





Newsletter



Mississippi Science Teachers Association

August 29, 2013

2013 MSTA Fall **Conference:** (CSI) Captivating Science Ideas

October 27 & 29, 2013 At the Marriot Hotel in Jackson. MS

For Hotel reservations call: 1-601-969-5100 Room rate is \$119/night (Be sure to mention MSTA when you make your reservations.) Last day to

Don't miss the Russell C. Davis **Planetarium Program**

Russell C. Davis Planetarium will present a program for MSTA Conference attendees on Sunday, October 27th, at 6:00 for free. The planetarium program may be part of CEU's, if you sign up for CEU's. We will have the name of the program at a later time but the program will be for Science teachers both elementary, secondary as well as college.



Submit Proposals For MSTA Conference

WE NEED YOU

Please go to 2013 Electronic **Submission Conference Proposal Form** to submit a proposal to present at the

Fall Conference. Deadline **September 25, 2013**

MSTA will be offering CEU credit again cost will be \$10 for 0.5-1.0 ceu.

Want to get your **MSTA News faster?**

Join the MSTA Listserv and the Mississippi Science Teachers Facebook page. All of the information in the Internet Resource section of this newsletter was gleaned from these two sources. Go to the instructions on joining the listserv by clicking on the links above.

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Presidential Post:

Could summer pass any faster? So much has happened in the field of education and science education. The NGSS is getting started in many states. The minutes from the April 19, 2013, Mississippi Board of Education showed the approval to extend the contract with Measured Progress of New Hampshire to align our 2010 science framework with the NGSS. This progressive step is placing Mississippi science on level with the national standards and framework. This is a very exciting time!

Still not sure what the NGSS means or how to tie it in with Common Core? There is training available through NSTA to help you. Visit the NSTA web site at www.nsta.org. You will see in the upper right corner the logo for NGSS. Clicking on that logo will take you to a resource page. Here you will find professional development (check with your district to see if they will accept the webinars for staff development credit). This PD will help you understand how to connect NGSS and Common Core and provide you with the background to share NGSS with your peers and administrators.

Our annual conference is October 28-29, 2013. Activities begin Sunday, October 27, with a special presentation at the Russell C. Davis Planetarium. The registration form is in this newsletter. Share the registration with your peers. Invite your administrator! We look forward to seeing you there!

Sincerely, Betsy Sullivan, President

President Elect Post:

Each fall, I enjoy reading the Mindset List for entering college freshmen prepared by Beloit College, Beloit, Wisconsin. Picking through the list several item captured my attention.

For instance, "They have always lived in cyberspace, addicted to a new generation of "electronic narcotics." As I look at my own children and my students, I am amazed at their understanding of electronics. During Vacation Bible School (where my alter ego takes over and I have 2-3 year olds for a week) one of my little girls took my iPhone, went to pictures, and pulled up the camera roll so she could see the pictures I had taken. I see very young children with iPads and wonder what kind of students they will be. I must admit "google" is a close friend!

While cyberspace has changed the way we exchange information, I still find a personal touch with my students goes a long way: an encouraging smile, a smiley face on paper, a "good job" comment, etc.

Another statement that caught my eye was: "Their folks have never gazed with pride on a new set of bound encyclopedias on the bookshelf". Do any of you recall looking up information in the World Book Encyclopedia or the hard copy card catalog at the library? Information is literally at our student's fingertips. Fortunately, we can access and use the many wonderful sites available to science teachers. Be sure to sign up for the MSTA listserve to see the resources others have found and are willing to share.

One item that reminds me how times have changed is: "Women have always piloted war planes and space shuttles." For our students, there are unlimited possibilities for their future, regardless of background, race, or gender. We have a great opportunity in our classroom to open avenues of opportunities for our students. Through our influence, some of our students will spend their lifetime in careers that they learned about in our science classes.

With each new school year, I remind myself of Christa McAuliffe's famous quote: "I touch the future. I teach"

(For those who want to see Beloit College's entire list: https://www.beloit.edu/mindset/2016/

Sincerely, President Elect Ann Huber



Scholarship and Grant Opportunity Otis Allen Criteria

- 1. Request a scholarship application (national or regional) from the scholarship chairperson).
- 2. Requests must be received two months prior to the national convention or regional meeting to be attended.
- 3. A person may receive a scholarship once in three to five years.
- 4. Earliest application received will receive first consideration.
- 5. Each recipient will receive scholarship monies as partial expense reimbursement after submitting a copy of their registration and a letter signed by his/her principal stating that the recipient attended the meeting.

To request a scholarship application, contact the chairman of the scholarship committee. Send the request to the following: Minnie C. Parham, Chairman, Otis Allen Scholarship Committee 402 Bell Avenue, Greenwood, MS 38930, Email: minnieparham@bellsouth.net

R. C. Roberts Grant Form

R. C. Roberts Grant Form

The R. C. Roberts Fund was initiated to honor Mr. Roberts, a long-time science supervisor in the Mississippi Department of Education and assist teachers in developing outdoor classrooms, nature centers, or nature trails at their respective schools. Maximum funding that can be obtained by one teacher from one school at a particular time is \$100. Applications for funding must show that additional funds from sources other than R. C. Roberts have been obtained to support the proposed project. This may be "in kind" support as well as monetary. Individuals who receive support from the R. C. Roberts Funds may apply for additional funding provided a period of three years has elapsed since the original funding was granted.

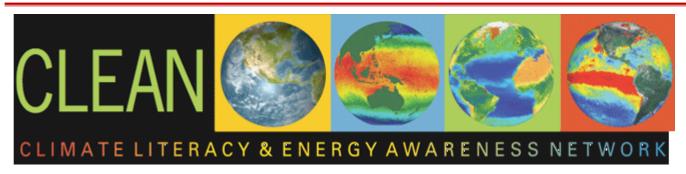
Guidelines for the R. C. Roberts Fund

Individuals interested in applying for funding should get an application form the Newsletter or request an application form from the Executive Officer or President of the Mississippi Science Teachers' Association. The completed application must be attached to the proposal and returned to the Executive Officer. The Executive Officer will assemble a committee of at least three individuals involved in science education who will examine the proposal and recommend funding status. The decision of the review committee to fund or reject the proposal is final.

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Name:
School:
School Address:
Phone:
Principal:
1. How long have you been at the school?
2. What do you plan to do with the money?
3. List the materials and cost of supplies for this project.

4.	Where is this project located in relationship to the school?
	
5.	Do you have the support of the principal? other teachers?
	If so, name/s
6.	What kind of monetary or "in kind" support do you have? List. If "in kind" support is provided, estimate
	its monetary value.

Complete the grant form and attach the proposal and return to: Bess Moffatt, MSTA Executive Officer, 1510 Oldfield Road, Gautier, MS 39553



Free Online Climate and Energy Teaching Resources - Grades 6 - 16

How do we help students become literate with topics surrounding climate and energy? The CLEAN (Climate Literacy and Energy Awareness Network) collection offers the following resources and support:

- 1. The <u>CLEAN search engine</u> directs you to annotations and links for 500+ vetted, online activities, videos, and visualizations on climate and energy for grades 6 16. These resources have been hand-picked and peer-reviewed by scientists for accuracy and teachers for classroom effectiveness.
- 2. The CLEAN site provides guidance on <u>teaching climate</u> and <u>energy science</u> using a set of essential principles to frame the science and inform teaching strategies. Learn more about these scientific principles, why they are important and challenging to teach, strategies for teaching age groups, and get directed to relevant activities, videos, and visualizations for each principle.
- **3.** Join the vibrant <u>CLEAN Network</u> with updates on educational policies and science, discussions with experts, conference & workshop announcements, and weekly telecons (Tuesdays at 1 pm ET). Share this resource with colleagues and students, and **bookmark** it for yourself! <u>cleanet.org</u>

The CLEAN project is led by TERC in Cambridge, MA, CIRES at the University of Colorado and SERC at Carleton College, MN.

Funded by NSF, NOAA, & Dept. of Energy

MISSISSIPPI SCIENCE OLYMPIAD

Hello!

As the director of the Mississippi Science Olympiad, I would like to encourage you and your students to assemble a team to compete in MSO. There are two categories: Division B (Grades 6-9) and Division C (Grades 9-12). The MS Science Olympiad website is http://www.usm.edu/science-matheducation. Additional information about Science Olympiad can be found on the national website, www.soinc.org.



In order to help you prepare for the competition, I invite you to the MSO Coaches Workshop scheduled for Friday, September 20, 2013, from 8:00 am until 3:30 pm at USM. The workshop will start with check-in at the R. C. Cook Union, room H. A registration fee of \$25 will include information and helpful tips on all events (including several that are new), demonstrations, and door prizes. We are making arrangements for vouchers toward lunch on campus.

We will also discuss the mandatory regional competitions scheduled for February. Representatives from both north and south regionals will be available to answer questions. The top 20 teams in each division will be invited to move on to the state competition to be held here at the University of Southern Mississippi on Friday, March 28, 2014.

Workshop attendees will receive a \$10 coupon good toward team registration for the MS Science Olympiad (one coupon accepted per team). Coaches registering a team the day of the workshop will receive the official Science Olympiad manual.

Attached you will find a workshop registration form. Please note that the deadline is Friday, September 13th. Please check the website for updates. The team registration form for the Mississippi Science Olympiad competition is also attached, since most teams register the day of the workshop.

We look forward to hosting the 2014 Mississippi Science Olympiad. Start preparing your teams now for the spring competition. The first-place team from each division will go on to the National Science Olympiad Tournament to be held at the University of Central Florida on May 16-17, 2014 in Orlando.

Please pass this information along to others in your school or district who may be interested. Help us build the Mississippi Science Olympiad so that we can have a great tournament!

If you have any questions, please feel free to contact me at sheila.hendry@usm.edu, or 601-266-6367. We hope to see you soon.

Sincerely,

Sheila Hendry, Ph.D.

Sheifa R Hendry

Director, Mississippi Science Olympiad Center for Science and Mathematics Education The University of Southern Mississippi 118 College Dr. #5087

Hattiesburg, MS 39406



Here are some new funding opportunities and classroom resources.

Discovery Ed STEM Camp

The Discovery Education STEM Camp is a series of standards-aligned curricula available at no cost to schools, districts, non-profit organizations, and parents for use as part of summer camps, after-school STEM programs or wherever support is needed. Please visit http://www.discoveryeducation.com/STEM for all details and to register for free!

Space Math at NASA

The SpaceMath@NASA resource introduces students to the use of mathematics in today's scientific discoveries. Through press releases and other articles, you will explore how many kinds of mathematics skills come together in exploring the universe. Lots of free materials and many use a TI graphing calculator. Please visit http://spacemath.gsfc.nasa.gov/ to check out the wonderful activities and resources.

Toshiba America Foundation

This grant contributes to science & math education by investing in teacher designed projects for students in grades 6-12. Grant requests for \$5,000 or less are accepted on a rolling basis, throughout the calendar year. Grant requests for \$5,000 or more are accepted and reviewed twice a year - August 1st and February 1st each year. Please visithttp://www.toshiba.com/taf and apply now! Good luck!

NSTA New Science Teacher Academy Fellows

The National Science Teacher Association is currently accepting applications for the 2013–2014 New Science Teacher Academy. Learn more about the New Science Teacher Academy during a live web seminar on July 9 or 11. The academy was created to help promote quality science teaching, enhance teacher confidence, and improve teacher content knowledge. Among the many benefits, attendees will get unlimited use of resources including vetted web links for lesson plans, links to state and national standards, professional organizations, safety tips and more. Plus accommodations, coverage of airfare, food, and registration fees to attend the NSTA national conference in Boston next year! Please visit http://www.nsta.org/academy for all details and how to apply.

American Honda Foundation

The American Honda Foundation has grants of up-to \$75,000 to youth education programs focused on science, technology, engineering, and math (STEM). Be sure to review some of the winning entries from last year. The next round of applications is due August 1st. Please visithttp://corporate.honda.com/america/philanthropy.aspx?id=ahf for all details.

Texas Instruments Call for Proposals

If you have practical insights or strategies for effectively using TI technology in the classroom, share them with your colleagues by presenting at the 2014 T3 International Conference, TI's premier professional development event, in Las Vegas, NV. The conference will be March 7-9, 2014. Presentation proposals must be received before midnight, August 16, 2013. Please do not delay. Presentation opportunities fill quickly. Speakers will be selected and notified by November 1, 2013.

BSCS Releases Two FREE Curricula For Teachers

BSCS has recently released two free curricula for science teachers. Middle School Science is an inquiry-based, multidisciplinary science program funded by the U.S. Department of Education and Institute for Education Sciences. The program comprises four units: Earth/Space Science, Life

Science, Physical Science, and Science and Society and provides meaningful ways to help your students meet the Next Generation Science Standards, including opportunities throughout each unit to engage in the practices of science. The program was developed based on the most recent research on teaching and learning with compelling results. The curriculum is only available online and is free for classroom use to teachers who agree to provide usability data and complete student pretests and posttests.

And don't miss out on one of BSCS' most popular curriculum supplements. Funded by the National Institute on Drug Abuse (NIDA), Drug Abuse, Addiction, and the Adolescent Brain is an exciting and informative program that presents students with a new way to think about drug abuse and addiction. Drug Abuse, Addiction, and the Adolescent Brain contains five classroom lessons that focus on the science of how drugs affect the brain, video interviews with leading scientists, animations to illustrate the effects of drugs, and a facilitation guide for presenting the video to adult audiences. For more information on this resource including sample video and lesson overviews, please visit the BSCS website atwww.bscs.org/drugabuse.

From John Moore, NABT

BSCS - A Science Education Curriculum Study



Research generates knowledge, knowledge builds leaders, and leaders transform education. Our vision ...

Travel Award to attend NABT (National Association of Biology Teachers) Conference - Atlanta, GA (Nov. 20th - 23rd)

Motivated, energetic, enthusiastic science instructors at the high school and community college levels are invited to apply for travel awards to attend the 2013 Professional Development Conference of the National Association of Biology Teachers (NABT), to be held in Atlanta, GA from November 20th through 23rd.

The awards are sponsored by the National Evolutionary Synthesis Center (NESCent) and the BEACON Center for the Study of Evolution in Action, which will cover all expenses (transportation, lodging, food and meeting registration).

The goal of this program is to identify talented, enthusiastic instructors who are excited about evolution, provide them with the opportunity to acquire new knowledge and pedagogical skills at the NABT conference, and then have them share this with their students (through classroom activities) and colleagues (through professional development activities).

Applicants should be high school or community college instructors with a passion for learning about and teaching evolution. They should have a proven track record of successfully covering evolutionrelated topics in their courses in innovative ways. In addition, they should be able to demonstrate a long-standing commitment to instructor professional development - both their own, and that of their colleagues.

If you're interested in becoming a NESCent/BEACON Evolution Scholar and helping to bring cutting edge evolutionary science to your institution, please visit http://www.nescent.org/eog/NABTtravelaward.php.

If you have questions, please contact Dr. Jory Weintraub at jory@nescent.org.

DEADLINE TO APPLY IS 8 PM EASTERN (5 PM PACIFIC) ON FRIDAY, OCTOBER 4th, 2013. AWARD WINNERS WILL BE ANNOUNCED BYFRIDAY, OCTOBER 11th.

OUTSTANDING BIOLOGY TEACHER AWARD

SPONSORED BY PRENTICE HALL

Each year, the National Association of Biology Teachers (NABT), through its *Outstanding Biology Teacher Awards* (OBTA), attempts to identify an excellent biology instructor in each of the 50 U.S. states; Canada; Washington, D.C.; Puerto Rico, and overseas territories. Nominations of worthy candidates by NABT members and friends help us to recognize those individuals whose outstanding work in the classroom qualifies them for this award.

Prentice Hall, the OBTA program sponsor, gives each awardee a pair of precision binoculars. Past recipients have received a microscope from Leica Microsystems, Inc., and a Video Flex Camera System from Ken-A-Vision. Award winners and their schools also receive certificates, as well as public and professional recognition. Recipients receive a year's complimentary membership in NABT and NABT honors Outstanding Biology Teacher Award recipients at a special ceremony in conjunction with its national convention.

Who is Eligible? ... Current biology/life science instructors (grades 7-12) with at least three years public, private, or parochial school teaching experience. A major portion of the nominee's career must have been devoted to the teaching of biology/life science. NABT membership is not a requirement. Unsuccessful candidates may be re-nominated. OBTA winners are ineligible for 10 years after selection.

What is the Process? ... Candidates will complete a form summarizing their professional experience, academic background, and education philosophy and provide four recommendations from colleagues familiar with their teaching effectiveness. Classroom observations and/or videotapes are important steps in the evaluation process.

Who Can Make Nominations? ... Colleagues, administrators, students, the teacher/candidates themselves, or anyone competent to judge the candidate's teaching effectiveness.

What Are the Criteria? ... Teaching Ability and experience, cooperativeness in the school and community, inventiveness, initiative and student-teacher relationships.

How Do I participate? ... Visit MSABE/wikispaces.com to nominate online or...Fill out the nomination form below and send your nomination to

Dr. Aleta Sullivan, OBTA-MS Director, P. O. Box 588, Poplarville MS, 39470

Outstanding Biology Teacher Award Nomination Form Name of Candidate:	
Candidate's School:	
School Address:	
School Phone: E-mail:	
Your Signature:	
Your Title/Connection to Candidate:	_

MS Project WET

Dear Teachers.

It is time for Make a Splash again. This is our free water festival for 4th and 5th graders. Free transportation to the museum, free admission and free lunch for your students. See the flyer to see if

Mississippi Science Teachers Association

08/29/2013

you qualify. Schools will be chosen on a first come first serve basis. New schools will be chosen over those that attended last year. That being said, you can still be considered if new schools do not fill all of the spots. Please let me know as soon as possible if you are interested.

Megan Fedrick
Education Coordinator
MS Project WET Coordinator
FW 303
MS Museum of Natural Science
2148 Riverside Dr.
Jackson, MS 39202
Megan.Fedrick@mmns.state.ms.us
601.576.6026



NSTA'S NEW SCIENCE TEACHERS ACADEMY

Are you a middle- or high-school science teacher in your 2nd through 5th year of teaching? Do you spend at least half of your time in the classroom? If so, you should consider applying to participate in the 2013-14 NSTA New Science Teacher Academy, a yearlong professional development and mentoring program.

A previous fellow of the program writes:

"All in all, the experience has been professionally invaluable. I might even go as far as to say life changing--since the experiences and benefits from this opportunity have altered my professional pathway. I want to thank all of those who worked so hard to make the New Science Teacher Academy the amazing opportunity that it was."

The National Science Teachers Association recognizes that new teachers' performance and confidence is enhanced with professional development, engagement with like-minded peers, and solid professional mentoring.

To that end, NSTA and sponsoring corporations established the New Science Teacher Academy, a program that fills those needs.

Academy Fellow Benefits:

- All-expense-paid (accommodations, airfare, meals, and registration fees) trip to the NSTA National Conference on Science Education
- Full membership in the National Science Teachers Association

- Access to facilitated, web-based curriculum devoted to content and classroom pedagogy
- Professional development web seminars conducted by leaders in science education
- E-mentoring from experts in the Fellow's science discipline and grade level
- Attendance at a Professional Development Institute or a Research Dissemination Conference

Visit <u>www.nsta.org/academy</u> to learn more or to apply. If you are not eligible to apply, but know a colleague who is, please feel free to forward this opportunity to them.



NSTA:: New Science Teacher Academy

www.nsta.org
On behalf of NSTA and the NSTA New Science Teacher A

On behalf of NSTA and the NSTA New Science Teacher Academy sponsors, we would like to congratulate a...

Teachers Needed to Pilot Next Generation Science Standards (NGSS)

Dear K-12 Science Teachers,

We are looking for K-12 science teachers across the nation to pilot the Next Generation Science Standards version of the STEMscopesT science curriculum. Participation in this pilot is an exciting opportunity for teachers to contribute to the effectiveness of the curriculum, benefiting not only your own students, but also students nationwide. As an incentive for participation, teachers will receive \$100 for each lesson reviewed that is returned to us with quality feedback.

STEMscopesT is a comprehensive online science curriculum that provides numerous hands-on inquiry activities, including intervention and enrichment resources, plus teacher support materials. Rice University has aligned the curriculum to NGSS so it can be used at the national level to benefit all students and teachers.

STEMscopesT can help your school or district by providing research-based Rice University-developed resources that support rigorous, student-centered STEM learning through inquiry-based, hands-on science learning activities. By providing the STEMscopesT team with quality feedback, teachers will help the us ensure that the NGSS version meets both our high standards for rigor and the needs of teachers and students, and that it can be implemented in classrooms across the nation.

Teachers participating in this pilot will be required to provide high quality descriptive feedback on their experiences teaching with the curriculum. In particular, we are interested in teachers' experiences with the "inquiry and practices" and "assessment" features of the curriculum within a 3-week timeframe. We would like for teachers to start reviewing the curriculum starting on September 1, 2013. Teachers may review as many lessons as they are able to fit into their scope and sequence, provided that feedback is of high quality and returned within the specified time frame.

The STEMscopesT curriculum team understands the practical realities of conducting pilots with schools and educators. The team is also aware of the considerable demands on teachers' time and appreciates your thoughtful consideration of this effort. Please contact Sandra Guzman Foster, Ph.D., Project Manager for the STEMscopes pilot at sfoster@stemscopes.com if you have questions regarding this pilot or if you would like to participate. If you are interested in participating, please include the following in your email: 1) your full name, 2) the grade level you teach, (if you are a secondary teacher, the science area you teach (physical science, earth science, biology), etc.), and 3) an email address and a phone number where you can be reached.

sfoster@stemscopes.com





Here are your science education resources and announcements for July 2013 provided by the Science Matters Network. Please forward them on to other science educators in your school and/or school district.

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Six Lockheed Martin–NSTA Fellows Experience Behind-the-Scenes Look at U.S. Military Satellite Launch and Human Spaceflight Program Tour

Last Friday, six science teachers from Florida and Colorado traveled to the Cape Canaveral Air Force Station in Florida to watch the launch of the U.S. Navy's second Mobile User Object System (MUOS) satellite atop the Atlas V rocket.



U.S. Navy's second Mobile User Object System (MUOS-2) satellite atop the Atlas V rocket.

Additionally, the teachers—who are Lockheed Martin—NSTA Fellows in the 2012—2013 NSTA New Science Teacher Academy—got upclose tours of the Orion Multi-Purpose



Lockheed Martin–NSTA Fellows at the launch of the U.S. Navy's second MUOS satellite. Left to Right: Mary Maddox, Valerie Christou, Robin Barkes, Lauren Case, Robin Hockey, Steve Kirsche.

Crew Vehicle Operation and Checkout Facility and a Cape Canaveral U.S. Air Force Station launch pad, and met with Lockheed Martin management and representatives of the U.S. Navy to gain a better understanding of the skills required of next generation space scientists and engineers.

The MUOS spacecraft, built by Lockheed Martin for the U.S.

Navy, vastly improves current secure mobile satellite communications by linking mobile users for the first time to a powerful voice and data system that delivers high speeds and data streaming, similar to consumer smartphone capabilities.

For the last six years, the NSTA New Science Teacher Academy has provided personalized support and high-quality resources to more than 1,000 science teachers nationwide. <u>Applications</u> for the 2013–2014 Academy are being accepted through August 26, 2013.

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Curiosity is the Most Important Traits for Success in the Science Classroom, New Survey Finds

According to the findings of a new pulse <u>survey</u> conducted by the FMC Corporation, FMC scientists, parents, and teachers in the Philadelphia School District agree that curiosity is the most valuable traits for kids' success in the science classroom.

The survey revealed that the majority of FMC scientists believe that curiosity (59.6 percent) and creativity (50 percent) are the most important traits for success in their field. The majority of scientists (84.6 percent), teachers (79 percent), and parents (65.5 percent), said that curiosity is the most important trait for a science student. Students had a different view, and the majority said that being smart (56.1 percent) led to success in the science classroom. About half of students (47.6 percent) also believed that successful scientists need to be smart.

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AFT Report Reveals U.S. Students Receive Subpar Education Due to Pervasive Test Preparation and Testing

A thorough analysis of two school districts' standardized testing programs concluded that students are not receiving a top-quality education because of extensive test preparation

and testing, according to a new report—<u>Testing More, Teaching Less: What America's Obsession with Student Testing Costs in Money and Lost Instructional Time</u>—released this month by the American Federation of Teachers.

Test preparation and testing took up 19 full school days in one school district and a month and a half in the other in heavily tested grades, making clear that cutting that amount in half would restore needed instructional time and provide additional funds for other instructional purposes, the report found. The study also found:

1. Direct financial cost of testing:

- The Midwestern school district spent more than \$80 per pupil tested in grades 5–6 and grade 8, but less than \$60 per pupil in grades K–2 and grade 12.
- The Eastern school district spent between \$50 and \$70 per pupil tested in most grades.
- 2. Annual cost of testing per pupil—combining costs for test purchasing and licensing, costs for logistics and administration, and time costs at \$6.15 per hour, per student, to account for instructional time lost to testing:
- The Midwestern school district's annual cost of testing per pupil in grades 3–8 was \$600 or more. For grades K–2, testing costs were around \$200 per student. In high school, except grade 12, per-student testing costs ranged from \$400 to \$600.
- The Eastern school district's annual cost of testing for per pupil in grades 6–11 exceeded \$1,100. For grades 1–2, testing costs were around \$400 per student; for grades 3-5, costs ranged between \$700 to \$800 per pupil.

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Teacher Education, Professional Development, and Grant and Award Opportunities 2014 Mickelson ExxonMobil Teachers Academy

Applications are now being accepted for the 2014 Mickelson ExxonMobil Teachers Academy. The Academy is an intensive one-week, all-expense-paid professional development program designed to help teachers develop innovative math and science teaching skills. Third- through fifth-grade teachers located in the U.S. are encouraged to apply. Applications for the 2014 Academy are due October 31, 2013. For more information about the program, click here.

James Bryant Conant Award in High School Chemistry Teaching

The award recognizes outstanding teachers of high school chemistry in the United States, its possessions or territories, at the national level. Any individual, except a member of the award selection committee or currently enrolled student of the nominee, may submit one nomination or support form in any given year. The nominee must be actively engaged in the teaching of chemistry in a high school (grades 9 -12).

The award consists of \$5,000 and a certificate. Up to \$2,500 for travel expenses to the meeting at which the award will be presented will be reimbursed. A certificate will also be provided to the recipient's institution for display. Click here for more information.

Captain Planet Foundation Grants

The Captain Planet Foundation funds and supports hands-on environmental projects for children and youths ages 6–18. Its objective is to encourage innovative programs that

empower children and youth around the world to work individually and collectively to solve environmental problems in their neighborhoods and communities. Grant amounts range from \$250 to \$2,500. Deadlines for submitting grant applications are **September 30** and **February 28.** Click here for more information.

American Honda Foundation Grants

The foundation awards grants of up to \$75,000 to K-12 schools, colleges, universities, trade schools, and others for programs that benefit youth and scientific education. ("Scientific education" encompasses the physical and life sciences, mathematics, and the environmental sciences.) The foundation is seeking programs that meet the following characteristics: scientific, dreamful (imaginative), creative, humanistic, youthful, innovative, and forward thinking. Deadlines to apply for the grants are **May 1**, **August 1,November 1**, **and February 1**. Click here for more information. (back to top)

Teacher Resources

Scope It Out! Game

The James Webb Space Telescope (JWST) may look unusual and not much like a telescope, but it has much in common with simple tube-shaped telescopes. NASA's Scope It Out! Game, most appropriate for high school students and adult astronomy buffs, uses puzzles to teach players about the basics of common refracting and reflecting telescopes you might have in your backyard. Then the game introduces the JWST and shows how it has the same basic parts as a typical telescope. Finally, the game compares the JWST to the Hubble Space Telescope and shows that while they don't look alike, they have the same essential parts. Inform students to pay close attention as they play the game because the information presented in each level will help them solve the puzzles in the next round. Users who want to run the game at an exhibit, museum, observatory, or university can download special files from the site.

Climate Science Activity Book

<u>Discover Your Changing World With NOAA: Ten Activities to Introduce You to the Essential Principles of Climate Science</u> introduces middle and high school students to the principles of climate science and the factors involved in climate change. Students explore climate science concepts as they make a solar cooker, set up a home weather station, construct an electronic temperature sensor, create a unique message about climate change, and play the Are You Climate Literate? board game. Each activity includes detailed instructions and illustrations.

BirdSleuth Project

With lesson plans, videos, images, facts about birds, and opportunities to participate in citizen science projects, the Cornell Lab of Ornithology's <u>BirdSleuth website</u> can hook students of all ages on science through the study of birds. In Get a Bird's-Eye View of Nesting Birds, elementary and middle school students watch footage from live bird cams and learn about nesting behaviors and habitats through accompanying lessons. In Evolution in Paradise, high school students explore evolution concepts through lessons and videos inspired by birds of paradise. (back to top)

What Is Science Matters?

Science Matters is an initiative by the National Science Teachers Association (NSTA) to bring content, news, and information that supports quality science education to parents and teachers nationwide.

Science Matters, sponsored by the ExxonMobil Foundation and Shell Oil Company, builds on the success of the Building a Presence for Science program, first launched in 1997 as an e-networking initiative to assist teachers of science with professional development opportunities. Building a Presence for Science—now Science Matters—reaches readers in 34 states and the District of Columbia.

Why does Science Matter? Science is critical to understanding the world around us. Most Americans feel that they received a good education and that their children will as well. Unfortunately, not many are aware that international tests show that American students are simply not performing well in science when compared to students in other countries. Many students (and their parents!) believe that science is irrelevant to their lives.

Innovation leads to new products and processes that sustain our economy, and this innovation depends on a solid knowledge base in science, math, and engineering. All jobs of the future will require a basic understanding of math and science. The most recent ten year employment projections by the U.S. Labor Department show that of the 20 fastest growing occupations projected for 2014, 15 of them require significant mathematics or science preparation to successfully compete for a job

This is why Science Matters. Quality learning experiences in the sciences—starting at an early age—are critical to science literacy and our future workforce. Feel free to publish this information in school newsletters and bulletins, and share it with other parents, teachers, and administrators.

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We Want to Hear from You

Do have a story idea or announcement that you think we should consider? Do you have a suggestion for how we can make this newsletter better? Let us know what you think. E-mail us your suggestions and feedback at sciencematters@nsta.org. We look forward to hearing from you!

ANNOUNCEMENT! Middle School Science Teachers Conference on Friday, September 13, 2013.

The Center for Mathematics and Science Education (CMSE) at the University of Mississippi will offer a **Middle School Science Teachers Conference on Friday**, **September 13**, **2013**. This conference begins at 8:30 a.m. and will feature *lab without a laboratory and a mobile planetarium demonstration*! This is a one-day conference led by University Faculty and Graduate Fellows from the CMSE. Cost of attendance is \$125 (includes lunch and 0.7 CEUs). Please join us here at the Jackson Avenue Center on the campus of the University of Mississippi.

For more information, call Charlotte Dailey at <u>662-915-6621</u> or visit our website at http://cmse.olemiss.edu/professional-development/middle-school-science-teacher-conference/. There is an informative flyer attached. Please post this information accordingly in your departments and schools!

Registration is now open!

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Middle School Science Teacher Conference

This one-day conference focuses on integrating inquiry throughout the science content frameworks. This conference is designed for 5th-8th grade science teachers.

September 13, 2013



REGISTRATION INFORMATION

Cost: \$125 (includes lunch and 0.7

CEUs)

Location: Jackson Avenue Center

University of Mississippi

Oxford, MS

Time: Septemember 13, 2013

8:30 a.m. -- 4:00 p.m.

Register: http://cmse.olemiss.edu/

professional-development/

SESSION TOPICS

- Inquiry in the Content Strands
- Mobile Planetarium Demonstration
- Lab without a Laboratory
- And More!!



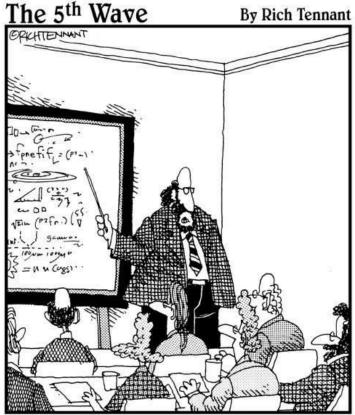


CONTACT INFORMATION

1111 Jackson Ave. W, Suite G Oxford, MS 38655

> umcmse@olemiss.edu Phone: 662-915-6621

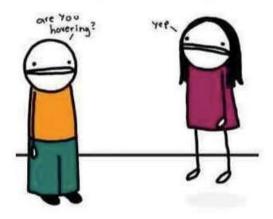
Just for Fun

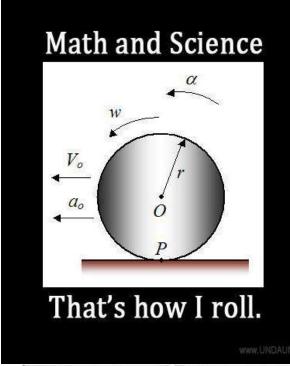


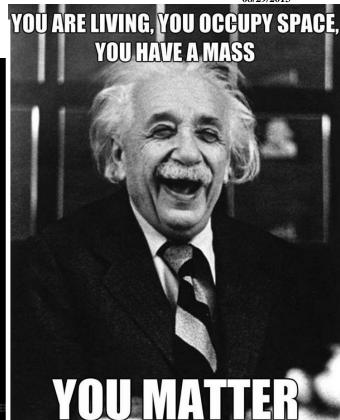
'Along with 'Antimatter,' and 'Dark Matter,' we've recently discovered the existence of 'Doesn't Matter,' which appears to have no effect on the universe whatsoever."

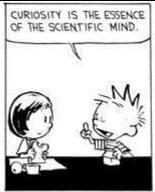
did you know?

You are never actually touching anything. Your atoms' electrons repel objects when they are 10^-8 meters away from you, but you can feel the force of the resistance. Technically right now, you're hovering.







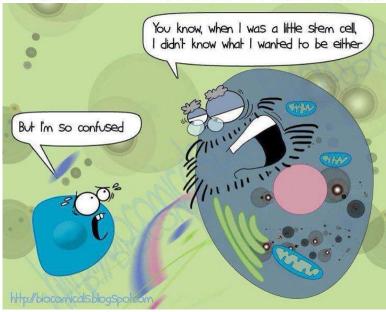




FOR EXAMPLE, YOU KNOW







MSTA Fall Conference - What a Bargain!!

This is what you get for your registration fee—

- Conference registration (access to over 100 sessions on science)
- MSTA T-shirt
- Lunch on Tuesday (Awards Luncheon)
- MSTA Dues for one year.
- MSTA Reception and Auction
 - o Free entry to the MS Museum of Natural Science exhibits
 - Heavy hors d'oeuvres and beverage
- Tour of Mississippi Children's Museum
- And do not forget the six publications per year and listserv to keep you up-to-date on Science Education opportunities.

MSTA CONVENTION ADVANCE REGISTRATION FORM 2013 MSTA Annual Convention October 27-29, 2013 Marriott Jackson, Jackson, MS

IMPORTANT NOTES:

- Each person attending the annual convention must complete a separate form.
- Spouses must file separate forms.
- Convention attendees must wear their nametag to gain admission to all convention activities.
- Early Bird Advanced registration deadline is Wednesday, October 9, 2013 (applications MUST be postmarked by October 9th for early-bird "free" t-shirt).
- Continued Advanced registration (no t-shirt) can be made through October 18 (postmarked date).
- For hotel reservations: Marriott Hotel-Jackson, Mississippi (Phone: 601-969-5100)

Cut-off-date for rooms is September 28, 2013)				
1. REGISTRATION INFORMATION (PLEASE PRINT)	2. REGISTRATION FEES*			
Name	Full Program (Mon. & Tues.) Rates			
	Member/Non-member \$70.00			
School/Organization (for convention badge)	Undergraduate/Graduate Student \$25.00			
PROFESSIONAL ADDRESS	Non-teaching Family/Guest/Spouse \$35.00			
Address	These Include the Awards Luncheon on Tuesday.			
City/State/Zip	OR Daily Admission: [Check the day(s)]			
School Phone	Monday. October 28 only:			
Grade(s) and/or subjects that you teach:	Member/Non-member \$40.00			
	Full-time Undergraduate/Graduate Student \$15.00			
	Non-teaching Family/Guest/Spouse \$20.00			
HOME ADDRESS	Tuesday, October 29 only:			
Address	Member/Nonmember \$70.00			
City/State/Zip	Full-time Undergraduate/Graduate Student \$25.00			
	Non-teaching Family/Guest/Spouse \$35.00			
Home Phone: ()	The Tuesday registration fee includes admission to the Awards luncheon.			
E-mail Address please print carefully : (If you have a personal email address you may want to use it so if you	Total Payment \$			
change schools your newsletters and communications will follow you.)	Make checks payable to MSTA			
	Early Bird Advanced Registration fee includes T-shirt. MUST be postmarked by 10/09/2013.			
	No registration refunds for registrations after 10/04/2013			
* On-site registration fees will be \$5.00 higher and does not include T-shirt.	T-shirt size:			
** Teachers who are also part-time graduate students	FOR OFFICIAL USE ONLY			
must register at the Member/Nonmember rate.	Personal Check Cash			
Send completed form and payment to: MSTA - Aleta Sullivan, Registrar	School CheckPurchase Order			
PO Box 588 Poplarville, MS 39470	Amount Received:			
email: <u>aleta@peoplepc.com</u> and I will let you know by email when I	By: Date:			
receive your registration				

Mississippi Science Teachers Association

2013 Convention Exhibit Registration Form The Marriott Hotel, Jackson, MS October 27 - 29, 2013

Your Organization:						
Address:						
Phone: ()	Fax: ()					
When you e-mail this form please e-mail m Individual(s) Responsible for Exhibit:	ne at : ebmat@bellsouth.net Thanks!					
Address (if different from above): List names needed for Convention badges	s: (3)					
and 3' high side dividers. Each booth w	hibit booth will be comprised of 8' high back drapes vill be furnished with one 7" x 44" company name sign irs and one wastebasket. Identification badges will be					
Service Contractor.	other services will be available through our Exhibit d to exhibitors 6 weeks prior to the show. This packet ing instructions for show materials.					
Booths for Commercial Organizations:	Booths for Non-Profit Organizations:					
8' x 6' booth spaces are \$300.00 each.	8' x 6' booth spaces are \$150.00 each.					
No. of booth(s) x \$300.00 =	No. of booth(s) x \$150.00 =					
Amount of payment enclo Make checks payable to N MSTA Mail form and payment on or before Octob	liss. Science Teachers Assn. or					

Belinda Matlock, Convention Exhibits Coordinator H: 4055 Bailey Acres Circle, Meridian, MS 39305

W: Lamar School, 544 Lindley Road, Meridian, MS 39305

Ph: 601-482-1345/ Fax: 601-693-7004

e-mail: ebmat@bellsouth.net

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Deborah Duncan, 1402 Golf Course Rd., Philadelphia, MS 39350 or email me at deb50duncan@gmail.com

MSTA Membership Application								
Mississippi Science Teachers Association cordially invites you to become a member.								
To do so, please complete the items below. Return completed form and the \$10.00 annual membership fee (\$5.00 student) to:								
Melinda Miller, Treasurer Mississippi Science Teachers Association, PO Box 588		Email address: Please print and use your personal address.						
Poplarville, MS 3947								
Name:								
	Last	First		Middle Ini	tial			
Home Address:								
	Street or Box		City	State Zip				
Name of School or Institution:								
Work address:								
	Street or Box		City	State Zip				
Grade Level: Circl E-mail address if y Subject(s) Taught:	ou have one:				•			