

# Courtney Christian School Science Fair Information Packet 2022-2023

If you have questions, contact me at  
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## Overview and Important Information

Each Science Fair project will require a binder with 8 tabs labeled as such:

1. Forms
2. Information
3. Abstract
4. Background Research
5. PHMP (Problem, Hypothesis, Materials, and Procedures)
6. DRC (Data, Results, and Conclusions)
7. Rough Draft
8. Final Draft

All documents given for the Science Fair and all items to be turned in will be kept in this binder. More information on each specific section will be included in greater detail throughout this packet.

The following describes the steps you will take to complete a successful project:

1. Choose your topic. Don't just pick an easy topic, find one that interests you. You will not be able to change your topic after it is approved.
2. State your purpose as a question. What is it that you want to find out by doing this project?
3. Research your problem. Look for books/websites that may help you and keep note of all information that you need for citing your resources.
4. Form a hypothesis. What do you think is going to happen? Phrase this as an if... then statement (If I do this, then I expect this to happen.) Your hypothesis may be wrong, that is ok.
5. Plan your project. How will you test your hypothesis? How will you measure the results? (You MUST have a way to measure results.) Make sure to keep notes and write down everything you do and what happens.
6. Collect all your materials. You will need to keep record of what you use, in exact amounts, and the order of all steps you take to complete your project.
7. Conduct your experiments. You may need to repeat your experiment to make sure that you are getting accurate results. Keep record of every thing you do during the experiment and what order you do them in. Use something to measure your experiments: a ruler or yardstick for measuring distance, a clock or stop watch to measure time, etc. Make sure your measurements are accurate.
8. Record your data. Do not forget to write down all of your measurements and observations. Organize the data in an orderly manner.
9. Draw conclusions. What did you learn? Have you proved or disproved your hypothesis? Tell us what happened. (You will not lose points if your hypothesis was wrong.)
10. Prepare your titles, charts, graphs, drawings, and diagrams. For the display board: Make them large enough to see, neat, and colorful.

11. Construct your science fair display. Get a cardboard trifold display board that is 36 inches tall by 48 inches wide. Display your information on your board in the order outlined in the display board section of this document.
12. Prepare and practice your presentation. Be able to tell about what you did for your experiment, what you used, and what you found out. Know it well enough that you don't have to read it from the display.
13. Plan a timeline so that you complete your project on time. Deadlines are set in stone and will not be pushed back.
14. Do not stress about the project. Pace yourself and enjoy it.

The following are important mentions:

- Project topics are awarded on a first come first serve type of basis. Since only one student (or set of partners) is allowed to complete their project on a certain project idea, the project idea may be approved for the first student (or set of partners) that submits their topic contract for that project idea. All other submissions for the same project idea will be rejected.
- Once a student completes the topic contract form and the topic is approved, they cannot change their topic without an appeal form signed by the parent. The student will have to request the appeal form from the teacher. Deadlines will not be pushed back even if the appeal is approved.
- If a student decides to work with a project on the partner, the parent/guardian of both students will need to sign the partner contract form, in addition to the topic contract form, agreeing that the students will work together. Once this form is signed, the students must work together for the duration of the project. **Choose partners wisely.**

All science fair projects must adhere to the following guidelines:

- Think safety before you start. Make sure you have adults available to help you for difficult or potentially dangerous parts.
- Do not eat or drink during an experiment.
- Wear protective goggles when doing an experiment that could lead to eye injury.
- Do not touch, taste, or inhale chemicals/chemical solutions.
- Always wash your hands after doing the experiment.
- Dispose of wastes properly.
- Students may not complete projects that could cause any harm to humans or animals. Any projects that include human or animal subjects (that would cause no harm) require the proper forms to be completed. See the teacher for these forms.
- Any project that breaks local, state, or federal laws are NOT permitted.
- Any project that involves drugs, firearms, or explosives are NOT permitted.
- Any projects requiring the use of any potentially dangerous devices (saws, knives, electricity, etc.) must have a qualified adult to complete these portions of the project.

- Parents/guardians should help supervise all portions of the project to ensure that students are safe.
- Use safety on the Internet. NEVER write to anyone without an adult knowing about it. Have an adult help you search for information for your project.

## Choosing a Topic

Think about a topic that is interesting to you. It may be something that you have learned about in a previous year of science class, or something that we will be covering this year that you are interested in. There are many science areas to choose from. The following are the categories of science that you will choose from for Science Fair:

1. Animal Sciences
2. Behavioral & Social Sciences
3. Biochemistry
4. Biomedical & Health Sciences
5. Cellular & Molecular Biology
6. Chemistry
7. Computer Science
8. Earth & Environmental Science
9. Energy (Chemical & Physical)
10. Engineering Mechanics
11. Mathematical Sciences
12. Microbiology
13. Physics & Astronomy
14. Plant Sciences

Each project will need to be classified into one of those categories. If you want to find a project within one of the specific categories, I suggest searching for “ (Insert Category) Science Fair Projects” for ideas. (For example, if I was interested in completing my Science Fair project on something in the category of Microbiology, I would research “Microbiology Science Fair Projects” to get some ideas.) However, if you have no idea where to start, I suggest looking at the following websites to get some ideas \*Be aware that not all of these projects are great fits for the science fair but can give you a place to start\*:

<https://www.sciencebuddies.org/science-fair-projects/project-ideas/middle-school>

<https://www.education.com/science-fair/middle-school/>

<https://sciencing.com/science-projects/> (This website breaks down projects into grade levels, make sure to select the appropriate grade level)

<https://sciencebob.com/science-fair-ideas/ideas/>

I am also giving the students a document that lists 200 ideas for science fair projects to help you identify what may be the best fit for this project.

## **Contract, Dates, and Logs**

Students will be given a Science Fair Topic Contract and a Science Fair Partner Contract. If a student chooses to work with a partner, the student will need to fill out the Science Fair Partner Contract first. This will be one form that both students and a parent/guardian of each student must sign to agree that the students will work together for the duration of the project. Partners must work together to complete all parts of the project, so parents/guardians will need to work together to ensure that the partners have time to do so. Students will fill out a log of which parts of the project each student worked on and parents will need to initial these logs.

If a student is working independently on the project, they will not need to complete a Science Fair Partner Contract. They will immediately be able to complete the Science Fair Topic Contract. Partners must wait until after they have signed the Partner Contract form and have shown the form to the teacher before they can complete the Topic Contract.

The Science Fair Topic Contract will be a form that the student (or partners) and a parent/guardian (for each student) must sign to secure a topic. The topic must be approved by the teacher before the student begins the project. The project may be rejected if it breaks any rules/guidelines for science fair projects, would not be an adequate project (as determined by the information provided in the written description of project), or has already been approved for another student. Each student (or set of partners) must have a different project and therefore, a proposed project may only be awarded to the first student (or partners) to turn in the contract. Topics cannot be changed after the Contract has been submitted and approved. If there is a significant reason that the project cannot be completed, the student must request an appeal form from the teacher. The appeal form must be signed by the parent/guardian of each student involved in the project to acknowledge that the deadlines will not be changed for the student(s) even with approval of a change of topic.

A list of due dates will be given to the student(s), so that they may pace their project accordingly. Students that do not turn in the required documents by the deadline will receive a grade of a zero for that portion of the project. It is the students responsibility to ensure that any required documents or items are ready and brought with them to school on the day they are due. Extensions will not be given for students that have forgotten any required parts of the project at home on the day they are due. If this is a concern for you or your student, please plan to bring the items early.

Students must keep a log of what information they work on for the project, when they worked on the information (the date), and parents should check these logs to ensure that your student is making progress on their project. Partners must work equally on the project, therefore, they must include their contributions individually. The teacher will check these logs on occasion and may ask students to have the parent sign the log.

## Information

I will provide one printed copy of this information packet to be kept in the student's binder to ensure that all students have access to this information. I will also send this information to parents/guardians via email addresses that have been provided to the school and connected to Renweb. The file will also be available under the class page on Renweb.

## Written Report Pieces

The written report is a summary of everything that you did to investigate your topic/problem. This provides vital information on what your project is about, as well as its effect on your understanding of the topic. Usually the written report is 5-8 pages in length. This includes all of your information and steps that you will complete in class.

Reports should be neatly bound in the final draft section of your science fair binder. It must be typed using the template provided in this document.

- Typed, double spaced. One inch margins, and 12 pt Times New Roman Font.
- Remember to include heading/titles on graphs/charts/tables.
- All photographs must have captions explaining their significance.
- Before you hand in your report make sure to reread, revise, and rewrite.
- Recheck your calculations, spelling, and grammar.

All written reports for a science fair project must include:

- Title page: The first page of the report should include the title of the project, as well as the name and grade of the student.
- Table of Contents: This page provides the reader with a list of different parts of the project and the page number on which each section can be found.
- Abstract: Your Abstract is a brief summary of the content and the purpose of the project. The abstract should be NO MORE than 250 words. Abstract is on a separate piece of paper from any other part of the paper.
- Statement of Purpose: State the purpose of the project in the form of a question.
- Hypothesis: You must have a hypothesis before you complete the project. A hypothesis is an educated guess about what you think will occur as a result from completing your experiment.
- Research: This is the part of the report that contains all the background information that you collected about your topic from your 3-5 sources. Any books or articles read from the internet/journal, authorities on the topic that you talked to, or outside materials collected should be summarized in this section. This should be written in your own words and NOT copied from your resources. This section is 3-5 paragraphs long.
- Materials: This is a list of all the materials and supplies used in the project. Quantities and amounts of each should be indicated. BE SPECIFIC.

- Procedure: You will list and describe the steps that you took to complete the project in a numbered sequence. This shows the stages of the project so that another person can carry out the experiment.
- Observations and Results: In this section you will tell what you learned from the project. It is also IMPORTANT to include all graphs, charts, or other visual data (pictures) that helps to show your results. YOU MUST HAVE ATLEAST ONE GRAPH, TABLE, OR CHART.
- Conclusion: This is a brief statement explaining why your project turned out the way it did. Explain why the events you observed occurred. Use the word “because” to turn an observation into a conclusion. State whether your hypothesis was proven or disproven. You could also add what you know now that you didn’t know before you completed your project.
- Reference page: This bibliography should list all the printed materials the student used to carry out the project. The items should be listed in alphabetical order in the standard format. See the References section for more detail.
- Acknowledgement: Here is where you thank everyone who helped to make your project successful (including Mom and Dad.) Everyone that you interviewed, including teachers, scientists, and other experts in the field should be mentioned here.
- Bible Verse: Select a bible verse and explain why you chose it to accompany your project.

## Abstract

An Abstract is a brief 250-word summary of the main ideas of your topic. It is one of the first pieces of information a judge would read about your project. It should be typed in 12 pt, Times New Roman font. It can be NO MORE than 250 words. Unlike the rest of the science fair report, it should be single spaced. It is to serve as an abbreviated version of your final report. A printed version of the abstract will be included in the abstract section of the Science Fair Binder (will be provided to the judges), at the beginning of the written report, and on your display board. Therefore, you will need 3 copies of your final abstract. The abstract should have the following 5 pieces of information:

- Introduction: Describe the purpose for doing your science fair project or intervention. Tell the reader why they should care about your project. Motivate the reader to finish the abstract and read the entire paper and display board.
- Problem Statement: Identify the problem you solved or the hypothesis you investigated.
- Procedures: What was your approach to investigating the problem? Don’t go into detail about materials unless they are 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 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? Did you prove or disprove your hypothesis? For an engineering project, state whether you met your design criteria.

#### Things to avoid for the abstract:

- Avoid technical terms that you or a reader would not understand.
- Avoid abbreviations or acronyms that are not commonly understood.
- Abstracts do not have a bibliography or citations.
- Abstracts do not contain tables or graphs.

#### How to Meet the Word Limit:

For the first draft, don't be overly concerned about the length. Just make sure you include 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. If you are still having trouble reducing word counts, put it aside for a while, then come back and reread.

## **Background Research**

Students must include 3-5 resources that they used to complete their project. More resources may be used as needed. The resources must be printed out and placed in the Background Research section of the binder. Wikipedia is not allowed. Resources may come from any of the following:

- Videos
- Reputable websites
- Books
- Interviews (write a transcript of the interview to include in this section)
- News articles

Information from these resources must be described in 3-5 paragraphs in the Research section of the written paper. The information used in the written paper must be highlighted in the printed resources included in the binder. This information should help to explain the background of your topic and help set up the idea of your project.

Make sure to check the Works Cited section and record any information that will be needed to make the bibliography entries for each source. These pieces of information can vary depending on type of source but may include the following: author name, title of article, title of book/journal/magazine, publisher, date published, website, date accessed, etc.

## **Purpose**

Students must include a purpose statement/problem statement. An example of how to begin the purpose statement is as follows: "The purpose of me choosing this topic is..."

## Hypothesis

A hypothesis is an educated guess about how things work. Most of the time a hypothesis is written like this: “If     [I do this]    , then     [this]     will happen.”

Your hypothesis should be something you can actually test, what’s called a testable hypothesis. In other words, you need to be able to measure both “what you do” and “what will happen.” We make an “educated guess”, then we write a hypothesis, and finally, set out to prove or disprove the hypothesis. What you think will happen should be based on your preliminary research and your understanding of the scientific principles involved.

If you keep in mind the format of a well-constructed hypothesis, you should find it easy to identify your variables. You will identify your independent and dependent variables as you write your hypothesis. The independent variable is the variable that the experimenter changes. This is the part that you are describing when you state your, “If     [I do this]    ” of your hypothesis. The second portion of the hypothesis describes your dependent variable. The “then     [this]     will happen,” statement shows what dependent variable is affected by the independent variable.

### Hypothesis Tips:

- The question comes first. You must identify the question that you are studying before you can write a hypothesis.
- A hypothesis is a statement, not a question. The hypothesis is an educated, testable prediction about what will happen.
- Make it clear. A good hypothesis is written in clear, simple language.
- Keep the variables in mind. Make sure that you are writing about the variables that you are actually testing.
- Make sure your hypothesis is “testable.” To prove or disprove your hypothesis, you need to be able to do an experiment and take measurements or make observations to see how two things (your variables) are related. You should also be able to repeat your experiment, if necessary.
- Do your research. Make sure that you are using research and your understanding of your topic to shape your project and hypothesis.
- Make sure your hypothesis is a specific statement relating to a single experiment.

## Materials and Procedures

Materials: This is an exact list of all of the items that you will use during your experiment. Be specific in the amount of each item that is used. Check out the example written report to see how this should be formatted.

Procedure: You will list and describe the steps you took to complete the project. Usually this is listed in a numbered sequence. This part shows the stages of the project so that another person can carry out the experiment. Check out the example written report to see how this should be formatted.

## Results

When writing your results to your Science experiment, you are discussing what happened during your experiment. What did you notice? Did anything change in your dependent variable? You are also including a chart, table, or graph in this section, along with an explanation of it. This is also the point in which you discuss what you observed and saw throughout the experiment.

## Conclusions

In the conclusion section, you will begin by stating whether your hypothesis was rejected or accepted and why. Discuss how your research helped you come to this conclusion. What would you change to further advance your experiment? What advice would you give for a future student that may want to try your experiment?

## Works Cited

Your resources used for your background information section should be compiled into a Works Cited page. Here are the requirements for resources:

- Must have a minimum of 3 sources.
- Resources must come from a reputable source (not Wikipedia or similar sites).
- Resources can be a video, book, website, interview, or news article.

Works Cited entries must be typed in 12 pt, Times New Roman font, located on their own page with the title “Works Cited” at the top of the page, centered. All resources should be double spaced, but do not skip spaces between entries.

\*\*\*[Easybib.com](http://Easybib.com) is a great resource to help format your Works Cited entries.\*\*\*

The following depicts how each type of resource should be formatted.

### Citing a Website with an Author:

Last, First M. “Article Title.” *Website Title*. Website, Date Month Year Published. Web. Date Month Year Accessed.

### Citing a Website without an Author:

“Article Title.” *Website Title*. Website, Date Month Year Published. Web. Date Month Year Accessed.

### Citing a Book:

Last, First M. *Book Title*. City of Publication: Publisher, Year Published. Print.

### Citing a Video:

Author name/poster’s username. “Title of Video.” Online video clip. Name of Website. Name of Website’s publisher, date posted. Web. Date accessed.

### Citing a Newspaper Article:

Last, First M. "Article Title." *Newspaper Title*. [City] Date Month Year Published: Page(s). Print.

For more examples see these websites:

- <https://owl.english.purdue.edu/owl/resource/747/12>
- <http://content.esaybib.com/citation-guides/mla-format/how-to-cite-a-website-mla/>

### **Acknowledgements**

Here is where you thank everyone who helped to make your project successful (including Mom and Dad.) Everyone that you interviewed, including teachers, scientists, and other experts in the field should be mentioned here.

### **Bible Verse**

Select a bible verse to include with your project. Try to pick one that you feel goes along with your project idea. Explain why you chose this bible verse. This section may be placed on the same page as the acknowledgments

THIS IS THE SCIENCE FAIR PAPER TEMPLATE. I AM ATTACHING THIS SO YOU ARE AWARE OF WHAT THE FINAL WRITTEN REPORT SHOULD LOOK LIKE. THIS IS A PREVIOUS STUDENT'S WORK. DO NOT COPY. \*\*\*BE AWARE THAT THIS PAPER IS NOT PERFECT AND MAY HAVE SOME MISTAKES. IT IS MEANT TO BE USED AS AN EXAMPLE OF CORRECT FORMAT ONLY.\*\*\* (Page numbers for the example are typed on the last line of the page so to not conflict with page numbers from the entire document. However, for the students' report, the page numbers should be inserted in the "footer" of the document.)

Chosen Chocolates

6th Grade Science

December 1, 2016

Student Name

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## ABSTRACT

The purpose of my Science Fair project, “Why does chocolate melt and which chocolate melts most in the same period of time?” is to find out more about chocolate because personally it’s one of the best foods ever created and I didn’t know much about it. I also wanted to know if the chocolate with more cocoa butter would melt most. I think this is important for cooking and using chocolate. If you are trying to whip up something quickly with melted chocolate that contains cocoa butter you might want to know which melts most, the one with more cocoa or less. So which chocolate does melt the most and why? Let’s find out... My hypothesis was that out of the three types of chocolate, dark chocolate would melt the most because it had the most cocoa butter. I got three types of chocolate of the same brand, dark, milk, and white. I took a small pan, filled it with water, and set it to boil. Then I put 20 dark chocolate chips in another small bowl. Once the water had boiled, I placed the bowl in the pan full of water for thirty seconds, then I removed the heat and stirred it five times. Then I left the chips to melt for 2 minutes. When I returned, I took a picture, washed the pan and repeated the process for milk and white chocolate. I did the same thing for trial 2 and 3, except for trial 2, I didn’t stir. After each trial, I compared the pictures to get the results. I carefully studied the pictures asking my family their opinion. In the first trial dark chocolate melted most, then white, and finally milk chocolate. The second trial came out with the same results but trial three didn’t. After comparing the results I decided that white chocolate melted most. In the end Dark chocolate melted most overall, white chocolate was next, and last but not least milk chocolate. My hypothesis was right! Why? Because dark chocolate has the most cocoa butter. So if you are taking a yummy chocolate dessert somewhere but don’t use dark chocolate because it has the most cocoa butter and will melt most.

## BODY OF PAPER

### **Background:**

First, include your 3 or more paragraphs of Background Research using your 3-5 resources. Do not talk about your actual results and conclusions yet. Those belong only in their designated section.

I have not included this portion from the previous student's work because every student's resources and manner of presenting that information may be slightly different.

Be sure not to forget this section in your own written report.

### **Purpose:**

The purpose of choosing this topic is.... (Personalize this for your project)

### **Hypothesis:**

The hypothesis for this project was: If ... then ... (Copy this from your abstract)

**YOUR HYPOTHESIS MUST REMAIN THE SAME THROUGHOUT THE WHOLE PROJECT!**

### **Materials:**

- 90 dark chocolate chips
- 90 milk chocolate chips
- 90 white chocolate chips
- A small pan
- A small bowl (must be smaller than the pan)
- A wooden spoon
- A burner
- A camera



- A timer
- Water

**Procedures:**

1. Take your pan and fill  $\frac{3}{4}$  full of water.
2. Turn on stove to a medium temperature and place pan on stove.
3. Bring water to boil.
4. Put thirty dark chocolate chips in the small bowl and place bowl in pan.
5. Start timer.
6. After 30 seconds turn off heat, and stir five times.
7. Leave chips for two minutes.
8. Take the bowl off the pan and take a picture.
9. Wash bowl.
10. Complete trial 1 by repeating this process with the milk and white chips.
11. After trial 1 do the entire process two more times not stirring during trial 2.
12. Compare pictures.
13. Record results.

**Results and Observations**

After completing my experiment I looked at my recorded results. In trial one dark was melted most. Trial two dark was most melted again. White was close behind. Finally in trial three white melted most! So in the end because dark “won” twice and white only once. In the end we can conclude that out of dark, milk, and white, dark melts most.

\*\*\*IN THIS SECTION, INSERT YOUR CHART, GRAPH, OR TABLE OF DATA.\*\*\*

## Conclusion

My Hypothesis was correct! Dark chocolate melted most out of the three types of chocolate. So if you are bringing chocolates in a picnic or “chocolatey” cookies to a party on a hot day you can know that dark chocolate melts most so use another type of chocolate. Hopefully, your treat will stay as nice as possible. Or maybe you want to leave a few candy bars in the car for a snack randomly. Now you know what type of chocolate to leave in the car, not dark chocolate! From this experiment I have learned so much about chocolate. I’ve learned its history and why it melts. It melts because of cocoa butter! When it is exposed to heat it changes to a liquid. No heat? The chocolate is a solid. Chocolate isn’t just a fabulous dessert. Chocolate has history and is actually good for you!

## WORKS CITED

Corriher, Shirley O. "The Elements of Chocolate." *The Elements of Chocolate*. American Chemical Society, Oct. 2007. Web 27 Oct. 2015.

Hubpages and Hubbers. "Which Chocolate Melts the Fastest and Why? Dark, Milk, or White Chocolate?" HubPages. Hubpages Inc., 2015. Web 27 Oct. 2015.

Sefcik, Lisa. "How Does Chocolate Melt?" EHow. Demand Media, 2015. Web. 27 Oct. 2015.

SpringstonTube. "Which Chocolate Melts Quickest?" YouTube. YouTube, 2014. Web. 27 Oct. 2015.

## ACKNOWLEDGEMENTS

This is where you thank and acknowledge whoever helped or assisted with your project in one or two sentences.

## BIBLE VERSE

Replace this verse with your own Bible verse:

“For I am convinced that neither death nor life, neither angels nor demons, neither the present nor the future, nor any powers, neither height nor depth, nor anything else in all creation, will be able to separate us from the love of God that is in Christ Jesus our Lord.”

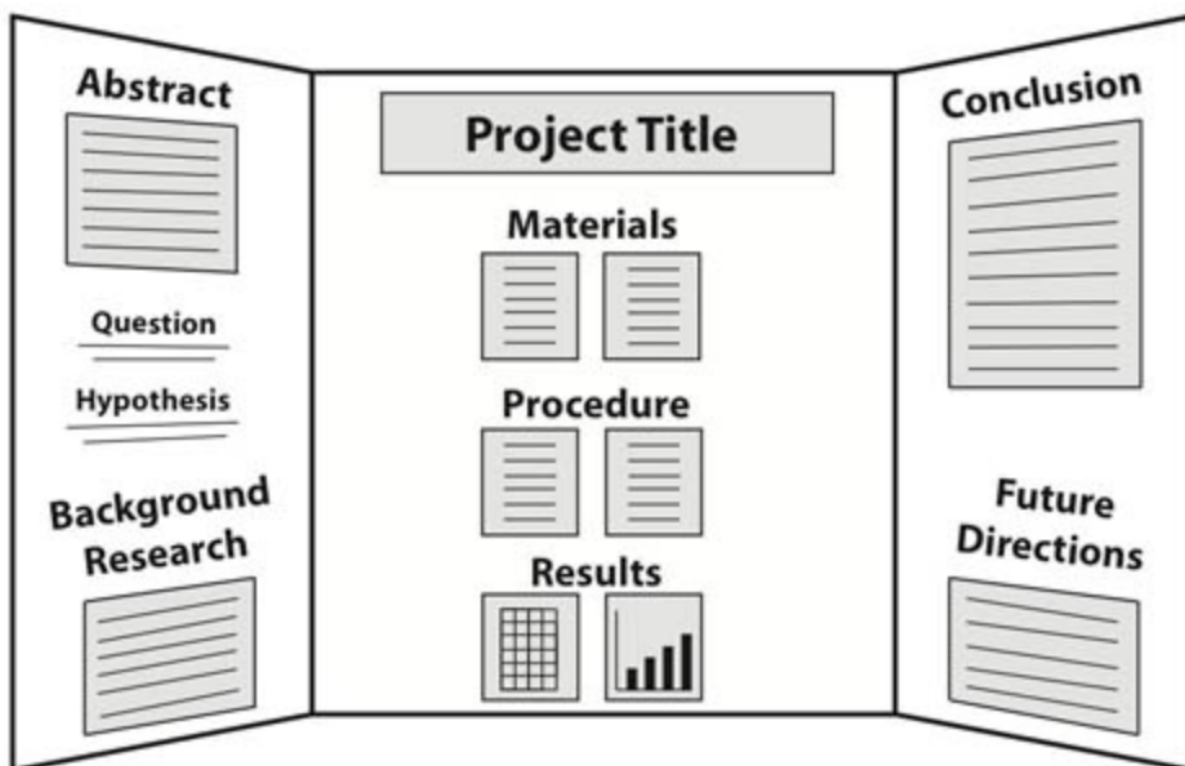
Romans 8:38-39

I chose this Bible verse because ...

## Science Fair Display Board

For almost every science fair project, you need to prepare a display board to communicate your work to others. In most cases you will use a standard, three-panel (trifold) display board that unfolds to be 36 inches tall by 48 inches wide. Display boards can be found at Amazon and other retailers.

- Organize your information like a newspaper so that your audience can quickly follow the thread of your experiment by reading from top to bottom, then left to right. Include each step of your science fair project: Abstract, Question, Hypothesis, Background Research, and so on.
- Use a font size of at least 16 points for the text on your display board, so that it is easy to read from a few feet away. It's OK to use slightly smaller fonts for captions on pictures and tables.
- The title should be big and easily read from across the room. Choose one that accurately describes your work, but also grabs peoples' attention.
- A picture speaks a thousand words! Use photos or draw diagrams to present non-numerical data, to propose models that explain your results, or just to show your experimental setup. But, don't put text on top of photographs or images. It can be very difficult to read.
- Your Bible verse should be placed on the back side of the right flap of the board.



## **Your Science Fair Oral Presentation**

A lot of students are scared of speaking in public or to a teacher/judge. Just imagine they are a fellow scientist who just wants you to share what you learned. Relax, smile, and have fun.

Remember, you are the expert and you had fun doing the project. But if you are a little nervous, we listed some helpful things you need to do during the presentation.

### **Helpful Hints:**

- Look sharp, feel sharp, and you will be sharp. Dress nice that day, be polite, and speak clearly. You will show that you have confidence. Don't forget to look at your audience.
- Introduce yourself. Point to the title of your display. Tell your audience why you chose to study this.
- State your problem that you studied (your question). Tell them about your hypothesis (what you thought might happen).
- Talk about what you learned while researching your topic.
- Talk about the sources (books, websites, and interviews) that helped you understand your topic.
- Tell about your project and explain the steps you took to conduct your experiment. Be sure to mention all the materials involved and point out the pictures that you may have taken.
- If it applies, be sure to show them that you tested your experiment at least 3 times.
- Show them all of the cool graphic organizers that you made, like your tables and charts. Remember to point out the labeled parts of your graph or table to show that you know what it represents.
- Be sure to explain what your data means. Make sure you can read your graphs and tables. Let them know if you were surprised by the results, or if you know what would happen because you studied about it.
- Make sure you sound like an expert on your topic. Always use appropriate vocabulary especially by using words from the Scientific Method, like: Problem, Hypothesis, Procedure, Results, and Conclusions.