

How to Write a Science Fair Project Abstract

An **abstract** is an abbreviated version of your science fair project final report. For most science fairs, it is limited to a maximum of 250 words (check the rules for your competition). The science fair project abstract appears at the beginning of the report as well as on your display board.

Almost all scientists and engineers agree that an abstract should have the following five pieces:

- **Introduction.** This is where you describe the purpose for doing your science fair project or invention. Why should anyone care about the work you did? You have to tell them why. Did you explain something that should cause people to change the way they go about their daily business? If you made an invention or developed a new procedure how is it better, faster, or cheaper than what is already out there? *Motivate* the reader to finish the abstract and read the entire paper or display board.
- **Problem Statement.** Identify the problem you solved or the hypothesis you investigated.
- **Procedures.** What was your approach for investigating the problem? Don't go into detail about materials unless they were critical to your success. Do describe the most important variables if you have room.
- **Results.** What answer did you obtain? Be specific and use numbers to describe your results. Do not use vague terms like "most" or "some."
- **Conclusions.** State what your science fair project or invention contributes to the area you worked in. Did you meet your objectives? For an engineering project state whether you met your design criteria.

Things to Avoid

- Avoid jargon or any technical terms that most readers won't understand.
- Avoid abbreviations or acronyms that are not commonly understood unless you describe what they mean.
- Abstracts do not have a bibliography or citations.
- Abstracts do not contain tables or graphs.
- For most science fairs, the abstract must focus on the previous 12 months' research (or less), and give only minimal reference to any earlier work.
- If you are working with a scientist or mentor, your abstract should only include procedures done by you, and you should not put acknowledgements to anyone in your abstract.

Why Is an Abstract Important?

Your science fair project abstract lets people quickly determine if they want to read the entire report. Consequently, at least ten times as many people will read your abstract as any other part of your work. It's like an advertisement for what you've done. If you want judges and the public to be excited about your science fair project, then write an exciting, engaging abstract!

Since an abstract is so short, each section is usually only one or two sentences long. Consequently, every word is important to conveying your message. If a word is boring or vague, refer to a thesaurus and find a better one! If a word is not adding something important, cut it! But, even with the abstract's brief length, don't be afraid to reinforce a key point by stating it in more than one way or referring to it in more than one section.

How to Meet the Word Limit

Most authors agree that it is harder to write a short description of something than a long one. Here's a tip: for your first draft, don't be overly concerned about the length. Just make sure you include all the key information. Then take your draft and start crossing out words, phrases, and sentences that are less important than others. Look for places where you can combine sentences in ways that shorten the total length. Put it aside for a while, then come back and re-read your draft. With a fresh eye, you'll probably find new places to cut. Before you know it, you will have a tightly written abstract.

Science Fair Project Sample Abstract

Advertisers are always touting more powerful and longer lasting batteries, but which batteries really do last longer, and is battery life impacted by the speed of the current drain? This project looks at which AA battery maintains its voltage for the longest period of time in low, medium, and high current drain devices. The batteries were tested in a CD player (low drain device), a flashlight (medium drain device), and a camera flash (high drain device) by measuring the battery voltage (dependent variable) at different time intervals (independent variable) for each of the battery types in each of the devices. My hypothesis was that Energizer would last the longest in all of the devices tested. The experimental results supported my hypothesis by showing that the Energizer performs with increasing superiority, the higher the current drain of the device. The experiment also showed that the heavy-duty non-alkaline batteries do not maintain their voltage as long as either alkaline battery at any level of current drain.

For more information:

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