

November Science News 2008

Congratulations to this outstanding Oklahoma science teacher:

Outstanding Biology Teacher Award for Oklahoma 2008

Kay Gamble, Ada High School Biology teacher

The OBTA is given each year by the National Association of Biology Teachers (NABT) to a life science teacher in each state who demonstrates exemplary practice in the teaching of life science. Kay recently attended the Awards Luncheon at NABT's Staff Development Conference in Memphis where she and her fellow OBTA awardees from across the country were recognized.

Air Force Association Grants

The Association is currently accepting grant applications August 1 – November 14, 2008. The grant process is competitive in nature. A committee comprised of outside experts in the field of aerospace education will review all qualified grant applications and make recommendations on funding. Based upon the funding available, the Association will choose to invest in projects that best serve our nation's students and support the mission of the Air Force Association.

Questions regarding the Educator Grant program should be directed to the program manager, Ann Sagle, <www.afa.org/aef/aid/educator.aspat>, 1-800-727-3337, ext. 4869 or via e-mail at <ASagle@afa.org>.

Teachers in Space Program

Pathfinders will be the first astronaut teachers to fly in space and return to the classroom. These Pathfinders will not only fly in space, they will also help us design the three-week training course for the large number of teachers who follow. We hope that Pathfinders will also return each summer to help us teach the course. We are currently accepting applications for the first two Pathfinders.

We're looking for one Pathfinder who is knowledgeable in science, technology, engineering, or math (STEM) subjects. Applicants for the STEM Pathfinder slot are asked to submit a proposal for an experiment that could be performed on a suborbital flight.

We're looking for another Pathfinder who has strong skills in lesson plan development.

Applications are asked to submit a lesson plan or curriculum module based on any aspect of human spaceflight. Teachers from all subject areas, STEM and non-STEM, are encouraged to apply. **Deadline is December 4, 2008.**

Visit <<http://www.teachersinspace.org/apply/apply.htm>> for more information.

AAPT High School Physics Teacher Grant

It is the goal of the AAPT to encourage high school teachers to experiment and improve on their teaching practices. It is our belief that as teaching practice improves, then physics enrollment and excitement among students increase. As a result, we offer the High School Physics Teacher Grant. We hope that this grant can provide the funds to

kick start the implementation of these practices.

Applicant must be a member of AAPT. Deadline is December 01, 2008

More information is available at: <<http://www.aapt.org/Grants/hsgrant.cfm>>.

Microdocs- Short videos available on ecology

Dr Stephen Palumbi of Stanford University and Garthwait & Griffin films are pleased to announce the launch of the free [Microdocs - Short Attention Span Science Theater](#).

This website presents a unique combination of technology and environmental science in a new way to help communicate the wonders of science.

Eye-catching and full of the accurate information, each microdoc has been written by leading scientists. Supporting each microdoc is text expanding on the concepts introduced by each film, and links to further reference material. One section lists the *National Education Standards* and the microdocs that address each point.

The website currently feature 30 two-four minute micro-documentaries exploring ecological sustainability - and to do this, the viewer takes a quick trip around coral reefs of the world from locations like Fiji, Samoa, the Caribbean, and Micronesia.

To learn more, please visit [Microdocs: The Short Attention Span Science Theater on Ecological Sustainability](#) or <http://www.stanford.edu/group/microdocs/>.

The Periodic Table Live!

"Periodic Table Live!" is a notable new resource from the Chemical Education Digital Library. Students and teachers especially are invited to interact with the periodic table, chose an element of interest, and learn all sorts of interesting information about that element--from details of its discovery, to its industrial uses and other characteristics. See <<http://chemeddl.org/>>.

Dr. Arbor Talks Trees

This interactive site for kids is an exceptional educational resource. A cartoon instructor teaches about tree anatomy, inner workings, photosynthesis, leaf structure, tree identification, cell structure and function, and more.

Visit <<http://www.urbanext.uiuc.edu/trees3/01.html>>.

Topographic Salad-Tray Model

United States Geological Survey provides this idea for making topographic models in the classroom.

Available at <http://online.wr.usgs.gov/outreach/topo_instructions.html__>.

General Science Resources

These resources can be very helpful, including not only for labs, but PowerPoints as well. "This site was designed initially as a resource for the students and parents & guardians of the students in my science classes. Over the years it has evolved into a teacher resource site as well."

Resources available at <www.science-class.net>.

Groundwater Song

This fun cartoon will help students learn about the water cycle and the importance of groundwater. Check out <<http://dnr.metrokc.gov/wlr/wq/groundwater-animation.htm>>.

Journey 3D" Educator Guide

The Summer 2008 movie blockbuster "Journey to the Center of the Earth 3D" will be released on Tuesday, October 28, on DVD - the perfect format for the classroom. Use the accompanying "Journey 3D" Educator Guide to explore related science topics. How accurate were Jules Verne's ideas about the Earth's interior? What is the theory of plate tectonics? Where are sedimentary, igneous, and metamorphic rocks found? How do Earth systems - the geosphere, hydrosphere, atmosphere, and biosphere - interact? The Educator Guide shows how students can find answers.

AGI, organizer of Earth Science Week, has collaborated with Walden Media, which produced this update of the Verne classic, to develop this booklet of relevant geoscience information and standards-based activities, using the movie as an opportunity to explore "science fiction and science fact." For a printable PDF of the Educator Guide, go to <<http://www.earthsciweek.org>>.

Oklahoma Mesonet Weather Science Fair

Your students are invited to participate in the 17th Annual Oklahoma Mesonet Weather Science Fair. The fair will be held at the National Weather Center in Norman, OK on February 21, 2009. All projects must use weather data.

Teachers must register their classes by **November 14th, 2008**. Send an email to earthstorm@mesonet.org which includes your contact info, the name of your school, and the number of projects you plan to bring. If you have not participated in the fair before, please indicate that you are a new school.

All projects must be registered using the online database by **December 5, 2008**. Full research plans are due **January 23, 2009**. Instructions for using the database will be provided to all new schools.

See <http://earthstorm.mesonet.org/for_teachers/science_fair.php>.

High School Lesson on Sea Floor Spreading

The Oct 2007 "School of Rock Activity of the Month" features an activity about seafloor spreading called "The Race Is On," which you can access at
Visit <<http://www.joiscience.org/learning/activityofthemonth/oct>>.

Templates for games (Jeopardy © and Who Wants to Be a Millionaire©)

Ready to use templates- all you need to do is type in topics and questions!

Download at <<http://teach.fcps.net/trt2/links/powerpointgames.htm>>.