

Science Fair Packet



Prairie-Hills School District 144
2011-2012

Prairie Hills School District 144
Schools' Science Fair Dates
2011-2012



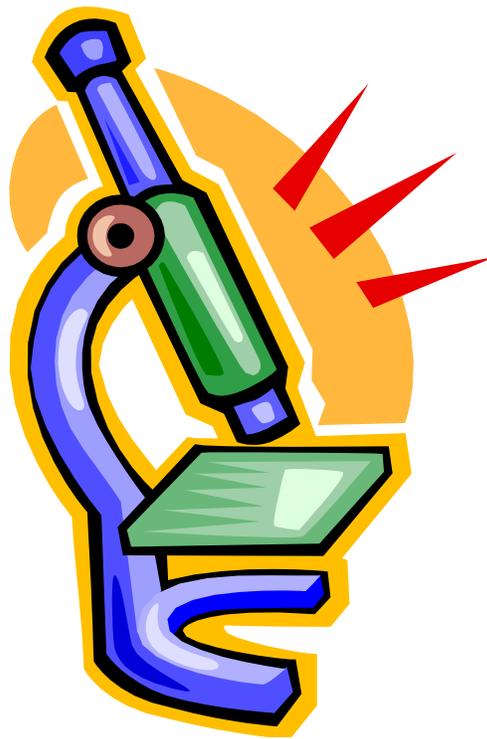
Prairie Hills Junior High School	January 19, 2012-6:00 P.M.
Markham Park School	March 28, 2012-1:00 P.M.
Nob Hill School	April 16, 2012-1:30 P.M.
Highlands School	April 18, 2012-9:30 A.M.
Fieldcrest School	April 18, 2012-1:30 P.M.
Mae Jemison School	April 18, 2012 1:30 P.M.
Primary Academic Center	April 18, 2012-6:30 P.M.

Contents

- I. Flyer and Letter for Registration
- II. Introduction Letter to Teachers
- III. 2011-2012 – Timelines
- IV. Science Fair Registration Form
- V. First Quarter - Project Summary Worksheet
- VI. First Quarter - Student Checklist
- VII. First Quarter - Teacher Checklist Rubric
- VIII. Second Quarter - Student Checklist (Written Report)
- IX. Second Quarter - Teacher Checklist Rubric
- X. Third/Fourth Quarter - Student Checklist (Display Board-Oral Presentation)
- XI. Third/Fourth Quarter - Teacher Checklist Rubric
- XII. Science Fair Dates
- XIII. Building Science Fair Rubric
- XIV. Student Information Packet
- XV. Survey (to be given later)

Mandatory District-Wide

Science Fair Projects



**All 4th—8th Graders
Prepare for
Prairie-Hills School District 144
Science Fair Competition!**

Come to School with

Science Fair Project

Dear Parent or Guardian,

We are excited to announce the *mandatory* Prairie-Hills School District 144 Science Fair. As part of the Science Curriculum, your child will be required to complete a science project. This is a perfect opportunity for parents and students to work together on a creative, hands-on approach of scientific principles. To make the process easy, the necessary steps for completing the project will be broken down quarterly, and reflected in their Science Grade.

Your child will receive further information concerning the necessary steps, timelines, project guidelines, and other important information regarding the science fair project at the beginning of the school year. Listed below are suggestions on how you might support your child's progress on his/her project.

- Talk to your son or daughter about what he or she might be interested in finding out. Work together to formulate a question that can be answered by setting up an experiment in which **measurable data** is collected.
- Take your son or daughter to the library or help him or her search online for information about the topic.
- Help your son or daughter think about an experiment that would help answer the project question.
- 4th – 8th Graders **are required to conduct their own science fair project** which must include the **Scientific Method**. This will eliminate the use of models or demonstrations of projects such as volcanoes, solar system, 'How to...' etc.
- Every 4th – 8th grader will be provided with **ONE** display board by their school in the second quarter.
- Projects **should not** include anything involved fire, explosives, or live insects/animals or hazardous cultures.

Our District's goal for holding a Science Fair is to stimulate and nourish a fond interest in science and to foster a lifelong appreciation of scientific processes in preparation for a life in an

increasingly technological society. This is also a great chance to promote educational links among parents, community, and school.

2011-2012 Science Fair Timeline (suggestive)

First Quarter

August 22-26	Teacher's Science Fair Packets Given (Explained by Science Fair Committee Member)
Aug 29- Sept 2	Student Packets Passed Out
Sept 6-16	Scientific Method Explained in Classroom
Sept 19	Registration Form Due
Sept 23	Teacher's Approval for Project Returned to Student
Sept 23	1 st Quarter Student Checklist Distributed
Oct 14	Student's Project Summary Worksheet Due
Oct 21	1 st Quarter Marking Period Ends

Second Quarter

Nov 7 -10	2 nd Quarter Student Checklist Distributed
Nov 10-Dec 9	Deadlines for Parts of Written Report Due (optional)
Dec 12-21	Written Report Due
Jan 5 -	Start Distributing Display Boards
Jan 13	2 nd Quarter Marking Period Ends

3rd Quarter

March 13	3 rd Quarter Marking Period Ends
March-April	Display and Oral Presentation Due (Principal/Teacher may choose specific due date. Grade will be used in appropriate quarter.)

4th Quarter

March 26	Begin Classroom Presentations (Submit top 3 projects of each class to Science Fair Coordinator at least 3 days before Building Science Fair.)
April 6-15	Spring Break
April 20	All Science Fairs Completed in Building Level
April 26	District Science Fair (6:00 p.m.)

INDIVIDUAL

SCIENCE FAIR REGISTRATION FORM

**DUE NO LATER THAN
FRIDAY, SEPTEMBER 19, 2011**

PLEASE RETURN YOUR FORM TO YOUR TEACHER
ONLY STUDENTS WHO REGISTER ON TIME WILL BE PERMITTED TO PARTICIPATE IN THE SCIENCE FAIR
**Students must submit a project as part of their graded classroom work.
It is a Science class requirement.**

GRADE LEVEL _____

HOMEROOM TEACHER _____

*STUDENT NAME _____

**PROJECT TITLE _____

DESCRIPTION _____

_____ I need an electrical outlet

***All parents must sign and approve their child's Science Fair Project.**

I acknowledge that I have received and reviewed the materials for the Science Fair and I am aware that my child is required to complete a Science Project.

I have approved and given permission for my child _____
to participate in this year's Science Fair.

Student's Signature _____ Date _____

Parent's Signature _____ Date _____

Teacher's Approval of Project

Please Conference with your Teacher about Project

Teacher's Signature _____ Date _____

Name: _____

PROJECT SUMMARY WORKSHEET

Due Date: _____

Topic: _____

Question (Statement of Purpose)
(Written as a Question)

Hypothesis:
If....., then I think

Materials I will need:

Procedures:
(Detailed Steps)

1st Quarter Student Checklist

Due Date	Component	Completed
Sept 19 th	Permission/Participation Slip – Signed and Returned	
Sept 19 th	Topic: Choose a topic. <i>Be sure it interests you. Don't pick one because you think it will be easy. Talk it over with your parents and when you have decided. Do not change your topic later.</i> (Included in Participation Slip)	
	Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project?</i> (Included in Project Summary Worksheet)	
	Hypothesis: Form a hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens.</i> (Included in Project Summary Worksheet)	
	Materials: List all materials that will be used in your experiment. <i>Include exact quantities for each item used.</i> (Included in Project Summary Worksheet)	
	Procedures: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order.</i> (Included in Project Summary Worksheet)	
	Research: <i>Look at any books that might help you, make observations by simply looking at things, talk to people, and find out as much as possible about your topic. Write down any ideas you have and where you got them.</i> (Included in Resource Form – You must have THREE!)	
	Deadlines: All deadlines to turn in components were met.	

Note: The Project Summary Worksheet can be accepted for the 1st Quarter. It does not need to be typewritten. If more space is needed on the Project Summary Worksheet, please use and staple extra paper to the original sheet.

1st Quarter Teacher Rubric

Student: _____

Due Date	Component	Total Points
Sept 19 th	Permission/Participation Slip – Signed and Returned	___ /15
Sept 19 th	Topic: Choose a topic. <i>Be sure it interests you. Don't pick one because you think it will be easy. Talk it over with your parents and when you have decided. Do not change your topic later.</i> (Included in Participation Slip)	___ /10
	Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project?</i> (Included in Project Summary Worksheet)	___ /10
	Hypothesis: Form a hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens.</i> (Included in Project Summary Worksheet)	___ /10
	Materials: List all materials that will be used in your experiment. <i>Include exact quantities for each item used.</i> (Included in Project Summary Worksheet)	___ /10
	Procedures: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order.</i> (Included in Project Summary Worksheet)	___ /10
	Research: <i>Look at any books that might help you, make observations by simply looking at things, talk to people, and find out as much as possible about your topic. Write down any ideas you have and where you got them.</i> (Included in Resource Form – You must have THREE!)	___ /30
	Deadlines: All deadlines to turn in components were met.	___ / 5
	TOTAL POINTS	___ /100

Note: The Project Summary Worksheet can be accepted

for the 1st Quarter. It does not need to be typewritten.

2nd Quarter Student Checklist Written Report

Student: _____

Due Date	Component	Completed
	Title Page: The first page in the report should include the title of the project as well as the name and grade of the student.	
	Acknowledgement Page: The second page in the report should thank all individuals who assisted in the project.	
	Table of Contents: This page provides the reader with a list of the different parts of the project and the page number on which each section can be found.	
	The Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project?</i>	
	Hypothesis: State your hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens.</i>	
	Research: This is part of the report that contains all the background information the student collected about the chosen topic. All gathered information should be summarized and presented in this section. It should be written in the student's own words and not copied from the source.	
	Materials: List all materials that were used in your experiment. <i>Include exact quantities for each item used.</i>	
	Procedures of Investigation: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order.</i>	
	Results: Tell what happened when you did the experiment. Show what happened by making a chart, graph, or table. Include the date, the time, and any other useful information. Write all measurements clearly.	
	Conclusion: This is a brief statement explaining why a project turned out the way it did. Students should explain why the events they observed occurred. The conclusion should tell whether the hypothesis was proven or not proven. It should offer an answer to the student's original purpose.	
	Reference Page: In alphabetical order, list all the resources that you used to research your project. Correct format was used.	
	Conventions: Proper use of spelling, grammar, punctuation, and	

capitalization. MUST be typed.	
--------------------------------	--

2nd Quarter Teacher Rubric Written Report

Student: _____

Due Date	Component	Total Points
	Title Page: The first page in the report should include the title of the project as well as the name and grade of the student.	/ 5
	Acknowledgement Page: The second page in the report should thank all individuals who assisted in the project.	/ 5
	Table of Contents: This page provides the reader with a list of the different parts of the project and the page number on which each section can be found.	/ 5
	The Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project?</i>	/ 5
	Hypothesis: State your hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens.</i>	/ 10
	Research: This is part of the report that contains all the background information the student collected about the chosen topic. All gathered information should be summarized and presented in this section. It should be written in the student's own words and not copied from the source.	/ 20
	Materials: List all materials that were used in your experiment. <i>Include exact quantities for each item used.</i>	/ 5
	Procedures of Investigation: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order.</i>	/ 5
	Results: Tell what happened when you did the experiment. Show what happened by making a chart, graph, or table. Include the date, the time, and any other useful information. Write all measurements clearly.	/ 10
	Conclusion: This is a brief statement explaining why a project turned out the way it did. Students should explain why the events they observed occurred. The conclusion should tell whether the hypothesis was proven or not proven.	/ 10
	Reference Page: In alphabetical order, list all the resources that you used to research your project. Correct format was used.	/ 10
	Conventions: Proper use of spelling, grammar, punctuation, and	/ 10

	capitalization. MUST be typed.	
--	--------------------------------	--

TOTAL POINTS /100

3rd/4th Quarter Student Checklist

Student: _____

Display Board

Due Date	Component	Completed
	Title: <i>Does the title catch people's attention and is it large enough to be read from across the room?</i>	
	Purpose	
	Hypothesis	
	Procedures of Investigation	
	Materials	
	Results/ Graphs/ Charts: <i>Did the student use pictures and diagrams to effectively convey information about the project?</i>	
	Conclusion	
	Conventions: <i>Proper use of spelling, grammar, punctuation, and capitalization on all elements on the display board.</i>	
	Neatness	
	Organization: <i>Are the sections on the display board organized like a news paper so they are easy to follow?</i>	

Oral Presentation

Due Date	Component	Completed
	Introduction: <i>Student introduces himself and gives the title of the project.</i>	
	Statement of Purpose/ Hypothesis	
	Explanation of Procedure	
	Explanation of Results/Charts and Graphs	
	Conclusion	
	Good Posture and Eye Contact	
	Speaks Clearly	

**3rd/4th Quarter
Teacher Rubric**

Student: _____

Display Board

Due Date	Component	Total Points
	Title: <i>Does the title catch people's attention and is it large enough to be read from across the room?</i>	/ 5
	Purpose	/ 5
	Hypothesis	/ 5
	Procedures of Investigation	/ 5
	Materials	/ 5
	Results/ Graphs/ Charts/Visual Items: <i>Did the student use pictures, diagrams, and/or visual items to effectively convey information about the project?</i>	/ 20
	Conclusion	/ 5
	Conventions: <i>Proper use of spelling, grammar, punctuation, and capitalization on all elements on the display board.</i>	/ 20
	Neatness	/ 10
	Organization: <i>Are the sections on the display board organized like a news paper so they are easy to follow?</i>	/ 20
TOTAL:		/ 100

Oral Presentation

Due Date	Component	Total Points
	Introduction/Acknowledgements: <i>Student introduces himself and gives the title of the project. Thanks all who had helped or encouraged student.</i>	/ 5
	Statement of Purpose/ Hypothesis	/ 5
	Explanation of Procedure/Materials	/ 10
	Explanation of Results/Charts, Graphs, and Visual Items	/ 20
	Conclusion	/ 10
	Answers Questions Effectively	/ 10
	Personal Reflections: <i>What I learned and what I would have done differently.</i>	/ 10

	Good Posture and Eye Contact	/ 15
	Speaks Clearly	/ 15

TOTAL: / 100

Building Level Science Fair Rubric

NAME: _____

DATE: _____

SCIENCE FAIR PROJECT BOARD GRADING	
0 = NO EVIDENCE 1 = SOME EVIDENCE 2 = CLEARLY VISIBLE	
THE DISPLAY BOARD CLEARLY INCLUDES THE FOLLOWING SECTIONS:	
TITLE	0 1 2
PURPOSE	0 1 2
HYPOTHESIS	0 1 2
PROCEDURES	0 1 2
MATERIALS	0 1 2
PICTURES - Did the student use pictures and diagrams to effectively convey information about the science fair project	0 1 2
CONCLUSIONS	0 1 2
ORGANIZATION - Are the sections on the display board organized like a newspaper so that they are easy to follow?	0 1 2
IS THE DISPLAY BOARD NEAT - Is the text large enough to be read, the title catches people's attention and is large enough to be read across the room	0 1 2
CONVENTIONS - Has the proper spelling and capitalization been used on all elements of the display board?	0 1 2
TOTAL	

SCIENCE FAIR PROJECT ORAL	
PRESENTATION 0	
= NO EVIDENCE 1 = SOME EVIDENCE 2 = CLEARLY VISIBLE FINAL RESEARCH REPORT	
INCLUDES THE FOLLOWING ELEMENTS:	
INTRODUCES SELF / ACKNOWLEDGEMENT	0 1 2
GIVES BACKGROUND RESEARCH	0 1 2
STATES HYPOTHESIS / PURPOSE	0 1 2
EXPLAINED THE CONCLUSION	0 1 2
ANSWERED QUESTIONS	0 1 2
DISCUSSED THE PROBLEMS YOU MAY HAVE ENCOUNTERED	0 1 2
SPEAKS CLEARLY	0 1 2
VARIES VOICE IN AN INTERESTING	0 1 2
PACING IS SMOOTH AND NATURAL	0 1 2
GOOD POSTURE AND EYE CONTACT	0 1 2
TOTAL	

Building Level Science Fair Rubric

SCIENCE FAIR PROJECT WRITTEN REPORT THE WRITTEN REPORT INCLUDED THE FOLLOWING ELEMENTS:	
ACKNOWLEDGEMENT PAGE	
TABLE OF CONTENTS	
STATEMENT OF THE PROBLEM / PURPOSE	
HYPOTHESIS	
VARIABLES / RESEARCH	
PROCEDURES OF INVESTIGATION	
RESULTS	
CHARTS / GRAPHS	
CONCLUSION	
REFERENCES / WORK CITES	
CONVENTIONS - Proper use of CAPITALIZATION,PUNCTUATION, SPELLING AND GRAMMAR	
ALL FACTS AND PICTURES IN THE RESEARCH PAPER HAS BEEN REFERENCED	
TOTAL TEACHER CLASSROOM POINTS	

CUMULATIVE POINTS EARNED	
PRESENTATION BOARD	
WRITTEN REPORT	
ORAL PRESENTATION	
CUMULATIVE POINTS	

**STUDENT'S PACKET
FOR
THE
SCIENCE FAIR
PROJECT**

SCIENCE PROJECT STEPS

1. Choose a topic. Be sure it interests you. Don't pick one because you think it will be easy. Talk it over with your parents and when you have decided, inform your teacher, and do not ask to change your topic later. Get your Registration form for your teacher signed by your parent and turn it in.
2. State your purpose as a question. What is it that you want to find out by doing this project?
3. Research your problem. Look at any books/websites that might help you, make observations by simply looking at things, talk to people, and find out as much as possible about your topic. 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 know or found out from step #3, what do you think the results of your experiments will be? After doing the experiments, it may turn out that your guess was wrong. It is okay if this happens.
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 notes and write down everything you do and what happens.
6. Collect all your materials. Find a place to keep things where others won't bother them. Let other family members know what you are doing so they don't 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 three times 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 clock 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? You made a guess about what you thought would happen. Now tell what really did happen. You don't lose points if your guess turned out to be wrong.
10. Prepare your titles, charts, graphs, drawings, and diagrams. Make them large enough to see, neat, and colorful.
11. Construct your science fair display. Get your cardboard display board from your teacher so you can show all your work and have your hands free to point to sections when you give your presentation.
12. Prepare and practice your presentation. Be able to tell about what you used what you did in your experiments, and what you found out. Know it well enough that you don't have to read it from the display.
13. Plan a time line so you don't leave everything until the last minute. If you need help, tell your parents and your teacher, the earlier the better.
14. Relax and Enjoy yourself. You will do a GREAT job!

SCIENCE FAIR RULES

Aw!, you mean there are rules? Of course there are, silly, this is made by adults!

1. Number one rule. . . think safety first before you start. Make sure you have recruited your adults to help you.
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. All experiments should be supervised by an adult.
7. Always wash your hands after doing the experiment, especially if you have been handling chemicals.
8. Dispose waste properly.
9. Any project that involves animals, drugs, firearms, or explosives are NOT permitted.
10. Any project that breaks district policy, and/or local, state, or federal laws are NOT permitted.
11. 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 search.
12. If there are dangerous aspects of your experiment, like using a sharp tool or experimenting with electricity, please have an adult help you or have them do the dangerous parts. That's what adults are for so use them correctly. (Besides, it makes them feel important!)

Science Fair Written Report

The written report is a summary of everything that you did to investigate your topic. The written report provides others with vital information on what your project is about as well as its effect on your understanding of the topic. Usually the written report is 5-30 pages in length. All information must be included in the written report. This report provides you with the opportunity to think about all the aspects of our project and share your ideas with others.

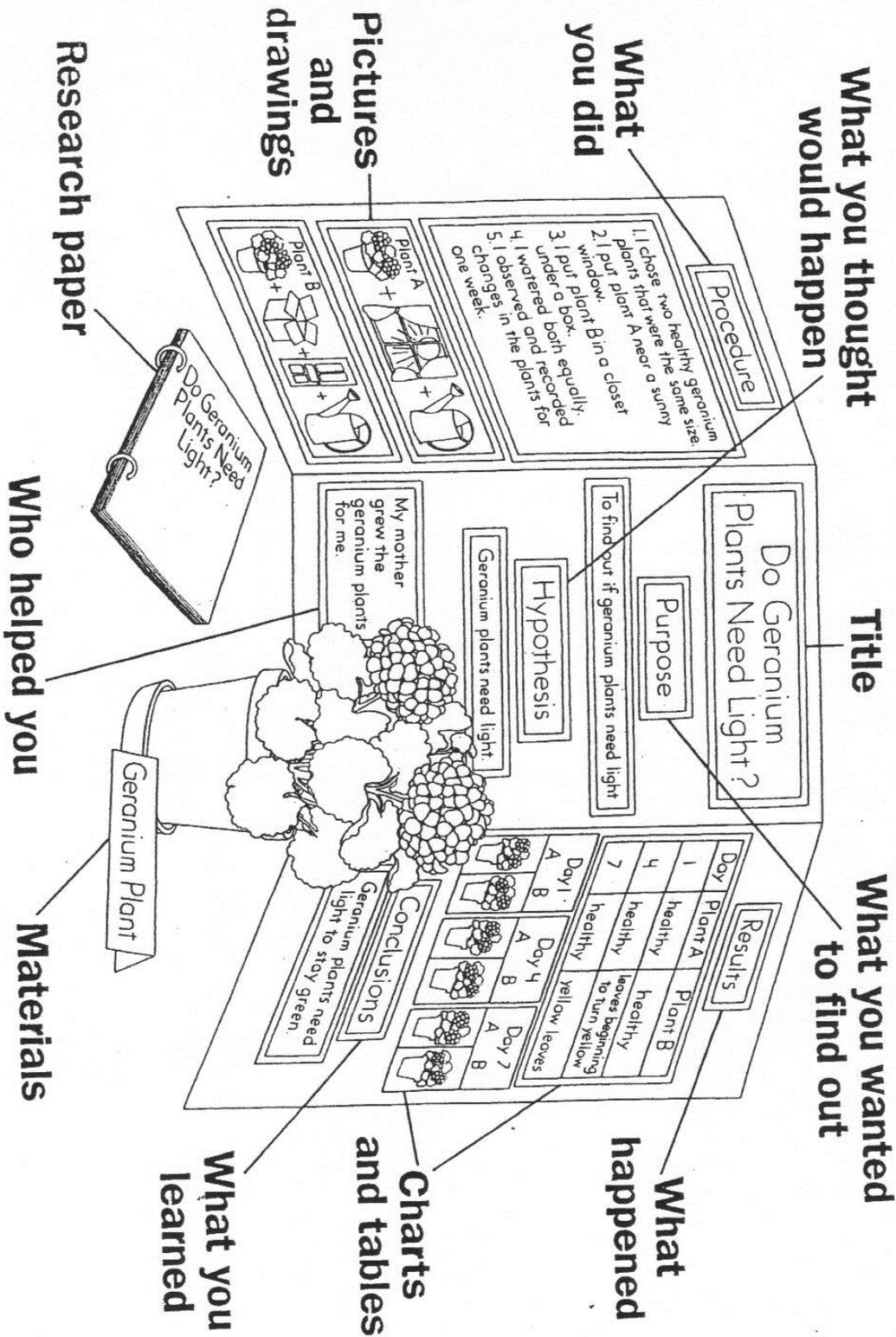
Reports should be neatly bounded in an attractive binder. It must be typewritten.

- Typed, doubled spaced. One inch margins, and 12 pt Times New Roman Font
- Remember to put headings/titles on graphs/charts/tables
- All photographs must have captions explaining their significance
- Before you hand in your report make sure to reread, revise, and rewrite
- Recheck your calculations, spelling, and grammar.

All written report for a science fair project should include:

- ✓ **Title Page:** The first page in the report should include the title of the project as well as the name and grade of the student.
- ✓ **Acknowledgment:** Here is where you thank everyone who helped to make your project successful (including Mom and Dad.) Everyone that you interviewed, including teachers, scientists, and other experts in the field should be mentioned here.
- ✓ **Table of Content:** This page provides the reader with a list of the different parts of the project and the page number on which each section can be found.
- ✓ **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.
- ✓ **Research:** This is the part of the report that contains all the background information that you collected about your topic. Any books or articles read from the internet/journal, authorities on the topic that you talked to, or outside materials collected should be summarized in this section. **This section should be written in your own words and NOT copied from your resources.**
- ✓ **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. It is also IMPORTANT to include all graphs, charts, 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. You should explain why the events you observed occurred. Using the word “because” is a good way to turn an observation into a conclusion. The conclusion should tell whether the hypothesis was proven or not proven. Also give the reason(s) why you chose to learn more about the subject. You could also add what you know now that you didn’t know before you completed your project.
- ✓ **Reference Page:** The bibliography should list all the printed materials the student used to carry out the project. Items should be listed in alphabetical order in a standard format. These website are a great place to go to find the proper way of writing a bibliography. <http://www.bibme.org/> , <http://www.easybib.com> or <http://www.knightcite.com> Also <http://www.Icyte.com> lets you “tag” information from Internet sources as you research.

Displaying a Science Fair Project

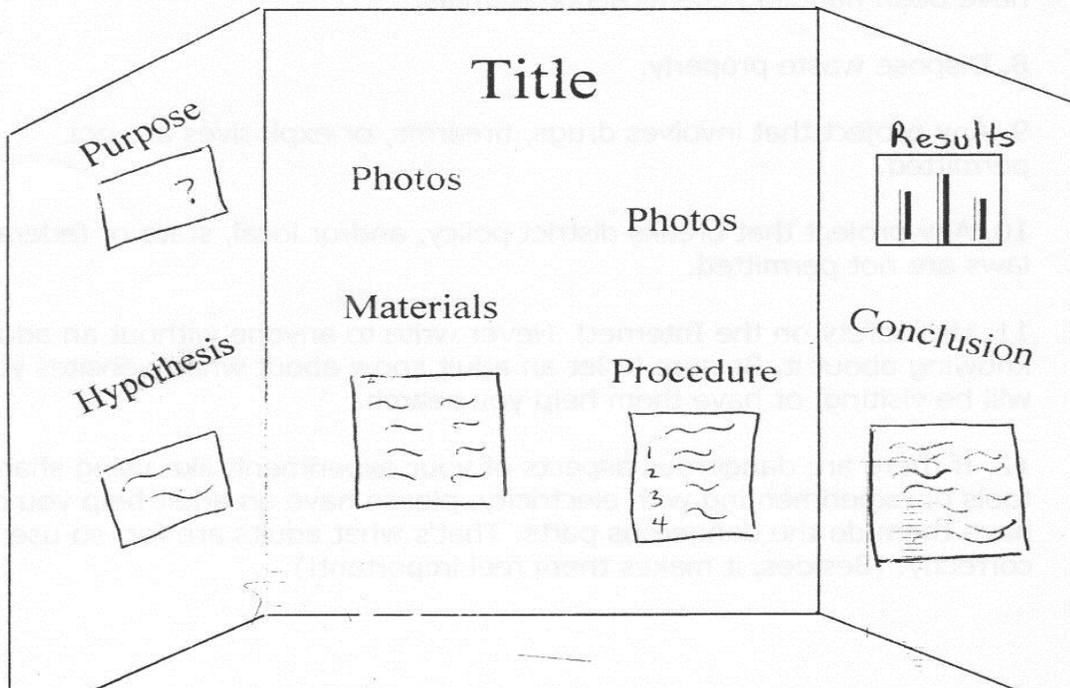


Teacher: Reproduce this page and the "Science Fair Time Line" page. Send them home with students to inform parents about the science fair and to help students prepare their projects. You may wish to use this chart with Frank Schaffer's *The Scientific Method* bulletin board set (FS-9492) and *Work Like a Scientist* chart (FS-2427).

**CHECKLIST
PROJECT POSTER BOARD**

1. **Statement of Purpose** – State the purpose of the project **in the form of a question**.
2. **Hypothesis** – State the hypothesis (educated guess that answers the project question)
3. **Materials** – List the materials used in the experiment
4. **Procedure** – Describe how the experiment was carried out. Provide a step-by-step explanation of how you conducted the experiment. Include drawings or photographs to help clarify your procedures.
5. **Data/Results** – Present data tables and graphs that show the outcome of your experiment
6. **Conclusion** – compare your results to your hypothesis. Did your findings support your hypothesis or not?

Miscellaneous: Be sure to include name(s)
Include photographs or drawings
This is a visual way to communicate to others so take your time and do a good job.



Science Fair Websites

1. **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. <http://www.usc.edu/CSSF/>
2. **Cyber Fair:** See sample fair projects, look through other student's examples, and see the steps involved in judging projects. <http://www.isd77.k12.mn.us/resources/cf/welcome.html>
3. **Experimental Science Projects:** Outlines steps in preparing a project (complete with an ideas list), and suggests the best ways to prepare one at different grade levels. <http://www.isd77.k12.mn.us/resources/cf/SciProjIntro.html>
4. **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/>
5. **Science Fair Central:** Includes cool project ideas, a science fair handbook, reviews of students' experiments, and more from Discovery Channel School. <http://school.discovery.com/sciencefaircentral/>
6. **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/>
7. **Scientific Method:** Describes the five steps of the Scientific Method that are helpful when creating a science fair project. Includes examples of wording and sample projects to explain certain steps. <http://school.discoveryeducation.com/sciencefaircentral/Getting-Started/Investigation.html>
8. **Super Science Fair Projects:** Guide to projects, topics, experiments, and tips for successfully completing a science project, including the six steps of the Scientific Method. <http://www.super-science-fair-projects.com/>
9. **What Makes a Good Science Fair Project?:** Short guide written by a group of experienced judges for the California State Science Fair. http://www.usc.edu/CSSF/Resources/Good_Project.html

Your Science Fair Oral Presentation

A lot of kids are scared of speaking in public or to a teacher/judge. Just imagine they are a fellow scientist who just wants you to share what you learned.

Relax, smile, and have fun. Remember, you are the expert and you had fun doing the project. But if you are a little nervous, we listed some things that you need to do during the presentation.

Helpful Hints:

- Look sharp, feel sharp, and you will be sharp. Dress nice that day, be polite, and speak clearly. You will show that you have confidence. Don't forget to look at your audience.
- Introduce yourself. Point to the title of your display. Tell your audience why you chose to study this.
- State your problem that you studied (your question.) Tell them about your hypothesis (what you thought might happen.)
- Talk about what you learned while researching your topic.
- Talk about the sources (books, websites, and interviews) that helped you understand your topic.
- Tell about your project and explain the steps you took to conduct your experiment. Be sure to mention all the materials involved and point out the pictures that you may have taken.
- If it applies, be sure to show them that you tested your experiment at least 3 times.
- Show them all of the cool graphic organizers that you made, like your tables and charts. Remember to point out the labeled parts of your graph or table to show that you know what it represents.
- Be sure to explain what your data means. Make sure you can read your graphs and tables. Let them know if you were surprised by the results, or if you know what would happen because you studied about it.
- Make sure you sound like an expert on your topic. Always use the appropriate vocabulary especially by using words from the Scientific Method, like: Problem, Hypothesis, Procedure, Results, and Conclusions.

INDIVIDUAL

SCIENCE FAIR REGISTRATION FORM

**DUE NO LATER THAN
FRIDAY, SEPTEMBER 19, 2011**

PLEASE RETURN YOUR FORM TO YOUR TEACHER
ONLY STUDENTS WHO REGISTER ON TIME WILL BE PERMITTED TO PARTICIPATE IN THE SCIENCE FAIR
**Students must submit a project as part of their graded classroom work.
It is a Science class requirement.**

GRADE LEVEL _____

HOMEROOM TEACHER _____

*STUDENT NAME _____

**PROJECT TITLE _____

DESCRIPTION _____

_____ I need an electrical outlet

***All parents must sign and approve their child's Science Fair Project.**

I acknowledge that I have received and reviewed the materials for the Science Fair and I am aware that my child is required to complete a Science Project.

I have approved and given permission for my child _____
to participate in this year's Science Fair.

Student's Signature _____ Date _____

Parent's Signature _____ Date _____

Teacher's Approval of Project

Please Conference with your Teacher about Project

Teacher's Signature _____ Date _____

Name: _____

PROJECT SUMMARY WORKSHEET

Due Date: _____

Topic: _____

Question (Statement of Purpose)
(Written as a Question)

Hypothesis:
If....., then I think

Materials I will need:

Procedures:
(Detailed Steps)

1st Quarter Student Checklist

Due Date	Component	Completed
Sept 19 th	Permission/Participation Slip – Signed and Returned	
Sept 19 th	Topic: Choose a topic. <i>Be sure it interests you. Don't pick one because you think it will be easy. Talk it over with your parents and when you have decided. Do not change your topic later. (Included in Participation Slip)</i>	
	Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project? (Included in Project Summary Worksheet)</i>	
	Hypothesis: Form a hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens. (Included in Project Summary Worksheet)</i>	
	Materials: List all materials that will be used in your experiment. <i>Include exact quantities for each item used. (Included in Project Summary Worksheet)</i>	
	Procedures: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order. (Included in Project Summary Worksheet)</i>	
	Research: <i>Look at any books that might help you, make observations by simply looking at things, talk to people, and find out as much as possible about your topic. Write down any ideas you have and where you got them. (Included in Resource Form – You must have THREE!)</i>	
	Deadlines: All deadlines to turn in components were met.	

Note: The Project Summary Worksheet can be accepted for the 1st Quarter. It does not need to be typewritten. If more space is needed on the Project Summary Worksheet, please use and staple extra paper to the original sheet.

2nd Quarter Student Checklist Written Report

Student: _____

Due Date	Component	Completed
	Title Page: The first page in the report should include the title of the project as well as the name and grade of the student.	
	Acknowledgement Page: The second page in the report should thank all individuals who assisted in the project.	
	Table of Contents: This page provides the reader with a list of the different parts of the project and the page number on which each section can be found.	
	The Purpose: State your purpose as a question or a statement. <i>What is it you that you want to find out by doing this project?</i>	
	Hypothesis: State your hypothesis. <i>What do you think is going to happen? Based on what you know or found out, what do you think the results of your experiment will be? After doing the experiment, it may turn out that your guess was wrong. It's okay if this happens.</i>	
	Research: This is part of the report that contains all the background information the student collected about the chosen topic. All gathered information should be summarized and presented in this section. It should be written in the student's own words and not copied from the source.	
	Materials: List all materials that were used in your experiment. <i>Include exact quantities for each item used.</i>	
	Procedures of Investigation: List and describe steps taken to complete the project. <i>Presented in chronological order or numbered order.</i>	
	Results: Tell what happened when you did the experiment. Show what happened by making a chart, graph, or table. Include the date, the time, and any other useful information. Write all measurements clearly.	
	Conclusion: This is a brief statement explaining why a project turned out the way it did. Students should explain why the events they observed occurred. The conclusion should tell whether the hypothesis was proven or not proven. It should offer an answer to the student's original purpose.	
	Reference Page: In alphabetical order, list all the resources that you used to research your project. Correct format was used.	
	Conventions: Proper use of spelling, grammar, punctuation, and capitalization. MUST be typed.	

3rd/4th Quarter Student Checklist

Student: _____

Display Board

Due Date	Component	Completed
	Title: <i>Does the title catch people's attention and is it large enough to be read from across the room?</i>	
	Purpose	
	Hypothesis	
	Procedures of Investigation	
	Materials	
	Results/ Graphs/ Charts: <i>Did the student use pictures and diagrams to effectively convey information about the project?</i>	
	Conclusion	
	Conventions: <i>Proper use of spelling, grammar, punctuation, and capitalization on all elements on the display board.</i>	
	Neatness	
	Organization: <i>Are the sections on the display board organized like a news paper so they are easy to follow?</i>	

Oral Presentation

Due Date	Component	Completed
	Introduction: <i>Student introduces himself and gives the title of the project.</i>	
	Statement of Purpose/ Hypothesis	
	Explanation of Procedure	
	Explanation of Results/Charts and Graphs	
	Conclusion	
	Good Posture and Eye Contact	
	Speaks Clearly	

NOTES