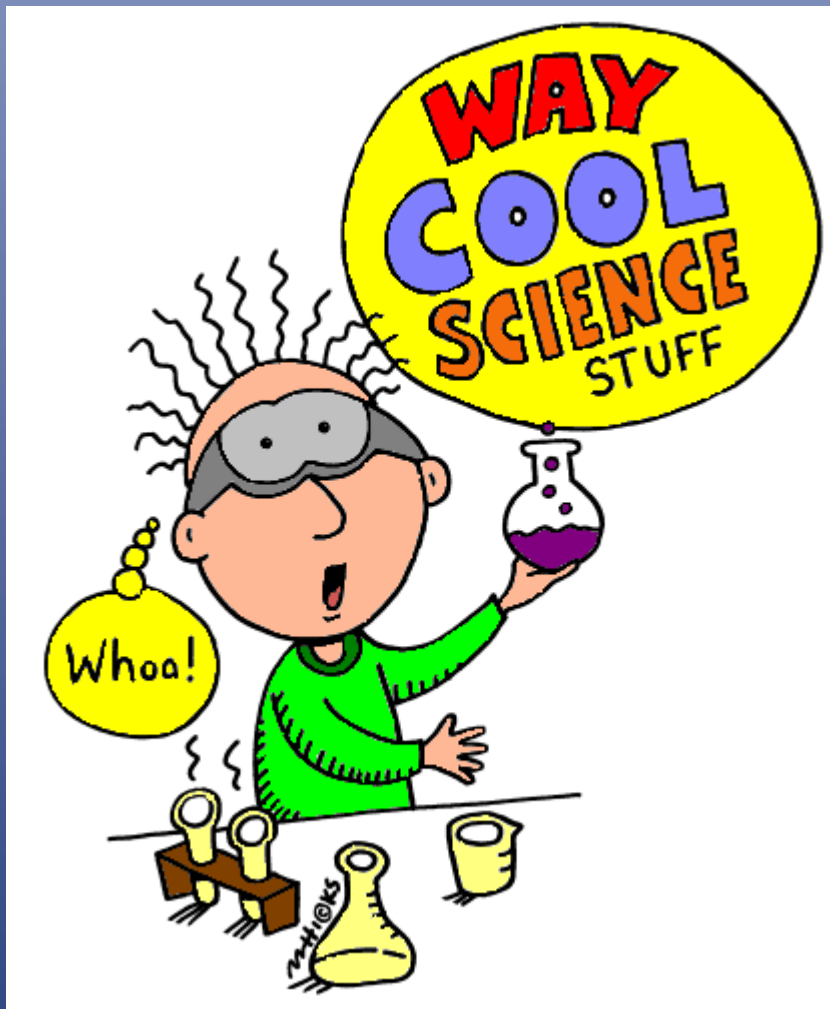


Riverview Elementary Family Science Fair 2019

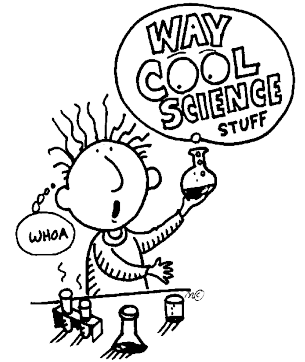


Thursday, May 2, 2019
Student Information

Riverview Family Science Fair

May 2, 2019

Thursday, May 2: 5:30 pm-7:00pm



Overview

Riverview Elementary School is hosting a family science fair to foster important science skills among students and encourage family collaboration. Participants have the opportunity to solve problems, think creatively, conduct experiments, and analyze data while completing individualized projects.

Please note:

- ★ Participation in the Science Fair is voluntary.
- ★ Students and their family members at all grade levels (K-5) are invited to participate.

Students may work alone, with family members, or with partners:

- ★ **Sibling collaborations and students working together across grade levels are encouraged!**
- ★ **Parents and other family members are invited to participate!**

Students wishing to participate must complete the attached form and return it to school AS SOON AS POSSIBLE.

Please contact Mr. Rossi at rossi@denville.org with questions.

Exhibition

On **Thursday, May 2** the science fair will be held at Riverview Elementary School as part of our "Related Arts Night." The exhibition will be open to students, families, and community members from 5:30pm-7:00pm.

*** All projects must be taken home immediately after the science fair
OR by the end of the school day on **May 3**. ***

SCIENCE FAIR PERMISSION SLIP:

(Return to your child's homeroom teacher ASAP)

Child's name _____

Grade Level _____ Homeroom Teacher _____

I give my child permission to participate in the Riverview Science Fair scheduled to take place on **Thursday, May 2, 2019 from 5:30 PM to 7:00 PM.**

Please include a brief description of your project:

...OR

_____ I know I want participate, but I haven't decided on a project idea yet.

Are you working with anyone else?

_____ I will be working alone

_____ I will be working with _____

Parent Signature _____

Science Fair Rules:

1. Projects must be safe!
2. Students' **name, grade, and class** must be displayed on their projects.
3. Students must be accompanied and supervised during the Science Fair by a parent.
4. The following are prohibited: fire, weapons, glass, dangerous chemicals, or animals. Also, no “exploding” projects.
5. Electrical switches and cords needed for exhibits must be approved by Mr. Rossi.
6. Expensive, irreplaceable, or fragile items should not be displayed. Valuable items essential to the project should be simulated or photographed.
7. School and teachers assume no responsibility for loss or damage to any exhibit.

*****All projects must be taken home after the science fair
or by the end of the day on May 3.*****

Looking for Project Ideas?

<http://www.sciencebuddies.org/>

<http://www.education.com/science-fair/>

<http://www.all-science-fair-projects.com/>

<http://www.sciencekids.co.nz/projects.html>

The Experiment Process (Scientific Method)

The scientific method is the process all scientists use to investigate science questions when conducting experiments. It involves identifying a problem, learning what is already known about that problem, thinking of a solution or answer (called a hypothesis), doing an experiment to test your hypothesis, and reaching a conclusion based on what you learned.

So before you even begin your project, it is important that you understand the scientific method. Using it to do your project takes some thought, but that's what science is all about!

The scientific method is an organized way of figuring something out when performing an experiment. There are usually six parts to it.

1. **Purpose/Question**- What do you want to learn? An example would be, "What doorknob in school has the most germs?" or "Do girls have faster reflexes than boys?" or "Does the color of a light bulb affect the growth of grass seeds?"
2. **Research**- Find out as much as you can. Look for information in books, on the internet, and by talking with teachers to get the most information you can before you start experimenting.
3. **Hypothesis**- After doing your research, try to predict the answer to the problem. Another term for hypothesis is "educated guess." This is usually stated as, "If I...(do something) then...(this will occur)."

An example would be, "If I grow grass seeds under green light bulbs, then they will grow faster than plants growing under red light bulbs."

4. **Experiment**- The fun part! Design a test or procedure to find out if your hypothesis is correct. In our example, you would set up grass seeds under a green light bulb and seeds under a red light and observe each for a couple of weeks. You would also set up grass seeds under regular white light so that you can compare it with the others. If you are doing this for a science fair, you will probably have to write down exactly what you did for your experiment step by step.
5. **Analysis**- Record what happened during the experiment. Also known as 'data'.
6. **Conclusion**- Review the data and check to see if your hypothesis was correct. If the grass under the green light bulb grew faster, then you proved your hypothesis. If not, your hypothesis was wrong. It is not "bad" if your hypothesis was wrong because you still discovered something!

A few other terms you may need to know:

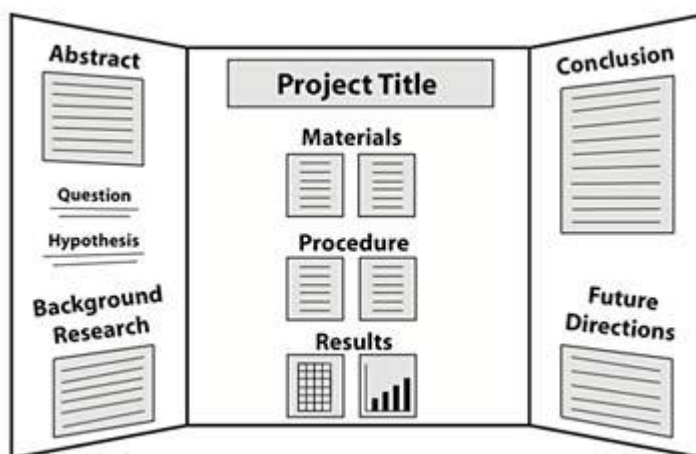
Independent Variable - This is the part of your experiment that you will test (vary) to answer your hypothesis. In the example above, the independent variable would be the different colors of the light bulbs.

Dependent Variable - This is what occurs in response to the changing independent variable. In our example the dependent variable is how much the grass seeds grow.

Control - The control should be the part of the experiment where you do not include the independent variable. In our example, grass seed that is growing under the white (uncolored) bulb would be your control. The control lets you compare your results in the experiment.

Science Fair Project Display Boards

- For almost every science fair project, you need to prepare a **display board** to communicate your work to others. In most cases you will use a standard, three-panel display board that unfolds to be 36" tall by 48" wide. A display board is a not a requirement, but may be a great way to share your information.



- **Organize your information like a newspaper** so that your audience can quickly follow the thread of your experiment by reading from top to bottom, then left to right. Include each step of your science fair project: question, hypothesis, variables, background research, and so on.
- **Use a font size of at least 16 points** for the text on your display board, so that it is easy to read from a few feet away. It's OK to use slightly smaller fonts for captions on picture and tables.
- **The title should be big and easily read from across the room.** Choose one that accurately describes your work, but also grabs people's attention.
- **A picture speaks a thousand words!** Use photos or draw diagrams!