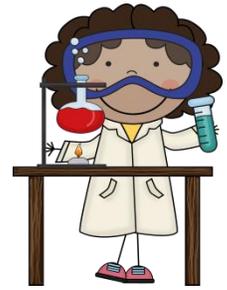


Whispering Pines Science Fair

SURVIVAL GUIDE



What? Whispering Pines Elementary Science Fair

When? March 8, 2017

- All project boards will be accepted starting Monday, **March 6th** at 7:30 am until Tuesday, **March 7th** at 4:00 pm.
- Late projects will not be entered for judging.
- Judging will take place Wednesday and Thursday.
- Projects will be available for public viewing and a brief awards ceremony will be held on Thursday, March 9th at Open House.
- Projects must be picked up the following day (Friday).

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 child 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 does NOT need to be typed or rewritten. **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 April 8, 2017.**

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:

<http://school.discoveryeducation.com/sciencefaircentral/>

<http://www.sciencebob.com/sciencefair/ideas.php>

<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?)

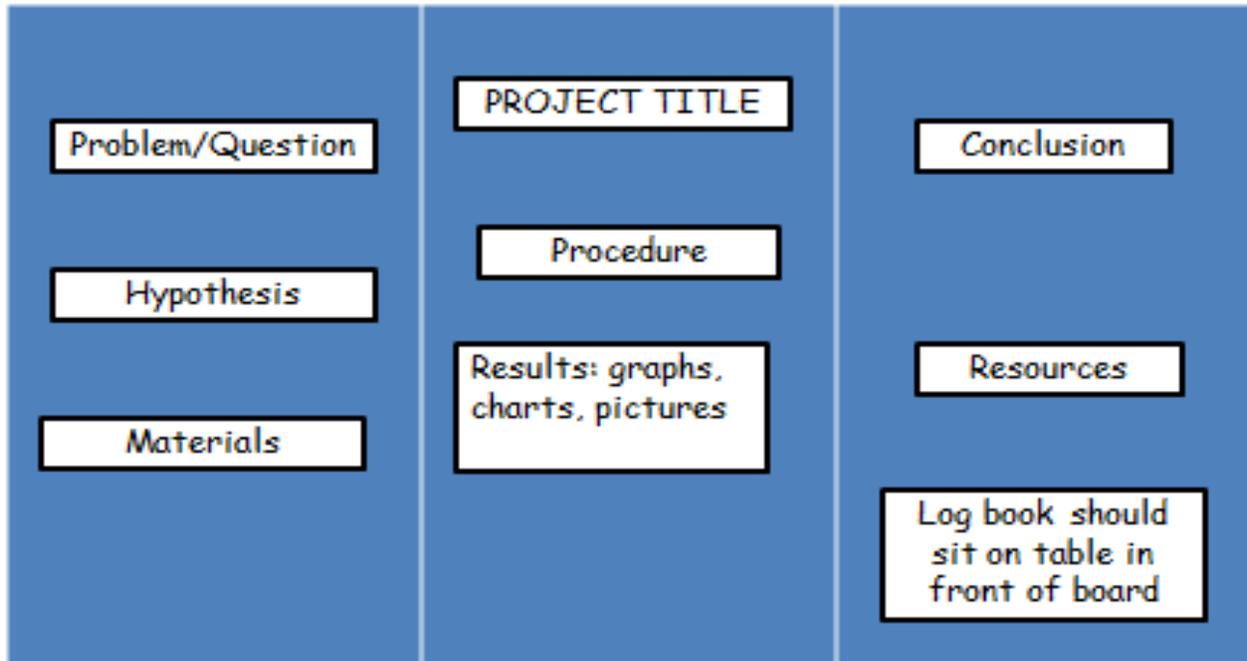
PROCEDURE: (What will you do? List step-by-step directions)

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



Helpful Hints:

- Use a font large enough to read from a distance & a font that is readable
- Arrange everything BEFORE you glue
- Check & double check for spelling errors - have an adult proofread your work
- Do not write directly on the board
- 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

Science Fair Judging Criteria

CATEGORY	10	7	4	1	SCORE
Testable Question	A clear question that can be answered through experimentation is present.	A clear question is present, but ability to answer through experimentation is unclear.	Asks a question, but ability to answer through experimentation is not possible.	Topic is not in the form of a testable question.	
Hypothesis	Hypothesis offers a clear answer to the question & is supported by an explanation of student's thinking. (I think...because...)	Hypothesis answers question, but explanation of thinking is unclear.	Hypothesis answers question, but explanation of thinking is absent.	Hypothesis is present but does not answer question.	
Procedure	Procedures were outlined in a step-by-step fashion that could be followed by anyone without additional explanations. No adult help was needed to accomplish this.	Procedures were outlined in a step-by-step fashion that could be followed by anyone without additional explanations. Some adult help was needed to accomplish this.	Procedures were outlined in a step-by-step fashion, but had 1 or 2 gaps that require explanation.	Procedures that were outlined were seriously incomplete or not sequential.	
Illustrations	Exceeds expectations.	Photos or illustrations clearly labeled & helps observer understand project.	Photos or illustration are present but not labeled clearly.	None	
Data Collection	Evidence of multiple trials & tests. Data was summarized, independently, in a way that clearly describes what was discovered.	Evidence of more than 1 trial. Data was summarized, independently, in a way that clearly describes what was discovered.	Evidence of only 1 trial. Data was summarized, but cannot clearly support conclusion & may not answer testable question.	Evidence does not support conclusion or address testable question. No summary of data.	
Conclusion/ Summary	Student provided a detailed conclusion clearly based on the data & related to previous research findings and the hypothesis statement(s).	Student provided a somewhat detailed conclusion clearly based on the data & related to the hypothesis statement(s).	Student provided a conclusion with some reference to the data & the hypothesis statement(s).	No conclusion was apparent OR important details were overlooked.	

CATEGORY	10	7	4	1	SCORE
Lab Journal	Lab journal clearly presents research from start to finish. Charts, graphs, data records, & notes support testable question. Evidence of student work is present.	Lab journal presents research from start to finish. Record of data is present, but not always clearly supportive of testable question. Evidence of student work is present.	Lab journal contains all of the basic parts of scientific process, but written account of data is incomplete. Evidence of student work is minimal.	Lab journal is present, but missing large chunks of scientific process. Little to no evidence of student work is present.	
Display	Each element in the display has a function & clearly serves to illustrate some aspect of the experiment. ALL items, Charts, graphs, etc. are neatly & correctly labeled.	Each element in the display has a function & serves to illustrate some aspect of the experiment. MOST items, Charts, graphs, etc. are neatly & correctly labeled.	Purpose of each element of the display is not always clear. Charts & graphs sometime labeled. Lacking neatness.	The display seemed incomplete or chaotic with no clear plan. Many labels are missing or incorrect.	
Presentation	Student clearly understands project & can explain ALL aspects of project. Student speaks loud & clearly.	Student understands project & can explain MOST aspects of project. Student speaks loud & clearly.	Student understands most of project, but has difficulty explaining some aspects of the project. Verbal presentation is incomplete or hard to understand.	Student has difficulty explaining project & understanding of the project is not evident. Verbal presentation is lacking.	
Originality & Creativity	Investigated an original question AND used an original approach or technique.	Investigated an original question OR original approach or technique was used.	Question was familiar and approach or technique was somewhat original.	Question was common & techniques &/or approaches required little thought or originality.	

Total Points

Comments: