2025 Science Fair

Student Packet

March 20th, 2025

"Exploring the wonders of science, where curiosity meets knowledge"

Visit the website www.PVScienceFair.com for more details and to sign up.

Contact PVPenguinsPTA@gmail.com with all questions or comments.

Overview

Park Village PTA is excited to announce a fun and engaging event for all students, parents and teachers to enjoy together in the name of Science! The PVES Science Fair is a voluntary event that is open to students of all grades. Science fair presentation boards will be set up in the MPR/lunch area and families will have the opportunity to view and learn from all the projects.

Projects can be in any of the following categories:

- Chemistry
- Earth & Environmental Sciences
- Engineering & Robotics
- Life & Animal Sciences
- Math, Computer, Electronics Science
- Physics

We want to keep this simple, straightforward, and most of all...fun! Depending on your student's grade, do as much, little, or more than you like.

Suggested Timeline

Plan a timeline so you don't leave everything until the last minute. If you need help, tell your parents and your teacher, the earlier the better.

Choose a Topic and Sign Up	ASAP
Research and form a hypothesis	1 week
Conduct your experiments and collect the data	1-2 weeks
Conclude and prepare your report and presentation	1 week
Science Fair Presentation night!	**Wednesday, March 20th 2024**

Science Fair Rules

1. Think **Safety First** before you start. All experiments must be supervised by an adult.
2. Never eat or drink during an experiment and always keep your work area clean.
3. Wear protective goggles when doing any experiment that could lead to eye injury.
4. Do not touch, taste, or inhale chemicals or chemical solutions.
5. Respect all life forms. Animals are not allowed to be used in experiments. Do not perform an experiment that will harm a person.
6. Always wash your hands after doing the experiment, especially if you have been handling chemicals.
7. Dispose of waste properly
8. Any project that involves animals, drugs, firearms or explosives is NOT permitted.
9. Any project that breaks district policy, and/or local, state or federal laws is NOT permitted.
10. Use safety on the Internet! NEVER write to anyone without an adult knowing about it. Be sure to let an adult know about what websites you will be visiting, or have them help you research.
11. Any potentially dangerous aspects of your experiment (sharp tools/electricity/chemicals) should be done with parental assistance.

Science Project Steps

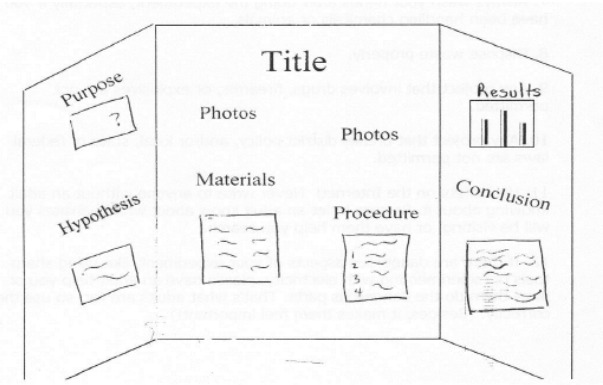
1. **Choose a topic that interests you.** Talk it over with your parents and when you have decided please register your project ASAP on the pvsciencefair.com.
2. **State your purpose as a question**. What is it that you want to find out by doing this project?
3. **Research your problem**. Make observations by simply looking at things, talk to people and read about your topic by looking at any books/websites that might help you. Write down any ideas you have and where you got them. Also, keep note of all information needed for citing your resources.
4. **Form a hypothesis**. What do you think is going to happen? Based on what you researched, what do you think the results of your experiments will be?
5. **Plan your project**. How will you test your hypothesis? What experiments will you do? How will you measure the results? Where will you keep your information? Be sure to keep organized notes to write down and describe your planning process.
6. **Collect all your materials**. Find a place to keep things where others will not bother them. Let other family members know what you are doing so they do not throw your materials away by mistake.
7. **Conduct your experiments**. Remember, the more times you do an experiment the more reliable and accurate the results will be. Do each experiment at least 3x and get an average of the results for your graph. Use something to measure your experiments: a ruler or yardstick if you are measuring distance, a stopwatch to measure time, etc. Check the measurements to be sure you are correct.
8. **Record your data**. As you do your experiments, you will want to write down what you saw or found out. Organize this information in an orderly manner. Put the date, time, and any other useful information. Write your measurements clearly.
9. **Draw conclusions**. What did you learn from your experiments? Have you proved or disproved your hypothesis? After doing the experiments, it may turn out that your guess was wrong which is ok. You may also want to discuss whether there could be changes in your experimental design to further address your question.
10. **Construct your science fair display**. Clearly present your findings on a Trifold cardboard display board. Prepare titles, charts, graphs, drawings, and diagrams. Make them large enough to see, neat and colorful.Show your work and have your hands free to point to sections when you give your presentation.

Science Fair Display Board

The display board is a summary of everything that you did to investigate your topic. The display board provides others with vital information on what your project is about as well as its effect on your understanding of the topic. **The following are guidelines. Depending on the grade of the student, you can do as much as you are able to accomplish.** All display boards for a science fair project should include:

- **Title:** The first page in the report should include the title of the project as well as the name and grade of the student.
- **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.
- **Materials:** This is a list of all the materials and supplies used in the project. Quantities and amounts of each should also be indicated.
- **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.
- **Observations and Results:** In this section, you will tell what you learned from the project. Include graphs, charts, tables or other visual data (pictures) that helps to show your results.
- **Conclusion:** This is a brief statement explaining why your project turned out the way it did. Using the word "because" is a good way to turn an observation into a conclusion. The conclusion should tell whether the hypothesis was proved or disproved. Discuss why you chose to learn more about the subject and what you know now that you didn't know before you completed your project.

The display board may be homemade with cardboard or purchased at Michaels, Walmart or Target



Science Fair Websites

- **California State Science Fair:** Read about this science fair which has been going on since 1952! You can learn how to enter, get help with your own project, or see a directory of past projects. https://csef.usc.edu/

- **Science Buddies:** Use the topic selection wizard to help you figure out what science projects interest you most. Once you have a topic, get help doing research, setting up the experiments, and completing them. http://www.sciencebuddies.org/

- **Science Fair Project Resource Guide:** Samples, ideas, magazines, resources, and more. Includes a list of sites that explain the Scientific Method. http://www.ipl.org/div/kidspace/projectguide/

Please feel free to research on your own age appropriate science fair projects. There are so many wonderful ideas!

Don't forget the most important thing…

The science fair is supposed to be something fun—not stressful! Choose a topic that interests your student and let them take the lead. Projects and display boards are NOT going to be graded or judged. The hope is that this will help our Penguin Scientists explore and learn something new.

Relax, have Fun with Science and Enjoy yourself. You will do a GREAT JOB!