

## Logbook Tips

This is some information to help you as you set up and record information in your logbook. There are three main things to remember about your logbook.

- (1) Everything you write in your logbook must be in blue or black ink only.
- (2) Logbooks are designed to be a work-in-progress. They are not meant to be perfect. If you make a mistake, simply mark through the mistake and continue your work. If you mess up a whole page, simply mark an X through the entire page. Do NOT tear out any pages or write on the back. Please make sure everything is legible.
- (3) There are many ways of organizing your logbook. As long as you include all of the necessary parts, the order is not as important. The most crucial portion of the logbook is your data. Make sure you include qualitative and quantitative data.

Below is an example of a format for a science project logbook. If yours is not in this exact order, do not stress. Remember, just make sure you label and include all parts. Also, number all of the pages in your logbook. A good place to put your numbers is the top or bottom right-hand corner.

- 1) Title Page: This should include your title (make it catchy), your name, school, and teacher's name.
- 2) Table of Contents: List the parts as you go through. You can add the page numbers at the end of your project.
- 3) Brainstorming: This is where you write all of the ideas you gathered at the beginning of the school year. Include your thoughts and feelings about your ideas. This section is not required. It is just a suggestion to let the judges "see" your thought process.
- 4) Question and Area of Science
- 5) Purpose Statement: This is why you are doing this experiment. Refer to the purpose statement handout for an easy format.

6) Research: You need a minimum of 5 sources. You need to have at least one page per source. Cite the source at the top of the page. Your research is the notes you take from each source.

7) Hypothesis: This is where you tell what you think will happen. This is the possible answer to your question. Remember to include research to back up your answer; tell why.

8) Variables: Make sure you have an independent variable (what you are testing), dependent variable (what and how you will measure), and control variables (what you will keep the same for all groups throughout the experiment).

9) Materials List: Make sure it is a detailed list including sizes and measurements.

10) Procedure: Include enough details that anyone can pick up your logbook and duplicate your experiment.

11) Data Table: This is where you will record your quantitative data. Here is a website with information on making a data table, as well as an example.

<http://www.brighthubeducation.com/science-homework-help/86665-how-to-make-a-science-data-table-for-projects-presentations/>

12) Data: The data portion of your logbook is very similar to a journal. Each entry needs to be dated and include quantitative data (numbers) as well as qualitative data (your thoughts and observations).

13) Pictures / Illustrations: It is a good idea to include pictures of you performing the experiment or illustrations to explain the process. Make sure you label and describe each picture. (Remember a picture is worth a thousand words.)

14) Graph of your Data: It is fine to print a copy of your graph and tape or glue it into your logbook.

15) Conclusion: Tell what you found from your experiment. Remember to include if your hypothesis was supported or rejected, along with data to back up your answer.

16) Reflections: Tell what you learned from this experience, as well as what you would do differently next time.