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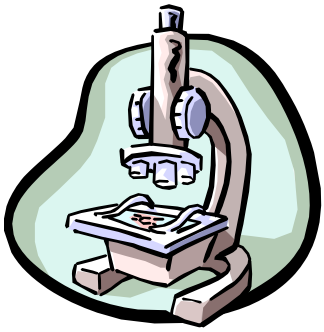
Spratley Gifted Center
7th Grade Gifted Science Fair
Information Packet



This packet contains the following sheets:

- **Parent and student letter (must be signed)**
- **Schedule and Due Dates for Science project assignments**
- **Science Fair project Proposal (requires signatures)**
- **Project Essentials page**
- **Rough draft format**
- **Science project rubric**
- **Guidelines for choosing a Science fair project**
- **Science project websites**

Please read this information carefully with your child. Sign and return the bottom portion of the letter by the date indicated.

Keep this packet along with any other research materials/notes in your science fair folder.

RE: Science Fair Projects September 2013
Dear Students and Parents,

All middle school students of the Spratley Gifted Center are required to complete a science fair project this year. This is a long-term assignment and is to be done entirely out of class on the student's own time. Students may work alone or in pairs but not in groups greater than two.

The emphasis for this project is on the scientific method and all projects must have results that can be **measured**, counted and recorded and include photographs of the project. Demonstrations and reports (e. g. solar systems, volcanoes) are not acceptable. Check your child's procedures to be sure there are no safety hazards. Live animals may not be brought to school for the fair (bring photos instead). Students experimenting with plants should start their project now in September.

Although some of the work will be done during the 1st nine weeks, the final grade for the project will be recorded during the 2nd nine weeks. Individual assignments relating to the project will be counted during the 1st & 2nd nine weeks. Assignments will be entered under the "project category" portion of a student's grade. In the event of an inclement weather day, the final project due date may be extended one day. Teachers will select a number of outstanding projects to be recommended for the Tidewater Science fair. These students will have a unique opportunity to participate in the Tidewater Science Fair held at Old Dominion University in March. Students need to organize their project on a 3-sided backboard or on a piece of full-sized poster board. Please note: **Participants at the Tidewater Fair are required to have a 3-sided backboard.** The backboard or poster board must include all components of the project (as stated on the rubric) and be able to stand alone (no report is needed). I have also provided a list of useful science fair websites.

PLEASE NOTE: Late projects will incur points deducted (15 pts) if turned in after the due date (see schedule next page). NO PROJECTS WILL BE ACCEPTED AFTER THE 20TH OF DECEMBER (late grace period). Please call right away if a family emergency prevents your student from submitting their project on time. EXCUSED ABSENTEES MUST SUBMIT THEIR PROJECT ON THE DAY OF RETURN REGARDLESS OF BLUE/SILVER DAY. IF YOUR CHILD IS ON A SUSPENSION THE DAY THE PROJECT IS DUE, THE PARENT MUST BRING IN THE PROJECT ON OR BEFORE THE DUE DATE TO AVOID A LATE PENALTY.
Students are required to bring their project to class. If a parent drops off a project in the main office, the student should pick it up and bring it to room 110.

Please sign and return the bottom portion of this letter to your teacher by **blue-9/23 silver-9/24**
Sincerely,
Mrs. Groth

I, the parent or legal guardian of _____ have read this letter & schedule concerning this years' science fair project. _

_____ _____ _____
Parent/Guardian Signature Student Signature Date

Schedule for Science Fair Project Due Dates

Due Date	Assignment	Point Value	Which 9 weeks grade is attributed to
(B) 9/23 **(S)** 9/24	Turn in signed bottom of letter.	5	1st
(B) 10/7 **(S)** 10/8	Science fair Project Proposal	10	1st
(B) 10/25 **(S)** 10/24	Project Essentials Page	10	1st
(B) 11/21 **(S)** 11/22	Rough Draft	20	2nd
(silver) 12/16 **(blue) 12/17**	Final Project Display board	100	2nd

All work must be turned in on the due date. Individual assignments pertaining to the project are graded under the project category. Assignments will only be accepted one day late for half credit. **Exception:** The last day to receive any points for the rough draft is **November 27, 2013.** If this is the case, the student will receive **10 points** for turning it in late. If you think you are going to be absent for any reason; turn in your rough draft **early**; they are always accepted early and this gives you more time to "perfect" your final project. **No rough drafts will be read for grammar, spelling, errors, etc. in December.** Work must be turned in neat and legible.

Do not wait until the last moment to do your work.

Fall 2013

Science Fair Project Proposal

NAME_____ DATE_____ BLOCK_____

- ❑ Check this box **only** if you are going to complete a science fair project together with a partner. If so, list partner's name:_____

  Partner's Science block: _____

*The due date for this sheet is **October 7, 2013- Blue day /October 8, 2013-Silver day**

Topic- _____

Purpose- (Briefly describe **what** you are trying to find out & **why** you chose this project. Tell how this relates to real world problems/situations.)

_____

_____

_____

Problem- (The question to be answered/ Write the problem or topic statement as a **question**.)

_____

_____

Hypothesis- (What you want to test expressed in an "If, then" statement.)

_____

_____

_____

Where did your project idea come from? (Check one)

- ❑ Internet (provide internet address) _____
- ❑ Book (give title and author) _____
- ❑ Family member (relation) _____
- ❑ Friend
- ❑ Media (television, radio)
- ❑ Science teacher (name) _____
- ❑ Project is a continuation from previous year's work
- ❑ Other (specify) _____

Where will your experimentation take place?

- ❑ Home
- ❑ Parent's work
- ❑ Other (specify) _____
- ☒ Certified laboratory
- ☒ Commercial setting (i.e., grocery store)

Estimated cost of project (**excluding** back board, office supplies like paper, pencil, calculator)

- ❑ $0-$10
- ☒ $11-$20
- ☒ $21-$30
- ❑ $31-$40
- ❑ more than $40

Will you be using any chemicals, biological materials, or human subjects for your project?

- ❑ No
- ❑ Yes (check appropriate box below)
- ❑ Human subjects
- ❑ Cultures involving bacteria, mold, fungus etc.
- ❑ Chemicals (including bleach, vinegar, etc.)

Write your general procedures <u>step by step</u> below & <u>attach a separate sheet of paper if necessary</u>. (Do not copy & paste directly from the Internet! Do not include trip to store to buy materials.)

1._____

_____

_____

_____

_____

_____

Student Signature _____ Teacher Signature _____

Parent/Guardian Signature _____ Date_____

Due Date: October 25th (Blue) October 24st (silver)

Name _____ Block _____ Date_____

Project Essentials

Title- _____

Materials- (list and give amounts of each, brand, etc).

_____

_____

_____

_____

_____

Independent variable (the one thing you will purposely change)

_____

Dependent variable (what you will measure quantitatively)

_____

Sources (List at least 3 sources you are using or intend to use to complete your science project and the dates accessed. One of these resources may be where you project idea came from, for example if your idea came off the website www.sciencebuddies.com , then you would just need two more sources.) Other sources may be used to support your hypothesis, give background information when introducing your problem or even help in explaining results from other scientists who have tried similar projects or run similar trials.
Name of website, actual web address, date student accessed. (this is the minimum required for web sources; if you know the authors include that as well by last name before the name of site).
1.

2.

3.

Photos: I will have _____ photo(s) of _____. These photos will specifically show:

_____.
Student Signature _____Teacher Initials _____

Name_____ Date_____
Assignment_____ Block_____
Rough Draft-due (blue-11/21) & (silver11/22)
TITLE

PROBLEM (state in the form of a question)

HYPOTHESIS (If/then statement)

VARIABLES
INDEPENDENT-

DEPENDENT-

CONSTANTS & CONTROL

MATERIALS (list type & amount)

PROCEDURES (list in steps)

SOURCES (at least 3 required; you may use (http://www.citationmachine.net) to help write your sources cited, follow MLA format).

DATA (OPTIONAL ON THIS ROUGH DRAFT)

(Optional Portion of Rough Draft but REQUIRED on Final Project)

ANAYLSIS OF DATA (graph)

RESULTS (Explain/summarize what you found out, compare different sets of data, averages, etc)

CONCLUSION (Relate your data to your hypothesis/Was your hypothesis supported? Can you account for any discrepancies)

PHOTOS (Don't forget to include on final and label them accordingly)

SCIENCE PROJECT **Block_____** **Date _____**
Name_____Partner (if applies) _____(B)due 12/17 (S) due 12/16

Title: _____

0= no evidence 1= minimal evidence/needs work 2= below average 3= average 4= above average 5= superior

Category	Points Earned	Comments
Mechanics:		
Title	0 1 2 3 4 5	_____
Neatness	0 1 2 3 4 5	_____
Organization/Structure	0 1 2 3 4 5	_____
Sources/Bibliography	0 1 2 3 4 5	_____
Process:		
Hypothesis (clear)	0 1 2 3 4 5	_____
Variables	0 1 2 3 4 5	_____
Constants(things that stay same) & control (sample to compare to)	0 1 2 3 4 5	_____
Materials List	0 1 2 3 4 5	_____
Procedure (in steps)	0 1 2 3 4 5	_____
Data collection (*at least 3 trials, charts)	0 1 2 3 4 5	_____
Analysis of Data (graphs, comparisons)	0 1 2 3 4 5	_____
Photo(s) of experiment	0 1 2 3 4 5	_____
Results (explains & Summarizes data)	0 1 2 3 4 5	_____
Conclusion (relate it to hypothesis)	0 1 2 3 4 5	_____
Effectiveness:		
Problem identified Clearly as a question	0 1 2 3 4 5	_____
Purpose (valid reasons)	0 1 2 3 4 5	_____
Visual/Display (overall)	0 1 2 3 4 5	_____
Completed on time	**15**	_____

***Note: If you do not have a control; still include on your board & put N/A or None to get credit.**

TOTAL _____ OVERALL GRADE_____

Guidelines for Choosing a Science Fair Project

The following contains guidelines and suggestions to assist you in helping your child choose an appropriate project.

1. The project must be an experiment, not a demonstration or simply a research project. Volcanoes, solar system models, research projects on whales, etc. are not acceptable.

   To help determine if a project idea is an experiment:

   •It must identify a problem that you will try to answer through doing tests (This is usually a question). Example: Do carrot seeds or bean seeds sprout faster?

   •It must have results that can be measured, counted or recorded with photographs and drawings.

2. Change only one thing (variable) in your experiment. Everything else must stay the same for each trial (test). For example, if you are testing the effect of plant food "xyz" on plants, you must use all the same type of plants, water them equally, give them equal amount of sunlight, etc. The only thing you can change is that half of the plants will get the plant food and half will not. This makes the test "fair". Then you can measure and compare the growth.
3. Do more than one trial and/or use more than one or two subjects (example: plants) in your tests.
4. Use tools such as rulers, thermometers, or balances to measure correctly. Use metric.
5. Choose projects that require materials that are inexpensive, easy to obtain, and safe to use.
6. Make sure that you will have enough time to set up the experiment and observe and record the results. Some experiments with plants or animals may require two or more weeks to observe and measure the growth or response. These types of experiments are good choices, but start early!
7. The content and concepts in the experiment should be appropriate for the grade level of the student. Students should learn something from doing the project and should be challenged, but they should not do projects that are designed for older students.

Unacceptable projects/Not allowed

- Below grade-level projects
- Projects involving **volcanoes, animal cruelty, or "musical heartbeats"**
- Most psychological projects unless you have a large number of human subjects (Note: 1 or 2 subjects representing an age or gender category is not enough)
- Projects involving **cookie or cake baking**
- **Projects involving growing mold on food (too basic and mold spores can cause illness).**

DON'T EVEN THINK ABOUT PLAGIARIZING!

SCIENCE PROJECT WEBSITES

(All have http:// prior to address)

http://biology.about.com/od/biologysciencefair/a/

http://school.discoveryeducation.com/sciencefaircentral/Getting-Started.html

www.energyquest.ca.gov/projects/index.html

www.sciencebuddies.com

www.scienceproject.com

www.scifair.org

www.stevespanglerscience.com/

www.crystal-clear-science-fair-projects.com/science-fair-project-ideas.html

www.factmonster.com/spot/sciproject2.html

***Please Note: A project chosen from one of these websites does not mean it will be automatically approved. It must meet all other science fair requirements involved and be seventh grade level or higher.**