



Spring Brook Elementary PTA

presents

Science Fair 2012

Students K-5 and their parents are invited to participate in the first annual Spring Brook Science Fair for a night of educational fun, guest scientists and homemade science projects! Kids can work with a partner, or independently, to develop a 'display' presentation or a project using the scientific method.



Wednesday, February 22, 2012

6:00 pm—8:00 pm

Gym/Multipurpose Room

Complete information regarding guidelines, safety rules and resources are attached, and available on the school website under PTA Science Fair 2012.

<http://springbrook.ipsd.org/Subpage.aspx?id=242>



Please return registration form to the office by January 31, 2012. For questions or comments, please email familyfunsb@gmail.com.

Name _____

Teacher/Grade _____

Email _____

Project Theme _____


Materials _____

Electrical Outlet _____yes _____no



Spring Brook Elementary Science Fair Project Guidelines

Where do I start? Science Fairs provide opportunities for kids to creatively explore an area that interests them — to do science themselves!

| | |
|--|--|
| <p>Thinking of your science fair project can be fun and challenging. First, think of an area that interests you or that you are curious about. Think of a problem you would like to solve in that area — form a hypothesis — run your experiment — collect data — form a conclusion.</p> |  |
|--|--|

Depending on grade level, we encourage slightly different types of projects. A display project is great for kindergarten up to 2nd graders. A display project would explain or show an area of science. Students in higher grades are encouraged to ask and hopefully answer questions in their work! Here are a few examples of how to change a display project into one that asks (and hopefully answers) a question:

| Beginner Level (K-2) | Advanced Level (3-5) |
|--|--|
| <ul style="list-style-type: none"> • The Five Senses • Planets of our Solar System • Dinosaurs of the Jurassic Period • Model of the Digestive System • Vinegar and Baking Soda Volcano | <ul style="list-style-type: none"> • Which of the five senses is used the most? • How high is Venus in the night sky? • Why did dinosaurs get so big in the Jurassic Period, but then smaller during the Cretaceous? • How long does it take for food to travel through the digestive system? • What is the limiting reactant in the vinegar and baking soda volcano? |

Now some of those questions are a bit tough, but hopefully you can see the difference between a display project and one that explores a question. It is perfectly fine and even encouraged for ALL Spring Brook students (K-5) to ask a question for their science fair project. **Need ideas?** Here are some references to help you:

| | |
|---|---|
| <p>Project Ideas:</p> <ul style="list-style-type: none"> • Do different brands of popcorn leave different amounts of unpopped kernels? • What percentage of an orange is water? • How to harness the energy of a windmill • Does the temperature affect the rate at which seeds sprout? • What makes a parachute work? | <p>Websites:</p> <ul style="list-style-type: none"> • http://www.ipl.org/div/kidspace/projectguide • http://www.lewiscenter.org/users/mhuffine/subprojects/department/ss.php • http://school.discovery.com/sciencefaircentral/scifairstudio/handbook/display.html • http://sciencebuddies.com • http://super-science-fair-projects.com/elementary-science-fair-projects.html |
| <p>Books</p> <ul style="list-style-type: none"> • Visit the Spring Brook website and click on “Online LMC Catalog” to view Spring Brook’s science offerings. • Be sure to stop by the LMC Science Fair Display to view a sample tri-fold and science books. • Visit your local public library and look for books by Janice Van Cleave and others. | |

Spring Brook Elementary Science Fair Safety Guidelines

Before starting your science project, take some time to think about possible safety issues associated with your project. Projects should be the work of the individual students and be monitored by a parent. In addition, many experiments have safety risks which must be identified and addressed by parents before the experiment.

Please follow these safety guidelines when choosing your project:

- Parents must carefully monitor any experiments that are performed as part of their student's project.
- Parents are responsible for insuring that proper safeguards are in place at home for any hazardous chemicals, electrical or mechanical equipment, open flames, cultures, or other hazards that may exist.
- Parents must supervise their students at all times during the fair.

Exhibit Guidelines

At the Science Fair, you will be allocated space at a table on which to place your exhibit. To make the Science Fair a safe and fun experience for the families that will be attending the fair, please follow these guidelines when creating an exhibit:

- Include your project title, name and class on a tri-fold display (see example below.)
- Your display must fit within the allocated space of 36 inches wide and 15 inches deep. The display must be self-supporting.
- In addition to the display board, other materials such as papers and dioramas may be included.
- Demonstrations performed at the fair need to be set up in a way that is safe and non-damaging.
- Items brought to the fair **MUST** fall within the school safety guidelines.

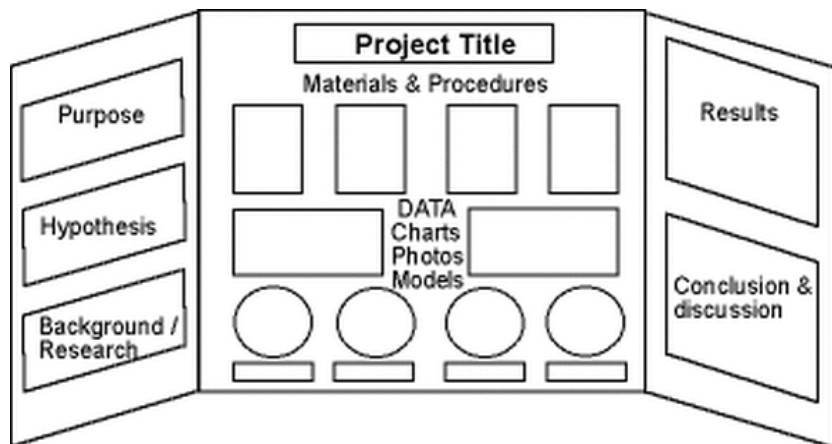
Presentation

Students should be prepared to briefly discuss their project with visitors and answer questions about it. Formal presentations are encouraged, but not expected. For students in 4th and 5th grades, the judges will be offering additional feedback on their projects with a view toward helping the students prepare for the competitive middle school Science Fairs. Here are some things the judges may ask you:

- What is the title of your project?
- Tell me about your project.
- What did you think would happen?
- Did you repeat the experiment?
- What was your control?
- What is your conclusion?

The Spring Brook Elementary Science Fair will be **NON-COMPETITIVE**. Each participating student will receive an award certificate.

Sample Science Fair Tri-Fold Display Board



Student Checklist:

- ✓ Problem (Idea)
- ✓ Research
- ✓ Hypothesis
- ✓ Method (experiment plan)
- ✓ Data
- ✓ Results
- ✓ Conclusion
- ✓ Science Display Tri-Fold
- ✓ Interview by Judges

Grade Level Contacts

For questions regarding your child's science project, please call or email the following:

| Grade | Contact | Email | Phone |
|---------|------------------|--------------------------|----------------|
| K-1st | Wendy Calcaterra | wcalc70@yahoo.com | (630) 369-8249 |
| 2nd-3rd | Katie Peterson | chp60565@gmail.com | (630) 922-9363 |
| 4th-5th | Kim Schink | kschink@wideopenwest.com | (630) 983-9923 |

Schedule on Wednesday, February 22, 2012:

5:30 pm Check-In/Set-Up for all Participants

6:00 pm Welcome, Judges Begin Project Viewing

6:30 pm Guest Scientists Presentations on Stage

7:00 pm Certificates Presented/Photo with Mr. Worst

8:00 pm Fair Ends/Exhibits Removed

- All student participants must arrive and set up their exhibits before the fair is open to the public.
- All student participants must be present at their exhibit until the end of the fair.
- Parents of participating students must supervise their student at all times during the fair.
- Volunteers will be available to help supervise those families with 3 or more student participants.

Additional Points of Interest and Reminders...

- Guest scientists will be on hand to perform experiments and identify simple scientific concepts. Parents and students are encouraged to stop by the stage and enjoy the show!
- Your student has a choice to work with a same-grade partner or work independently.
- Our judges panel will be visiting each student's display to ask questions and provide encouragement for all of the hard work and effort that goes into every Science Fair project.

Science Fair Ideas:

Check out these Science Fair ideas to help you get started! Pick one from the list, or let an idea inspire you to ask a different question!

K-1st

Food Pyramid
Sorting and
Classification
Dinosaurs
Smell: Sniffing Jars
Plants and Water
Exploring Taste
Static Electricity
with Balloons

2nd-3rd

Human Body
Space and Astronomy
Life Cycle of a Frog
String Phone (sound)
Egg Drop
Grow Salt Crystals
Fingerprints
Paper Airplanes (test
different papers)

4th-5th

Volcanos
Make a Kaleidoscope
Make a robot
Germs
Video Games (positive &
negative effects)
How does a parachute work?
Rain Gauge
How colors affect emotions.

District 204 Science Curriculum:

Kindergarten:

5 Senses
Nutrition
Self-Care
Seasons
Magnets
Earth Day
Plant Seeds
Phases of Matter
Density

First Grade:

Astronomy
Entomology
Weather, Air &
Clouds
Organs, Health
Solar System
Rocks
Insects: Butterfly
Life-Cycle

Second Grade:

Scientific Method
Water Cycle
Nutrition
Density
Plant Anatomy
Plant Seeds
Meal Worm Life
Cycle

Third Grade:

Phases of the Moon
Muscles, Bones &
Joints
Simple Machines
Habitats/Food Chain
Phases of Matter

Fourth Grade:

Circulatory System
Respiratory System
Health
Scientific Method
Ecosystem
Rocks
Planets
Magnetism, Electricity

Fifth Grade:

Scientific Method
Atmosphere
Cloud Types
Atoms & Molecules
Water Cycle
Magnets, Static
Electromagnetism
Digestive System
Microscopes
Cells
Single Cell Organisms
Brine Shrimp