

# Smith's Science Fair

May 21, 2015

5:30pm-7:00pm

## General Information

- All 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> graders may enter a project in the Science Fair.
- Each student is allowed one entry.
- Students may work alone or with one partner.
- Siblings working together will have their project entered in the older child's grade level.
- Project set up will be from 3:00 pm to 4:30 pm May 21.
- Awards will be announced shortly after 7:00 pm May 21.
- Project clean up and removal will be 7:00 pm to 8:00 pm May 21.
- Students (with an entry) and at least one parent or guardian must be present at the science fair.
- Students will be required to be present at their display for 30 minutes for judging.
  - 3<sup>rd</sup> graders 5:30 – 6:00
  - 4<sup>th</sup> graders 6:00 – 6:30
  - 5<sup>th</sup> graders 6:30 – 7:00

## Display Information

- Entries must have a tri-fold presentation display board no larger than 36" by 48".
- No electricity will be provided or accessible, however students may use batteries.
- Students will be assigned an area on the octagon shaped lunch tables in the café or gym. There will be 2 to 3 entries per octagon table.
- Safety: Displays should not contain potentially dangerous items such as:
  - Hazardous chemical substances
  - Sharp items such as knives
  - Flames, lighters, or matches
  - Lasers
  - Small items that could be a choking hazard in reach of small children

## Judging

- Awards of participation, honorable mention, 4<sup>th</sup> place, 3<sup>rd</sup> place, 2<sup>nd</sup> place, and 1<sup>st</sup> place will be given in each grade level.
- One overall 1<sup>st</sup> place award will be given.
- Additional special awards will also be awarded such as organization, crowd favorite etc.
- Students will be judged on:
  - Creativity
  - Display
  - Use of Scientific Method
  - Knowledge of project
- A judging rubric is available online.

# The Project

## What makes a good science fair project?

Your science fair project should be designed around an **experiment** rather than a science report. Not only are experiments more fun than a science report, they are more interesting, and they take you through the **Scientific Method**, which is the way real scientists investigate in real science labs.

## How do I come up with my project idea?

Some of you probably know exactly what you want to do. Maybe you did a cool experiment in class this year and you've been thinking of trying that experiment with a different variable. Maybe you saw something in a book you would like to test. If you can't think of anything right now, you just need to think of an area that is of interest to you and go from there.

Here's an example: Let's say you like Silly Putty and you always wanted to make your own Silly Putty following a recipe you saw. Well, just making the Silly Putty isn't the experiment, so that wouldn't make for a great science fair project. However, comparing how far the homemade Silly Putty stretches versus the store bought kind would be. You could easily follow the Scientific Method and come up with an awesome experiment.

You can even answer a few questions at [www.sciencebuddies.org](http://www.sciencebuddies.org) using their "Topic Selection Wizard" to help you find a project for your grade and interests.

## Can you give me a few more examples?

Yes! Here are a few to get you thinking:

- Will seeds germinate if you soak them in a liquid other than water?
- Does the temperature of a magnet affect its magnetic field?
- Does the number of batteries affect a light bulb's brightness?
- Does the starting temperature of water affect how long it takes it to freeze?
- Which paper towel is stronger?
- Which type of soda cleans a penny the fastest?
- Does peeling a fruit affect its buoyancy?

### **What sort of ideas should I stay away from?**

First, stay away from anything that does not interest you. Second, some topics such as Animals in the Rainforest, Types of Bears, All about Alaska, and My Rock Collection show, report, or explain things, but don't really test anything. They may be cool, but they have no testable question, no variables, no data collection, no new information discovered, and therefore, no science experiment. Lastly, we recommend that you do not do projects that are too easy or way too complicated for your abilities.

### **What needs to go on my display board?**

Your display board should include your findings using the Scientific Method. Other things to include would be pictures, diagrams, and interesting facts you discovered throughout your investigation. You can see some great examples on the internet of displays. Here are the steps of the Scientific Method.

Testable question

\*What question are you trying to answer?

Hypothesis

\*I predict that ... because...

Materials

\*Complete list

Procedure

\*List all steps clearly

Observations & Data Collection

\*Represent all data with charts or graphs

Results

\*Clearly written explaining the effect of the variable

Conclusion

\*Reflect on hypothesis

Extension

\*What would be a way to try the investigation again differently?

### **What if I have questions along the way?**

Your teacher in 3<sup>rd</sup> grade or your Science teacher in 4<sup>th</sup> and 5<sup>th</sup> grade will be happy to answer your questions.

**Have fun working on your project!**