



SCIENCE BYTES

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This is an information exchange that is available to all teachers in the Anchorage School District. Please read and then DO it!

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For your Calendar:

NSTA Conferences 2008-2009

NSTA Regional Conferences – 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

April 4, 2009 @ Begich Middle School

Your NASA Dream Experience

Your NASA Dream Experience: A nationwide contest as seen in Seventeen Magazine is open for applicants until midnight December 15, 2008. A team of 2 students (ages 16-20) and an educator/sponsor will earn the opportunity to spend 3 days at either Johnson Space Center or Kennedy Space Center on a job shadow and behind the scenes experience during the spring of 2009. Contest details for Your NASA Dream Experience are detailed at <http://www.nasa.gov/centers/johnson/education/seventeen.html>

GLOBE MASSMAIL: ENO Climate Change Campaign 2009

Greetings from Finland!

ENO Programme invites schools and children & youth associations to take part in the Climate Change Campaign that will take place from November 2008 to January 2009. Introductory weeks and activity packages are available in many languages. They are both for basic and advanced levels, varying from arts and drama to scientific articles and radio stories. There is a survey available for public at large.

The mascot for the campaign is Frank The Frog, a frog who brings awareness on Climate Change. The Majestic March Of Frogs will take place on 21st of January 2009, around the world!

Schools must register by 28th of November 2008 to participate in the activities. Registration information is available on the website. <http://enocc.blogspot.com/>

Please go to this Web site and find all information and registration form in: Czech, English, Finnish, French, Portuguese, and Spanish. <http://enocc.blogspot.com/>

Regards,
Mika Vanhanen, coordinator
ENO-Environment Online
www.enoprogramme.org
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School Technology Resources Micro-Lessons

An STR Micro-lesson is a relatively brief but highly engaging learning activity that is based on a microscopic image. It starts with a question, and ends with a discovery.

Bookmark this page, and return from time to time to see new Micro-Lessons as they are posted.
<http://schooltr.com/Micro-Lessons/index.html>

NSTA Express Poll: What Are the Barriers to Improving Student Achievement?

NSTA wants to know — what do you think are the barriers to improving student achievement in science. Is it classroom time devoted to science instruction, support from administrators, or maybe lack of support from parents? Please take this short survey
<http://www.surveymonkey.com/s.aspx?sm=gJu6z3gh5sYRwA8ML_2bzpLw_3d_3d
<http://www.surveymonkey.com/s.aspx?sm=gJu6z3gh5sYRwA8ML_2bzpLw_3d_3d> — only a few quick questions. Thanks for your participation!

Apply to Participate in the ARMADA Project

The University of Rhode Island's Office of Marine Programs is now accepting applications for the ARMADA Project- Research and Mentoring Experiences for Teachers. The ARMADA Project, funded by the National Science Foundation, provides K-12 teachers an opportunity to actively participate in ocean, polar, and environmental science research and peer mentoring. Selected Master Teachers (with five or more years teaching experience) are paired with leading scientists and participate in shipboard, field, or laboratory research. Research experiences will take place during the summer, although there may be opportunities during the school year. Upon completion of their research experience, Master Teachers develop ways to bring the fruits of their research experiences, including scientific data, methodologies, and technology into their classrooms. They share their experiences by mentoring new teachers in their school district and by presenting their results at the National Science Teachers Association National Conventions.

The ARMADA Project has placed teachers in research experiences all over the world. Past experiences include taking part in the largest North Pacific humpback whale study in the waters off the coast of Alaska, investigating the impacts of global change in the Arctic Ocean and the Antarctic, monitoring and assessing tidal creeks in South Carolina, studying the impact of human activity on dusky dolphins in New Zealand, identifying foraging behaviors of Antarctic Crabeater Seals, water circulation studies in the Norwegian Sea, and a variety of ecosystem monitoring projects in the Bay of Fundy, Narragansett Bay, Gulf of Maine, Stellwagen Bank, Western Shelf of Florida, Sargasso Sea, Bahamas, Alaska, and Block Island

Sound.

See: <http://www.armadaproject.org>
<<http://www.armadaproject.org>> for more information on past research experiences. Or contact Andrea Kecskes at 401-874-6211. The application deadline is February 9, 2009

FREE Teacher Resources

FREE makes it easier to find teaching and learning resources from the federal government. More than 1,500 federally supported teaching and learning resources are included from dozens of federal agencies. New sites are added regularly. Get new resources delivered to you several times a week: sign up for the FREE RSS. FREE was originally conceived in 1997 by a federal working group and launched a year later. It was redesigned and re-launched for the first time in November 2006. FREE is among the most popular K-12 websites maintained by the U.S. Department of Education because of the many great resources being offered by contributing federal agencies. To view these resources, please visit:
http://www.free.ed.gov/subjects.cfm?subject_id=41
<http://www.free.ed.gov/subjects.cfm?subject_id=41>

Free Scientific Method Poster

Please visit:
http://www.sciencebuddies.org/science-fair-projects/teacher_resources.shtml
<http://www.sciencebuddies.org/science-fair-projects/teacher_resources.shtml> to obtain your free poster.

This free classroom poster offers a great visual overview of the six steps of the scientific method as described on the Science Buddies website. Request a free copy for your classroom today! There are no shipping and handling charges and supplies are limited.

Calling All Tech-Savvy Girls, Coders Gamers, & Web Divas!

Applications are now open for the NCWIT Award for Aspirations in Computing. Apply by December 1, 2008 to be recognized for your contributions to the digital world.

Award-winners receive \$500, a new laptop computer, and a trip to the Bank of America Technology Showcase and Awards in Charlotte, NC.

Complete application materials and details are available at <http://www.ncwit.org/award>

Online applications and all supporting documents must be received by December 1, 2008.

The NCWIT Award for Aspirations in Computing is open to all high school girls and is sponsored by the

National Center for Women & Information Technology (NCWIT) (<http://www.ncwit.org/>) and
<http://www.ncwit.org>) and
Bank of America (<http://www.bankofamerica.com/>)
<http://www.bankofamerica.com>)

Name a Habitat in Antarctica - Grades K-12

Deadline: Nov. 20

NASA and the Challenger Center for Space Education have partnered to engage students in ongoing activities for one of NASA's concepts for astronaut housing on the moon through a contest to name a habitat in Antarctica. NASA currently is conducting a test of a lightweight, durable, inflatable habitat on the cold, harsh landscape of the National Science Foundation's McMurdo Station.

The Challenger Center is organizing and conducting the "Name that Habitat" competition for students in kindergarten through twelfth grades from Oct. 21 to Nov. 20, 2008. The Challenger Center will recruit subject matter experts to serve as judges for the contest and will provide prizes and other items for the winner and participants. The winning name will be selected later this year and announced by scientists in Antarctica in January 2009. Student, teachers and the public will be able to follow the progress of inflatable habitat activities throughout the project.

For more information about entering the Name that Habitat contest, visit: <http://www.challenger.org/hab>
<<http://www.challenger.org/hab>>.

Toyota TAPESTRY Grants for Science Teachers

The Toyota TAPESTRY Grants for Science Teachers program offers grants to K-12 science teachers for innovative projects that enhance science education in the school and/or school district. This year 50 large grants, and a minimum of 20 mini-grants, totaling \$550,000 in all, will be awarded. The categories are Physical Science Application, Environmental Science Education, and Integrating Literacy and Science.

The program is open to middle and high school science teachers residing within the 50 United States and U.S. territories and possessions and it is also open to elementary teachers who teach some science in the classroom or are teaching specialists. To apply for funding, qualified teachers must write a Toyota TAPESTRY proposal according to the proposal requirements. The deadline for the completion of the online application is 11:59 p.m., Eastern Standard Time, Wednesday, January 21, 2009. Recipients of Toyota TAPESTRY grants will be notified by March 4, 2009. Non-recipients will be notified by May 31, 2009. The link is

<http://www.nsta.org/pd/tapestry/?lid=hpql>
<<http://www.nsta.org/pd/tapestry/?lid=hpql>>

Chemistry Lesson Plan Competition

Educators are encouraged to submit lessons for aspiring chemists/scientists in grades K-8 that highlight innovative investigations and exciting experiments on the subject of chemistry/science for an opportunity to win cash awards from the Chemical Educational Foundation (CEF). The Foundation's You Be The Chemist (YBTC) Lesson Plan Competition will award \$1,000 as 1st prize, \$500 for 2nd place entries, and \$250 for 3rd place entries in the three categories of Science Inquiry, Structure of Matter, and Human & Environmental Chemistry. The nine winning lesson plan entries and their authors will be published on the CEF Web site.

Schools can win too! The school of each category first place winner will receive \$250 to be used for science education material. In addition, the first 50 entrants to the competition will receive a complimentary copy of the YBTC Activity Guides: Lesson Plans for Making Chemistry Fun. The YBTC Activity Guides, one for grades K-4, the other for grades 5-8, features detailed chemistry lesson plans, vocabulary words, assessments, activity sheets, homework opportunities, and experiment materials that consist of non-toxic household items. A tool that strives to be both educational and fun, the kit provides chemistry concepts with real-world references. For complete details, rules, regulations and guidelines, visit: http://www.chemed.org/Lesson_Plan.html
<http://www.chemed.org/Lesson_Plan.html>
Contest deadline is December 20, 2008.

2009 is the Year of Science

More than 350 organizations are shining the national spotlight on science in 2009, by celebrating the question: How Do We Know What We Know? Find out how you can participate in the Year of Science 2009 (YoS09) by visiting: <http://www.yearofscience2009.org>
<<http://www.yearofscience2009.org>>

Safety Guidelines for Chemical Demonstrations

Read this first! Before doing a demonstration involving the use of chemicals, every science teacher should read this edition of Flinn Scientific's Science Department Safety Training Notes entitled "Safety Guidelines for Chemical Demonstrations."

Chemical demonstrations can produce attention-grabbing results that dramatically illustrate chemistry in action--from making fountains of foam to creating kalei-

doscopic colors, and generating flashes of fire. This month's safety training reminds you that safety must always come first by providing important guidelines to consider before doing any chemical demonstration.

Knowing what the results will be before performing a chemical demonstration for your students is essential. When you order science supplies, knowing what to expect is also good advice. Order from Flinn and you can always count on receiving safely packaged chemicals and prompt delivery of quality products. Great service is no surprise when you order from Flinn!

Click on the following link for proof that choosing Flinn as your #1 source for laboratory chemicals is your best choice--for top quality and safe packaging--and your best price too! Order all your chemicals from Flinn Scientific! <http://www.flinnsci.com/FlinnPriceComp.pdf>

To print "Safety Guidelines for Chemical Demonstrations" please go to:
<http://www.flinnsci.com/Sections/Safety/Snotes/snotes.asp>

Centers for Disease Control and Prevention's (CDC) Science Ambassador Program

The Science Ambassador Program is an innovative career development opportunity for middle and high school science teachers. Selected teachers attend a 5-day workshop, where public health professionals, including epidemiologists and behavioral scientists lead discussions on the history of public health and current public health topics. The learning environment is collaborative, and lectures are based on current research and interventions affecting public health worldwide. Previous topics include HIV/AIDS, teen dating violence, environmental lead exposure, and alcohol abuse.

The Science Ambassador program provides the training and resources participants need to introduce public health topics into the classroom in ways that support state science education and National Science Standards. Participants work with CDC scientists to develop and publish lesson plans in public health-related sciences. These lesson plans are used by teachers nationwide.

For an application or more information, please check out our website at;
<http://www.cdc.gov/scienceambassador> or contact the Science Ambassador Program by email at scienceambassador@cdc.gov.

All travel expenses are covered by CDC.

Please check our program website for information on applying to the 2009 program!

American Museum of Natural History

Programs for Teachers

Educator Evenings

Exhibition openings with curator introductions and relevant resources. [MORE »](#)

English Language Learners

Science and cultural programs for English Language Learner teachers, students, and families. [MORE »](#)

Graduate Courses

Courses offered in partnership with NYC universities and colleges. [MORE »](#)

Institutes

Multi-day institutes offer in-depth content knowledge in science and social studies. [MORE »](#)

Internships

Internships for museum, science, social science, and education professionals. [MORE »](#)

New Visions

Improving the quality of education for NYC school children. [MORE »](#)

PD Workshops

Day, evening, and weekend programs designed to support in-school curriculum goals. [MORE »](#)

Seminars on Science

Online graduate courses for educators in the life, earth, and physical sciences. [MORE »](#)

Urban Advantage

Program designed to support NYC middle school student investigations. [MORE »](#)

Online Educational Resources and Support

Many interesting and relevant web-based programs. [MORE »](#)

<http://www.amnh.org/education/newsletter/2008.11.html>

LIVE from Antarctica

Join New York City Educator Shakira Brown-Petit, LIVE from Antarctica, for exciting, highly interactive sessions about Earth's polar regions and climate change. See and learn how and what scientists are researching on the ice as they attempt to find evidence of a world much warmer than it is today. Brown-Petit will share climate resources.

Option 1 is designed for classroom participation, allowing students to see, hear and interact directly with Brown-Petit. Option 2 offers educators a professional development opportunity to interact directly from the comfort of home.

Sessions are designed for elementary and middle school audiences and are taking place on Nov. 12, 19 and 24, 2008. Sessions require both an Internet connection and a telephone.

To register, visit
<http://www.us-satellite.net/antarcticalive/>.

Questions about the webcasts should be directed to
webinfo@us-satellite.net.

To read more about Shakira Brown-Petit, visit
<http://www.nasa.gov/audience/foreducators/science-and-the-city.html>.

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