Science Project Logbook

Whether you are a research scientist or this is your first time doing a science fair, a logbook is a crucial part of any research project. The judges will want to see it and it will count as an important part of the final mark.

What is it?

It is similar to a journal. It covers the entire project. It starts with the initial thinking of the selection of the project, to the final part of getting all your project together.

Journals and logbooks are used to understand the process that the researcher went through from the beginning to the end of the project. The logbook is a very important proof of all that a researcher did.

What is used for a logbook?

Usually, it is a hardcover lined notebook. It is not a spiral bound book or a softcover notebook that many students use for notes in class.

In secondary one and two science fair, you may use a softcover notebook such as a lined Canada Notebook.

Looseleaf paper cannot be used, but it may cut and glued into the notebook if necessary.
What goes on the front of the logbook?

On the front of the notebook, there is your name, name of the school, the level and teacher's name in a prominent location.

What goes inside the logbook?

The pages are numbered at the top of the page. If the pages are already numbered, you do not renumber them.

You may not tear out pages of the logbook, but you may cross items or sections out.

Every entry in the logbook should be dated, just like a journal. Keep the entries brief and concise. Full sentences are not required.

This however means that someone else reading the entry must be able to make sense of it. If your mother or father cannot make sense of it, then it is not clear.

Remember that the logbook is a personal record of your work. Do not re-do your logbook because it looks sloppy. It is not a science lab report. It is recording on the fly what you are doing.

See the example on the next page.
When do I write in the logbook?

Use it regularly and jot down down everything that you do. It is difficult to remember little details later on and the little details may prove very important.

For example, you forgot to store away a chemical that you are using in an experiment and left it out all weekend on the table in the lab. You make a note of that.
Later on in reviewing your research notes, you read that this chemical breaks down if it is not stored out of sunlight.

This little fact of having noted that you forgot to store the chemical away would explain why the experiment did not function as predicted after it was exposed to sunlight all weekend.

How do I organize my logbook?

The logbook can be organized by using headings in capital letters in the center of the page below the date of entry. Some people colour code these entries, but that is not a requirement.

Here are some entry headings that you may find useful:

- Deadline Schedule
- Daily Notes and Reflections
- Background Research Library & Internet
- Contacts
- Supply sources
- Experimental Setup/Procedures and materials
- Data collection
- Results (pictures, graphs, summary tables)

Always include any changes made to procedures, accidents, failures, or mistakes. As human beings, all of us make mistakes!