

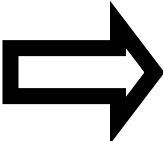
GUIDELINES FOR SCIENCE FAIR LOG BOOK

LOG BOOK INSTRUCTIONS

What is a Log Book? It is a record of your experiment (like a journal) that is kept in a composition notebook. A composition notebook does not have pages that can be torn out. Everything written in the logbook stays.

What should be in your Log Book? When you **begin** your experiment you need to record the following in your logbook:

1. **All of your research prior to choosing your project.** (Include all books, websites and other sources that you researched)
2. **Proposal** (each section must be labeled). Make sure that all the corrections from the original proposal have been made before you copy into log book.
 - The **Problem** (in the form of a question)
 - **Hypothesis** – written as an if.... then statement.
 - **Independent Variable**
 - **Control Variable**
 - **Dependent Variable**
 - List of the **all the Materials** that you actually use in the experiment. (This may change slightly from your original proposal).
 - List and number the **steps/procedures** that you are following for your experiment.
 - **Drawings or illustrations-** Illustrate the experimental design and work in progress. Include sketches and diagrams of the setup of your experiment.
3. **Data-** You need to record everything that happens in your experiment neatly. Use a ruler to make neat data charts. Be sure to write observations neatly that can be read by others. Please date all entries when they occur. Include photos and drawing if it helps show what has occurred.
 - If you run into problems, **record the problem** and how you plan to solve the problem in your Log Book. Research possible solutions. If it doesn't solve the problem come up with a new plan and try that.
 - Include question and ideas for further experiments or questions for your teacher.
4. Explain in a few sentences the reasons why you choose this topic for your experiment. What about this subject interests you?



Your log book will be graded on how much of the above criteria are included in your log book.

LOG BOOK CHECKLIST

_____ The **Problem** (in the form of a question)

_____ **Hypothesis** (written as an if... then statement).

_____ **Independent Variable** (only one)

_____ **Control Variable** (must include at least four)

_____ **Dependent Variable** (what is measured)

_____ List of the **all the Materials** that you actually use in the experiment.
(This may change slightly from your original proposal).

_____ List and number the **steps/procedures** that you are following for your experiment.
Put in number format.

_____ **Drawings or illustrations-** Illustrate the experimental design and work in progress.
Include sketches and diagrams of the setup of your experiment.

_____ **Data-** You need to record everything that happens in your experiment neatly.
Use a ruler to make neat **data charts**. Be sure to write observations neatly that can be
read by others. Please date all entries when they occur. Include photos and drawing
if it helps show what has occurred.

