St. Joseph School

Science Fair 2012

May 29-31

St. Joseph School will hold its annual **Science Fair on May 29-31.**

This is a student project. Students will choose a topic that interests them and is within their range of ability. It is important that your child understands the project. Your child may be asked to answer questions regarding the procedures, results, and conclusions with the judges.

Students in grades **K-2** will work on a class exhibit with their teacher. Students in grades **3-5** may choose to do an experiment or an exhibit. **Middle School** students must do an experiment reflecting their science theme for the year (Earth Science = 6th, Life Science =7th, Physical Science = 8th.) Be sure to check out the library and the Internet for great ideas. Both are excellent sources of information.

We encourage parents to support their child's efforts at every step, guiding and encouraging whenever necessary. Let the final project reflect your child's individual effort and design.

Your child's teacher will discuss the requirements/procedures/ topic ideas in class. If you have any questions please feel free to contact your child's teacher, Mrs. Stringer, Mrs. Martinson, or Mrs. Miller.

The Science Fair will be held in the Parish Center. Judging will take place on Tuesday May 29th.

Thank you for your support during this learning process.

Science Fair 2012
Directions for Grades 3-5

The Science Fair will be held on Tuesday, May 29th. Before you begin, be sure to fill out the Science Fair Project Sheet and return it to your teacher for approval.

The following is a list of do's and don'ts:

1. This is a student project and parents should only offer guidance.

2. Electrical outlets are not available. Battery operated projects are acceptable.

3. No harmful chemicals are allowed. Any project involving live animals, animal tissues, or human subjects must receive prior permission from your teacher. Your teacher will give you a special form to fill out. Failure to include this permission form will result in disqualification from judging at the Science Fair.

4. No commercially purchased kits will be accepted for judging.

5. Please write your **student number** on the top right corner of the front of the project. Print your name and grade on the back of your project.

6. Observe all requirements and judging criteria.

Please see your teacher if you have any questions.

Science Fair 2012
Directions for Grades 6-8

The Science Fair will be held on **Tuesday, May 29th** and all projects in the Middle School grades will be completed at school this year.

Please be aware and consider the following:

- You have the choice of working alone or with one other student.
- You will need to submit and be approved for your science project idea. **These are due on Thursday, April 5th**.
- We will begin Science Fair projects the week of April 23rd.
- **You will need to bring all materials (tri-fold board, lettering, pictures, tools, equipment, etc.) to complete your project to school by April 23rd.**
- No commercially purchased kits will be accepted for judging.
- No electrical outlets are available. Battery operated projects are acceptable.
- No harmful chemicals are allowed.
- Any project involving live animals, animal tissues or human subjects must receive prior permission from your teacher. Failure to comply will result in disqualification from judging at the Science Fair.
- Observe all requirements and judging criteria.

Please see Mrs. Martinson for any clarifications.

St. Joseph School Science Fair

Presentation Board Requirements

(Points noted are the criteria used by the judges.)

EXPERIMENTS - Using Scientific Method

(Displays MUST contain the first 6 components.)

1. **Question:** (10 pts.) State the question you want to answer, or a problem you want to solve, or a theory you want to prove or disprove. **(This must be stated in the form of a question.)**

2. **Hypothesis:** (10 pts.) Briefly describe what you think the answer to the problem is.

3. **Materials:** (10 pts.) List materials you used to conduct experiment (do not include items you needed to make the display itself, i.e. poster board, paper, etc.)

4. **Procedure:** (10 pts.) Describe the actual steps of your experiment.

5. **Results:** (20 pts.) Describe what actually happened when you did your experiment.

6. **Conclusions:** (20 pts.) What did you learn from the results. Did you answer your question, solve your problem, prove or disprove your hypothesis? Why or why not? What problems did you encounter in doing your project and how did these problems affect your results? **DO NOT SIMPLY RESTATE YOUR RESULTS!!!**

7. **Title (optional):** You may choose to give your display a separate, catchy title. Or, your question may serve as your title.

EXHIBITS — (displays MUST contain each of the following 5 components)

1. Name **WHAT** you are exhibiting (solar system, shell collection, bug collection.) (10 pts.)

2. Explain WHY you chose this subject (e.g.," I want to learn more about several types of butterflies...") (15 pts.)

3. Prepare the exhibit, the actual items displayed and labeled. You can use charts, graphs, drawings, etc. Include **RESEARCH** on the topic. (25 pts.)

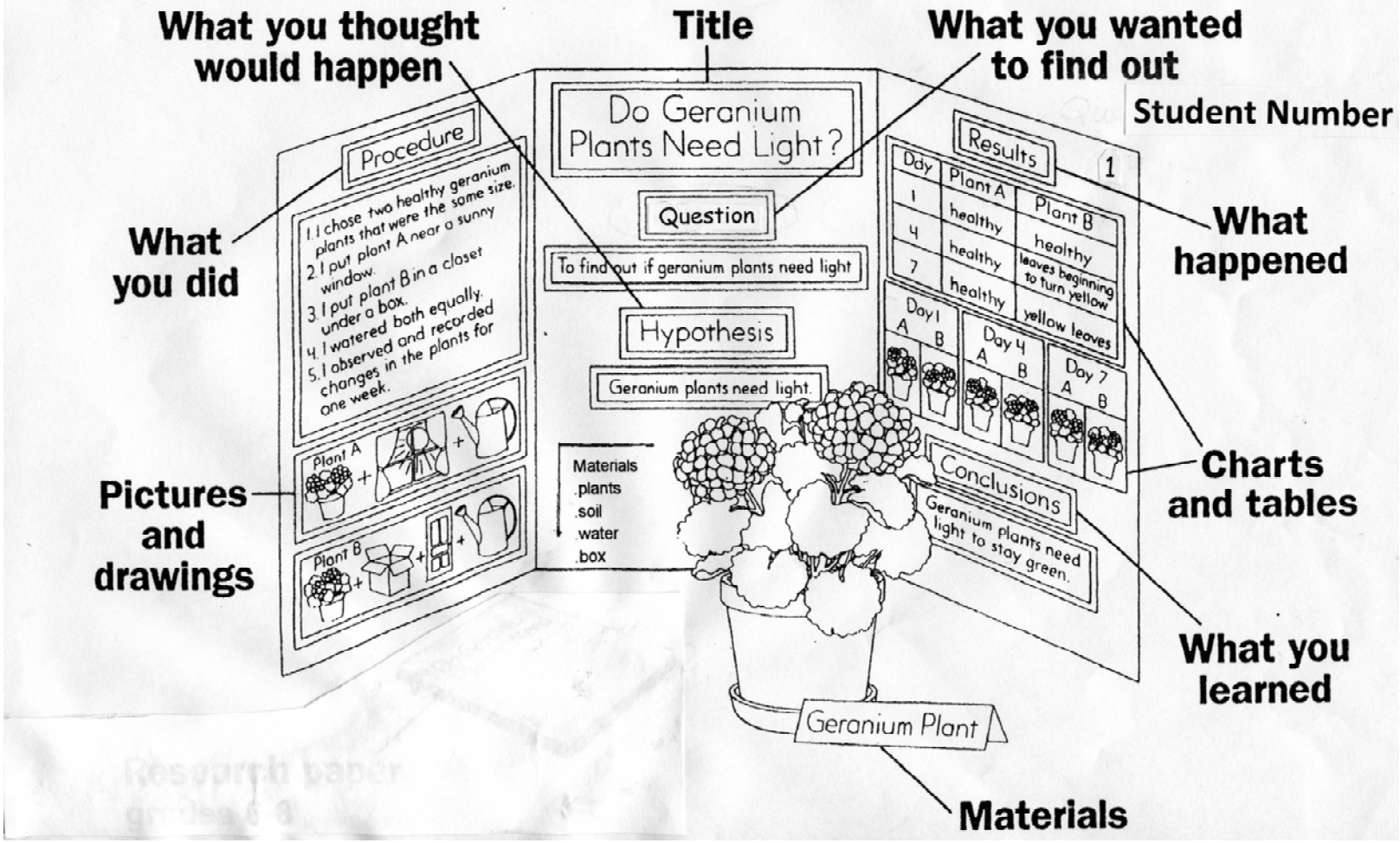
4. Explain **WHAT YOU LEARNED** by setting up this exhibit that you didn't know before. (i.e. "Before doing this project, I thought.... However, I learned that.....") (15 pts.)

5. State your **CONCLUSIONS** (summarize your project - may state opinions here.) (15 pts.)

NOTE: Appearance of your presentation for both experiments and exhibits is worth 20 points. Appearance includes neatness, use of color, effective use of space, creativity, etc.

Use Presentation Board or Poster Board

Displaying a Science Fair Project



SCIENCE FAIR
Judging Criteria

The Science Fair judges will be looking for the following qualities when judging your science project.

APPEARANCE - Is the project neat, organized, colorful, and creatively presented?

ALL REQUIREMENTS PRESENT - Are all required components present?
Note: On experiments, required components must be labeled.

SPELLING / GRAMMAR / CLARITY - Is written material spelled correctly and easy to understand?

CONCLUSIONS - Does the student demonstrate scientific thinking when evaluating the results of the experiment?

CREATIVITY - Is this an original idea or unique approach to the problem?

THOROUGHNESS - Is project complete leaving few/no questions unanswered?

Remember that if your project receives one of the top 6 scores in your grade, you will be called in for an interview by the judges. You will be asked questions regarding the science behind your project. So, it is important that you fully <u>understand</u> and can <u>explain</u> your science project without reading your display.

Keeping all of these criteria in mind
will lead to an outstanding project.

SCIENCE FAIR PROJECT

Name_____Date_____

EXPERIMENT: State the QUESTION that you will be answering.

_____

_____

EXHIBIT: Describe what you will be displaying.

_____

_____

Does your project involve:

~ Toxic/hazardous chemicals?	(NOT ALLOWED)	
~ Bacterial cultures?	(NOT ALLOWED)	
- Live/dead vertebrates, invertebrates		
or microorganisms or parts?	YES	NO
~ Tissue samples?	YES	NO
~ Human subjects?	YES	NO

(An answer of yes to any of the above questions requires special permission by the teacher. For grades 6-8, there are special forms to fill out for entry into the OCSEF. These forms are available online at www.ocsef.org You must complete the form before turning in project, or it will not be eligible for award.)

Parent Signature: _____

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I give permission to this student to complete the project as stated above.

Teacher Signature: _____ Date_____

Comments:

_____

_____

Practical Hints for Science Fair Projects

http://www.scn.tsu.edu/~dennisl/CMS/special/sf_hints.html

Science Fair Projects should be FUN and educational, with the emphasis on FUN. Here are some helpful hints which will help you think of and carry out a science fair project you will enjoy learning from.

- **Pick something you are interested in.**

  Since science fair projects require a lot of effort, you need to be interested in your subject or you will not have a good time doing the project and you will not learn much from it. In trying to pick a science fair project I would start by writing down the things I was interested in. Once I had done that I would try to find a project which would involve studying the things I was interested in.

  For example, if you like music you could try to measure and compare the volume of sound from different CD's to try to determine which CD's are loudest. Or you could try to determine the effect music has on people's emotions. If you like sports you could try to measure how the distance a basketball travels in the air is related to the angle at which it is thrown upward.

- **Get all the assistance you can in performing and understanding your project, but do the work yourself.**

  If you do the work yourself you will get a much better understanding of why things do and do not work as expected.

- **Don't wait until the last minute to start your project.**

  A good project requires that you spend a lot of time thinking about how it works. In addition, careful measurement require you to repeat your experiment more than once. That takes time.

- **Your project doesn't have to be complicated to be a good science fair project.**

  The most important things to demonstrate with your science fair project are that you understand your project and have explored the scientific and technical issues behind your project as well as you can.

- **Don't get upset if your experiment(s) demonstrate that your hypothesis is incorrect.**

  Historically some of the most important experiments have been those which disproved the original hypothesis for conducting the experiment. You may even want to revise your hypothesis in light of what you find out from your experiments especially if you find a more interesting line of research.