



# SCIENCE BYTES

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## For your Calendar:

### NSTA Conferences 2008-2009

#### NSTA Regional Conferences – 2008

October – Charlotte, NC: October 30-November 1, 2008

November – Portland, OR: November 20-22, 2008

December – Cincinnati, OH: December 4-6, 2008

#### 2009 National NSTA Conference

New Orleans, LA – March 19-22, 2009

### Science Fair 2008-09

#### Alaska Science and Engineering Fair

March 27-29, 2008

Looking for volunteers for the SF Board.

### Science Olympiad 2008-09

**TENTATIVE** April 4, 2009 @ Begich Middle School

## Anniversary of Signing of the Constitution

To mark the anniversary of the signing of the U.S. Constitution on September 17, 1787, Congress has asked that educational institutions take one day to teach the document that shaped America's democratic government. In support of students and teachers in their studies, a variety of online resources are available from the Federal Resources for Educational Excellence (FREE) web site. Additional resources are available from the National Archives and Records Administration and the National History Education Clearinghouse. For more information, please go to <http://www.ed.gov/policy/fund/guid/constitutionday08.html>.

Also, on Constitution Day/Citizenship Day, schools are encouraged to participate in "Pledge Across America." The synchronized Pledge will begin at 2:00 p.m. EDT; 1:00 p.m. CDT; 12:00 noon MDT; 11:00 a.m. PDT; 10:00 a.m. in Alaska; and 8:00 a.m. in Hawaii. For more information, please go to <http://www.celebrationusa.org>.

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## Flinn Scientific - Safety Background

Do new secondary level science teachers in your school district have the safety background they should? Do they have a resource where they can get pertinent information about the chemicals and products they are expected to use in lab?

For thousands of science teachers nationwide that resource is the Flinn Scientific Catalog/Reference Manual. Teachers refer to it as their "Safety Bible" due to the valuable safety and product-use information it contains.

Make sure all the secondary level science teachers new to your school district get their own copy of the Flinn Scientific Catalog/Reference Manual. Give the gift of safety.

To get your new teachers signed up to receive their own Flinn Scientific Catalog/Reference Manual, please forward this e-mail to the science department chairperson at all your middle schools and high schools and ask them to click on the link below:

[http://www.flinnsci.com/nt\\_webform.asp](http://www.flinnsci.com/nt_webform.asp)  
<[http://htmlmail.flinnsci.com/clickThrough.asp?MAIL\\_ID=58&URL=www.flinnsci.com/nt\\_webform.asp](http://htmlmail.flinnsci.com/clickThrough.asp?MAIL_ID=58&URL=www.flinnsci.com/nt_webform.asp)>

Very truly yours,

Kevin T. McNulty

Vice President - Marketing  
Flinn Scientific, Inc.

Please add [flinn@flinnsci.com](mailto:flinn@flinnsci.com) <<mailto:flinn@flinnsci.com>> to your e-mail Address Book or Safe List to ensure that e-mails from Flinn Scientific are not blocked by any e-mail filters that your school/district technology department may be using.

Flinn Scientific uses e-mail to send teachers monthly Science Department Safety Training Notes, lab ideas and activities, special invitations to Flinn events and other information you will find of value as a Flinn customer. We will never share your e-mail address with any person or organization.

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### **Flinn Scientific Announces : Free Middle School Science Demonstrations**

Flinn Scientific offers free demonstrations that middle school science teachers can present to their students. These demonstrations are guaranteed to excite your students and teach valuable and sometimes difficult-to-learn concepts that are relevant to National Science Education Standards.

Two demonstrations are now available.

**Bohr Atomic Model** – Students can learn about atomic structure and electron energy levels by building mobile-like atomic models to hang from the ceiling. Models of nitrogen, oxygen, fluorine, or neon are good first choices—not too complicated or too big—perfect for atomic model making!

**Human Epidermal Cells** – Observing epidermal cells is more engaging when students examine their own cells with a microscope. Safer than collecting cheek cells from inside the mouth, this technique also teaches students that their summer suntans aren't fading, their tanned skin cells are actually shedding away and being replaced by new cells.

These demonstrations are free to middle school science teachers: <http://www.flinnsci.com/msfaxpr2008.asp>

Flinn Scientific, Inc.

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1-800-452-1261

E-mail: [flinn@flinnsci.com](mailto:flinn@flinnsci.com)

Web site: [www.flinnsci.com](http://www.flinnsci.com)

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### **Themed Garden Tours - Tryck's Nursery**

Doug Tryck of Tryck's Nursery offers Friday evening themed garden tours from 6 - 7:30 pm through September.

September 19- Fall colors -native plants

Sept 26- Fall colors- Exotic trees and planting for winter interest

All he asks is that reservations(space is limited) are made- 345-2507, and that he'll be accepting non perishable food items for the food bank

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### **Space Explorers Inc., Planetary Times**

**MOST BLACK HOLES MIGHT COME IN ONLY SMALL AND LARGE** Black holes are sometimes huge cosmic beasts, billions of times the mass of our sun, and sometimes petite with just a few times the sun's mass. But do black holes also come in size medium? A new study suggests that, for the most part the answer is no.

More Info... <http://news.space-explorers.com/?v=6=9=1>  
<<http://news.space-explorers.com/?v=6&i=9&a=1>>

**CASSINI IMAGES RING ARCS AMONG SATURN'S MOONS** NASA's Cassini spacecraft has detected a faint, partial ring orbiting with one small moon of Saturn, and has confirmed the presence of another partial ring orbiting with a second moon. This is further evidence that most of the planet's small, inner moons orbit within partial or complete rings.

More Info... <http://news.space-explorers.com/?v=6=9=2>  
<<http://news.space-explorers.com/?v=6&i=9&a=2>>

**SPIKY PROBE ON NASA MARS LANDER RAISES VAPOR QUANDARY** A fork-like conductivity probe has sensed humidity rising and failing beside NASA's Phoenix Mars Lander, but when stuck into the ground, its measurements so far indicate soil that is thoroughly and perplexingly dry.

More Info... <http://news.space-explorers.com/?v=6=9=3>  
<<http://news.space-explorers.com/?v=6&i=9&a=3>>

**2008 ATLANTIC HURRICANE SEASON KICKING INTO HIGH GEAR** For the first time in the 2008 hurricane season, there were four tropical cyclones active in the Atlantic Ocean basin on one day.

More Info... <http://news.space-explorers.com/?v=6=9=4>  
<<http://news.space-explorers.com/?v=6&i=9&a=4>>

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## **Environmental Education**

### **Climate Discovery Courses for Educators ~ Online**

September 19 - November 7, 2008 ~

Are you seeking a K-12 professional development opportunity that will enhance your qualifications, competency, and self-confidence in integrating Earth system science, climate, and global change into your science classroom? This Fall the National Center for Atmospheric Research (NCAR) is offering a series of seven-week online courses for middle and high school teachers that combine geosciences content, information about current climate research, easy to implement hands-on activities, and group discussion.

<http://eelink.net/cgi-bin/ee-link/newclick/8825114>

### **Earth Education Workshop ~ New York**

October 18, 2008 ~ Melville, New York

The Earth Education Workshop is designed to introduce leaders to earth education programs, methods, and materials that help learners of all ages build broader understandings of earth's systems of life; deepen feelings for the earth; and encourage individuals to craft more harmonious lifestyles. Examples of indoor sessions include Leadership Guidelines, Concept Building, and Environmental Habits; outdoor activities focus on ecological concepts, observation skills, and solitude enhancing in a natural place.

<http://eelink.net/cgi-bin/ee-link/newclick/8825116>

### **Environmental Science Education: Fall Ecological Field Studies ~ Online**

September 22 - December 12, 2008 ~ Online

This Montana State University graduate course is designed for educators of students in grades 6-12 who are interested in integrating inquiry oriented, experienced-based, environmental studies into their educational program. Participants will learn basic ecological field study techniques and conduct studies in their local environment.

Instructor: Michael Brody

Credit: 3 graduate

<http://eelink.net/cgi-bin/ee-link/newclick/8825118>

### **National Park(ing) Day**

September 19, 2008

National Park(ing) Day is an all volunteer effort to celebrate city parks while promoting the need for more parks by creating temporary parks in public parking spaces.

<http://eelink.net/cgi-bin/ee-link/newclick/8825120>

### **Professional Development for a Sustainable Future ~ New Mexico**

October 17-18, 2008 ~ Albuquerque, New Mexico

The "Soar to Greater Heights: Professional Development for a Sustainable Future" conference is jointly presented by the EE Association of New Mexico, New Mexico Council of Teachers of Mathematics, and New Mexico Science Teachers Association. The conference begins with "Field Trip Friday," with visits to local EE programs, workshops, and events, followed by New Mexico's Lieutenant Governor Diane Denish moderating "Educating for a Sustainable Future." Guest panelists will represent the fields of science and technology, mathematics, social issues, and the environment. Saturday's events include concurrent sessions on math, science, environmental, and inter-disciplinary tracks.

**Read the latest newsletter EE Connections here >>**

[<http://www.eeanm.org/news.htm>](http://www.eeanm.org/news.htm)

### **Professional Development on Global Sustainability ~ Online**

Are you interested in continuing professional development? Would you like to learn at your own pace? "Facing the Future: Educating & Inspiring a Global Generation" is an online, independent continuing education course for educators of grades 5-12, to build upon their teaching expertise and to think creatively about how to integrate global issues, sustainability, and local solutions into their curricula.

<http://eelink.net/cgi-bin/ee-link/newclick/8825124>

### **CLEARING Magazine**

CLEARING is one of the oldest publications for environmental and place-based education in the country. First published in 1978, CLEARING is a quarterly magazine for formal and non-formal educators that features thought-provoking perspectives, insightful resource reviews, grade- and subject-specific activities and lesson plans, and news from regional EE associations in the western US and Canada. Available in print and online.

<http://eelink.net/cgi-bin/ee-link/newclick/8825126>

### **Green Schools Initiative Back to School News**

The latest Green Schools Initiative newsletter, A Green Back to School, is packed with helpful information on shopping green for the start of the new school year.

<http://eelink.net/cgi-bin/ee-link/newclick/8825128>

### **New Activity Guide from "Meet the Green"**

Meet TheGreens.org kids' guide to looking after the planet has just added a new activity guide. It pairs hands-on activities to deepen kids' understanding of topics like recycling and global warming with campaigns to reduce junk mail and get drivers to stop idling cars. This innovative, Web-only project comes from WGBH in Boston, the producer of shows like ZOOM, ARTHUR, Frontline, & NOVA.

<http://eelink.net/cgi-bin/ee-link/newclick/8825130>

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### **New NASA Opportunities**

#### **SECRET LAYER OF THE SUN**

Next April, for a grand total of eight minutes, NASA astronomers are going to glimpse a secret layer of the sun. Researchers call it "the transition region." It is a place in the sun's atmosphere where magnetic fields overwhelm the pressure of matter and seize control of the sun's gases. It is, in short, the birthplace of space weather. For the entire story, see

[http://science.nasa.gov/headlines/y2008/05sep\\_sumi.htm?list820645](http://science.nasa.gov/headlines/y2008/05sep_sumi.htm?list820645)

#### **WALL-E LEARNS ABOUT PROPORTION (K-8)**

Calculate the diameter of the moon with the help of Wall-E. In this online video, the mischievous robot learns that the Lunar Reconnaissance Orbiter is mapping the moon. To watch the film, go to

[http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Wall-E\\_Learns\\_About\\_Proportion.html](http://www.nasa.gov/audience/foreducators/topnav/materials/listbytype/Wall-E_Learns_About_Proportion.html)

#### **AFTERSCHOOL UNIVERSE TRAINING (5-8)**

Afterschool Universe is a hands-on astronomy program targeted at middle school children in out-of-school-time settings. It explores basic astronomy concepts through hands-on activities and focuses on the Universe outside the solar system. Information sessions and training workshops are currently being held across the country, and a Seattle session will be held in February 2009. The project will also be presented Sept. 17-19 at the Science and Technology in Out-of-School Time conference in Chicago. In addition to registration information, the site provides a link to other afterschool science resources. For more information, go to

<http://universe.nasa.gov/afterschool>

### **EPO'S CHRONICLES: SCIENCE COMIC**

Offered in conjunction with the GLAST launch, Epo's Chronicles uses an engaging storyline with fictional characters to teach real science to students and science enthusiasts of all ages. The weekly comic follows the adventures of Epo, a sentient spaceship/ observatory, and Epo's companion Alkina as they travel through space trying to figure out our origins and learn about the universe we live in. New episodes appear each Monday, and are available in English, French, Italian and Spanish. To read the most recent episode, go to

<http://epo.sonoma.edu/EposChronicles/>

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### **NASA Education - Informal Training Opportunity**

Afterschool Universe is a hands-on astronomy program targeted at middle school out-of-school-time settings. It explores basic astronomy concepts through hands-on activities and focuses on a journey through the universe beyond the solar system.

Information sessions and training workshops are being held at various locations across the country. Two-day intensive training is also held periodically at the NASA Goddard Space Flight Center. This training allows program leaders who are unfamiliar with the content to become comfortable leading the sessions.

Upcoming training includes workshops at Kennedy Space Center in Florida Oct. 1-2, 2008, and in New York State through a partnership with the Department of Astronomy at Cornell University. The project will also be presented at the National Conference on Science & Technology in Out-of-School Time on Sept. 17-19, 2008, in Chicago.

For more information, visit

<http://universe.nasa.gov/afterschool>. Questions about this program should be directed to

<http://universe.nasa.gov/au/contact.html>.

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