

Whispering Pines Science Fair Survival Guide



What? Whispering Pines Elementary Science Fair

When? February 26, 2019

- All project boards **will be due** the week of February 11th - February 15th.
- Late projects will not be entered for judging.
- Projects will be available for public viewing and a brief awards ceremony will be held on Tuesday, February 26th during our Spring Open House.
- Projects must be picked up the following day (Wednesday).

Why? The emphasis and intent of the Science Fair is to provide an opportunity for students to explore some pieces of the world around them. The investigation that they pursue should be safe, fun, and educational. We expect the students to do the bulk of the work themselves. Parents should be a resource, provide supplies, transport the project to school, and ensure safety.

How?

1. A good science fair project answers a question through some type of experimentation/testing. Students should come up with a question that is of interest to them and predict what they think the outcome will be (i.e. hypotheses). They then plan an experiment that will test their hypothesis. Demonstrations and reports generally do not make good science fair projects.
2. The project should follow the steps of the Scientific Method. Students should take care to explain their hypothesis and conclusion. Tell **why** the experiment happened the way that it did. For example, when stating the hypothesis, be sure to use the word "because..." This forces a better answer because the student must explain their thinking.
3. Students are to display their project on a heavy-duty tri-fold presentation board that can stand freely on a table. These boards are easily found at Wal-Mart, office supply stores, or craft stores. Students may display the results of their experiment as long as it fits inside the area of their project board. (See rules below).
4. Project boards should be neatly decorated and clearly display all of the steps of the Scientific Method. Students are *highly encouraged* to use photographs of the actual experiment to display on their board.
5. **Students must keep a log book which should include everything that they do to complete their project from brainstorming to making a plan to observing and recording data to making their conclusion.** This log book can be as simple as a spiral notebook and **MUST BE** written by the student. **Students MUST have this log book with their display on the day of the fair.**
6. Keep in mind that repeated tests and multiple samples increase validity. For example, if an experiment is done on plants, use many plants since seeds are a variable. Repeat trials whenever possible. Display results in a graph or chart.

7. While parental supervision is encouraged, students should pick a project that they can easily complete themselves. Parents...be their lab assistant! Help them manage supplies, offer a hand when needed, and take lots of pictures!!
8. Planning ahead is critical for a successful (and less stressful) outcome. Please keep in mind that completing the experiment only means that you are halfway through the project. Leave plenty of time to create the display board neatly.
9. Awards will be given for 1st, 2nd, and 3rd place for Kindergarten - Second Grade entries and Third - Fifth Grade entries. Best of Show medals will also be awarded to the top three overall winners. These projects will be invited to participate in the **District Elementary Science Fair on March 30, 2019 at Kingwood Park High School.**

A few rules to keep in mind:

1. No liquids or semi-liquids (like shortening) can be displayed. Take pictures!
2. No unnecessary glass. Use plastic if possible.
3. No hazardous chemicals or equipment. If power tools of any kind are needed to complete the experiment, adult supervision is required at all times.
4. Plants are OK...be sure to use multiple samples.
5. Live animals must be treated with extreme care. "No animals should be subjected to any procedure or condition (intentional or negligent) which results in pain, discomfort, abnormal behavior, injury or death."
6. Animals may not be displayed on the day of the fair. Take pictures instead!

Science Fair Internet Support:

<https://learning-center.homesciencetools.com/article/science-fair-projects-for-elementary/>

<http://www.sciencebob.com/category/science-fair-ideas/>

<http://www.sciencebuddies.org/>

<http://www.stevespanglerscience.com/lab/experiments/>

<http://www.education.com/science-fair/>



Science Fair Planning Sheet



PURPOSE/QUESTION: (What do I want to find out?)

RESEARCH: (What do I need to find out first in order to ask a good question?)

HYPOTHESIS: (What do you think will happen? Include the word "because")

MATERIALS: (What do I need to conduct my experiment?)

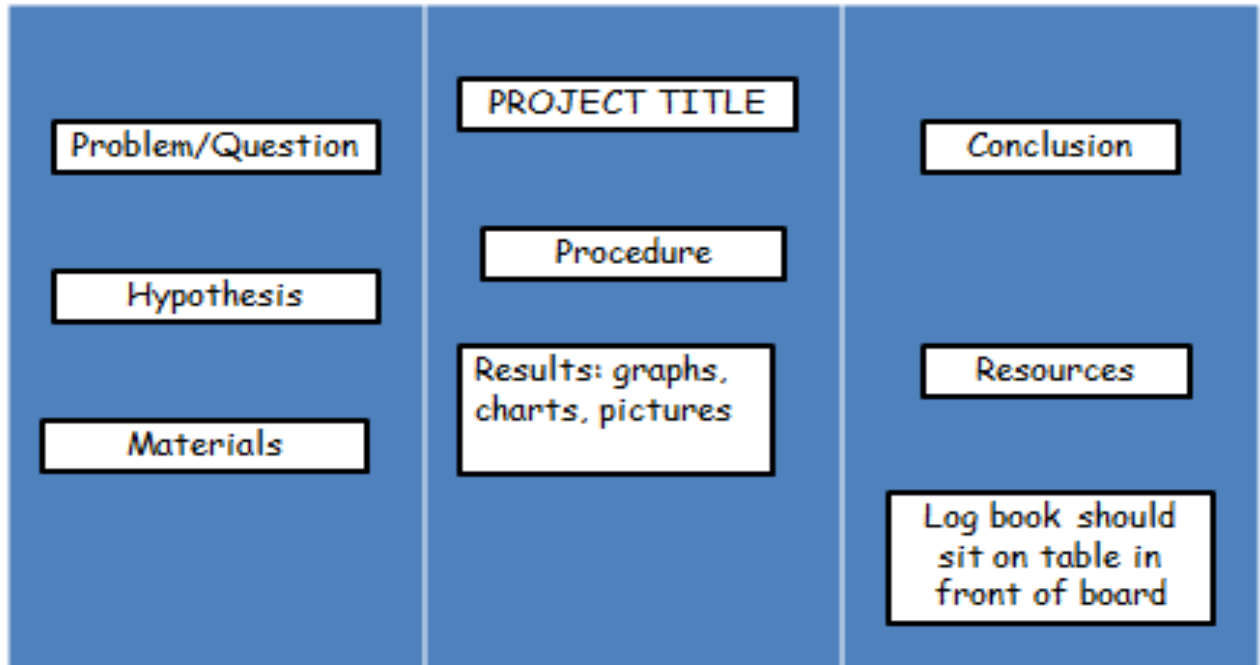
PROCEDURE: (What will you do? List step-by-step directions)

RESULTS: (Show what happened in your experiment by using pictures, charts, and/or graphs)

CONCLUSION: What did you find out? Tell whether your hypothesis was right or wrong (*Remember: It is OK to be wrong in your hypothesis*). **Explain** what you now know to be true.

RESOURCES: (Include all books and websites that you used to complete your project)

Display Set Up



- Do not use glitter glue or other distracting items
- Be precise - cut straight and glue straight
- Data log book should sit in front of your board on the table
- Pictures of your experiment really improve the quality of the display board - be sure to write captions under the pictures to explain what they are
- If you take an image and use it on your board, you must give that image credit by listing where you got it, as a caption, under the picture
- **DO NOT** use pictures of people's faces on the board

Board #

SCIENCE FAIR JUDGING SCORE SHEET

Project Title:

Category	Criteria	Point Value	Points Awarded	Score
CONTENT	Creative/original problem or question for student of this age	6 pts		
	Question & hypothesis are clearly stated & directly related	4pts		
	Question can be answered with measurable data	4 pts		
	Student demonstrated an understanding of experimental design	6 pts		
	Comments:			

PROCEDURES	Procedure clearly tests hypothesis	4 pts		
	Procedural steps are clearly written out	4 pts		
	Experiment was repeated for reliability (at least 3 trials)	4 pts		
	Materials are listed	2 pts		
	Comments:			

RESULTS	Science notebook contains dated entries, raw data, & description of procedures	8 pts		
	Results are clearly presented & demonstrated with an explanation, & a data chart, graph, table, or pictures.	6 pts		
	Measurement data was collected appropriately (used correct measuring tools, and units, such as liters with liquids, grams with mass, meter & centimeters with length)	4 pts		
	Comments:			

CONCLUSION	Conclusion is clearly stated	5 pts		
	Conclusion is logical & based on data collected	5pts		
	Conclusion relates back to the question & hypothesis	4 pts		
	Comments:			

DISPLAY BOARD	Clearly organized	4 pts		
	Attractive & easy to read	4 pts		
	Proper usage of grammar & spelling	4 pts		
	Creative display of information including pictures	4pts		
	Demonstrates the student's own work	4 pts		
	Comments:			

ORAL PRESENTATION	Communicated understanding of science behind the project	4 pts		
	Describes experiment procedures without reading the board	3pts		
	Explains how results relate to hypothesis	4 pts		
	Speaks clearly with good eye contact	3 pts		
	Comments:			

TOTAL SCORE: