

Dear Parents/Guardians:

We are excited about the interest in this year's Science Fair, which will take place on Thursday, January 23<sup>rd</sup>, 2014. With about two months to go, we want to share with you the following important information.

A comprehensive packet accompanies this letter. Please read it with your child so both of you understand the purpose and the process of this project. If you have any questions, please contact your child's teacher.

We want our budding scientists to have fun and to be safe. It is strongly advised that you supervise any experiments; especially those involving chemicals, electricity, or that require sharp tools. Always insist upon safety gear. These precautions will assure that your child's inquiry into the magnificent world of science is safe.

As your child progresses through the scientific method of inquiry, here are a few suggestions:

The emphasis for this project is on the scientific method. Students should select a topic that centers on a **problem that is testable**, with **results that can be measured, counted, or recorded** through charts, graphs, and photographs. Demonstrations and reports (models of the solar system or volcanoes) are not acceptable. Parents are encouraged to provide guidance in the selection of a topic and assistance with planning. **However, the project must be the child's own work.** 

Check your child's project to be sure there are no safety hazards. Students may use small invertebrate animals (animals without backbones) such as earthworms or crickets. However, live animals may not be brought to school (photographs must be used instead). Students experimenting with plants should start the project immediately!

Be sure that your child keeps a Science Folder with one pocket on each side. In one pocket, he/she should have the Science Fair Project Packet. In the other pocket, he/she should have their Science Fair Planning Form.

Remember: The face of an individual is not permitted in any photograph that is displayed.

Experiments that involve plants or animals must start soon so schedule deadlines are met.

I Students may type the information that will go on the Science Display Board, if they wish. If they wish to write it, it must be very neat and print, no cursive.

I The written report must be typed.

I Students must submit a research log with their written report.

I Students may also enhance their project by using the computer for illustrations (in the form of tables, graphs, clip art, etc.); however, they must include at least 2 student made illustrations. All illustrations must be cited even of the student completed it.

I Finally, we encourage parental assistance; however, we do not support parents doing the project for their child. The students will be presenting their experiment in class and they will have to answer questions about their project. Remember, it is the student's project; we want him/her to take responsibility for it. Be there to help prioritize activities and effectively manage their time.

#### Please be sure to sign and return the following page to your child's teacher. Your signature is due on <u>December 13th,</u> 2013 or December 16th, 2013.

Thank you for your encouragement and support. We are certain that all children will have an everlasting learning experience because parents and teachers are so committed to working together for success.

# Middle School Science Fair Due Dates

## Friday December 13th, 2013 or Monday December 16th, 2013

Proposal (what you are doing and how you are doing it) for Science Fair Project due (needs to be approved) Students should be starting and conducting their experiments after it has been approved. Students should be putting their display boards together as they are working on the project.

#### Tuesday, December 17th, 2013 or Wednesday December 18th, 2013

Title & Problem Statement Hypothesis List of Materials List of procedures Students should be working on and conducting their experiments

#### Monday January 6th, 2014 or Tuesday January 7th, 2014

Class discussion held in regards to the Science Fair. At this time, if there are any questions, comments, concerns, then they will be addressed at this time.

# \*\*All aspects of the Science Fair project will be due a week from these dates. Students will start their presentations on the week of January 13<sup>th</sup>, 2014.\*\*

Monday January 13th, 2014 or Tuesday January 14th, 2014

(everything is due!) Rough Draft Results Data and Conclusions Summary/Abstract Applications/Recommendations Acknowledgements and Bibliography Display Board Students should be putting their display boards together as they are working on the project.

Projects are due in class, ready to be presented,

The Science Fair at Somerset Pines Academy is on January 23rd, 2014 (Thursday at 6:00 PM in the Cafeteria)

At this time, students Science Fair projects will be judged and during the week of January 27<sup>th</sup>, 2013—the winners, who will be moving on to the Broward Science Fair will be announced.

### Middle School Science Fair Contract

1. I understand that my child must complete a Science Fair Project and that failure to do so will seriously affect his/her Science grade in the second quarter.

2. I am aware that I may assist my child in his/her project; however, parents are not allowed to do the project for their child in any way. They can only assist with an experiment for safety reasons only. They may not conduct the experiment for the child or write any part of the report for them.

3. I also understand that it is very important that my child turns in each part of the project on its due date. Also, if the teacher requires that any corrections be made to a part of the project, those corrections are due during the next class period that student has science class.

4. I have visited new.schoolnotes.com/shibbard81 and read all available material in regards to the science fair off of the M.S. Science Fair link.

5. I understand the due dates are as follows:

#### Friday December 13th, 2013 or Monday December 16th, 2013

Proposal (Idea) for Science Fair Project due (needs to be approved) Contract signed and returned Students should be starting and conducting their experiments after it has been approved. Students should be putting their display boards together as they are working on the project.

#### Tuesday December 17th, 2013 or Wednesday December 18th, 2013

Title & Problem Statement Hypothesis List of Materials List of procedures Students should be working on and conducting their experiments

#### Monday January 6th, 2014 or Tuesday January 7th, 2014

Class discussion held in regards to the Science Fair. At this time, if there are any questions, comments, concerns, then they will be addressed at this time.

### Monday January 13th, 2014 or Tuesday January 14th, 2014

Results Data and Conclusions Summary/Abstract Applications/Recommendations Acknowledgements and Bibliography Display Board Projects are due in class, **ready to be presented**,

#### Signature (due 12/13/2013 or 12/16/2013)

# By signing below, you are acknowledging that you've read the Science Fair Letter, the Science Fair Due Dates, and the Science Fair Contract and you are agreeing to the above terms and conditions of the Science Far.

Student's Name:	
Student's Signature:	
Parent/Guardian Name:	_
Parent/Guardian Signature:	
Date:	

Please keep the copy attached in your Science Fair Folder.

# **Grading Guidelines**

Attached are the rubrics that will explain, in detail, what the science fair project must include.

Below are some other tips and helpful suggestions:

1. Remember that a good project is planned and developed over a period of time. Start planning now!!

2. Display boards may be purchased at office supply stores and teacher supply stores, such as ACE. Shop now, lots of people will be buying display boards. You don't want to wait until stores run out or color selections are slim.

3. When the experiment is presented, the display board will be used as a visual aide, so be sure the information is LARGE enough for the whole class to see. Be ready to answer questions from the class and the teacher.

4. The entire Science Fair project will be worth 3 grades:

- Each part must be completed in on its due date or points will be deducted, as per the teacher's discretion.
- a. Written Report (see attached rubric)
- b. Display Board (see attached rubric)
- c. Oral Presentation (see attached rubric)

#### Science Fair Display Board Rubric

1. Title: The title is phrased as a question. (5 points)

2. Problem Statement/Purpose: One or two sentences written on the display board telling what you studied. Tell why you picked your topic. (10 points)

3. Hypothesis: One sentence written on the display board. It tells what you think will happen in your experiment...written as an "if....then..." statement. (10 points)

- 4. Materials: All materials listed on the display board, including amounts (5 points) example:(1/2 cup)
- 5. Procedure: Tell what you did sequentially (step by step) (10 points)

6. Data: graphs, pictures, charts, surveys, drawings. Results: what happened during your research? (No faces in the photos please...) (10 points)

7. Conclusions: Did your results prove or disprove your hypothesis? Write one or two sentences on the display board and sharing this information. (10 points)

8. Abstract/summary: A summary of the completed experiment. Include what you did and the results of your experiment. (10 points)

9. Neatness and Appearance: Your Science Fair display board and visual display (sample experiment) should be neat and well organized. (10 points)

10. Difficulty/Creativity: The project should be appropriate for the grade level and a challenge for the student. The Project presented an experiment with measurable outcomes. (10 points)

11. Independently Completed: All work is completed by the student. (10 points)

## Total = 100 points

# **Oral Presentation**

1. Discussed why you chose this experiment and explain the research you did for this project. (10 points)

2. Tell us what your problem statement was. (10 points)

3. State the hypothesis using an "if...then ..." statement. (5 points)

4. Explained how you conducted the experiment including the materials you used. You do not have to be specific with the measurements for the oral presentation. (20 points)

5. Tell us what the independent and dependent variable of your experiment were. (5 points)

6. Make sure you have a clear understanding of the experiment and are able to tell others about it. (20 points)

7. Explain the results of your experiment and relate it to the problem statement. (10 points)

8. Tell us how your project can benefit others or how it can apply to a real life situation. (10 points)

9. Make sure you engage in eye contact when presenting and do not read the board.

(10 points)

Total = 100 points

# Science Fair Written Report Rubric

Must be typed (12 font, Times New Roman)

1. Title: The title is phrased as a question. (5 points)

2. Research/Purpose: One or two paragraphs explaining your topic and should include research information (make sure it is properly cited). You also need to state why you chose this topic. (10 points)

Problem Statement: State the problem that you will be researching.(5 points)
Hypothesis: One or two sentences that states what you are going to study. Must be written as an if...then...statement. (5 points)

5. Materials: All materials that you used for the experiment, including amounts. For example: (1/2 cup) (5 points)

6. Identify the independent and dependent variables:. (5 points)

7. Procedure: Tell what you did sequentially (step by step) be very specific. Remember, a good science experiment should be written so some else can conduct it the same way you did and get the same results. (10 points)

8. Data: graphs, pictures, charts, surveys, drawings, etc. (no faces in the photos please...) (5 points)

9. Conclusions: Did your results prove or disprove your hypothesis? (5 points)

10. Abstract/ summary: A summary of the experiment along with an analysis of the results or your experiment. (10 points)

11. Application/recommendations: How can your project benefit others? How can your project be applied to a real life situation. (10 points)

12. Difficulty/Creativity: The project should be appropriate for the grade level and a challenge for the student. **The project is testable**, with **results that can be measured, counted, or recorded** through charts, graphs, and photographs. (10 points) 13. Acknowledgements/Bibliography: Who do you want to thank? (5 points)

14 . Research Log (10 points)

Total = 100 points

# Student Science Fair Planning Form

Period \_\_\_\_\_

Name \_\_\_\_\_

Use this form to go step by step through the Scientific Method in order to successfully complete your Science Fair Project. It is very important that you meet all due dates. Deadlines will be strictly enforced.

I This packet goes on the right side of your Science folder. On the left side, you should have your Science Fair Project Packet.

If you lose this, you will have to start all over again, so be sure to keep it in your Science Folder and always be sure of where you have placed your Science Folder.

# PROBLEM STATEMENT

**HYPOTHESIS** 

MATERIALS Include the independent and dependent variables. Include amounts of materials.

\_ PROCEDURE Number the steps, bullet them, or use transition words (first, second, third,... next, last, etc) and skip lines.

# SUMMARY / ABSTRACT

<u>BIBLIOGRAPHY</u> All students must have a bibliography. You only have to do this if you used references such as the internet for an article or a website, a magazine, a book, or another other reference source.

\_\_\_\_\_

\_\_\_\_\_

#### ACKNOWLEDGEMENTS

**DATA /RESEARCH LOG** If you made a graph or took pictures, made a picture, a chart, or a survey please put them in the Science Folder and label them DATA. All other data should be in your research log.

# CONCLUSIONS

# APPLICATIONS/RECOMMENDATIONS

\_\_\_\_

\_\_\_\_\_

<u>PLANS FOR MY SCIENCE DISPLAY BOARD</u> This space is to be used to list any plans or ideas for your display board.

**REVISEMENTS** Use the space below to revise any steps of the project that your teacher asked you to redo. Be sure to label what part it is. If you need more space, simply staple some loose-leaf sheets to the last page of this packet.