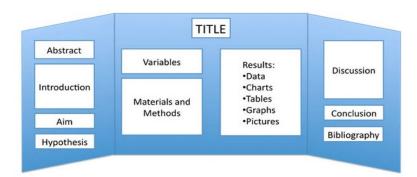


Year 6 Science Fair Guide – For Teachers, Students and Parents

Welcome to our Merimbula Public School Science Fair! A lot of work goes into completing a Science Fair Project. If you follow this guide, and tackle the project one step at a time, you should achieve your goal. The first step of the Scientific Method is to state the problem you are wanting to solve.



Below is a list of what to include on your display board.

Abstract (Completed Last)

The abstract should include a brief summary (overview) of the entire project. This is like a quick snapshot for guests and judges during the Science Fair.

<u>Aim</u>

What exactly is the intention of your project? What are you trying to discover?

Hypothesis

A detailed overview of what you think will happen? What do you think the results of your testing will be?

Introduction

The introduction should include the following:

- Why you have chosen your particular topic;
- What you already know about your topic;
- Any research you have done to support your project.

Variables

A list of all independent variables, dependent variables and controls.



PO Box 48 Merimbula NSW 2548 Ph: 64951266 FAX: 64953239 merimbula-p.school@det.nsw.edu.au



Materials and Method

The method contains the steps followed in your experiment. Don't write a list of materials used, include what you used in paragraph form. Write in the past tense and in the 3rd person. e.g. "A bunsen burner was used to heat the test tube". Include everything that you did and explain it in enough detail so that someone who was not there could do the experiment exactly as you did. Also state the controlled, independent and dependent variables.

<u>Results</u>

The results should include a written explanation of the major findings in paragraph form, and dates of findings. Your findings should be presented as graphs, charts, tables and/or pictures. Start with a brief overview of what you found out. Graphs and tables should be plotted in pencil or done on a computer (for example, in Excel).

Each table and graph should have a caption that contains enough detail so that it can be understood, even if it is separated from the text. Also, describe any major findings or unexpected errors.

Discussion

The discussion section should include:

- 1-2 sentences to summarise your results.
- Are there any anomalies in the results? (i.e. things that don't seem to fit). Can you explain these?
- Can you explain the trends or patterns in your results?
- Did your results support your hypothesis? It's okay if they don't, it just means you did not find what you expected to find, which is interesting in its own way.
- Do you your results agree with what you learnt from your references? How are they the same? How are they different?
- What interesting questions did your project lead to? What more could you do in this area?

Limitations

- What would you do to improve the project if you were to do it again?
- Were you happy with the method? Most scientists can think of a couple of changes they would have liked to make if they could.
- How could you improve the fairness, accuracy, sample size etc.

Conclusion

- Did your results support the hypothesis?
- What is the importance of this experiment? Who would be affected?

References / Bibliography

This is a list of all text and source materials used and should be presented alphabetically. Referencing is important as you need to acknowledge where you obtained your information. Wikipedia is not a reference, but it is a great place to start your research.

Acknowledgements

This is a written acknowledgment of all people who provided you with assistance, stating the type of assistance provided. Make a list of parents, peers, the teachers or mentors that significantly contributed to your research.