

Science News



Volume 1, Issue 8

March 2008

CALENDAR OF EVENTS

SAVE THE DATES:



Core Curriculum Showcase
March 25th and March 26th, 2008
To Register:

<http://www.learningtimes.net/curriculumshowcase>

NSTA Science Convention
Boston, MA
March 26th - 30th, 2008

Planning Guide/Pacing Calendar
Unit 4 Begins around April 10th

31st Annual SCONYC Conference
Saturday, April 12th, 2008
Stuyvesant High School

The World Science Festival
May 29th, 30th, 31st, 2008

The New York Waterfalls Project
Summer/Fall 2008

Contest

We are looking for a "Creative Name" for our newsletter. Please send all entries to RHarris2@schools.nyc.gov

The winner will be announced in the April or May issue and will receive a "Science" book of their choice.



If you would like to be placed on the science distribution list, please e-mail Roy Harris at RHarris2@schools.nyc.gov

The Department of Mathematics and Science



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Important Update of the Core Curriculum Rollout

Please note the changes below:

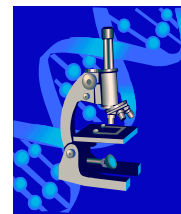
- 2007 - 2008 Grades 3, 4 and 6 implemented
 - 2008 - 2009 Grades 5, 7, 8 and 8 accelerated to be implemented.
 - 2009 - 2010 Grades K, 1 and 2 to be implemented.
- More information will be available at the Core Curriculum Showcase and in the Principal's Weekly.

Forensic Science Summer Workshop 2008

Session 1 (IS2388) July 7-10 Session 2 (IS2389) July 14-17

Materials provided include:

- * Copy of textbook (Cengage South-Western)- Forensic Science: Fundamentals and Investigations
- * 20 PowerPoint presentations: labs, activities, readings, case studies
- * Instruction for creating additional resources, PowerPoints and video clips
- * Free ancillary resources and websites



Whether you are teaching a course in forensics or you're looking for ways to integrate forensics into your existing math or science curriculum, you will find this hands-on course to be extremely useful! The course content can be expanded to challenge the needs of the advanced placement, accelerated or honors student or it can be used to motivate, encourage and engage students who would otherwise shy away from math and science.

For more information contact: Bud and Patti Bertino (518) 384-1718 nolanp@nycap.rr.com

2008 Water Conservation Art & Poetry Contest (4th, 5th & 6th Grade)

The New York City Department of Environmental Protection is pleased to announce the 22nd annual Water Conservation Art and Poetry Contest. In light of the new New York City Science Scope and Sequence, fourth grade students are invited to join fifth and sixth graders in creating original art and composing poetry that reflects an appreciation for New York City's water supply, our wastewater treatment system, and the importance of water conservation. For contest guidelines, entry forms, and past winners, please click on this direct link:

<http://www.nyc.gov/html/dep/html/news/artpoetry.shtml>. If you would like to receive the contest guidelines and other resources in the mail, please reply with your school name and address.



The New York City Department of Environmental Protection website www.nyc.gov/dep is a wonderful resource. You can also find lesson ideas, activities, and more, at the environmental education page, which can be found in the left main menu. If you have any questions, contact educationoffice@dep.nyc.gov or (718) 595-3506. Thank you for helping your students to understand and appreciate the value of water and the importance of protecting our natural resources.

The DEP looks forward to receiving applications before the March 17 deadline. You can find the guidelines at the following link: http://schools.nycenet.edu/offices/teachlearn/science/Water_Contest.pdf

40th Middle Atlantic Regional Meeting

The New York Section of the American Chemical Society invites you to the 40th MARM at Queensborough Community College in Bayside, NY from May 17-21, 2008. The organizers of MARM have created a diverse weekend chemical education program that is sure to interest teachers, researchers and students from all backgrounds. For more information, go to: <http://www.marmacs.org/2008/index.html>

7th Grade Teachers – Matter and Energy Classroom Extension at NYCCSSE

7th grade science teachers!

The NYC Center for Space Science Education (NYCCSSE) has designed an experience especially for your students. Bring them to our center to:

- * Simulate a mission to rendezvous with Comet Halley
- * Build on their understanding of matter and energy by using the electromagnetic spectrum to identify gas samples collected from the comet
- * Learn the importance of teamwork in space travel

To register for this experience, visit our website www.nyccsse.org and sign up for “Sun Borough – Option B.” For more information either check out our website or call (212) 608-6164.



2008 Presidential Awards for Excellence in Mathematics and Science Teaching Seek Nominations

Each year, the President of the United States recognizes outstanding kindergarten-6th grade or 7th-12th grade mathematics and science teachers by bestowing upon them the Presidential Awards for Excellence in Mathematics and Science Teaching <http://www.paemst.org/> (PAEMST). Awards are given to teachers in each state and four U.S. jurisdictions, Washington, DC; Puerto Rico; Department of Defense Schools; and the U.S. territories (American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, and the U.S. Virgin Islands). The PAEMST program is administered by the National Science Foundation (NSF) on behalf of the White House. In 2008 the PAEMST program will receive applications from kindergarten through 6th grade mathematics and science teachers. In 2009 the PAEMST program will receive applications from 7th through 12th grade mathematics and science teachers. PAEMST winners are honored the year following receipt of the application.

Each award recipient will be provided a \$10,000 award from the NSF and gifts from a broad range of donors. Awardees and their guests are honored during events that take place in Washington, DC over the course of a week-long celebration. These events include an awards ceremony, celebratory receptions and banquets, and professional development programs. Since this is the first year that the nomination and application will be completed online, the nomination deadline has been extended to March 1. Nominated kindergarten through sixth grade teachers should submit their applications by May 1, 2008.

<http://www.emsc.nysed.gov/ciai/mst/inform/presaward.htm>

<http://www.emsc.nysed.gov/ciai/mst/science/presawardsci.htm>



Annual SCONYC Conference
SCONYC
Science Council of New York City



Metro NYC science educators K-12 are invited to attend this all-day conference at Stuyvesant High School at Chambers and West Streets in lower Manhattan. The conference includes four workshop sessions, general session with keynote speaker, exhibition of science textbooks & materials and buffet luncheon. It provides the participant with a compact but comprehensive day of quality professional development opportunities.

Are you interested in presenting at the conference? All workshop presenters receive free registration.

For more information about presenting, write to:

2008.sconyc.conf@ix.netcom.com

For information about the conference, registration and workshop proposal forms, go to: www.sconyc-ny.org.

2008 NYC Tap Project Water Walk

Celebrate World Water Day with your students by participating in the **2008 NYC Tap Project Water Walk!** The one mile walk for **fourth through twelfth grade** students and their families will help raise awareness and support for children worldwide who suffer from a lack of readily available clean water. Millions in the developing world die of water-related illnesses each year and many children must spend their days collecting water from distant sources rather than going to school. Students and their families will learn the value of clean water, in particular the importance of New York City's drinking water, and their role in conservation efforts.



The Walk will take place **Saturday, March 15th at Riverside Park**. To **register** and for more information, please see the attached pdf document for the flyer or go to: <http://inside.unicefusa.org/taprojectwaterwalk>

Click on the following link for a flyer and more information:
<http://schools.nycenet.edu/offices/teachlearn/science/tapwaterwalk.pdf>

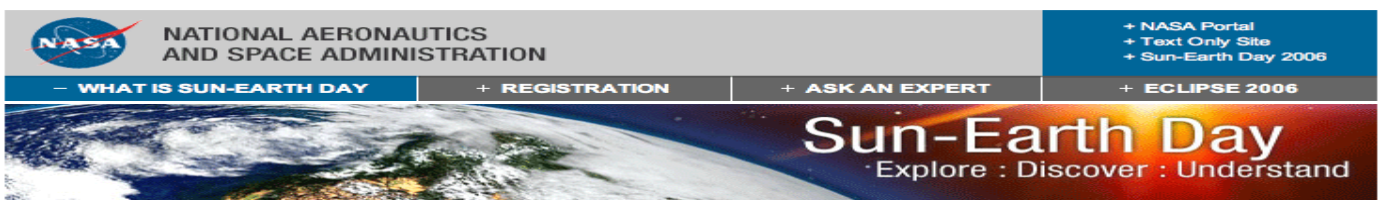
2008 Summer Research Opportunity for Grades 7-12 School Teachers

If you are a grade 7-12 science, mathematics or technology teacher and would like to participate in a six-week NYCRI (New York City research Institute) research and educational program, from June 27 - August 7, 2008 please read the following requirements and details:

Candidate must be employed as a grade 7-12 science, mathematics or technology teacher. A high level of computer skills is desirable. The total summer stipend will be \$3600 (\$600 per week). The length of the NYCRI summer research program is 6 weeks: June 28 - August 7, 2007 (participants must commit to the entire 6-week program), school teachers will conduct research, develop research based learning units and assist NASA scientists with the mentoring of high school students. **Complete NYCRI details may be accessed at:**

<http://education.gsfc.nasa.gov/nycri> . Please send questions, expressions of interest and your resume to: Dr. Frank Scalzo, NASA Goddard Institute for Space Studies, 2280 Broadway, New York, NY 10025 His e-mail is: Frank.Scalzo-1@nasa.gov

Get Ready for 2008 Sun-Earth Day!



Sun-Earth Day is comprised of a series of programs and events that occur throughout the year culminating with a celebration on or near the spring equinox. The 2008 Sun-Earth Day will be March 20. Register now to receive a monthly update about Sun-Earth Day events and resources at <http://sunearthday.nasa.gov/registration/login.php>. For more information and multimedia resources designed for formal and informal education, visit <http://sunearthday.nasa.gov/2008/index.php>.

March Birthday Corner



Joseph Priestley, March 13, 1733



During his lifetime, Priestley’s considerable scientific reputation rested on his invention of soda water, his writings on electricity, and his discovery of several “airs” (gases), the most famous being what Priestley dubbed “dephlogisticated air” (oxygen). However, Priestley’s determination to defend phlogiston theory and to reject what would become the Chemical Revolution eventually left him isolated within the scientific community.

Jeremias B. Richter, March 10, 1762



Jeremias Benjamin Richter was a German chemist who discovered law of equivalent proportions. He studied chemistry in his spare time while in the Prussian army (1778-1785) and afterwards while earning a Ph.D. in mathematics (1789). Richter was much influenced by Kant, whose lectures he may have attended, in the contention that science is applied mathematics. Richter looked for mathematical relationships in chemistry, convinced that substances reacted with each other in fixed proportions. He showed such a relationship when acids and bases neutralize to produce salts (1791). Thus he was the first to establish stoichiometry, which became the basis of quantitative chemical analysis. He died of tuberculosis at age 45 years.

Interesting Science Facts

- * The African Elephant gestates for 22 months.
- * Without its lining of mucus your stomach would digest itself.
- * The low frequency call of the humpback whale is the loudest noise made by a living creature.
- * The fastest speed a falling raindrop can hit you is 18mph.
- * The risk of being struck by a falling meteorite for a human is one occurrence every 9,300 years.
- * A typical hurricane produces the energy equivalent to 8,000 one megaton bombs.
- * Each domestic cow emits about 105 pounds of methane a year.
- * The female lion is a much more efficient hunter than the male.

Scramble Corner

E E L C D I B

Clue: A unit of measure of the loudness of sound.

P L E O

Clue: The place on a magnet where the magnetic field is strongest.

M R T H I A C O I O N D

Clue: Small structures that are found in the cytoplasm of plant and animal cells and that serve as the center of energy production for the cells.

Answers: Next month.....

Antarctic Quest Challenge for Grades 5-14

NASA Quest Challenges are free web-based, interactive explorations designed to engage students in authentic scientific and engineering processes related to issues encountered daily by NASA personnel. In this challenge, students become scientists and propose Antarctic research using a new tool called LIMA. (Landsat Image Mosaic of Antarctica). Students will develop a research question and debate the value of studying the chosen Antarctic feature. Registration is expected to begin in March 2008.

LIMA is the first true-color high-resolution satellite view of the Antarctic continent enabling everyone to see Antarctica as it appears in real life. This new view of Antarctica is revolutionizing Antarctica research by providing landscape scale views and data on the entire continent that were not previously available. The LIMA web site was designed as part of the International Polar Year to familiarize people with Antarctica, to explore the richness of its features, to learn about why Antarctica matters to us all, and to explain and demonstrate how scientists use satellite imagery to study the continent. For more information: <http://quest.nasa.gov/challenges/lima/about.html>.

Cornell Science Sampler Series for High School Science Teachers – Saturday, March 15, 2008

Applications will be accepted until program is full. Space is still available. The Cornell Science Sampler Series (CSSS) is a collaboration between several of the outreach offices of Cornell's research centers and departments to provide teacher professional development in the areas of science, engineering, technology and math.

Download a [program flyer](#) and [application form](#) for the coming workshop. Topics will include Atomic Force Microscopy, Fuel Cell Chemistry, Cloud Chambers and Building Blocks of Life. Location: Cornell Weill Medical Center, 1300 York Avenue, New York, NY 10021

PBS, Local Stations Launch "iTunes U" Content

Teachers, students, and lifelong learners now have a new source for free, educational multimedia, as PBS and local PBS stations KQED (San Francisco), WETA (Washington, D.C.), WGBH (Boston), and WNET (New York) recently began offering high-quality video clips and other educational resources on iTunes

<http://www.apple.com/itunesu>

Opening of the Dolan Lab in East Harlem



The Dolan DNA Lab will have its official New York City opening shortly. The lab is located at The John S. Roberts Educational Complex (J.H.S. 45M) –at 2351 First Avenue East Harlem, New York 10035. The 1,200 square foot Harlem DNA Lab is a state-of-the-art laboratory equipped with dissecting and compound microscopes, autoclave, incubators, centrifuges, micropipets, electrophoresis apparatuses, DNA thermal cycler, and DNA chip analyzers. The laboratory will accommodate up to 32 students and will be offering workshops to teachers and students in the coming months. Harlem DNA Lab is directly administered by the DNALC (DNA Learning Center) and is staffed by educators and Ph.D. biologists who have been trained to deliver an exceptional learning experience for every visitor. Look for future announcements about this exciting opportunity.

“The New York City Waterfalls” Coming This Summer

Public Art Fund, a non-profit art organization working in New York since 1977, is proud to announce a monumental work of public art, “The New York City Waterfalls”, by internationally respected artist Olafur Eliasson. From July to October 2008, four man-made waterfalls will be sited within the New York Harbor in Lower Manhattan, Brooklyn and Governors Island. This temporary project is commissioned by Public Art Fund, and presented in collaboration with the City of New York.

The installation will insert nature into the urban cityscape and will add a striking element to New York City’s iconic skyline. There will be a number of viewing opportunities for the public along the Brooklyn and Manhattan waterfronts. Public Art Fund is also organizing special boat tours with Circle Line Downtown to view “The New York City Waterfalls” with reduced price and free tickets available to the public.

Public Art Fund is joining with City and State agencies and environmental organizations to develop resources for young people and adults to enjoy the waterfalls that examine the waterfront through the topics of art, history, science, environmental responsibility, aquatic life, ecology, water conservation, and other related subjects. For more information, please visit www.nycwaterfalls.org



Brooklyn Bridge (Brooklyn)
The New York City Waterfalls (artist’s rendering), 2008
© Olafur Eliasson, 2008
Courtesy Public Art Fund

World Science Festival 2008 in New York City

The first World Science Festival – a five-day celebration of science throughout New York City – will be held from May 28 to June 1, 2008. The brainchild of noted Columbia physicist Brian Greene, and in partnership with the City’s major universities and science institutions, the festival will feature the world’s leading scientists and science communicators in an exciting program of lectures, debates, performances, discussions and screenings. Events of special interest to school-age audiences include the Science of Sports (in partnership with the NBA), the Science of Imagination (a look behind the special effects used in Disney theme-parks), and a street fair with youth and family-oriented programming on Saturday, May 31.

As a special opportunity for New York schools, the Festival offers access to its *Pioneers in Science* event on Thursday, May 29, 4 pm at the Proshansky Auditorium of the CUNY Graduate Center (365 Fifth Avenue). The event features top scientists being interviewed about their work on stage by NYC high school students. To apply for the limited contingent of sponsored tickets allowing free entry for groups of high school students and their teachers, send a message to pioneers@worldsciencefestival.com.

Girls! Balance the Equation

Inspiring Girls to Pursue Careers in Science, Technology, Engineering and Math

Thursday, May 29th, 10:00am-12:00pm

Scholastic Headquarters, 557 Broadway at Prince Street, NYC

Scholastic, The World Science Festival and Girls! Balance the Equation will host a dialogue on boosting girls’ interest in STEM subjects in conjunction with the weekend-long World Science Festival coming to New York City. The conversation, open to science educators from all NYC schools, will host a number of high-profile women who work in STEM fields, to discuss their own STEM career path and the source of their inspiration. The event will provide teachers with strategies for encouraging girls to pursue careers in science, technology, engineering and math. Space is limited. To reserve your spot, e-mail name, grade and school to RSVP@scholastic.com

Suggestions for Preventing Accidents Theft and Vandalism in the Lab

- Students should be provided with a list of laboratory safety rules in the form of a safety contract signed by the student.
- Signs should be posted in the laboratory regarding care and use of the facility and the equipment.
- Keep the lab door closed and locked after the beginning bell.
- Do not place equipment or chemicals on the counters or on carts near the exit doors.
- Teachers should assign students specific seats in lab.
- Students should not be allowed to roam around the lab room while lab is in session.
- A count and list of laboratory materials should be provided to the lab teacher.
- Teacher could assign a student as the “materials manager” for each lab table.
- No food, drink or gum should be permitted in the lab.
- Students should never be left unattended.
- Students should be required to sign a bathroom pass log book.
- Students could be required to leave their ID card with the teacher when using or borrowing expensive equipment for lab exercise.
- Teachers should account for all equipment and supplies at clean up time using the list you provided.
- Modes of emergency communication should be functioning.



Evaluating Lab Procedures

1. What are the hazards of the chemicals used in the procedure? Use the MSDS (Materials Survey Data Sheets) as a source of information.
2. Are any of the chemicals on the NYCDF list of banned chemicals? For a quick reference, refer to the on line Science Safety Manual by the New York City Board of Education.
3. Are flammable liquids required in the lab procedure?
 - If so are the quantities of flammable liquids very small- less than 10 milliliters.
 - If small amounts of flammable liquids are used will any ignition sources be involved? If ignition sources are present the experiment should not be used.
4. Are any carcinogenic substances used? For a quick reference, refer to the on line Science Safety Manual by the New York City Board of Education. Because this information may be dated, you should also refer to the MSDS (Materials Survey Data Sheets) to determine this. Any known human carcinogen, suspect human carcinogen, or known animal carcinogen should not be used.
5. Are strong oxidizers used? If so, will they be dilute solutions?
6. Are chemicals considered mutagenic or teratogenic?
7. Can the lab procedure generate significant pressure?
8. Can the lab procedure result in a fire or explosion due to the reactive nature of the chemicals?
9. Does the lab have a fume hood or ventilation? If not, the lab experiments cannot use hazardous chemicals. Use the following guidelines to determine whether the experiment requires the use of a fume hood. As a rule of thumb, use a fume hood or other local ventilation device when working with any appreciably volatile substance with PEL (Permissible Exposure Limit) or TLV (Threshold Limit Value) of less than 50 ppm (parts per million) or when working with any volatile hazardous chemical (those with vapor pressures above 20 mm Hg). Procedures involving moderately toxic or slightly toxic chemicals (those with PELs TLVs greater than 100 ppm or 500 ppm respectively) may have to be conducted in a fume hood depending on the quantity involved and the rate of evaporation.
10. Does the lab procedure generate significant amounts of hazardous waste?

For any questions or information, please contact Catherine Henihan, Laboratory Health and Safety Specialist at chenihan@uft.org

Department of Science Professional Development Offerings



We have had tremendous feedback workshops. These workshops included:

Core Curriculum training for grades 3, 4 and 6, the 4th and 8th grade State Test (written & practical components), Science Notebooking, Science Journaling, the Living Environment State mandated labs and the Regents Earth Science Part D lab component.

Many of these workshops will be offered again this spring (please click on the link below for dates/times and price). Below we have a short description of each workshop we offer and we strongly encourage you to sign up for these very important courses. Principals need to pay through FAMIS to enable teachers to attend. After making a payment through FAMIS and obtaining a purchase order number, the teacher then can click on the "Click Here" tab and register. The teacher must have the purchase order number in order to complete registration.

<http://schools.nycenet.edu/offices/teachlearn/science/SciencePD.doc>

The Four Mandated Living Environment Labs (Middle and High School) May 10th

This full-day workshop will walk the participants through the four NYS mandated laboratories in Living Environment—Making Connections, Diffusion through a Membrane, The Beaks of Finches and Relationships & Biodiversity.

Earth Science—Part D Training (Middle and High School) April 5th or May 10th

This full day workshop session will introduce both the practical and written components of the Earth Science Part D Regents examination that will be given for the first time in June 2008. Teachers will set up the stations for the practical examination, take the test and grade the performance tasks utilizing the state rubric.

Science Notebooking (Elementary and Middle School) March 19th

This full-day workshop session will introduce participants to the importance, for students, of notebooking in the science class. The workshop will focus on efficient methods of setting up, and keeping science notebooks, how to incorporate notebooks in the science program, how to use notebooks as formative assessments, and how students can utilize their notebooks as reference documents.

Science Journals (Elementary and Middle School) April 10th

Nature journals can be used in both formal and informal education settings to record observations of the natural world and create opportunities to learn art, science, mathematics, and language arts. Journals used in this way are practically unmatched for enhancing observational and thinking skills at the same time they enhance knowledge and appreciation for local nature. This full-day workshop will get you started keeping nature journals of your own and guide the use of nature journals as tools for teaching and learning.

Using Your Classroom Science Trade Books to Support the Science Curriculum April 15th

This full-day workshop session will instruct teachers and supervisors how to use the science trade books that come with the core curriculum. The participants will be taken through an in-depth review of the trade books supporting, enriching and extending the already established curriculum in the schools. This workshop will show participants techniques to adapt the science trade books to the already existing curriculum.

Workshops Designed for Administrators

We are also offering workshops for Administrators which will help both Principals and Assistant Principals develop an understanding of science content & pedagogy. These workshops include, a half-day and/or full-day visit from our science specialists on how to observe science classrooms, protocols for effective lessons and laboratory lessons.



Observing Science Classrooms & Structures to Support Science Instruction (Elementary)

This half-day workshop will be conducted at an elementary school in Queens. Principals will be introduced to rubrics used in science classrooms for observations and rubrics used for science fairs. The principals will receive and discuss protocols used for observing a science lesson in the elementary school. They will walk through various classrooms, take notes and engage in discussion groups with the science cluster and classroom teachers. A discussion and examples of “How to Schedule Your School With Enough Science Periods” will take place during the visit. April 8th or May 8th

Personalized, In House, One-on-One Science Support Services (Half Day) (All Levels) Your choice of date.

Receive personalized half-day, one-on-one science support services for grades K-12. Services include, but are not limited to, planning for effective professional development, Principal/AP support and development, walk through evaluations and recommendations, instructional support, both informal and formal teacher observations, help with inquiry teams and setting up effective classroom and laboratory room environments.

Personalized, In House, One-on-One Science Support Services (Full Day) (All Levels) Your choice of date.

Receive personalized full-day, one-on-one science support services for grades K-12. This in-house service provides schools the opportunity to tailor support to meet individual school needs. Services include, but are not limited to, planning for effective professional development, Principal/AP support and development, walk through evaluations and recommendations, instructional support, both informal and formal teacher observations, help with inquiry teams and setting up effective classroom and laboratory room environments.

NSTEP TechXplore Competition.

Registration is now open for the *Spring 2008 NSTEP TechXplore Competition*. TechXplore is a national science and technology competition that pairs middle and high school students with a mentor to collaborate on solutions to real-world problems. Last term we had 38 teams from our region participate, with mentors from technology fields around the country! The teams’ web pages and PowerPoint projects will be entered to compete for \$1,000 prizes. Previous participants may enter new teams. For more details, please contact Steve Peters at speters@nstep-online.org or at 917-796-7718. You can also register directly at www.nstep-online.org.

CCMR (Cornell Center for Materials Research) Institute for Chemistry Teachers

July 14 – July 18, 2008 at Cornell University, Ithaca, NY

Designed specifically for high school chemistry teachers, the CCMR Institute for Chemistry Teachers is a unique opportunity for professional development. The Institute currently offers a one-week course *CHEM 501: Contemporary Chemistry for Teachers*, for graduate credit. Teachers will receive housing, stipend and 1 Cornell graduate credit. To apply, go to:

http://www.ccmr.cornell.edu/education/teachers/cict_apply.html



On line Museum of Natural History

There are only a few days left to register for the March session of *Seminars on Science* from the American Museum of Natural History. The six-week courses are online and can be taken for up to 4 graduate credits each from a number of universities. The session runs March 24 – May 4, and you can sign up now at learn.amnh.org

Useful Science Websites and E-Mails

Inquiry

This site allows you to do inquiry lessons with just about anything you have lots of. It allows students to ask their own testable questions, answer their questions, compare their work to the work they think scientists do, and link their answers to the content. See <http://wetheteachers.com/plan.php?id=37>

A spin-off is inquiry type activity on the effects of surface area on chemical reactions
<http://wetheteachers.com/viewfiles.php?fid=464>

Another spin-off on osmosis

<http://wetheteachers.com/viewfiles.php?fid=431>

The other is a hands-on inquiry involving the process required to inhale and exhale air and what happens when things are changed in body structures. <http://wetheteachers.com/viewfiles.php?fid=748>

This is not inquiry, but you might find this activity on the difference between observations, conclusions, etc. useful <http://wetheteachers.com/viewfiles.php?fid=668>

Classification

These are good beginning taxonomy and classification activities on this website:

www.exploringnature.org (you can use the word “science” for the username and password if you don’t want to register, though it’s free)

http://www.exploringnature.org/database/teacher_activity_detail.php?reference=29

http://www.exploringnature.org/database/teacher_activity_detail.php?reference=30

http://www.exploringnature.org/database/teacher_activity_detail.php?reference=31 <http://www.scienceteacherprogram.org/biology/biolps.html>

National Institutes of Health

The National Institute of Health offers free lesson plans on a plethora of subject in Biology including: Cell Biology & Cancer, Infectious Diseases, Human Genetic Variations. The site includes a downloadable CD-ROM, Teacher Guide and State Standards. Go to: <http://science.education.nih.gov/customers.nsf/highschool.htm>

Demonstration Videos

MIT has created a site for teachers and students. They have released several lectures, videos, demonstrations and notes for use in science and mathematics classes. Go to: <http://ocw.mit.edu/OcwWeb/hs/home/home/index.htm>

Safety

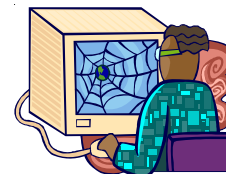
This is a great resource for all of you who find it necessary to print warning signs. <http://www.ehs.cornell.edu/lrs/labdotlabels/labdotlabels.htm> Also, go to: http://www.stclair.com/go/industrial_signage/sb2/html From this website, you can design and print your own warning signs, complete with pictures from a standard library of images.

Learning Styles

There are two website that contain surveys that students can take to be able to see how they learn and how best they can study. You can then situate your students in groups for labs, activities, etc. The surveys can be found at:

<http://www.engr.ncsu.edu/learningstyles/ilsweb.html> and

http://www.metamath.com/multiple/multiple_choice_questions.html



Whale Posters

Hawaiian Islands Humpback Whale National Marine Sanctuary

You can download copies at

http://hawaiihumpbackwhale.noaa.gov/kids_page.html http://hawaiihumpbackwhale.noaa.gov/kids_page.html

(under posters) or contact patty.miller@noaa.gov <<mailto:patty.miller@noaa.gov>> or

christine.brammer@noaa.gov <<mailto:christine.brammer@noaa.gov>> to have posters sent to you.

Regents Files

Here is a site with all old regents exams for ES (Earth Science) from 1957-present.

[http://nysl.nysed.gov/uhtbin/cgisirsi/20080204200246/SIRSI/0/518/0/39007765EA/Content/](http://nysl.nysed.gov/uhtbin/cgisirsi/20080204200246/SIRSI/0/518/0/39007765EA/Content/1?new_gateway_db=HYPERION&user_id=CATALOG)

[1?new_gateway_db=HYPERION&user_id=CATALOG](http://nysl.nysed.gov/uhtbin/cgisirsi/20080204200246/SIRSI/0/518/0/39007765EA/Content/1?new_gateway_db=HYPERION&user_id=CATALOG) <http://nysl.nysed.gov/uhtbin/cgisirsi/20080204200246/SIRSI/0/518/0/39007765EA/Content/1?new_gateway_db=HYPERION&user_id=CATALOG>

Chemistry- The Gas Laws

A great online tutorial program- each student completes the tutorial and the quiz and can register themselves (for free!). www.chemthink.com



NYC Department of Science Website

<http://schools.nyc.gov/Academics/Science>

NYC FOSS Website

www.fossweb.com/nyc

If you have any questions for FOSS, please e-mail:

fossnyc@berkeley.edu

NYC Harcourt Website:

http://www.harcourtschool.com/menus/science/index_nyc.html

If you have any questions for Harcourt, please e-mail:

Jeanette.Watley-Wilson@harcourt.com

Glencoe Website:

http://www.glencoe.com/sites/new_york/teacher/science/index.html



New York State E-Blast Site: Excellent for updated NYS Science information

<http://www.emsc.nysed.gov/ciai/EBlasts/eblast.html#science>