

“How to Write a Good Science Fair Report” by Mr. John Sullivan: All his coaching notes and specific layout (title, headings, paragraphs) are in **BLACK** text. The word processing steps for formatting the report are in **RED** text, by Mr. Sullivan & Mrs. Barry. (*Formatting notes:* --Entire document should be typed in Times New Roman or similar font, in black ink; no colors. --Except as noted, font size should be 12, and text should be aligned left.)

## **Introduction**

(*Formatting notes:* The Heading “Introduction” – centered, 14-18 pt., same size as Title, in part 1 of your report. Can use Format Painter tool to apply Title’s formatting to all other Headings in document, to make sure they are all the same.)

The introduction is another summary (like the abstract), but with a different focus. In the introduction you want to focus on the background information to allow the reader to understand all that follows. The introduction should include information on what your topic is, why you picked it, and why it is interesting and important. In addition to this, you really need to get into the scientific information about your topic. This varies with different projects, but I expect a good amount of scientific information about your topic. In this part you may need to use a direct quote from one of your sources. The way that this is done in a scientific paper is putting the author’s name and publication in parentheses after the sentence. (Sullivan, 2002). That’s it; that’s how you do it!

End your introduction with a brief overview of your experiment, just what you did. End it with your hypothesis.

## **Experiment**

You always start your next section immediately after the end of the previous one. Do not start it on a new page (unless the other section ended at the bottom of a page).

Skip a line, do the heading and then skip another line and begin.

In the experiment section describe in detail what and how you did your experiment. This is like the materials and procedure parts of a lab report combined. Please do not make a list or do numbered steps, but rather, write it all in paragraph form. The rule about numbers is: if you are writing a number under 100, spell out the word and put the digit in parentheses after. Example: five (5) milliliters (mL). If you are referring to a number 100 or higher, just write it as digits. Example: 150 mL. In this section make sure to identify your control, constants, and variables. You should write this section in the first person (I, me, myself). Do not include data or conclusions in this section.

## **Discussion**

This section is big! It is the most important, so you should spend the most time on it. In this section, you “bring it all together” and give your thoughts and ideas. In this section, you start by referring to your observations and data. You summarize them; you do not completely write them out. Next you want to spend some time talking about what your results mean. If you do an experiment on bacteria growth, what does it mean that you had the highest growth rate in room temperature pond water? Why? What would be a reason for that? Why not cold tap water? Let me be clear: your opinion is good, but not enough! You need to try to back up your results with scientific proof. You will want to cite research in this section also. Try to find a study that got the same or similar results or try to find the scientific theory or fact that supports your conclusion. You may have

more than one conclusion to draw from your experiment, so do not stop at just one. You may also explain why something did not work or happen.

End this section with either accepting (correct) or rejecting (incorrect) your hypothesis and discussing possible errors and things you could/would do differently if doing it again (the experiment, that is, not “I would start my paper sooner!”).

## **Conclusion**

The conclusion is a brief summary of the results and experiment. This is your final wrap-up of what you got and what it means. You should only be summarizing what you have already said in your discussion – do not introduce anything new here.

## **Acknowledgments**

This is a chance to give thanks and credit to anyone who helped you. You do so by saying: I would like to thank Mr. Brian T. Sullivan of Atlantic Insurance for his assistance with transportation for this project. If you have human subjects you should thank them for their participation in this section.

*(Page Break before References)*

## **References**

Examples:

(Article: magazine, journal, encyclopedia, website)

Sullivan, J.P. (2002). Good Science Fair Info. "Time Magazine" 257: 127-135

(Book)

Sullivan, J.P. 2002. The Book of Science Fair Reports. Sullivan Press, Coventry, RI.

*(Page Break before Appendix)*

## **Appendix 1**

DATA:

Use charts and graphs to properly display your data. May also include notes, observations. You do not have to type this stuff, but make it look nice and have it on full size paper.