JC Projects

A guide to writing up your JC Project

Part 1 (Introduction)

(i) Statement or problem to be investigated - This is what you are going to do but in your own words

(ii) Background research undertaken - No doubt you will have to look up a few website and books to find information for your investigation. You may even have to ask your teacher or someone at home for information. This is your background research you will need to give at least 3 pieces of background research.
Make sure for all three you mention where you got the piece of information and what you used it for.

Part 2 (Preparation and Planning)

(i) Variables1. The Independent Variable (what I will change - 1 thing)*
2. The Dependent Variable (what I will measure - 1 thing)*
3. The controlled Variable (what i will keep the same - as many as you can!)

*In an experiment were you have to change two factors (like the physics) you would only change one at a time.

(ii)Equipment: Be sure to list every piece of equipment you use, leave nothing out!

(iii)Tasks: This is the list of jobs that need to be done.

Part 3 (Procedures, apparatus etc.)

(i) Safety - don't just say I wore safety glasses say why! For example I wore safety glasses and a labcoat becuse acids are corrosive.
(You need at least two safety precautions)

(ii + iii) Procedure with diagram - The best advice I can give is to write it like a recipe if a person cannot copy the experiment using what you have written its no good and you need to do it again

(iv) Data and observations -Decide what results you are going to take and when you are going to take them before the experiment.
Make up a data table before you start your experiment so you can record your measurements assoon as you observe them. This will ensure that you are consistent in the way that you record your results and it will also make it easier to analyse

Measurements should be clearly laid out in a graph and/or table form.

If your experiment involves any colour changes this is where you mention it. Was there anything else you noticed when doing the experiment whatever it is no matter how small, include it.
Other observations to note include
· Did you encounter any problems with the experimental method?
· Did you notice any interesting patterns happening?

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Part 4 (Analysis)
THIS IS A VERY IMPORTANT BIT

(i) Calculations and Data Analysis - Make sure you outline any calculations or formulae that you used.
Some useful sentence starters in this section are:
· I can see from my results that ……..
· When I changed ……..., …….. changed by……..
· From the graph I can see that …….

(ii) Conclusion and Evaluation of result Answer some of the following questions in your written report.
· Do your results answer the question you were asking at the start?
· Were the results what you were expecting?
· Is there a trend in your results or did anything unusual happen?
· If you got an unusual result why do you think this happened?
· If you drew a graph did you get a straight line or a curve – what does this show?

Part 5 (comments)
(i) Refinements, extensions and sources of error
· Do your results answer the what you were trying to find out
· Were you surprised by these results
· Was there anything that might have affected your results.
· Are there any changes you would make if you could do the experiment again.
· Is there any way of making it more accurate.
· Does your investigation have any real life applications.
· Could you develop your experiment further, how?