Mills Park Elementary School

**2013 Science Fair Information Sheet**

**What is the purpose of a Science Fair?**

The process of choosing a problem and formulating a hypothesis, planning a project and predicting the results, gathering and analyzing data, and drawing conclusions is an incredible learning experience for anyone, but especially for children. Celebrating your child’s use of the scientific method will prove to be a memorable experience!

**What is the Scientific Method?**

The scientific method is a problem-solving approach that, once learned, can be used as an approach in many areas in life, not just science. Usually applied in a series of steps, the scientific method includes:

1. Ask a question or identify a problem
2. Observe what is happening and conduct background research
3. Construct a hypothesis that explains what is happening or predict a result
4. Test the hypothesis by doing an experiment
5. Analyze the data and draw a conclusion
6. Communicate the results using descriptions, graphs, and tables

**Who Enters Projects?**

***Fourth and Fifth*** grade students may choose to enter a project. Students may choose to work with up to two other students; however, each student is responsible for making arrangements outside of school to collaborate on the project.

**How do we enter a Project?**

Entry Formsshould be completed and handed in to classroom teachers by December 20th, 2012.

**What type of projects can be entered?\***

1. **Experiment**

Conduct an investigation to solve a problem, answer a question, or test a hypothesis.

Example: *Which battery lasts the longest?*

1. **Observation**

Reports on observations that help explain a scientific process.

Example: *What birds frequent a feeder in the month of December?*

1. **Invention**

Invent something new or add an innovative touch to something already existing.

**\*Note: Those projects which best utilize the scientific method have the greatest chance for advancement to regional competition in the science fair.**

**\*Note:** **Students should not do projects with dangerous substances or that may harm animals or people. Please visit the NC Science and Engineering Fair website at** [**www.ncsciencefair.org**](http://www.ncsciencefair.org) **for a complete list of rules and requirements for your child’s project.**

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**2013 Science Fair Schedule of Events**

**Entry Forms Thursday, Dec. 20th, 2012**

**Project Registration Monday, Jan. 28th, 2013**

*4-6 pm*

*OR*

 **Tuesday, Jan. 29th, 2013**

*8-9 am.*

**Science Fair Tuesday, Jan. 29th, 2013**

**Note:** Students should **NOT** put their name on their poster. At check in, students will be given a sticker with the project number that will be affixed to the top right hand corner of the display.

**Viewing and Pick-Up**

Projects may be viewed from 6:00-7:30 PM on Thursday, January 31st, 2013. Anyone wishing to view the projects during the day should check in at the office first.

**Awards/Assembly**

A variety of awards are presented for the science fair projects. Projects are evaluated using the rubric included in this packet. The top ten projects will receive an “Honorable Mention” award and will have a blue ribbon placed on the project. From these, the top three projects will receive a “Best in Show” award and will move on to the regional science fair competition.

The top ten projects will be honored during an assembly on Thursday, January 31st at 9:20 am. During this assembly, the “Best in Show” awards will be announced. All projects should be picked up after the viewing on the evening of Thursday, January 31st or before school the next morning.

**Questions and More Information: Please call or email…**

Danielle McCaslin (5th grade teacher) dmccaslin@wcpss.net

Kristen Kenyon (4th grade teacher) kkenyon@wcpss.net

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**2013 Science Fair: How can I help as a Parent?**

**Please…**

* Encourage your child to do a project.
* Read the information provided.
* Offer suggestions and praise throughout the process!
* Discuss the scientific method with their children
* Provide materials and help to organize.
* Help your child set up a schedule and offer reminders. (Entry form due December 20th!)
* Attend parent night information session to gather more information.
* Keep it simple!
* Remember that *Ideas and work should be the child’s own.*
* Provide opportunities for your child to visit a library for research

**Also remember…**

• purchase a display board

• consider early check-in the day before

• volunteer to help Judge or check-in

• attend the Science Fair on Thursday, January 31, 2013 between 6:00 and 7:30 PM

**Parent Don’ts for the Science Fair**

• waiting until the last minute.

• turning in late entry forms.

• placing his or her name, or photo of their face on the front of the display board.

• bringing in any live animals or food as part of the display (Take pictures instead).

• allowing your child to use fire, sharp objects, or dangerous chemicals as part of the project.

• spending more than about $20.00 on supplies.

• buying a kit for your child to put together.

• forgetting to turn in your child’s project by 9:00 AM on Tuesday, Jan. 29th.

• forgetting to attend the Science Fair viewing on Thursday, Jan. 31st.

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**2013 MPE Science Fair Project Scoring Rubric**

*Below you will find a copy of the judges scoring rubric that will be used for each project. Please review this rubric as you plan and prepare your science fair project.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Scientific Content** | Above Average | Average | Fair | Needs Improvement |
| Demonstrates comprehension of content material | 4 | 3 | 2 | 1 |
| Conclusions accurately based on data | 4 | 3 | 2 | 1 |
| Limitations of data discussed | 4 | 3 | 2 | 1 |
| Measurements/Observations are accurate | 4 | 3 | 2 | 1 |
| Evidence of scientific literature citing | 4 | 3 | 2 | 1 |
| Study is thorough | 4 | 3 | 2 | 1 |
| **Effectiveness** | Above Average | Average | Fair | Needs Improvement |
| Accompanying literature is easy to understand | 4 | 3 | 2 | 1 |
| Project display attractive | 4 | 3 | 2 | 1 |
| Sequencing of display was logical | 4 | 3 | 2 | 1 |
| **Creativity** | Above Average | Average | Fair | Needs Improvement |
| Demonstration of skills (use of the scientific method) | 4 | 3 | 2 | 1 |
| Originality in approach | 4 | 3 | 2 | 1 |
| Originality in design of project or use of equipment | 4 | 3 | 2 | 1 |
| **Presentation** | Above Average | Average | Fair | Needs Improvement |
| Was prepared to be presented | 4 | 3 | 2 | 1 |
| Explanation of project was clear and concise | 4 | 3 | 2 | 1 |
| Gave accurate responses to questions and showed content knowledge | 4 | 3 | 2 | 1 |
| **Totals** |  |  |  |  |

As we prepare for our 3rd Annual MPE Science Fair, we are also searching for this year’s judges. We are in need of 20-30 qualified adults to help with the science fair scoring. In order to keep scoring fair, we would love to bring in as many non-MPE, outside resources as possible for this task. Many of you work in science related fields and probably know people that would be willing to volunteer their time. If you know someone that is interested in helping out at this year’s science fair\*, please provide their information on the bottom portion of this flyer and return it to school with your child by December 14th, 2012.

\*The fair will be held on Tuesday, January 29th, and judges will need to be at MPE from 9:00 am - 1:00 pm.

Please print the following information neatly.

Your Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Person Volunteering: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Volunteer’s Occupation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Volunteer’s Email Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Best Contact Number for Volunteer: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_