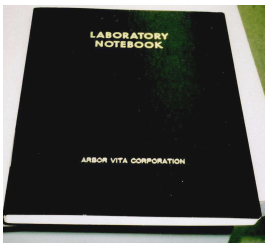
1a How to Set Up A Legal Scientific Notebook



Background: Everyone working in laboratory sciences that are involved in research or product design and development must document their work. For a laboratory employee documentation is done in a legal, scientific notebook (See Figure 1.1). A legal, scientific notebook contains a record of all work done by the biotechnology employee.

[Figure 1.1 - Legal Scientific Notebook]
A lab employee receives an official legal scientific notebook from a company. Most companies number notebooks and keep a record of their location.

Often a scientific notebook is required in court cases. Examples of when a scientific notebook may be used in court include:

1. To settle patent disputes, such as when someone argues that they made a discovery first and says a discovery or process belongs to them.
2. When a specialist must report findings from testing, such as in paternity suits or criminal cases.

If the scientific notebook is not produced in an acceptable fashion, it will be inadmissible as evidence and will not be used. The following protocol will help you setup and maintain your legal scientific notebook.

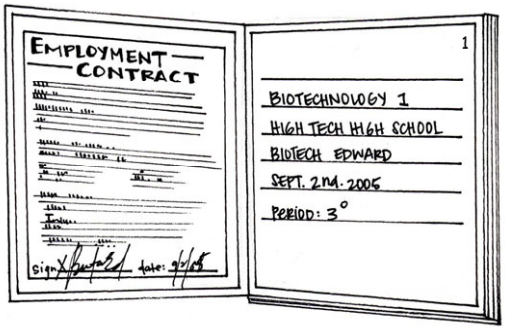
Procedures: To Set Up A Legal Scientific Notebook:

1. **Obtain** a bound notebook with sewn pages. A composition-style notebook works well.

2. Use only **dark blue** or **black pen** to make <u>all</u> entries into the notebook. Be careful when making entries. Incorrect entries may be scratched out with a <u>single line only</u> and must be labeled with initials.

3. Graphs and other small sheets of paper may be pasted into your notebook, when necessary. When pasting, use a **gluestick** only. There should be no loose papers in the notebook.

4. **Number every page** of the notebook, in the top, outside corner, starting with the front side of the first page being number **1** and the back of the first page numbered **2**. Continue numbering the front and back of <u>every</u> page of the notebook (See Figure 1.2).



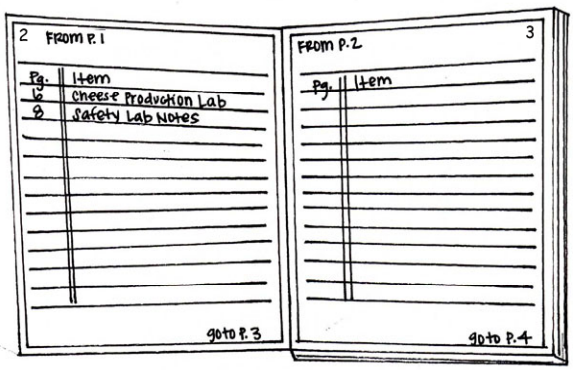
[Figure 1.2 - Numbering and Title Page]

5. Make page #1 the **Title Page**. In the middle of the page, in bold print, write:

<u>Name of Course</u> NOTEBOOK
Name of Institution
Employee Name
<u>Today's Date</u>
Class Period

*Also, write this information on the front cover of your notebook with an ultra fine tip permanent pen

6. Make pages #2-5 the **Table of Contents**. Write "Table of Contents" at the top of each of these pages. Record the page and title of each new activity in the Table of Contents (See Figure 1.3).

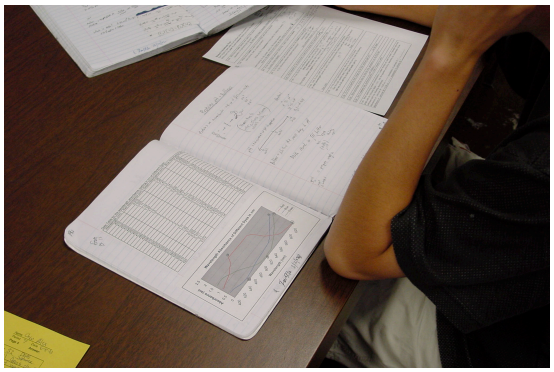


[Figure 1.3 - Table of Contents]

7. Glue the Laboratory Notebook Policy sheet onto the inside back cover of the notebook. Read the policy carefully before recording information into your notebook.

8. The record of work begins on page #6.

- Sign and date the bottom of the page. Also, write **Go to...** on the bottom right hand-side of the page to tell the reader where the rest of the information for this topic is found in the notebook. On the page you "go to", write "from page ____" showing the page you came from. If you set your notebook up this way, it should be relatively easy for you or anyone familiar with the work you are doing to find specific data, observations, and conclusions about a specific topic.



Laboratory Notebook Policy

Based on the Laboratory Notebook Policy used at Life Technologies, Foster City, CA.

Why is proper record keeping in a bound notebook important?

In the US, the first person to conceive and show diligence to develop an invention, product, or process is awarded the patent for that product or process. Notebooks, properly kept and witnessed, are legal evidence of conception and diligence to practice an invention.

Record Keeping Procedures:

1. Use only your official AP Biology notebook to record your work. All work must be recorded in the notebook and no other document.

2. Date and sign every page. Sign and date at the end of an experiment.

3. Maintain a Table of Contents as you make entries in the notebook. The first page of every lab investigation should be in the Table of Contents.

4. Make all entries legible in black permanent ink only. No pencil entries. Colored pencils are acceptable on some drawings. Highlighting can be used for important ideas/concepts.

5. Do not erase, ink-over, or white-out any errors. Line through errors so they can still be read. Place your initials by the correction.

6. Briefly state the objective or purpose of each experiment, and reference previous work or projects. Use "From", "See page..." or "Go to..." statements to tie together sections of a lab report or continuous work.

7. Record all directions, materials, and quantities used plus reaction or operating conditions in sufficient detail and clarity so someone of equal skill could understand or repeat the procedures if necessary.

8. Avoid abbreviations and codes when possible. Only abbreviations for metric measurements may be used universally.

9. List all persons from whom samples or data were obtained, shared, or transferred.

10. Attach as much original data as practical in the notebook. Where it is not practical to attach original data, attach examples and make clear reference to where the original data is stored.

11. When procedures, data, conclusions, etc. are continued from previous pages, each one must have a "from page # ___" listed. When continuing to another page, there should be a "go to" statement directing the reader to the continuation of work.

12. Write/print clearly so there is no ambiguity as to the information recorded. Skip lines between data tables graphs, and important conclusions to make it easier to find and read recorded information.