

E-Blast # 2 December

Ways to serve this holiday season... Source Youth Service America

Gather a group of friends and make holiday cards. Distribute the cards to nursing homes and hospitals. (Contact your local nursing homes and hospitals to make sure they take holiday card donations.) You can also donate the cards to send to troops stationed overseas. www.redcross.org/holidaymail

Host a food drive and donate nonperishable food items to a local food pantry. (Find a food bank near you and call to ask them what items they're in need of.) You can also sort and pack food at a local food bank. Find a local food bank at: <http://feedingamerica.org/foodbank-results.aspx>

Cook and/or serve a meal at a shelter for homeless youth and families. Make and bring table decorations, such as place mats or floral centerpieces, to create a warm, cheerful environment for the guests. Use sites like United Way, Volunteer Match, or Idealist to search for shelter near you.

www.liveunited.org/take-action/volunteer

www.volunteermatch.org

www.idealists.org

Clean out your closet and donate clothes and shoes that don't fit you or you don't wear any more to a family crisis center or homeless shelter. During cold months, places like this really need sweaters, coats, hats, and other winter weather gear. Organize a coat drive at your school or community center and donate your collection to One Warm Coat. www.onewarmcoat.org

Host holiday-themed story hour at a local library and read holiday classics like How the Grinch Stole Christmas or The Legend of Poinsettia (Mexican folktale).

For information on each of the following educational offers and resources please visit the LSTA website at: <http://lsta.info> Select the E-Blast button from the menu on the home page and then click on the December #2 link.

1. MATHCOUNTS APPLICATION Deadline December 31st
2. NEA Youth Leaders for Literacy Grants Deadline January 5th
3. 2011 Japan-U.S. Teacher Exchange Program Deadline January 6th
4. GOOGLE Science Fair
5. Gr 9-12: Spirit of Innovation Award 2010-2011 Competitions Deadline January 17th
6. Gr 6-12: Frontiers in Physiology Professional Development Fellowship Application Deadline January 24th
7. Captain Planet Foundation Grants Deadline January 25th
8. PK-12: Introducing a new web site: the Education Research Digest
9. PK-12: The Science of Everyday Life

10. Gr K-6: Siemens Science Day: Learning by doing Deadline February 24th
11. Gr K-6: Free Lesson Plans for Exploring Energy Resources
12. Gr 6-12: New NSTA Competition Brings Needed Lab Resources to Teachers
13. The 2011 EngineerGirl Essay Contest Deadline March 1st
14. Gr 7-12: Seeking Nominations: PAEMST program Deadline April 1st
15. NASA's Climate Kids Riding the Tides
16. NASA TILES FOR TEACHERS
17. Calendar

1. MATHCOUNTS Application deadline is December 31The deadline to register for the 2011 MATHCOUNTS Competition Program has been extended to December 31. MATHCOUNTS is a national enrichment club and competition program that promotes middle school mathematics achievement through grassroots involvement in every U.S. state and territory. MATHCOUNTS offers two unique programs to middle school teachers and students: The MATHCOUNTS Competition Program and the MATHCOUNTS Club Program.

The MATHCOUNTS Competition Program provides the extra incentive and the perfect atmosphere for students to push themselves to achieve more in mathematics. Consisting of fun and creative problems that promote critical-thinking and problem-solving skills, the MATHCOUNTS competitions have written and oral rounds, as well as individual and team components. Though challenging and non-routine, the competition problems focus on the 6th through 8th grade standards of the National Council of Teachers in Mathematics. Often referred to as the MCP, the MATHCOUNTS Club Program provides schools with the structure and activities to hold regular meetings of a math club. Depending on the level of student and teacher involvement, a school may receive a recognition plaque or banner and be entered into drawings for prizes. More details are at www.mathcounts.org.

2. NEA Youth Leaders for Literacy Grants (Deadline: January 5)

The National Education Association (NEA) is partnering with Youth Service America to offer Youth Leaders for Literacy grants to support service-learning projects focused on increasing young people's interest in reading and improving literacy in schools and communities. Youth Leaders for Literacy will award 30 young people from across the U.S. with \$500 grants. Successful projects will be youth-led and address an established literacy need in the applicant's school or community. The projects will launch on NEA's Read Across America Day on March 2nd and culminate on Global Youth Service Day, April 15-17. All 50 states and the District of Columbia are eligible to apply. Youth ages 5-25 are welcome to apply along with an adult ally. The application deadline is midnight January 5, 2011. Access the application at: www.YSA.org/grants/nea-youth-leaders-literacy

3. The 2011 Japan-U.S. Teacher Exchange Program for ESD will provide up to 48 U.S. teachers and administrators with the opportunity to travel to a three-day conference in the U.S. and to Japan for two weeks to learn about ESD efforts and strengthen ESD curricula in both countries. ESD is “a vision of education that seeks to balance human and economic well-being with cultural traditions and respect for the earth’s natural resources,” according to the United Nations Educational, Scientific, and Cultural Organization (UNESCO).

Up to 48 educators from Japan will travel to the United States in late April, and up to 48 educators from the U.S. will travel to Japan in late June. At the end of the program in each country, all 96 educators will gather for a few days of joint collaboration. For more information about the program, or to access the online application, please visit our website at www.iie.org/esdteacher. The application deadline is January 6, 2011. Please do not hesitate to contact us at esdteacher@iie.org or 888-527-2636 if you have any questions.

4. GOOGLE SCIENCE FAIR

On 11 January, 2011, we are launching the inaugural Google Science Fair. We have partnered with NASA, CERN, National Geographic, Scientific American and the LEGO Group to create a new STEM competition that is more open, accessible and global than ever before. We are reaching out to educators prior to launch to let you know “the Google Science Fair is coming” and to extend an invitation to schools and teachers to get involved early in our global competition.

To sign up for fun and free resource kits for your classroom or school (with bookmarks, stickers, posters and more!) and a reminder notification when GSF registration opens, please visit the Google Science Fair at: <http://www.google.com/sciencefair>

The Google Science Fair is a global competition that any student aged 13 - 18 from around the world is eligible to enter. Students can enter as individuals or as teams of up to three. There is no entry fee and registration and submission will happen online. The deadline for submissions will be the 4 April, 2011. The Science Fair will culminate in a “once in a lifetime” celebratory event at Google headquarters in California in July 2011 where finalists will compete for internships, scholarships and prizes in front of a panel of celebrity scientist judges including Nobel Laureates, tech visionaries and household names.

5. Gr 9-12: Spirit of Innovation Award Launches 2010-2011 Competitions

<http://www.conradawards.org/> The deadline for submissions is January 17, 2011. The Conrad Foundation Spirit of Innovation Awards is now accepting entries for its 2010–2011 program year. The competition challenges teams of high school students to create innovative products using science, technology, and entrepreneurship to solve 21st century, real-world problems. Students receive support from scientists, engineers, and entrepreneurs to develop product concepts and bring winning ideas to the

marketplace. Teams compete in one of three categories: Clean Energy, Aerospace Exploration, and Cyber Security.

6. Gr 6-12: Frontiers in Physiology Professional Development Fellowship

<http://www.frontiersinphys.org>

Middle and high school science teachers are invited to apply for a year-long \$9,000 professional development fellowship in the Frontiers in Physiology Program, Six Star Science for Student-Centered Learning, sponsored by the American Physiological Society (APS). Six Star Science principles support excellence in education: student-centered instruction, diversity/equity, technology, assessment, current scientific content, and reflecting on teaching and learning.

Eligibility: Middle and high school science teachers

Themes: Explore Effective Teaching Strategies / Experience the Research Process / Enhance Your Classroom Materials

Dates: Fellowship year: April 2011 - April 2012

Online application due no later than: January 24, 2011

Notifications: March 2011

Fellowship payments:

- * \$4,000 for a Summer Research Experience
- * \$1,700 for completing assignments and a summer workshop week
- * \$300 for a classroom materials grant
- * Travel to San Diego, CA, April 21-25, 2012

7. Captain Planet Foundation Grants (Deadline: January 25)

The mission of the Captain Planet Foundation is to fund and support hands-on, environmental projects for children and youths. The Foundation is interested in funding innovative programs that empower children and youth to work towards solving environmental problems in their neighborhoods and communities. All funded projects must involve young people ages 6-18 (elementary through high school). Nonprofit organizations and public schools worldwide are eligible to apply for grants of \$250 to \$2,500. In order to be considered for funding, proposals must: Promote understanding of environmental issues; Focus on hands-on involvement; Involve children and young adults 6-18 (elementary through high school); Promote interaction and cooperation within the group; and Help young people develop planning and problem solving skills. Generally, the range of grants awarded by the Foundation is \$250 - \$2,500. For more information, visit: www.captainplanetfoundation.org

8. PK-12: Introducing a new web site: the Education Research Digest

<http://www.educationresearchdigest.com/>

This completely free website features succinct, 500-word articles summarizing recent studies that touch on hot-button issues in education. New articles are posted daily to bi-daily. The site is intended to be a resource for professors of education, current primary and secondary school teachers, and students studying to become teachers.

9. PK-12: The Science of Everyday Life <http://www.scienceofeverydaylife.com>
3M and Discovery Education have launched a new online resource center, Science of Everyday Life. The Web portal offers activities and interactive tools designed to encourage exploration and engagement with science that is part of the most relevant "laboratories" in our world—our homes, classrooms and communities. In addition, educators can interact with colleagues on the Science of Everyday Life blog and enter a monthly sweepstakes for a chance to win an assortment of products from 3M.

10. Gr K-6: Siemens Science Day: Learning by doing
<http://siemensscienceday.com/rules.cfm> Entries accepted through February 24, 2011. Imagine a day of Discovery at your school - complete with engaging science demonstrations, hands-on activities, and thrilling surprises. Enter the Ultimate Cool School Science Day Sweepstakes daily to increase your chance of winning.

The winning school will be treated to a spellbinding assembly that is not only fun and interactive, but also underscores the importance of science literacy. Your school could be the Ultimate Cool School...

Enter daily for a chance to win an Ultimate Cool School Science Day Assembly. Students will be amazed as they participate in interactive demonstrations and conduct mind-blowing experiments with a leading science guru and personality. Teachers will discover "cool" new hands-on activities and stimulating resources that will excite students in a special professional development workshop.

11. Gr K-6: Free Lesson Plans for Exploring Energy Resources

<http://generalmotors.discoveryeducation.com/>

Cell phones, iPods, TV's, game stations - these are items that our students are very familiar with, and most have used. But do they really know what powers them and where the energy comes from? General Motors and Discovery Education have designed a series of lesson plans and activities to help you and your classroom explore how electricity is generated and stored and how it is poised to change how we live.

Download FREE LESSON PLANS for elementary and middle school students that will help you and your classroom explore, investigate and even design your own energy-related solutions, plus much more.

* Explore different energy sources, such as renewable and non-renewable

* Examine the current energy situation

* Take a deep dive into battery technology

* Construct a simple circuit

12. Gr 6-12: New NSTA Competition Brings Needed Lab Resources to Teachers
<http://shellsciencelab.nsta.org>

NSTA and Shell announce the NSTA's Shell Science Lab Challenge—an innovative new competition for middle and high school teachers that will bring much-needed laboratory resources to school districts nationwide. Schools will compete for up to \$93,000 in prizes, including a grand prize school science lab makeover valued at \$20,000.

The Challenge asks teachers who have found innovative ways to deliver quality lab experiences in schools with little or inferior equipment to submit their strategies. Entries will be judged on the basis of several criteria, including uniqueness, creativity, and replicability of their submissions. 18 regional winners will be selected. Of the 18 winners, five national winners and one grand prize winner will be selected.

Prizes include gift certificates for lab equipment, cash grants, NSTA memberships, NSTA Learning Center subscriptions, travel to NSTA conferences, and paid conference registration fees. Entries submitted to the Challenge will form a national database of ideas and strategies and serve as models for how to succeed in science lab instruction with limited school and laboratory resources. Schools in urban and rural areas, and those with underserved populations, are encouraged to apply.

The deadline for entries is February 2, 2011.

13. The 2011 EngineerGirl Essay Contest has been posted. The topic this year is "Engineering & Human Service – Relief from a Disaster". You can find the guidelines and related information on the EngineerGirl.org website under the Contest section. The deadline for this year is March 1, 2011. Students in grades 3-12 can compete for cash prizes. We look forward to reading some exciting and creative essays this year, and we hope you will help us to spread the word. If you know of a student, parent, or educator who may be interested in the contest, please pass this information along.

<http://www.engineergirl.org/CMS/Contest.aspx>

14. Gr 7-12: Seeking Nominations: PAEMST program

<http://www.paemst.org>

Are you or do you know an outstanding mathematics or science teacher in seventh through twelfth grade? Please consider nominating him or her for the Presidential Awards for Excellence in Mathematics and Science Teaching. Anyone - principals, teachers, parents, students, or member of the general public - may nominate a teacher by completing the nomination form available on the PAEMST website.

Nominations must be made by April 1, 2011.

Applications are due May 2, 2011.

What Are the PA for Excellence in Mathematics and Science Teaching?

The Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) is the highest recognition that a kindergarten through 12th-grade mathematics or science teacher may receive for outstanding teaching in the United States. Enacted by Congress in 1983, this program authorizes the President to bestow up to 108 awards each year. The National Science Foundation administers PAEMST on behalf of the White House Office of Science and Technology Policy.

15. NASA's Climate Kids Riding the Tides

What is as tall as a seven-story building, lives in the ocean, has three blue arms, and provides energy to more than 1000 homes? Give up? It's the world's biggest tidal energy generator. These machines most of a more modest size harness the energy of the tides and turn it into electricity for cities. This technology represents one more ingenious way of meeting society's energy needs without hurting the environment. Find out more about the clean energy of the tides and how it is being tapped at NASA's Climate Kids,

<http://climate.nasa.gov/kids/news/index.cfm?FuseAction=ShowNews&NewsID=11>.

16. NASA TILES FOR TEACHERS

The space shuttle has made space exploration history over the past 30 years by regularly traveling through such extreme temperature fluctuations. Scientists and engineers collaborated to develop unique materials to withstand extreme temperatures. This led to the development of five space shuttles with their unique "skin" of shuttle tiles. NASA is now offering a limited number of space shuttle tiles to schools on a first-come, first-served basis. Schools may request a tile <http://gsaxcess.gov/NASAWel.htm>. The tiles are available on a first-come, first-served, one-per-institution basis. Click on the tile icon to log on to the request page. Additional information on tiles is available at the website as well as recommendations for curriculum and science lab projects. While you are at the website, you also can view and request other artifacts that are offered periodically.

A Department of Education statistics tracking number (NCES for schools or IPEDS for universities) is needed to register; hyperlinks are available to the sites to find your institution's tracking number. Because the tiles are government property, a transfer protocol is observed (signatures and routing are done electronically). Recipients will be responsible for a shipping and handling fee of \$23.40, which is accommodated by the shipping company through a secure website.

For more information about the shuttle artifact donation program, read the feature article "Hands-on History" at <http://www.nasa.gov/audience/foreducators/hands-on-history.html>. Perhaps students will be inspired to hone their science, technology, engineering, or mathematics skills and seek careers in deep space exploration to Mars or beyond.

17. Calendar

January 4: Deadline to apply for the Einstein Fellowship

<http://www.trianglecoalition.org/ein.htm>

January 5: Deadline apply to participate in the Mars Education Challenge

<http://www.exploremars.org/>

January 5: NEA Youth Leaders for Literacy Grants

www.YSA.org/grants/nea-youth-leaders-literacy

January 6: 2011 Japan-U.S. Teacher Exchange Program

www.iie.org/esdteacher

January 14: Deadline to apply for the Sustainable Agriculture Grants

<http://www.sare.org/NCRSARE/cfp.htm>

January 15: Deadline to apply for Alan Shepard Technology in Education Award

http://www.amfcse.org/Alan%20Shepard%20Award/alan_shepard_award.htm

January 17: Deadline for entries in Spirit of Innovation Competitions

<http://www.conradawards.org/>

January 24: Deadline to apply for Frontiers in Physiology Fellowship

<http://www.frontiersinphys.org>

January 25 Captain Planet Foundation Grants

www.captainplanetfoundation.org

January 31: Deadline for entries in the DuPont Challenge Science Essay Contest

<http://thechallenge.dupont.com>

February 1: Deadline for entries in the National Spaced Out Sports Design Challenge

<http://education.ssc.nasa.gov/spacedoutsports>

February 1: Deadline to apply for Toshiba America Math and Science Grants

http://www.toshiba.com/taf/612_apply.jsp

February 2: Deadline for entries in the NSTA Exploravision competition

<http://www.exploravision.org/>

February 2: Deadline for entries in the NSTA Lab Resources competition

<http://shellsciencelab.nsta.org>

February 4: Deadline for entries for the USA Biology Olympiad for High School Students
<http://www.usabo-trc.org/registration.php?s=tr>

February 16: deadline for entries in the Rubber Band Contest for Young Inventors
<http://www.rubberbandcontest.com>

February 23: Deadline for Toyota Tapestry Program entries
<http://www.nsta.org/pd/tapestry/>

February 24: Deadline for entries in the Siemens Science Day: Learning by doing
<http://siemensscienceday.com/rules.cfm>

February 28: Deadline for the 3rd Kids Science Challenge, sponsored by NSF
<http://kidsciencechallenge.com>

March 1: 2011 EngineerGirl Essay Contest
<http://www.engineergirl.org/CMS/Contest.aspx>

March 7: Deadline for the 6th Annual DNA Day Essay Contest
<http://www.ashg.org/education/dnaday.shtml>

March 10–13: 2011 National Conference in San Francisco
<http://www.nsta.org/conferences/2011san/?lid=con>

March 15: Deadline to apply for the Siemens We Can Change the World Challenge
<http://www.wecanchange.com/>

April 1: Deadline for entries in the 2011 Thacher Environmental Research Contest
<http://www.strategies.org/ThacherContest>

April 1: Deadline for Seeking Nominations: PAEMST program
<http://www.paemst.org>

April 24-30: Sky Awareness Week
<http://www.weatherworks.com/skyawareness.week.html>