

## April Eblast

Hi Everyone and Welcome to Spring:

Don't forget to pass this information on to anyone in your building who might be able to use it. This month we have:

1. Math / Science Workshop
2. Chemicals in Montana Schools
3. Earth Science Community Meeting
4. Are you a K-12 educator looking for graduate-level science coursework?
5. Native Nexus Conference set April 13-15 at MSU
6. Building Number Sense Workshop for K-6
7. Tip of the Month
8. Present in Missoula for MCTM or MSTA Next Year
9. Two web sites you might use!
10. Chemistry Olympiad
11. Astronomy in Hawaii this summer

Upcoming dates in science and math: Just as a reminder, we'll list some of the dates of upcoming events. All of these have been explained in either our previous eblast and these are all archived at <http://ecommerce.nsta.org/bap/>

April 3 – 5 – Montana Science Fair in Missoula

April 6 – 9 – NCTM in Anaheim, CA

April 13 – 15 – Native Nexus Conference at MSU

April 16 – Expanding your Horizons in Science and Mathematics in Bozeman

April 29 – May 1st – Building the Power of Algebra with Technology Workshop at MT. Learning Center

May 16 - Deadline to submit proposal for a presentation next year in Missoula

June 13 – 17 – Science / Math Workshop at Canyon Ferry

July 5 – 8th – Building Number Sense Workshop at Canyon Ferry

We'd love to know about your event so please send us information.

1. Math / Science Workshop

Plan on attending the math / science workshop at Canyon Ferry on June 13 – 17. This workshop is about a marvelous integrated unit of study strong in math where students receive kits to put together robotic toys. The kits are free and your students will have the opportunity to participate in a wonderful hands-on workshop. You can register by going to [www.umt.edu/cyberbear](http://www.umt.edu/cyberbear). If you are one of the first 20, you can almost go for free.

2. Chemicals in Montana Schools

In August a survey was sent to over 400 Montana schools asking about chemicals they might have in storage. Over 37% of the schools returned the survey. If you wish to see the results go to <http://www.mdeqschoollabs.com>. This site also has information regarding hazardous waste management and disposal of science lab chemicals. Another excellent source on chemical management is Flinn Scientific ([www.flinnsci.com](http://www.flinnsci.com)). The company's chemical & biological catalog reference manual 2005 has become the resource on chemical storage and safety.

3. Earth Science Community Meeting

NASA Earth Science Education Community Meeting May 18-20, 2005 Rosen Centre Hotel, Orlando, FL.

The meeting website is: <http://www.ncar.ucar.edu/eo//roadmap/>

NASA will hold a second Earth science education community meeting May 18-20, 2005, in Orlando, Florida at the Rosen Centre Hotel. The broad Earth system science education community is invited to participate in this important planning activity.

At this meeting the Steering Committee will present a draft NASA Earth science education roadmap for community review and comment. The Earth Science Education Plan is available at <http://science.hq.nasa.gov/strategy/index.html> (scroll down to \_Education Plan\_).

## Travel Support

Deadline to apply April 4, 2005

Notification April 22, 2005

A limited amount of support will be available to ensure diverse/broad participation by the community.

Selection will be based on: Diversity of participation; Potential contribution to the meeting objectives and roadmapping process; and demonstrated need -- no other sources of travel support/funding are available to attend this meeting. NASA particularly encourages classroom teachers to apply for travel support.

Applications will be available on the conference WWW site, with an April 4 deadline to apply. Applicants will be notified of the status of their travel support request no later than April 22.

4. Are you a K-12 educator looking for graduate-level science coursework?

Deepen your knowledge of the life, Earth and physical sciences this summer through an online course from Seminars on Science, the award-winning online professional development program from the American Museum of Natural History.

Seminars on Science is offering eight courses this summer:

- o The Ocean System – Integrated Science (a new course)
- o Diversity of Fishes – Classification, Anatomy and Morphology
- o Earth: Inside and Out – Dynamic Earth Systems
- o Genetic, Genomics, Genethics – Molecular Biology
- o Space, Time and Motion – Physical Science
- o The Link Between Dinosaurs and Birds – Evolution and Classification
- o Sharks and Rays – Ecology, Classification and Evolution
- o In the Field with Spiders – Classification, Anatomy and Morphology

If you have questions, email [seminfo@amnh.org](mailto:seminfo@amnh.org) or call (800) 649-6715. (Note: save money by registering early).

For more information on courses or to register, go to

<http://learn.amnh.org/welcome.php?w=MTSTA>

## 5. Native Nexus Conference set April 13-15 at MSU

A conference that will explore Indian arts and science at the Missouri Headwaters is scheduled April 13-15 at Montana State University's Strand Union Building. High school student groups are especially encouraged to attend.

Native Nexus will focus on cultural understanding and environmental awareness among students, teachers, professionals, elders and tribal government officials. It will precede MSU's 30th annual American Indian Council Pow Wow, which is scheduled April 15-16.

MSU President Geoff Gamble will open the Native Nexus conference Wednesday, April 13, followed by an opening blessing by Henrietta Mann, Cheyenne prayer leader and special assistant to the MSU president. The conference will

feature more than 20 presentations by renowned artists and scientists, including Gregory Cajete, artist and author of "Native Science;" Susan Stewart Medicine Horse, artist and director of Chief Plenty Coups State Park; Darrell Kipp, executive director of the Piegan Institute; Russell Stands Over Bull, president of Arrow Creek Resources; Birdie Real Bird, Hardin Public Schools educator and Crow doll maker; Suzanne Christopher, MSU health professor and director of the MSU Messengers for Health program; Walter Fleming, head of MSU Native American Studies Department and Tim Ford, head of MSU's Microbiology Department.

The American Indian Science and Engineering Society's (AISES) Knowledge Bowl for high school students will be held on Friday, April 15. The second

Gathering of American Indian Artists Arts and Crafts Market, organized by the Montana Tribal Tourism Alliance, will take place on April 14 and 15 in the Strand Union Building.

Conference registration forms and more information about the conference, are available at the Native Waters website, <http://www.nativewaters.org/> or call (406) 994-6079 or email [nativenexus@hotmail.com](mailto:nativenexus@hotmail.com). For more information on the American Indian Council Pow Wow, contact Jim Burns at (406) 994-4880 or [jburns@montana.edu](mailto:jburns@montana.edu). For more information on the Gathering of American Indian

Artists Arts and Crafts Market, contact Dyani Bingham at (406) 259-4600.

#### 6. Building Number Sense Workshop for K-6

This summer there is a special workshop for administrators, math coaches, math resource teachers, and lead teachers examining ways to build student proficiency in math. The workshop is taught by two elementary math coaches from Billings. For any administrators and lead teachers who want to learn what is involved in improving performance in K-5 math, this workshop is a must. The workshop is held at the Montana Learning Center at Canyon Ferry Lake. The deadline for registration is April 1 or until the workshop is filled. For more information there is a flyer posted at <http://ecommerce.nsta.org/bap> or contact Linda Horst at [horstl@billings.k12.mt.us](mailto:horstl@billings.k12.mt.us)

#### 7. Tip of the Month

This is a new feature to our BaP eblast. We have many talented teachers out there with some great ideas so we thought it might be helpful to share them. If you have an idea or tip, please let me know so that I can include it in future eblasts.

This month's tip comes from Dan O'Brien at Polson schools. There are five people in the science department and they all seemed to use the back room to eat lunch, but there was very little professional discussion among the teachers during this lunch hour. Dan obtained a table that could be placed in the center of the room so everyone was facing each other as they ate lunch. He was amazed at how much conversation was generated around the table during lunch. Teachers were talking about curriculum, pedagogy, sharing teaching and content ideas, etc. Everyone working together in a school helps to produce a stronger curriculum and experience for the students. What could you do at your school to generate more conversations between staff members? Thanks Dan for a great tip.

#### 8. Present in Missoula for MCTM or MSTA Next Year

Don't forget to present at the state convention next year in Missoula. The convention is held Oct. 20 – 21 and the deadline for submitting proposals to present is May 16. Many times if you put a proposal application in an outstanding teacher's mailbox in your building, it might be enough to convince them to present. The easiest way to obtain an application is <http://mea-mft.org/edcon>. You can either print the form off or you can fill it out online (the final submission is best online). Think of some of your fellow professionals that might benefit from making a presentation. Just the fact that you recognize them by putting an invitation in their mailbox might make their day.

#### 9. Two web sites you might use!

The Exploratorium always seems to come up with the greatest web site links, and this month is right on course. SATURN: JEWEL OF THE SOLAR SYSTEM  
<http://www.exploratorium.edu/saturn/> . After its long journey to Saturn's largest moon, Titan, the Huygens probe was released from the Cassini spacecraft. Learn about Saturn and Titan and view archived Webcasts from January 2005. Listen in as Exploratorium Senior Scientist Paul Doherty (remember our MEA last year) talks to mission scientists at NASA's Jet Propulsion Laboratory about Titan, what the new pictures of Saturn's largest moon tell us, and what it means for our understanding of earth.

A second great website is MATH EXPLORER

[http://www.exploratorium.edu/math\\_explorer/index.html](http://www.exploratorium.edu/math_explorer/index.html)

Looking for a way to get middle-schoolers interested in math? The Exploratorium created The Math Explorer because:

\*more middle school kids would like math if they learned it the Exploratorium way

\*getting kids excited about math opens up career paths

\*they wanted kids to see how math can be useful, interesting, and fun.

The Math Explorer has games for kids who like playing, crafts for kids who like making things, and science experiments for kids who like experimenting. For educators, The Math Explorer has clear, simple explanations of math that you never learned (or you've forgotten). Best of all, you don't have to be a math whiz yourself.

Take a minute and check out these web links.

#### 10. Chemistry Olympiad

Montana is participating in the National Chemistry Olympiad. This contest challenges top chemistry students to answer a series of chemistry questions. To view these questions (they are an excellent data bank of chemistry questions) go to: <http://center.acs.org/education/olympiad/2000/OL00LS.pdf>

To view all the rules and requirements of this contest, go to the Montana message board at <http://ecommerce.nsta.org/bap>. The deadline is April 12. All of this information was sent to teachers whose demographic profile show them teaching chemistry so if you didn't receive this information earlier, you can either change your demographic profile at <http://ecommerce.nsta.org/bap> or else let me know, and I'll make the changes. Thanks for your efforts and work.

11. Astronomy in Hawaii this summer

Astro-Vaganza is offered this summer through the University of Hawaii, Hilo and the Mauna Kea Astronomy Education Center in Hilo, Hawaii. Astro-Vaganze, taught by science educators, NASA, Mauna Kea observatory outreach staff and cultural practitioners, offers a chance to experience not only exciting astronomy content, Polynesian culture and wayfinding but also visit Hawaii while earning two (NSCI 494N) or three (ED694) credits.

A brochure is filed on the BaP Montana Message board or one can find information about the Mauna Kea Astronomy Education Center at <http://maunakea.hawaii.edu>.