the beginning of each laboratory period.

The laboratory notebook is first and foremost a record of one's work in the lab. If that seems obvious, consider the fact that many students INSIST on recording experimental observations and data on their hands, scrap paper, etc. A good scientist learns to "work" in a notebook just as surely as he/she learns to work in the lab.

While an expert at lab note taking may produce a notebook that is a work of art, the ultimate aesthetic appeal of a notebook is far less important than its logical sequence and clarity as a record of investigation. "Wanting it to look neat" is therefore not an acceptable excuse for not entering all data and observations directly in the notebook. Please continue to develop the habit of recording ALL your observations. This cannot be emphasized enough!

The purpose of the pre-lab is to allow the student to become familiarized with the basic principles of the experiment along with the tasks that he/she will be expected to execute in order to gather the appropriate data. The pre-lab will ALWAYS be checked for completion (and graded) before the student enters the laboratory. The pre-lab should contain the following:

1. at the top of the first page of an experiment: **the complete experiment title**
the date
your name
lab partner (if appropriate)
2. at the top of EACH succeeding page: **your name**
the experiment title
3. the body of the pre-lab should contain:
 - a. **Purpose** – Using complete sentences, briefly state the purpose or goal of the experiment. WHY ARE YOU DOING IT? WHAT ARE YOU TRYING TO FIGURE OUT? Make sure to use the active voice in this section and throughout your report. It is usually more precise and less wordy than the passive voice.
 - b. **Procedure** – A brief paragraph explaining the basic techniques and steps you will perform while doing the lab. This section should explain how you intend to accomplish your task in the laboratory (i.e procedure plan). Give balanced chemical equations as needed along with a logical sequence of data processing. It should include topics like:
 - **Materials and Equipment** – This list should contain a compilation of all the necessary chemicals and equipment necessary to carry out the experiment.
 - **Safety Information** – Before beginning any experiment, it is important to note potential hazards, safety precautions, and any pertinent physical data necessary for the experiment.
 - c. **Data and Calculations** –Data should be recorded in neatly prepared and NUMBERED tables (use a ruler). Numbering of the tables will facilitate discussion of results at the conclusion of the experiment. You will fill-in the data tables throughout the course of the experimentation during your assigned lab period.
 - d. **Observations** – In general, record any pertinent observations. Non-numerical information may be written in simple comment form.

As a final note, consider the following three points:

1. use black ball-point ink when writing
2. do NOT decorate errors; a single line through an entry will suffice—you may decide later it was correct after all!
3. be sure to record PRIMITIVE data—for example, initial and final buret readings, not the difference done in your head