2011-2012 7th and 8th Grade Science Fair Project

Dear Students and Parents/Guardians,

Welcome back to school! The second week of school is an excellent time for parents and students to begin thinking about the Science Fair. The 2011-2012 Science Fair will be here soon, so now is the time to start putting together ideas for a fun, informative and successful Science Fair.

Project Selection

In class, students will begin the brainstorming process for their projects. We are asking students to review their ideas for Science Fair with their parents to make sure that there is a plan for success.

In order to be successful, a few things need to be taken into consideration:

1) Find something that is interesting to study! This is going to be an in depth experiment that will take several months. The best idea is to pick something that is of interest to the student!

-If you can't stand worms, it might be a bad idea to pick worms to study for Science Fair!

2) What materials are available to the student for experimentation?

-While it may be a great idea to do research involving expensive equipment, if it is not available, it may be wiser to simplify the research and experimentation.

3) Past projects can be a great source of ideas!

-While you cannot simply re-do a previous experiment, there is no reason why previous work can't be built upon. Did you do an experiment studying the effect of light on plants? Maybe you can use that work as a springboard into something even more exciting!

4) Science Fair is a great opportunity for students to stretch their brains and expand their scientific horizons.

-The best science fair projects are those that students take ownership of! Science Fair should be FUN! Get creative!

Students are being asked to share their project ideas and receive approval from their parent/guardian and teacher before proceeding. A full timeline of activities is attached to this letter.

Display Board Materials

Board materials will be available at South Loop. For ten dollars ($10.00) a student can purchase a display board, die-cut lettering, border and pre-printed display labels. The date for the sale of the boards will be announced soon.

2011-2012 Exhibit Guidelines

Display Design and Evaluation

- The exhibit must not exceed dimensions of 76 cm deep and 122 cm wide. Build the exhibit no higher than 122 cm. No overhang is allowed. If the scientific apparatus exceeds the height limit, use photographs to show what has been done. No part of the project may be placed on the floor.
- Construct your own exhibit; teachers and parents are to provide only the necessary guidance, encouragement, and constructive criticism.
- Keep the title of your project brief, captivating, and prominently visible on the exhibit. It may contain no more than 45 characters and spaces. Titles in excess of 45 characters will be shortened to fit into available space on the entry form.
- Make lettering neat and uncluttered. Make sure all words are spelled correctly.
- Determine the best way to present the research. The presentation may include graphs, charts, posters, 35 mm slides, PowerPoint presentations, videotape, transparencies, demonstration of apparatus, and other components. Attach a copy of your *Abstract*, *Safety Sheet*, and endorsement(s) (if necessary) to the front of your display board.
- Exhibits must conform to size limitations. No easels or tripods are allowed on the floor around the exhibit. Floor-mounted exhibits will not be considered for competition.
- Exhibits must be constructed so that wall space is not required. All exhibits must be freestanding. Objects may not be attached to draperies or the exhibitor identification sign. No lighting of any type may be used to illuminate the exhibit.
- The City Science Fair Exhibits Committee will provide space on a table, a table covering, an identification sign, and an extension cord (if needed). The student must provide all other needs of his/her exhibit (for example, transparent tape, tacks, staples, tools). The exhibit space can only accommodate a display of the following dimensions: 76 cm deep, 122 cm wide, and 122 cm high. No exceptions are made.
- All equipment and materials are exhibited during the fair at the risk of the exhibitor. The Science Fair Exhibits Committee, the CPS Student Science Fair, Inc., and the Museum of Science and Industry assume no responsibility for loss or damage to such equipment and materials. A security room is available for overnight storage of valuables.

- Normal wear and tear on exhibits is to be expected during the time the fair is open to the public. For this reason, each exhibitor is advised to protect his/her project as completely as possible. Valuable equipment should be fastened securely to prevent its removal and should be safely stored when the exhibitor is away from his/her project.

Student Resources

A wealth of materials is available for students that require additional assistance. While some class time will be devoted to the Science Fair, students will be expected to work on the majority of their projects independently. To assist students, teachers will be available before and after school. It is the responsibility of the student to solicit additional help! Please, do not wait until mid-November to ask for help!

Another excellent resource is the Chicago Public Library. Almost every library has a section devoted solely to Science Fair. A large part of the project is research, so if students to not already have a library card, it is high recommended that students get one as soon as possible.

In addition to the resources at the school and library, the internet is a wonderful source for Science Fair information. Mr. Fiorenza's website will be updated with documents and links. (fc.cps.edu/~jbfiorenza). Also useful is the CPS Science Fair website (http://www.chicagostudentsciencefair.org/).

Research Paper Expectations

The research paper portion of the Science Fair allows students to demonstrate their mastery of the subject matter that they are studying. Research should be done using primary sources. Wikipedia should never be used as a primary source of research. A reputable Wikipedia entry is well sourced and documented. Wikipedia can be used as a general reference, but please do not use it as a primary source of information.

Student work that is turned in must properly cite and reference all sources. Plagiarism, the representation of someone else's work as ones own, is a serious academic violation. Plagiarism is a Group 3 offense, per the Student Code of Conduct. Student work must include citations and references.

Name _____

Homeroom _____

Date:

2011-2012 Science Fair Brainstorm and Project Selection

I am most interested in the following areas of science:

1)

2)

3)

I have access to the following materials that might be useful for a Science Fair Project

1)

2)

3)

The subject that I would like to study and experiment on is:

1) _____

The variables that will be tested are:

Independent:

Dependent:

Independent Variable: is a factor that can be varied or manipulated in an experiment This is what you will be changing during experimentation.

Dependent Variable: is what you measure in the experiment and what is affected during the experiment. This is what you will be observing, or measuring during experimentation.

Example: In an experiment measuring the effect of sunlight on plant growth, sunlight is the independent variable, and plant growth is the dependent variable.

South Loop Elementary 2011-2012 Science Fair Contract

I understand that as part of the Science course requirements at South Loop Elementary I am required to complete a Science Project that represents my own work.

I understand that a final typed research project will be submitted along with a display board and in addition an oral presentation of research and experimental findings will be presented to my science class.

I understand that my writing will be original, unique and my own work, unless properly cited and sourced. I understand that failure to submit my own work will result in failure and that the Student Code of Conduct will be used in situations where work is clearly plagiarized.

I understand that there will be drafts turned in, per the schedule attached to this document and that I am responsible for making sure all assignments are submitted in a timely manner.

I understand no group work is allowed and that I must work on my project independently.

I understand that I cannot do the exact same project as another person, including a sibling.

I understand that my experiment will need to be approved before I begin working. I understand that the use of dangerous chemicals, objects or animals in my research must be approved ahead of time. I understand that some hazards are deemed far too dangerous and I will change my project if I am asked to do so.

I understand that my final project will be graded per the rubric that is attached to this document. I understand that each of the milestones will be graded, in addition to the final grade that I will earn.

I understand that this contract will be stored in my binder for future use and reference.

Student Name (print) _____

Student Name (sign) _____

Parent/Guardian (print) _____

Parent/Guardian (sign) _____

Teacher (print) _____

Teacher (sign) _____

2011-2012 Science Fair Timeline

The following timeline provides the due dates for the 2011-2012 Science Fair. All milestones are due on the date published in typed, printed form. Hand written copies are not acceptable. Computers and printers are available after school for any students wishing to complete their work.

Date	Milestone	
9/23/2011	Project Selection and Approval Safety Considerations	
10/14/2011	Hypothesis/Purpose Endorsements (If required) Research First Draft	Outline, research first draft References
10/21/2011	Procedures Due	
11/8/2011	Research Second Draft	Outline, first draft and revisions due References
11/17/2011	Results and conclusion	
11/30/2011	Final Project due to teacher*	
12/8/2011	Science Fair	

*Final submissions must be in APA format and submitted per the requirements of the science fair. Papers must be printed.

S0UTH LOOP SCHOOL

1212 S. Plymouth Court, Chicago, IL. 60605
Phone (773) 534-8690 Fax (773) 534-8689
Tara Shelton, Principal Timothy Butler, Assistant Principal

November ___, 2011

Dear Parents/Guardians:

We all have been preparing and the time has come for Science Fair! Teachers and students spent a great deal of time in the first quarter on Science Fair. All that hard work is ready to pay off.

South Loop Middle School will hold its annual science fair on December 8, 2011 from 5:00-6:30pm. Each student is required to participate in this important learning experience. Student projects are to be completed at home independently by the student.

7th and 8th grade project boards and papers are due in class on November 30th.

The four best projects in 7/8th grade will be selected for the area science fair. Judges will select winners from this group to represent South Loop Middle at the city wide Science fair.

We hope you will encourage your child to participate in this special activity. If you have any questions, please contact Mr. Butler at 773-534-8690.

Thank you,

Mr. Butler
Mr. Fiorenza

Research Report : Science Fair Research Report

Teacher Name: **Mr. Fiorenza**

Student Name: _____

CATEGORY	4	3	2	1
Organization	Information is very organized with well-constructed paragraphs and subheadings.	Information is organized with well-constructed paragraphs.	Information is organized, but paragraphs are not well-constructed.	The information appears to be disorganized. 8)
Amount of Information	All topics are addressed and all questions answered with at least 2 sentences about each.	All topics are addressed and most questions answered with at least 2 sentences about each.	All topics are addressed, and most questions answered with 1 sentence about each.	One or more topics were not addressed.
Quality of Information	Information clearly relates to the main topic. It includes several supporting details and/or examples.	Information clearly relates to the main topic. It provides 1-2 supporting details and/or examples.	Information clearly relates to the main topic. No details and/or examples are given.	Information has little or nothing to do with the main topic.
Sources	All sources (information and graphics) are accurately documented in the desired format.	All sources (information and graphics) are accurately documented, but a few are not in the desired format.	All sources (information and graphics) are accurately documented, but many are not in the desired format.	Some sources are not accurately documented.

Mechanics	No grammatical, spelling or punctuation errors.	Almost no grammatical, spelling or punctuation errors	A few grammatical spelling, or punctuation errors.	Many grammatical, spelling, or punctuation errors.
First Draft	Detailed draft is neatly presented and includes all required information.	Draft includes all required information and is legible.	Draft includes most required information and is legible.	Draft is missing required information and is difficult to read.
Paragraph Construction	All paragraphs include introductory sentence, explanations or details, and concluding sentence.	Most paragraphs include introductory sentence, explanations or details, and concluding sentence.	Paragraphs included related information but were typically not constructed well.	Paragraphing structure was not clear and sentences were not typically related within the paragraphs.
Graphic Organizer	Graphic organizer or outline has been completed and shows clear, logical relationships between all topics and subtopics.	Graphic organizer or outline has been completed and shows clear, logical relationships between most topics and subtopics.	Graphic organizer or outline has been started and includes some topics and subtopics.	Graphic organizer or outline has not been attempted.
Diagrams & Illustrations	Diagrams and illustrations are neat, accurate and add to the reader's understanding of the topic.	Diagrams and illustrations are accurate and add to the reader's understanding of the topic.	Diagrams and illustrations are neat and accurate and sometimes add to the reader's understanding of the topic.	Diagrams and illustrations are not accurate OR do not add to the reader's understanding of the topic.

Name _____

Homeroom _____

Abstract: (Write one paragraph for purpose, procedure and conclusion)

Purpose:

Procedure:

Conclusion:

Safety

Write one paragraph that describes the safety hazards and precautions that were taken during this experiment.

Signed:

Teacher: _____

Student: _____

Endorsement Page

Include a signed copy of the endorsement for this project, if required.

Title Page

(title)

_____

(category)

_____

Sponsoring Teacher: _____

Signature of Science Fair Coordinator: _____

(Insert Your Name)

1212 South Plymouth

South Loop School

Chicago, IL 60605

Table of Contents

Insert Your Name

Table of Contents: (Create a Table of Contents for what follows)

Acknowledgements: (Give credit to everyone that helped you do your project – teachers, parents etc)

Purpose and Hypothesis: (Write the purpose and Hypothesis as complete sentences. Hypothesis needs to be in If/Then format.)

Research: Review of Literature: (Put your 5 paragraph research paper here)

Materials: (List all materials used)

Procedures: (Put numbered step by step procedures here)

Results: (Summarize the findings of your experiment. Include data, calculations and units of measure. Graphs, charts and tables should be included here.)

Conclusions: (Analyze your data and refer to your hypothesis. Is your hypothesis correct or incorrect.)

References: (Put your references here.)