



# Mississippi Science Spots

February 2009

**Mississippi Department of  
Education**  
  
**Office of Curriculum and Instruction**  
  
**601-359-2586**  
  
**Science Specialist: Mary Wroten**  
  
[mwroten@mde.k12.ms.us](mailto:mwroten@mde.k12.ms.us)

## Professional Development

### 2009 National Science Teachers Association Conference in New Orleans March 19–22, 2009

Celebrate science in magical New Orleans, one of our most beloved cities. Attendee registration is now open. Register online or download and submit an Advanced Registration Form in Adobe Acrobat format. Find more information at <http://www.nsta.org/conferences/2009new>.

### Professional Development Opportunities

The U.S. Satellite Laboratory announces several professional development opportunities for schools in each state. Find information at [www.us-satellite.net](http://www.us-satellite.net) about the no-fee, proven, and exciting, thematic science curriculum with teacher training and ongoing support.

### National Association of Biology Teachers (NABT) Nominations

Each year, the National Association of Biology Teachers through its Outstanding Biology Teacher Awards attempts to identify an excellent biology instructor in each of the 50 U.S. states and territories. Nominations of worthy candidates are now being solicited to recognize those individuals whose outstanding work in the classroom qualifies them for this award. Nominate a Mississippi teacher today at <http://mypeoplepc.com/members/aleta/MSABE/id7.html>.

### Presidential Awards for Excellence in Mathematics and Science Teaching (PAEMST)


Congratulations to Mississippi finalists of the 2009 PAEMST Awards for Science, Grades K-6. Myra Kinchen of Clinton Public School District, Kerry Matthews of DeSoto County School District, and Jeanette Simmons of South Pontotoc School District were recently honored at a reception and other recognition activities at the Mississippi Department of Education. The national awardee will receive \$10,000 and a trip to Washington D.C. in the spring.

### PAEMST Nominations and Applications

Nominations and applications for the 2008-2009 award cycle are now available for teachers in grades 7-12 at <http://www.paemst.org>. PAEMST nominations must be submitted by March 1, 2009.

### Grant Applications and Lessons Plans

Earth Day Network has announced new grants for 2008-2009: (1) The National Civic Education Project is designed to promote a more democratically active citizenry of environmental education in today's society. (2) The Campus Climate Challenge provides stipends and year-long support to climate change educators. Information about the grants is available at <http://ww2.earthday.net/node/13458>.

 *This symbol indicates items that are new in this issue of MS Science Spots.*

## NASA Endeavor Science Teaching Certificate Project

The NASA Endeavor Science Teaching Certificate Project awards over 40, one-year fellowships each year to current and prospective teachers. In partnership with State Departments of Education, Endeavor Fellows take five graduate courses in an innovative online format from the comfort of their home or school. They learn to apply research-based pedagogical strategies and cutting-edge content to their classroom contexts while becoming a part of a special network of like-minded educators across the Nation. Contact <http://www.us-satellite.net/> for more information.

# Students



## Inspiring Invention Contest

Students in grades K-8 and 9-12 are invited to participate in the Inspiring Invention Contest. Students in each category will create a thirty-second public service announcement designed to motivate students to pursue inventing and innovating as part of their educations and, later, in their careers. The public service announcement topics shall be focused on ideas for an invention that improves a sport, game or hobby. Details may be found at <http://discoveryeducation.com/inspiringinvention/contest.cfm>. The application deadline is **March 15, 2009**.



## 2009 International Young Eco-Hero Awards

Action For Nature will award cash prizes of up to \$500 to students, ages 8-16, to recognize the individual accomplishments of young people whose personal actions have significantly improved the environment. Download an application at <http://www.actionfornature.org/eco-hero/ecoheroawards.html>. The deadline is **February 28, 2009**.

### Third Annual Gravity-Driven Catapult (Trebuchet) Competition

The University of Mississippi School of Engineering and the Mississippi Junior Academy are inviting all students in grades 7-12 to participate in the Third Annual Gravity-Driven Catapult (Trebuchet) Competition on April 21, 2009. Registration forms, a list of participants, and students' t-shirt sizes must be submitted by **April 7, 2009**. For more information, contact Maxine Woolsey at [mwoolsey@olemiss.edu](mailto:mwoolsey@olemiss.edu) or 662-915-1849.

### Mississippi Regional Science Bowl

The annual Mississippi Regional Science Bowl will take place on Friday, **February 13, 2009**, on the campus of Mississippi University for Women (MUW) in Columbus, MS. The Science Bowl is a Tournament-style academic competition that challenges and recognizes high school students' knowledge of sciences and mathematics. MUW scholarships will be awarded to individuals for outstanding performance in the competition. Visit [http://www.muw.edu/sci\\_math/wsb/](http://www.muw.edu/sci_math/wsb/) for more information.

## New Scholarship Opportunity

The Davidson Institute for Talent Development is offering high achieving young people across the country the opportunity to be named as 2009 Davidson Fellows, an honor accompanied by a \$50,000, \$25,000, or \$10,000 scholarship in recognition of a significant piece of work in Science, Technology, Mathematics, Music, Literature, Philosophy, or Outside the Box. Download an application at [www.DavidsonFellows.org](http://www.DavidsonFellows.org). The deadline to apply is **March 4, 2009**.

### "eCYBERMISSION" Competition

The eCYBERMISSION is a free, web-based science, math, and technology competition that allows students in grades 6-9 to compete for regional and national awards while working together to solve problems in their community. The competition also promotes self-discovery for all students by helping them recognize the real-life applications of math, science and technology. Learn more at [www.ecybermission.com](http://www.ecybermission.com).

### 2009 Thacher Scholars Award

The Institute for Global Environmental Strategies (IGES) announces the 2009 Thacher Scholars Award. This national competition is for high school students to demonstrate the best use of geospatial technologies or data to study Earth. Learn more at <http://www.strategies.org/docs/ThacherAnnouncement2009.pdf>.

## Youth and Adult Outdoor Photography Contest 2009

The Mississippi Wildlife Federation is hosting the Youth and Adult Outdoor Photography Contest 2009. Youth, ages 10-18, are invited to submit photographs no later than **June 1, 2009**. Go to [http://www.mswildlife.org/events/youth\\_adult\\_contest.html](http://www.mswildlife.org/events/youth_adult_contest.html) for more information.

# Free Resources

## NASA Spacewalking Guide

NASA offers new educational resources, including a spacewalking educator guide for grades 5-12, the space environment, the history of spacewalking, NASA's current spacesuits and the work that astronauts do during spacewalks. There are also two investigation activities in an "Exploration Brief" that allows students to demonstrate the principle behind the operation of the space shuttle extravehicular mobility unit (spacesuit). Find out more at <http://www.nasa.gov/audience/foreducators/spacesuits/home/index.html>.

## Color Me Physics

*Color Me Physics* is a series of books created with the goal of introducing children to physics in a fun, exciting way. *Color Me Physics: Coloring Book* introduces children to physics and some of its most famous characters. The book includes one coloring page and a short description for each of the ten physicists

featured. *Color Me Physics: Activity Book* contains games and puzzles. The printable books are available at <http://www.physicscentral.com/experiment/colormephysics/index.cfm>.

## Create A Graph

Create A Graph is a free tool that allows users to design a graph, enter data, and generate five types of graphs. An online tutorial explains and illustrates the different types of graphs and provides a step-by-step guide to creating examples for downloading and printing. Learn more at <http://nces.ed.gov/nceskids/createAgraph/default.aspx>.

## Top 10 Science Questions of 2008

The *Everyday Science Library*, found on the How Stuff Works website at <http://science.howstuffworks.com/10-questions-20081.htm>, explores the science behind commonly used objects and discusses science at work in daily life. The featured article this month is the "Top 10 Science Questions of 2008."

## Free Smithsonian Resources

The Smithsonian Center for Education and Museum Studies offers a searchable database of more than 1500 science lessons on various topics. Lessons include background information, detailed descriptions of activities, and student worksheets. Visit the website at <http://www.smithsonianeducation.org/educators/index.html>.

## The Exploratorium

The Exploratorium offers free hands-on activities for middle school students. The activities, using easily obtained materials, are designed for students to do at home and/or in the classroom. Each is followed by an explanation of the scientific principles utilized in the activity. Visit <http://www.exploratorium.edu/explore/handson.html> for more information.

## Teachers' Domain

"Teachers' Domain" is a free digital library of multimedia resources for K-12 audiences, focusing primarily on life sciences. Teachers and students can use classroom-ready streaming video clips, audio clips and interactive activities. There are over 150 resources from broadcast programs such as Nova, A Science Odyssey, and ZOOM. Teachers can integrate Teachers' Domain content into their existing curriculum. Learn more at <http://www.teachersdomain.org>.

## Howard Hughes Medical Institute

The Howard Hughes Medical Institute produces many award-winning, free science education resources on DVD, VHS, CD-ROM, and the web. All are free to educators and can be ordered through <http://www.biointeractive.org>.

## Ask Dr. Global Change

“Ask Dr. Global Change” is a searchable collection of answers to questions about global warming, ozone depletion, greenhouse gases, and other issues related to climate change. This free service from the Global Change Research Information Office can be found at <http://www.ed.gov/free/s-scienc.html>.

## Geologic Time

“Geologic Time” is a short, easily understandable U.S. Geological Survey booklet that discusses the relative time scale, fossil succession, rocks and fossils, and radiometric time scale. Access it at <http://pubs.usgs.gov/gip/geotime/contents.html>.

## Seeds Feed the World

“Seeds Feed the World” is a publication from the National Gardening Association. Teachers will discover the history of people/seed partnerships and find ideas for classroom investigations. Download a copy from <http://www.kidsgardening.com/special/see-d-news/seedsfeed-03.pdf>.

## The Futures Channel

One of the main goals of *The Futures Channel* is to produce mini-documentaries and multi-media content that educators can use to enliven their curriculums and connect mathematics, science, technology, and engineering to the real

world so that students have context and purpose for what they are learning. More information may be found at [www.thefutureschannel.com](http://www.thefutureschannel.com).

## Free Classroom Activities

The 2007 Advanced Technology Environmental and Energy Center (ATEEC) is a national center that promotes and supports environmental technology education to address the needs of the national and global workforce. Over 25 activities were developed for use in the classroom, which are available at <http://www.ateec.org>.

## Science Fair Central

Discovery Education ([www.discoveryeducation.com](http://www.discoveryeducation.com)) has launched a new website to provide K-8 teachers with a comprehensive approach to science education. In addition to a wealth of general resources, the site includes a link to science fair ideas and resources. Learn more at <http://school.discoveryeducation.com/sciencefaircentral/?pID=fair>.

## Science Education at Jefferson Lab

“Science Education at Jefferson Lab” offers 16 hands-on activities to answer intriguing science questions. Students can learn the periodic table of elements and other science information via flash cards, matching games, and crossword puzzles. Learn more at [http://www.free.ed.gov/subjects.cfm?subject\\_id=41](http://www.free.ed.gov/subjects.cfm?subject_id=41).

## Children’s Science Misconceptions

Operation Physics, an Elementary/middle school physics education outreach project of the American Institute of Physics has compiled a list of children’s common science misconceptions. Read them at <http://www.amasci.com/miscon/opphys.html>.

## Forensics in the Classroom

Court TV has developed, as part of a continuing educational partnership with the American Academy of Forensic Sciences, “Forensics in the Classroom.” Download this free standards-based curriculum supplement at [http://www.courttv.com/forensics\\_curriculum](http://www.courttv.com/forensics_curriculum).

## Real-Time Information

Real-Time Information helps ensure that critical information needed by emergency forecasters & managers during extreme events is available. See "live" views of volcanoes around the world, weather images, geologic & mineral resource information, national flood-threat forecasts, & streamflow information. Visit [interactive2.usgs.gov/learningweb/explorer/topic\\_realttime.asp](http://interactive2.usgs.gov/learningweb/explorer/topic_realttime.asp).

## Subscribe to MS Science Spots

Administrators and educators who wish to subscribe to this newsletter may add their names to the mailing list by sending a blank email to [mwroten@mde.k12.ms.us](mailto:mwroten@mde.k12.ms.us) with the subject line, “Listserve.”