Dear Ken,

Welcome to 2009 and most importantly, to science fair season! This issue features various resources to help you, your students, and even their parents prepare for a successful science fair. Whether you need helpful handouts for your classroom, tried-and-true tips from past successful participants, or news about the latest nationwide science events, we’ve got you covered. Science Buddies is also proud to introduce the Family Online Safety Guide from one of our key sponsors, Symantec and the Symantec Foundation. Read highlights and visit the link below for a free download of the guide.

Please enjoy reading about our latest resources and visit us online anytime at www.sciencebuddies.org to find out more about any of the articles you see here.

Sincerely,
Kenneth Hess
Science Buddies Founder and President
www.sciencebuddies.org

P.S. The deadline to hit our fundraising goal of $10,000 is January 31st! Please consider donating or encouraging your students’ parents to donate. As a nonprofit business, every contribution helps to keep our resources free for our nearly 9 million visitors!

News and Announcements

Science Fair Project Guide Webpages Now Available as PDFs!

If you’ve visited the Project Guide section of our website, you know what a wonderful resource it is for you and your students. If you haven’t, stop by and take a look! Now you can easily share the valuable information with your students. Printable copies of our Science Fair Project Guide webpages are now available in PDF format. These handouts are excellent resources to print, copy, and pass out to your students. The pages include information about topics such as:

- Background Research Plans
- Variables
- Conducting an Experiment
- Data Analysis & Graphs

Visit the Teacher Resources page for a complete list.

Submit a Photo and Earn $50!

Earning $50 is as simple as point, click, shoot! Email us a digital image of you and/or your students, and Science Buddies will pay $50 for photos that we use on our website or in outreach materials. Photos must meet our requirements. Visit this link for more details!
Introducing Symantec's Family Online Safety Guide

One of Science Buddies' key sponsors, Symantec and the Symantec Foundation, has created a Family Online Safety Guide, an excellent resource for educators and parents. The guide is full of helpful safety tips and information about the benefits and risks of the Internet in relation to children, tweens, and teens. Highlights include:

- A set of non-invasive questions to open up the lines of communication between you and your students or children about their Internet usage.
- Tips for safely browsing the Internet.
- Information about blogging, downloading, and the social networking sites your students and children probably visit.
- Tips for safe online shopping, bill paying, and banking.

For additional information about online safety, you can also check out Symantec’s Family Resource website, which provides easy-to-understand insights about Internet safety issues, with materials designed for educators, as well as parents and grandparents.

Science Buddies Raises $7,811 Toward $10,000 Goal!

Science Buddies is close to reaching its fundraising goal—$10,000 by January 31st! As of this mailing, we are at $7,811. Contributions will help Science Buddies serve over 9 million students, teachers, and parents in 2009, and help keep our science resources free for all. If you have used Science Buddies in the classroom, please let parents know about our valuable resources and our fundraising effort. Even a $1 donation helps. Visit our donations page for more information.

Science Buddies Awarded $25,000 Grant from Monsanto Fund

2009 is the Year of Science, and Monsanto is teaming up with Science Buddies to make the educational experience of participating in a science fair fun, accessible, and inspirational for students and teachers alike.

Science Buddies has received a $25,000 grant from the Monsanto Fund, a private foundation and the philanthropic arm of Monsanto Company, to enable Science Buddies to develop more content related to food science, plant biology and genetics, and agriculture.

"Monsanto Fund is proud to support Science Buddies because we recognize the importance of equipping teachers and students with valuable tools to enhance the educational experience," said Deborah Patterson, president of Monsanto Fund.

New food science, plant biology and genetics, and agriculture science fair projects will be developed on the website throughout 2009.

Tips and Tricks for Teachers

Science Buddies Self-Assessment Tests

Here's a helpful tip: Remind your students to use the self-assessment tests at the end of each of our How to Do a Science Fair Project Project Guide pages to review their own work. Here's an example from our Variables page:

What Makes for Good Variables? For Good Variables, You Should Answer "Yes" to Every Question.

- Is the independent variable measurable?
- Can you change the independent variable during the experiment?
- Have you identified all relevant dependent variables, and are they all caused by and dependent on the independent variable?
- Are all dependent variable(s) measurable?
- Have you identified all relevant controlled variables?
- Can all controlled variables be held at a steady value during the experiment?

Tips and Tricks for Students

Ways to Wow the Judges
Not only does the Science Buddies website offer hundreds of Project Ideas for students, but it also provides information designed to help students succeed at science fairs. Be sure to share the following display board and judging tips and links with your students.

Making a Great Display Board
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. (Sample display board formats)

- 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: Abstract, question, hypothesis, variables, background research, and so on.
- 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 to present non-numerical data, to propose models that explain your results, or just to show your experimental setup. But don't put text on top of photographs or images. It can be very difficult to read.

Preparing for the Science Fair Judging Process
Practice Makes Perfect
- Write a short "speech" (about 2–5 minutes long) summarizing your science fair project. You will give this speech when you first meet the judges. (Remember to talk about the theory behind your science fair project-why your project turns out the way it does.)
- Organize a list of questions you think the judges will ask you and prepare/practice answers for them. Practice explaining your science fair project to others and pretend they are judges.
- Practice explaining your science fair project in simple terms so anyone can understand it.

Presenting Yourself Professionally
- Always dress nicely for the science fair judging period—NO JEANS!
- Make good use of your display board. Point to diagrams and graphs when you are discussing them.
- Be confident with your answers; do not mumble.

Upcoming Events and Deadlines

Events
- **Year of Science** Science Buddies is a partner organization in the Coalition on the Public Understanding of Science (COPUS) Year of Science 2009 effort. Each month in 2009 will focus on a scientific theme. [Register online](#) to receive notification about upcoming events and activities for Year of Science 2009.
- **The International Year of Astronomy 2009** Check out their website for the latest events and information.
- **Intel STS Finalists Announced** The announcement of the Intel STS finalists will take place on Wednesday, January 28, 2009.
- **National Engineers Week** Visit the website for more information about events happening from February 15–February 21, 2009.

Deadlines
- **DuPont Challenge Science Essay Contest** The submission deadline is January 31, 2009.
- **Intel Schools of Distinction Awards** These awards "recognize U.S. schools that implement innovative, replicable programs that inspire their students and lead to positive educational outcomes in the areas of math and science." Awards include $10,000 from the Intel Foundation, and more than $100,000 in products and services from the program award sponsors. The school selected as Star Innovator for 2009 will receive an additional $15,000 cash grant from the Intel Foundation, as well as additional services and products from the award sponsors. The submission deadline for applications is February 17, 2009.

Science Buddies gratefully acknowledges its Presenting Sponsor