

Science Fair Research Paper

The Research Paper is the formal presentation of the project. It is comprised of three parts: library research, the experiment, and the results.

Research Paper Requirements

Checklist of required contents

1. **Binder**
2. **Title Page**
3. **Table of Contents**
4. **Abstract**
5. **Main Body of Paper with Scientific Footnotes**
6. **Bibliography**

Explanation of required contents

1. **Binder** – use a secure folder that is easy to handle and read
2. **Title Page**
 - The title of the project
 - **DO NOT** put your name on your project
3. **Table of Contents**
 - Use the major points of your paper
 - Page numbers are used to locate each heading
4. **Abstract** – a summary of the entire project
 - on one sheet of paper
 - 250 words or less
 - Titled in the following manner
 - Abstract
 - Name of Project
 - Should include:
 - Define the Experiment (Include the Hypothesis)
 - Explain how it was conducted
 - Summarize the results

5. Main Body of Paper with Scientific Footnotes - The paper should flow coherently from start to finish.

Organizing the Written Report

Library Research

Ideas for the types of information to include

- The history of similar experiments or inventions
- Definitions of all important words and concepts that describe your experiment
- Answers to all your background research questions
- Explanations of why the materials you are using react the way they do

The Experiment

Do not include all the details and data; this is recorded in the log book.

Information to include

- Materials and Apparatus – a brief discussion of the purpose of the apparatus or testing procedure in order to inform the reader as to what the Experiment is to accomplish
- Experimental Process
 - Explain the particular process that was chosen for this experiment and why.
 - Include sufficient detail as to how the Experiment was conducted

The Results and Conclusions

The most important portion of the paper because it explains what the whole project was about.

Information to include

- Accomplishments – summarize and present the findings in a simple concise format
- Implementation – explain how the results of the Experiment will impact society
- Failure – if the Experiment failed discuss why it failed; explain any changes that may need to be made to make future experiments successful

Written Report Requirements

- Length: 7 double-spaced typed pages in Times New Roman 12 point font
- Pages should be numbered
 - Pages should be numbered at the bottom center
 - Do Not number the Table of Contents or Abstract
- May include appropriate pictures, graphs and other visuals, but are not considered part of the minimum length
- Be sure to proofread for errors! Use Spell-check and Grammar Check

Scientific Footnotes

- Any sentence that is a direct quote or contains unique information or numerical data must be footnoted.
 - FAILURE to footnote critical information is PLAGIARISM
- Use Scientific Footnotes
 - Example 1: In 1989, 120,000 chickens were lost in that region due to heat exhaustion (1, p. 45). Numbered Bibliography
 - Example 2: In 1989, 120,000 chickens were lost in that region due to heat exhaustion (Broiler, p. 45).

6. Bibliography

- Sources: A minimum of 6 sources acceptable sources
- Follow MLA bibliography form