

December 20, 2013

Dear Parent(s) or Guardian:

The science fair project is an activity that draws upon basic and advanced skills that have been taught and emphasized in your child's science program. Students generate a science fair project and apply the scientific method to solve the problem. Your help may be needed throughout your student's project. For example, your child may ask for your assistance in the following ways:

- Conducting research via libraries or internet.
- Typing presentation materials for display.
- Retrieving necessary materials needed for their experiment.

Please go over this information and discuss it with your child. More details will be sent home after topic has been approved by your child's teacher.

Sincerely,

Mrs. Jennifer Jurasits
Jr. High Coordinator
Mrs. Nicole Nechvatal
Elementary Coordinator

PROJECT FOCUS

Students are encouraged to think of a question that they are interested in to make the project more engaging. Your question will drive your entire project. Make sure that your question is something that can be measured and answered by following the scientific process. Your question will also be the title of your project. Students can choose from the following types of projects.

- **Experiment** to answer original question using the Scientific Method.
- Create an **Invention** to solve a real life problem using the Engineering Design Process.
- Answer original question using in-depth **Research**.

TIMELINE/DUE DATES

The following should be worked on over Christmas Break and submitted to your teacher on **Monday, January 6, 2014**.

- Submit for teacher approval, a topic question/problem to investigate
- Do preliminary research. Collect and read books for your topic.
- Develop a hypothesis (your best guess) based on your preliminary research.
- Decide on the procedure that you will use to test your hypothesis.
- Make a list of your materials. Gather your materials.

These items will need to be worked on **during the month of January** and completed **prior** to typing your **rough draft**.

- Conduct your experiment or build and test your invention. Compile your research. Record data.
- Organize your data and results.
- Write your conclusion based on your results. Write a "real world" application of what you learned.

Type a rough draft of your science fair report and submit it to your teacher on **January 31, 2014**. This will allow for proper time to review and revise with peers and/or adults and return it to the student by **February 6, 2014**.

After submitting the rough draft, assemble your science fair display board and display items. This along with the final draft will be **due on February 18th** to begin judging for the week.

SCIENCE FAIR WRITTEN REPORT

Scientists always write reports of their research so that others may learn from them. Your research will be shared through your written report, a project display, and an oral presentation so others may learn from you.

TITLE PAGE Put the project title in the center of the page.

In the lower right corner:

Last Name, First Name

Grade ____

Teacher Name

School Name

Date (include year)

NOTE: This same, exact information will also go in the upper right corner of your report cover, and on the upper right corner on the back of the display board.

PURPOSE In three sentences or less, tell why you did your science project on the topic you chose.

ACKNOWLEDGEMENTS In one or more sentences, say, “thank you” to those who have helped you with your project.

TABLE OF CONTENTS List each of the following sections and the page numbers for each. Type the page numbers at the bottom of each page.

PROBLEM State the problem in the form of a question.

RESEARCH This part of your report has information that was found by other scientists and relates to your topic.

HYPOTHESIS State your best guess for answering the question before you have performed an experiment.

EXPERIMENT (This part is not needed for a Research project. For an Invention project, you may substitute the Engineering Design Process format.)

Include these parts:

- A. **MATERIALS:** List the materials you used.
- B. **PROCEDURE:** List the steps of your experiment. Do not use the words “I” or “you”.
- C. **DATA :** Show what you observed during the experiment. Include measurements you made. You may also use drawings to help show what you observed.
- D. **RESULTS:** Tell about your data and what you observed. Even if your data shows that your guess was not right, your project is still good.

CONCLUSION Use two or three sentences to tell what you learned from your experiment. Was your hypothesis valid? Why or why not?

APPLICATION Explain how what you learned from your project is applied in the real world.

SOURCES List all books, articles, and other sources that you used for your research. Only one book may be an encyclopedia reference. You may also interview experts to help with your studies.

DISPLAY INFORMATION

DISPLAY BOARD MATERIALS

The display board must be sturdy and stand by itself on a table. Foam core-board and cardboard are the best materials.

DISPLAY DIMENSIONS

1. When display board is laid open and flat, it should be no more than 48 inches wide.
2. Side panels should be 12 to 18 inches.
3. Height should be no more than 48 inches.

COLORS

If you need to paint your display board, enamel paint works best. Do not use water-based paint. Contact paper may also be used. Use contrasting colors on your board as backing and a border for all typed material.

LETTERING

Your title and subtitles may be computer-generated or cut from construction paper. Do not freehand the letters. The subtitles which are mandatory on the display board are: Problem, Hypothesis, Procedure, Results, Conclusion, and Application.

REPORT POCKET

There must be a “pocket” on the front of the display to hold your report.

DRAWINGS, PHOTOS, TABLES, AND GRAPHS

Drawings and photos are most useful on the display. Drawings should be drawn in pencil first and then retraced. They may also be scanned from the computer. Tables must be displayed in a clear, organized form. All tables and graphs must have explanatory titles. Graph axes must be labeled with a description of what each axis represents and the units being represented.

If you have a camera, you should photograph your experiment’s progress. A photo of you with your experimental set up is encouraged. All photos must be titled.

DISPLAY ITEMS

Something that represents the project should be placed in front of the board. Examples include: equipment or materials used, models, artistic representations, simulated items, samples, or specimens. There are endless possibilities - be creative!

SAFETY CONSIDERATIONS

No part of your display may pose a safety hazard. Do not include harmful chemicals, bacterial cultures, sharp objects, or any source of heat or flames. No live or preserved animals are allowed.

