

Science Fair Information

Packets Available

Science Fair: January 15th and 16th

PWE Gym

- Projects must be brought to school by 8 am Wednesday, January 15
- Projects should be taken to your homeroom classroom. Someone will come around and pick them up later that morning.
- Packets for Science Explorers will be given during the meetings on Dec 10 and 12. Science Fair entries are required for Science Explorers if they are planning to attend the end of the year field trip.
- Other students are encouraged to enter the fair. Teachers, please supply them with a packet.
- Some social studies projects can be transformed into Science projects. Ask your teacher.

All first place winners will be entered in the Regional Science Fair in February. The entry fees will be paid by Science Explorers.

There are many awards given on the regional level including monetary awards. We would like to encourage all students to take pride in their project and think “outside the box.”

***Any student needing help needs to get with their teacher, Science Explorer sponsor, or science fair committee member before the holidays.

Science Fair Committee:

Debbie Callaway, Janet Alston, Jill Crommelin, Julie Fariss

Science Explorer Committee:

Debbie Callaway, Lorri Woodard, Janet Alston, Kelli Wiggins, Jamie Broussard

My Science Project Packet

12 Easy Steps to Science Project Completion A Step-by-Step Guide for Students

Step 1: Choose a topic. Think about what science topic interests you or a question that you want to find the answer to.

- Check here if you have picked a science project. Write your name on it and place it in your science fair folder.

Project Topic: _____

What is the purpose of your project/experiment?

PURPOSE: _____

Create an interesting and catchy title that relates to your purpose and project topic.

Title of your Project: _____

Step 2: Write a *problem*. Turn the purpose into a question. You will investigate this big question during your experiment.

PROBLEM: _____

Step 3: Research your project topic. You can use books, encyclopedias, magazines, the internet, and other sources. Write five or more facts about your topic below:

Topic: _____

RESEARCH: _____

REFERENCES: Where did you find your information? Write the names and authors of the books and websites you used to find your facts below.

Step 4: Write a *hypothesis* for your project. This is an educated guess about what you think the outcome of your experiment will be. Look back at your research. Really think about what could happen in your experiment based on what you learned about your project topic. Once you complete your experiment your hypothesis will either be proven (you were right) or rejected (what you thought would happen didn't). It is ok if your hypothesis is rejected. You just need to explain in your conclusion why you think it was rejected and what you might change for the next time.

A good hypothesis has these four elements:

1. Restates the question
2. Provides an educated guess about what will happen in the experiment (predicts the answer to the question)
3. Explains why you think this will happen and uses ideas from research to back it up
4. Can be tested with an experiment.

HYPOTHESIS: _____

Step 5: List the materials and write a procedure.

MATERIALS: List the materials needed for your project. Make sure to include amounts with units. Don't forget to include measurement tools if you used any (example: ruler, measuring cup).

PROCEDURE: Write the directions for completing your experiment. Number each step. Be very detailed in what has to be done. Someone else should be able to follow your procedure and complete the experiment just as you did. *Use your own words!*

Step 6: Gather the materials needed for your project.

Check here if you have gathered all of your materials.

Step 7: Conduct your investigation and collect data.

- Record the data from your experiment below. *Use another sheet if you need to.*
 - Write down **all** of your **observations** and **measurements** below.
 - Be sure to write your data in an organized like in a table or chart.
 - Draw pictures of your experiment on another sheet. Don't forget labels!
 - *Take photos of the experiment and yourself performing the experiment.*

Step 8: Write your results. Write one paragraph to summarize your results. Create a table and graph to display your data.

RESULTS:

Design a table or chart here to collect your information

(Did we mention that you needed to take pictures of you doing the actual experiment?)

Conclusion:

Now tell us what you learned from this and if you were able to prove your hypothesis. Did it work? Why did it work or why didn't it work? What did the results tell you? Sometimes not being able to prove a hypothesis is important because you still proved something. What did you prove?

Application:

(How does this apply to real life?)

Its important to know about this experiment because.....

Step 9: Draw a conclusion.

CONCLUSION: What happened in your experiment? What do your data and observations tell you? Was your hypothesis proven or rejected? What did you learn from this project? Look back at your research and include science concepts and ideas in your conclusion. After doing this experiment do you have any new questions that you would like to explore?

Step 11: Build your display. Create your exhibit and presentation board.

- Use the layout below to create your display board.
- Make it neat, colorful and attractive! Include pictures!
- Write your name, grade, teacher, and school on the back of your board. This will keep things fair during the judging.

Science Project Display Board

<p><u>Materials</u> List what you used for your experiment</p>	<p>The Title of the Project</p>	<p><u>Results</u> Charts/Tables Graphs Written observations Drawings</p>
<p><u>Procedure</u> 1. 2. 3.</p>	<p><u>Purpose/ Problem</u> What do you want to find out?</p>	<p><u>Hypothesis</u> What is your prediction/ educated guess</p>
<p><u>Research</u> Facts about your topic</p>	<p>Photos, pictures or drawings of your experiment and you conducting the experiment</p>	<p><u>Conclusion</u> Sum up what you learned in your project</p>
	<p>Leave this bottom space open so that you can place your project/experiment materials on the table in front of your board and it will not cover what is on your board.</p>	<p><u>References</u> Your sources</p>

Only projects that follow the criteria below will be submitted to enter the science fair

- Project displays an experiment with a hypothesis that can be tested
- Includes each category from the science fair judging rubric
- Follows the scientific method
- Typed with no grammatical, sentence structure or spelling errors
- Neat, colorful and attractive display board
- Display includes pictures or video
- Display of the experiment/materials used

All projects that do not meet the above criteria will be displayed in or outside the student's classrooms.

Step 12: Prepare an oral presentation.

- **Plan your presentation.**
Place notes on index cards to guide you during your presentation. Be ready to answer questions from your classmates and teachers.
- **Bring your project display board and experiment to school on the due date.**
Carry the project materials in a bag, container, or box that has your name on it!
- **Present your project to the class and demonstrate your experiment (if possible).**