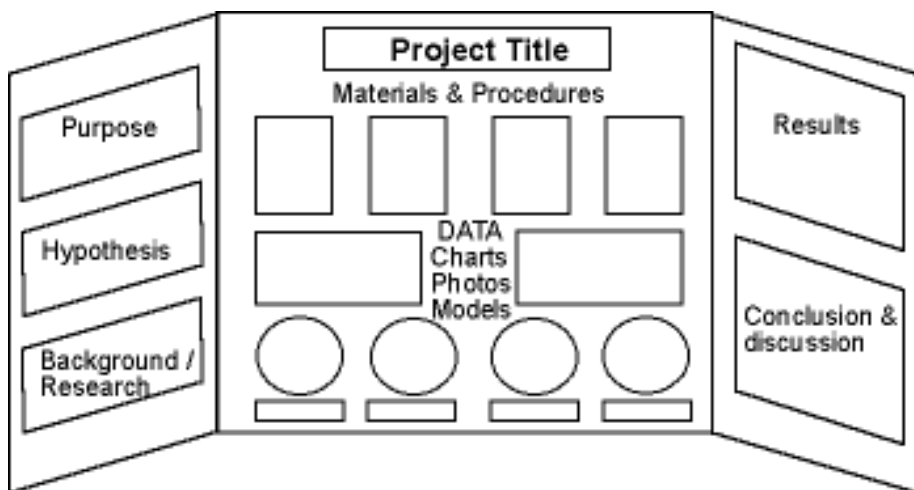


Valencia Valley Science Fair
Guidelines Packet

Dear Scientists,

Our judging panel will be at Valencia Valley on **Wednesday, May 1st**. This is a great opportunity for students of all grades to show off their project and practice presenting their work to our panel of friendly and encouraging science judges. Projects will be separated by Experiment and Research/Display categories, and by grade levels.

1. Due to limited space, project boards may not be more than 28" x 40" (Small Size)
2. The title of your project must be in question form. (i.e. How does light affect the reproduction of bread mold?)
3. Your name, grade level, and teacher must be printed on the front of your display.
4. Your project should be your work with minimal parent help. However, younger students will need more assistance than older students.
5. Your project should reflect your grade level. Use your own words. Remember this is your work and we want to know what YOU were able to discover.
6. Buying items from a store is sometimes necessary, but we discourage a complete ready to assemble science fair project kit. Be creative and do it yourself.
7. NO DANGEROUS CHEMICALS OR OBJECTS AND NO OPEN FLAMES.
8. NO POISONOUS ANIMALS OR PLANTS ARE ALLOWED. Live animals should be put into your exhibit just before judging and then removed when you are done. Make sure you have a small cage to secure your critter. When in doubt, please ask!
9. Your final display project must be able to stand on a table top without support.



SAMPLE JUDGING QUESTIONS:

EXPERIMENT:

UPK/Kindergarten:

What is your experiment?

What steps did you use to test your experiment?

What happened after you did these steps?

1st Grade:

What is your experiment?

What materials did you use?

What steps did you use to do your experiment?

What were your results?

What did you learn?

2nd - 6th Grade:

Why did you select this experiment?

What was your hypothesis?

What materials did you use?

What procedure did you use to test your hypothesis?

What were your results?

What did you learn from your testing?

RESEARCH & DISPLAY:

UPK/Kindergarten:

Where did you get your information?

Explain your display board.

What facts did you learn?

1st Grade:

Where did you get your information?

Explain your display board.

What are 2 interesting facts you have learned?

2nd - 6th Grade:

Why did you select this topic?

What are the 3 most interesting facts you learned?

Explain your display board.

What sources did you use to gather information?

What else would you like to learn about this topic?

THE SCIENTIFIC METHOD

The scientific method is the tool that scientists use to find the answers to questions. It involves the following steps: doing research, identifying the problem, stating a hypothesis, conducting project experimentation, and reaching a conclusion.

Research

Research is the process of collecting information from your own experiences, knowledgeable sources, and data from exploratory experiments. After you have selected your topic, you begin what is called project research. This is research to help you understand the topic, express a problem, propose a hypothesis, and design one or more project experiments - experiments designed to test the hypothesis.

Problem

The problem is the scientific question to be solved. It is best expressed as an “open-ended” question, which is a question that is answered with a statement, not just a yes or no.

Hypothesis

A hypothesis is an idea about the solution to a problem, based on knowledge and research. While the hypothesis is a single statement, it is the key to a successful project. All of your project research is done with the goal of expressing a problem, proposing an answer to the hypothesis, and designing project experimentation. Then all of your project experimenting will be performed to test the hypothesis.

Project Experimentation

This is the process of testing your hypothesis. The things that have an effect on the experiment are called variables. There are 3 kinds of variables that you need to identify in your experiments: independent, dependent, and controlled. The independent variable is the variable you purposely manipulate (change). The dependent variable is the variable that is being observed, which changes in response to the independent variable. The variables that are not changed are called the controlled variables.

Project Conclusion

The project conclusion is a summary of the results of the project experimentation and a statement of how the results relate to the hypothesis.