

Elements of Writing a Science Fair Project

1. Title Page
 - a. Title of Project in the form of a question
 - b. Positioned half way down the page.
 - c. Your name
 - d. Date
2. Table of contents
 - a. An organized list of pages and their content.
3. Abstract
 - a. Explain in 250 words or less what you did, how you did it and what you found out, An Abstract should include the purpose of the experiment, procedures used, data and conclusions. It may also include any possible research applications.
4. Introduction
 - a. The introduction sets the scene for your report. It should include your hypothesis, an explanation of what prompted your research and what you hoped to achieve.
 - b. The history of similar experiments or inventions
 - c. Definitions of all important words and concepts that describe your experiment
 - d. Answers to all your background research plan questions
 - e. Mathematical formulas, if any, that you will need to describe the results of your experiment
 - i. For every fact or picture in your research paper you should follow it with a citation telling the reader where you found the information.
 - ii. A citation is just the name of the author and the date of the publication placed in parentheses like this: (Author, date). This is called a reference citation when using APA format and parenthetical reference when using the MLA format. Its purpose is to document a source briefly, clearly, and accurately.
 - iii. If you copy text from one of your sources, then place it in quotation marks in addition to following it with a citation. Be sure you understand and avoid plagiarism! Do not copy another person's work and call it your own. Always give credit where credit is due! The above is from Science Buddies.org
 - f. Purpose and hypothesis and variables.
5. Method
 - a. Describe in exact detail your step by step procedures. Remember, someone should be able to repeat your experiment by following your procedures. You should have multiple trials of your experiment

- b. First list exactly all materials and quantities needed for your experiment.
6. Results/Discussion
 - a. This is the essence of your paper. Make data tables and graphs of your results first.
 - b. Use statistical analysis to explain your data results. Check links on Science fair resources for more info.
 - c. Relate your results and conclusions to other related research in your area. Explain anything that did not turn out as you expected. A discussion of what you might do if you expanded this project should be included.
 - d. Every data table has to be labeled and described as well as the graphs.
7. Conclusion
 - a. Restate the hypothesis.
 - b. Does your results support or not support the original hypothesis.
 - c. Explain your results and what you would do differently if you were to redo this experiment.
 - d. Do not put anything in the conclusion that has not already been discussed in the whole paper.
8. Acknowledgements
 - a. While it is important to thank people who have helped you, do not use names which could identify you, or your school to the judges.
9. Work cited
 - a. Your work cited list should include any documentation which is not your own. Include 8-10 sources, websites, journals, etc.
 - b. Follow MLA formatting to write your work cited.

Visual display board

1. A good display has a good title-usually in the form of a question. It is well constructed, has no spelling errors and it is well organized and easy to read
2. Has all the above except the Title page and acknowledgements.
3. Many items are not permitted as part of your display for safety reasons. Photographs are an important alternative (your face should not be in the photo or covered up)

Interview

Judges want to talk to you about your project. They want to know what you learned from your research and experimentation.