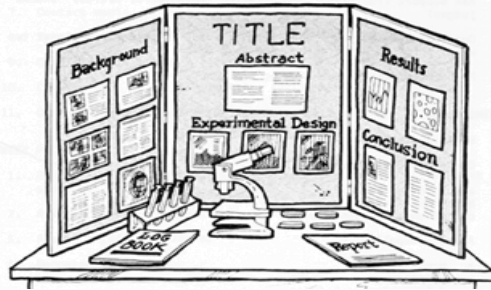


**SCIENCE FAIR 2010**  
***Wednesday, February 24, 2010***



The Burning Tree Science Fair will be held on **WEDNESDAY, February 24**, in the All Purpose Room (Kindergarten projects displayed in the Media Center). The Science Fair is a fun, non-competitive way for students to explore the world around them. It gives them an opportunity to work on any science project or inquiry that might interest them. It provides students the opportunity to display their work at school, and share their experiences with the school community. It's a lot of fun, and we're looking forward to a big turnout!

On the morning of the Science Fair, Burning Tree's young scientists are invited to describe their projects to officials, including many parents and friends of the school who are scientists or have scientific backgrounds. Later in the day, all classes will have an opportunity to observe the students' projects. Finally, in the evening, parents and friends are invited to see and hear about the Science Fair projects. Parents may also visit the Fair during the day. It's a great chance to investigate areas of scientific interest, have fun, and be a part of an exciting event. And remember, everyone who participates is a winner!

There are some tips on making a great Science Fair Project and on finding good ideas in the attached flyer, while books have been set aside in the Media Center with ideas for projects to suit every taste and interest. There are also a lot of books in the public library, or you should feel free to call any member of the Science Fair Committee to discuss ideas or ways to find resources.

**Attached is the Science Fair Entry Form.** Please fill it out and return it to your child's teacher, to let us know that you want to participate. Also, **we will take orders for showboards** to display your work. We will sell them at the cost of \$5.00 per board (including tax), and will deliver them to school on **January 29** for all orders received by January 28. Additional deliveries will be made, as needed. Please use the attached order form to place your orders now! The boards are also available at local craft stores, or you can make your own. However, proceeds from the sale of show boards will finance the Science Fair.

Finally, we invite you to volunteer and to help make Science Fair 2010 a big success for the kids. There are many ways to volunteer. Scientific ability is not necessary, so let us know if you want to be a part of it.

The Science Fair Committee:

Katerina Papaioannou (301)229-4286, [michaelkaterinap@gmail.com](mailto:michaelkaterinap@gmail.com).  
Celine Barker (301) 229-5818 , [celine.maryland@gmail.com](mailto:celine.maryland@gmail.com).

# SCIENCE FAIR 2010

## *Schedule of Events*

### **Tuesday, February 23, 2010**

5:30 - 7:30 p.m.

Deliver all Science Fair Projects to All-Purpose Room. (Kindergarten Projects are delivered to the Media Center.)

### **Wednesday, February 24, 2010**

9:15 - 11:00 a.m.

Each Science Fair Participant in grades 1-5 will have a turn to present his or her project to a Science Fair Official. Kindergarten students present their projects to teacher and classmates.

11:00 a.m. - 3:00 p.m.

Classes visit the Science Fair.  
Families may attend the Fair during this time.

6:30 - 8:00 p.m.

Families attend the Science Fair. Students must stay with their project for some part of the evening to present it to interested visitors.

8:00 p.m.

All Science Fair Projects must be taken home.  
(NOTE: Due to space constraints, projects left after 8:00 p.m. will be discarded.)

***Reminder:*** *Science Fair Entry Forms should be returned by Friday, February 19, 2010.*

***SNOW DATES:*** *Tuesday, March 2<sup>nd</sup> for set up, and Wednesday, March 3<sup>rd</sup> for the Science Fair.*

**SCIENCE FAIR 2010**  
***The "Do's," Don't" and "How-to's"***

1. Put your **name, grade, and teacher's name** on your show board and on each piece of equipment.
2. Fragile items can break! Although every attempt is made to have students be gentle with projects, your project will be viewed by hundreds of interested people. **Is your project durable enough?**
3. We encourage you to use a **small show board (24" x 48")** and, if possible, to consider space in the design of your project, so that we can more easily display all of the projects. Plan to take up no more room than half a width of a lunch table -- we put projects back-to-back. We will be taking orders for show boards and will deliver it to your child's classroom (see attached order form). Cost is \$5. This may also be purchased at another store, if needed. A show board is not required.
4. Projects are best done individually or in a group of no more than 2 students.
5. Change your mind? Please send a note via school if you want to change your project or if you can't complete your project.
6. No posters can be hung. **Live animals are discouraged. No open flames. Electrical outlets are very limited. Contact us if you need an outlet (can you use a battery instead?) or if you have any special requirements.**
7. Deliver your project on Tuesday, February 23<sup>rd</sup> between 5:30 and 7:30 p.m. If you can't come at that time, please ask a friend to bring your project.
8. Don't forget your emergency/backup supplies! Many people will view your project or want a demonstration. **Be prepared with extra "ingredients" like batteries, light bulbs, baking soda, vinegar, etc. as well as tape and tools for repair.**
9. Practice your oral presentation for your morning talk with the Science Officials. Be able to tell why you chose your project, show how it works, and explain your project. What did you learn? What are you showing?
10. In the past, the Science Fair has been crowded. Families are encouraged to visit the Science Fair from 11 a.m. to 3 p.m. as well as from 6:30 to 8:00 p.m. on Wednesday, February 24<sup>th</sup>. In the evening, no strollers will be allowed in the All Purpose Room.
11. Take your project home at the end of the evening. If you cannot do so, make arrangements with a friend or neighbor to take it home for you. We have nowhere to store your project!

# ENTRY FORM SCIENCE FAIR 2010

***Wednesday, February 24th***  
***(Snow date: Wednesday, March 3rd)***

Science Fair projects are on the topic of your - the student's - choice. Your project can be an investigation of scientific questions, a demonstration of scientific principles, or a display of a scientific collection. You can do a project about things you already know, or learn something new. A project can be something that takes a long time or can be done in a few days. It can be something to look at, like a collection or a demonstration, or it can be a report on the results of an experiment that you've done at home. Read about possible projects in the collection of books and articles in the Media Center. We look forward to seeing your projects!

NAME \_\_\_\_\_ PHONE \_\_\_\_\_

TEACHER and GRADE \_\_\_\_\_

PROJECT TITLE \_\_\_\_\_

PROJECT DESCRIPTION

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If you are working on your project with another student, please list his or her name and grade:

NAME/GRADE \_\_\_\_\_

Thanks for participating and have fun!

***Please return this form to your teacher by***  
***Friday, February 19<sup>th</sup>***

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Parents:

\_\_\_ Yes! I can help out. Name: \_\_\_\_\_

I'd prefer to \_\_\_ help with set up; \_\_\_ be a Science Fair Official;  
\_\_\_ help during the classroom visits; \_\_\_ help as needed.

## Great Ways to Make Great Science Fair Projects

It's easy to make a great Science Fair Project for Burning Tree's 2010 Science Fair! Here are some hints and tips to get your creative science thinking hat on:

- You can follow these easy steps: 1) **Purpose**. What is your question? What do you want to learn? Start with a subject that you are curious about. Be sure your question is manageable to explore or investigate. 2) **Research**. Find out as much as you can -- read books, research on the internet, ask teachers. For example, if you are interested in how to make the most effective paper airplane, you might start by learning a little about the principles of flight, as well as a little information about the composition of different types of paper. 3) **Hypothesis**. Try to predict your answer. 4) **Experiment**. Design a test or procedure to confirm or disprove your hypothesis. What material would you need? Remember to keep track of the steps you take. 5) **Analysis**. What happened when you did your experiment? What did you observe? What did you learn? 6) **Conclusion**. Review your data, and see if your hypothesis was correct. Remember -- research that proves your hypothesis is wrong is just as valuable as research that proves you were right! Finally, prepare for sharing your knowledge with others.
- Check out the science section in the school library. Mrs. Barry has set books aside. There are also many materials in the public library. Good magazines for ideas include Muse, Discover, Popular Science, and National Geographic Kids. We've also got tips for a few good websites below.
- Watch commercials on TV. Test their claims. Are generic brands as good as famous brands? Is your favorite breakfast cereals really part of a "nutritional breakfast?" You can find cool ideas, in the news (anything interesting that happened somewhere in the world), in the kitchen (what happens to your favorite recipe if you change one ingredient?), and in your backyard (what makes the leaves change color?).
- We've got examples of great science fair projects done by BT students in the past on the next page. If there's one that interests you, go for it! But think ... can you change it, add to it, make it bigger, smaller, simpler? Change a variable? How can you make it YOUR unique contribution?
- Thinking of making a volcano? Think it over... they're messy; ingredients quickly run out of supply; the effect is cool, but after that one fun minute, what's all really about? However, if a volcano is really your heart's desire, it can be a good project -- just be sure to include some cool facts or information about baking soda and vinegar, or about volcanic eruptions that we might not already know.

Websites: <http://nyelabs.com>

[http://Exploratorium.edu/science\\_explorer](http://Exploratorium.edu/science_explorer)

<http://www.tryscience.org/> (and then click on "experiments")

<http://www.sciencebob.com>

## Topics from Past Science Fairs

Where do germs grow most in my house?

Global warming

Which cat food do cats prefer?

Paints from nature

Why are bird's beaks different?

Asian Bird Flu: What do we know about it?

Static electricity

Conductors and insulators

How chlorine is made

How can a lemon be electric?

Electricity and magnetism

Battery voltage and bulb brightness

Why do cut apples get brown?

Will an egg float in different types of water?

How do you make raisins dance?

Which foods contain starch?

The effect of water on popcorn

Why does the shell of an egg become soft in vinegar?

How music affects heart rate?

Where is DNA found?

Why do you get out of breath when you are running?

Why does your skin turn white under a band-aid?

Fingerprints: What type are you?

Can you taste without your nose?

How to tell time using the sun

How do you predict the weather? Making a barometer

How can you grow a stalactite and a stalagmite?

How fast does mold grow on tea?

How do submarines work?

Effects of acids, bases and salts on metal

How fast does water evaporate if sugar, salt or vinegar is added?

How long does it take to make ice cubes? Try different shapes and sizes

Gas is a blast! Which combination of acid and base produces the most gas and why?

Show how light is bent by lenses, a prism and water

Is the tail of an airplane important?

Does freshwater or saltwater evaporate faster?

Is salt or sand better at melting ice?

What surface do marbles roll on the fastest?

**SCIENCE FAIR 2010**  
***Volunteers!***

You can help make this Science Fair a great experience for the kids! There are lots of ways to help, and no special science background is required:

**Tuesday, February 23<sup>rd</sup>:** Can you help with set-up between 5:00 and 7:30 (or for part of that time)?

**Wednesday, February 24<sup>th</sup> :** Can you be a Science Fair Official between 9:15 - 11:00a.m? Come and hear the scientists present their work. This is the best opportunity to really see the Fair! The students love the one-on-one presentations, and do a great job.

**Wednesday, February 24<sup>th</sup> :** From 11:00 to 3:00 all of the classrooms will view the projects, and families also are invited for an early preview. If you can come during the day, consider volunteering for an hour or two while you view the Fair.

\_\_\_\_\_ YES! I can help out.

I'd prefer to \_\_\_\_\_ help with setup; \_\_\_\_\_ be a Science Fair Official; \_\_\_\_\_ help during the classroom visits; \_\_\_\_\_ help as needed.

Your name and telephone number:

\_\_\_\_\_

Your child's name and teacher:

\_\_\_\_\_

THANKS! Please return this to your child's teacher. Questions? Call any of us:

The Science Fair Committee

Katerina Papaioannou (301) 229-4286, [michaelkaterinap@gmail.com](mailto:michaelkaterinap@gmail.com), or Celine Barker (301) 229-5818, [celine.maryland@gmail.com](mailto:celine.maryland@gmail.com).

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**SCIENCE FAIR 2010**  
***Show board Order Form***

Student's Name, Grade and Teacher:

\_\_\_\_\_

Parent's Name, Telephone Number and e-mail Address:

\_\_\_\_\_

How many show boards do you want? \_\_\_\_\_

THE COST IS \$5.00 PER SHOWBOARD (INCLUDING TAX). PLEASE PAY BY CHECK, MADE PAYABLE TO BURNING TREE PTA and deliver with this form, in an envelope marked "Science Fair" to your child's teacher. We will deliver the showboards to your student's classroom on Friday, January 29, for all orders received by January 28. Additional delivery dates will be scheduled for orders received after January 28.