

West Covina Christian School Science Fair 7th Grade



Information Packet

Checkpoints:

1. Friday, January 27th: Bring in your 3 Science Fair Questions
2. Friday, February 17th: Bring in your Science Fair Proposal
(Students with teacher-approved proposals may begin their projects)
3. Friday, March 2nd: Update #1 due
4. Friday, March 23rd: Update #2 due
5. Wednesday, April 18th: Bring finished project to school. Be sure to include journal and project worksheet.
6. Week of April 23-26 Oral Presentations

*Extra Credit given to checkpoints turned in before due date

Science Fair:

Thursday, April 26th @ Open House in their homerooms.

*To be eligible for judging, your project needs to be turned in on time!

Taking Your Projects Home:

Projects should be taken home on Friday, April 27th

Project Requirements:

The student's project needs to be experimental. A project is experimental if it meets the following criteria:

- A) A hypothesis is posed (a statement, not a question)
- B) A student experiment is conducted, using the scientific method
- C) Data/records are collected and analyzed
- D) The solution to a problem is sought

Projects are to be done on an individual basis. No team projects permitted. Students may seek help from an adult or another student with typing, backboard construction, and critique of methods. Students must do 90 percent of the total work. All help should be acknowledged in the written report.

Display Board Criteria:

1. **Maximum size** may not exceed 48" wide by 30" deep by 72" high

2. Display Board

Should be free-standing for table display

Should be attractive, creative, eye-catching, neat and informative

Computer-generated graphics and lettering must be the student's work

Student's name, grade and school name must be placed on the **back** of the project in the lower right-hand corner

The following shows how the board should be put together:

Left Side	Middle	Right Side
1. Problem/Question 2. Background Information 3. Hypothesis 4. Abstract	1. Title 2. Design (procedure/materials) 3. Data	1. Results 2. Conclusion 3. Future Application 4. Biblical Application

3. Display/Project Information

A) Topic

A good project is one that is chosen to fit your interests and abilities, so the time you spend selecting a topic is very important for your future success. **You will be working with this project for a long time.**

Do not choose a topic that you will be unable to do, or a topic that requires equipment that is too costly to obtain. Stay within your abilities and means. Sometimes, equipment can be borrowed from a teacher or a friend, but you should check before choosing your topic.

Be sure that topics encompassing sensitive issues are dealt with from an appropriate Christian perspective, and avoid any topic that may be offensive.

B) Title

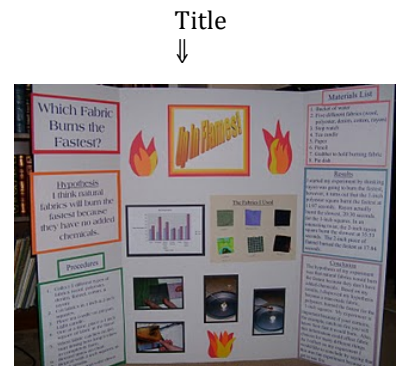
Make it short, yet descriptive, conveys specific information about your project.

C) Problem/Question

State the problem in 1-2 sentences. It is the question you set out to answer. It should be in the form of a question.

D) Background Information

Include any background information that you have researched on this topic. What have other people learned about the topic you are testing? Define terms that most people will not understand in your project.



E) Hypothesis

The hypothesis should be in the form of an "If, then, because" statement. This is your prediction on what you believe will happen in your experiment. This should be written out after you have done careful research into any background information related to your topic. Be sure to include your rationale.

F) Abstract (approx. 50 words)

An abstract is a summary and description of what was done and what happened as a result.

Example: "Three brands of tennis balls were tested to determine which one retained its bounce over the longest period of time. The balls were regularly bounced over a five-week period. Of the three brands tested, Brand A, Brand B, and Brand C, Brand B retained its bounce best."

G) Experimental Design

Includes all the steps and materials you will need to complete the experiment. Be specific with your steps. Number them. Include a drawing, diagram, or photo of the project to help illustrate. Make sure you have done the appropriate number of trials.

Indicate in this section what your independent and dependent variables are as well as your control group and all constants.

H) Data

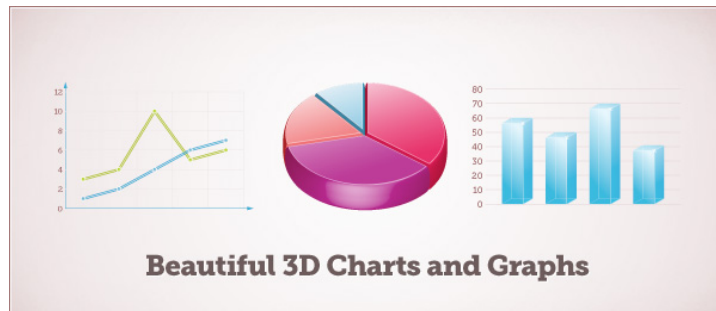
Your data should be comprehensive. This would include **all** observations of your experiment, both qualitative (descriptions) and quantitative (measurements), as needed. They could be in the form of charts, tables, graphs, lists, drawings, etc.

No	Month	Sales volume	Receipt
1	January	120	360000
2	February	155	465000
3	March	89	267000
No	Month	Sales volume	Receipt
4	April	134	402000
5	May	201	603000
6	June	189	567000
No	Month	Sales volume	Receipt
7	July	157	471000
8	August	105	315000
9	September	108	324000
No	Month	Sales volume	Receipt

I) Results

This section should be an abbreviated representation of your data. This could also be in the form of a chart (pie), graph, table, etc.

Include a written explanation of your results, pointing out comparisons or trends.



J) Conclusion

1. Specifically state whether the hypothesis is correct or incorrect and your reason why it was this way.
2. State what further experimentation could be done to broaden the scope of the problem or ways to improve upon your experiment.

K) Future Applications

Based on your experiment and the results you received, how could someone use this information in the future? What benefit could it have? How practical and affordable is it? Could this be used in the near future or are we still a long way off?

L) Logbook/Journal



The logbook is the history and the record of the progression of your science project. It begins the first day you receive the assignment and ends the

day you turn it in. It is a diary for your science project. Every time you work on the project, you need to record your work in your logbook. When your experimentation begins, you will refine your procedure in detail and write it out in your logbook, step-by-step, drawing and labeling any apparatus you use and explaining how all the variables are controlled.

Your data is first taken in your logbook. Your results are first formulated here. Include a bibliography as your first page; listing any sources you used during your investigation. (Ex. Books, websites, people, magazines, etc) Keep adding to this list as you use more sources. You need to have at least 3 sources.

Everything you do on your project is in your logbook!

Remember: From start to finish, everything must be in your logbook. Keep the book neat and clean. It will be displayed with your project.

M) Examples/Equipment

Equipment, samples, or other items from your experiment may be included as a part of your display. These can be brought in on the day of Open House.

N) Biblical Application/Illustration

Each project must include a related biblical application/illustration, and it must be included on the visual display and the written report.

What truth from God's Word does your experiment help show?

What lesson can be drawn from your experiment?

Is there an analogy?



O) Photographs and/or Diagrams

Should be included in the logbook or on the display to demonstrate the experimental process.

P) Oral Presentation

An oral presentation will be given during the week of Open House. Each student will sign up for a day in which to present that week. However, all projects are due the Friday before Open House week, NOT the day of your presentation!

Be prepared to give a 1-3 minute presentation on your project. Give a general description of what you did in your experiment, what happened, biblical application, and what you would do differently next time. You may also include in your presentation what you liked/disliked and/or the simplest/hardest step. Notes will be allowed.