

Science News



Volume 1, Issue 10

May 2008

CALENDAR OF EVENTS SAVE THE DATES:



NY08
World Science Festival

The World Science Festival
May 29 - June 1, 2008
www.worldsciencefestival.com

The New York Waterfalls Project
Summer/Fall 2008

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



Summer Core Curriculum PD Registration

Week of July 28 – July 31:

- 5th Grade FOSS, Harcourt and Blend
- Accelerated 8th Grade

Week of August 4 – August 7:

- 7th Grade FOSS, SEPUP, Glencoe and Blend
- High School Science - Earth Science, Living Environment, Forensics, Science Research, Data Analysis

Week of August 11 – August 14:

- 8th Grade SEPUP, Glencoe and Blend

Teachers who missed training this past year for Grades 3, 4 and 6 will be offered training on **Friday, August 29** (Chancellor's Conference Day) as well as sessions in Fall, 2008.

The registration links for grades 5, 7, 8 and accelerated 8 for Summer PD are ready!! Please make sure to speak to your Principal about registration and read the information carefully before you register. The link is:

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

Continue to Vote for the New Name of the Newsletter

Please continue voting for the new name of the science newsletter. The results and the new name will be announced in the September 2008 issue.

Click here to vote:

http://www.surveymonkey.com/s.aspx?sm=GKonz3mViJ4q1UgdkT4OSA_3d_3d

If you would like to be placed on the science distribution list, please e-mail Roy Harris at

RHarris2@schools.nyc.gov



Division of Teaching and Learning,
Office of Curriculum and Professional Development



The Department of Mathematics and Science

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Scope and Sequence Update

The Scope and Sequence has been slightly revised from the 2007 edition based on feedback from the elementary and middle school focus and leadership group meetings during the year. You can find the revised edition dated May 1, 2008 on the science website or go to:

http://schools.nycenet.edu/offices/teachlearn/science/ScopeSequence_Science.pdf

Change in Earth Science Part D Revision From NYS Ed

The New York State Education Department issued this urgent message about Earth Science Part D Examination that will be administered for the first time in June 2008: The performance test will be just 3 stations. The density of fluids station has been eliminated. The exam will remain as 9 minutes per station for a total of 27 minutes. The 15 points remain the same. A change was also made on students retaking the Regents exam after June 2008. EACH time a student takes the exam as a retake, they must take a new performance test. They will no longer be able to use previous years' scores. The information can be found at the following website:

<http://www.emsc.nysed.gov/osa/scire/earthscience-performance.pdf> If you have any questions or concerns, please feel free to contact Denise McNamara at dmcnama@schools.nyc.gov or (212) 374-0870.

The Earth Science Regents Review

The **Earth Science Regents Review** section located at NewYorkScienceTeacher.com has been changed to a new, much more user friendly name called: <http://reviewearthscience.com/index.php>. All of the review material from the original site is still there. Graphics and navigation has been reworked to make it a much more user friendly experience. Additionally, the 100 Illustrated Ways Review Sheet has been revised and its location has been moved to: <http://reviewearthscience.com/100ways/index.php>

Earth Science Non-Secure Materials

The shipments of non-secure materials will be sent to your principals between May 16-22, 2008. The Earth Science Performance Exam booklets will be contained with this material. As always, you will need to remind your AP of Administration or Exam Coordinator to let you know as soon as these boxes arrive. This Part D Earth Science material is still considered secure. At the very least this will give you a little extra time to prepare the station materials for your exam. SED still wants the exams administered in June, but before the written exam.

Women in Science

Bold Visions: Women in Science & Technology gives us a glimpse into the lives of women who are dispelling the myths commonly associated with professionals who work in the fields of science and technology by showing how engineers make a difference in our lives. Order your FREE copy now by contacting JETS at info@jets.org. Simply email JETS with the subject heading: "Bold Visions" and provide them with your name and mailing address.



Plan Activities Now for Earth Science Week 2008

Earth Science Week (Oct. 12-18) won't take place for months. So now is the perfect time to start planning your activities. Don't wait until the hectic first weeks of the next school year. Take this opportunity to make a wish list: How would you like your students to celebrate Earth Science Week 2008?

You can promote this year's theme - "No Child Left Inside" - by planning outdoor activities to help your students learn Earth Science firsthand. Whether you schedule a fieldtrip or simply explore the playground, you can find Earth Science anywhere there's earth, water, and sky. Maybe your students can record observations of cloud patterns or dig up fossil evidence of past life. Conduct activities featured on the Earth Science Week website at

<http://www.earthsciweek.org>.

Last year, Arizona's Petrified Forest National Park organized special events on the park's geology, including hands-on exhibits and guided tours. The Illinois State Geological Survey took students on a Geological Science Field Trip at Pere Marquette State Park. And a "Rock Hounds Unite!" Geology Day was held at the North Branch Nature Center in Montpelier, Vermont, including mini-field trips led by professional geologists. For more ideas, read about past events at <http://www.earthsciweek.org/highlights/index.html> or see recommendations at

<http://www.earthsciweek.org/forplanners/index.html>.

World Science Festival- May 29 - June 1, 2008

The universe of science comes to life during the World Science Festival. The Festival will feature many of the world's leading scientists (including over a dozen Nobel Laureates) along with dancers, Olympic athletes, magicians, mountain climbers, and a giant mechanical dinosaur to transform New York City into a stage where scientific exploration and discovery is the headliner. With over 40 exciting programs, performances, screenings, discussions, lectures, and debates, the Festival will entertain and educate all ages!



Pioneers in Science

Thursday, May 29, 4:00 p.m., Proshansky Auditorium, CUNY Graduate Center

As a special opportunity for New York public schools, the Festival offers **FREE** access to its *Pioneers in Science* event. Could robots someday be our friends? Just ask the woman who invented the well-known social robot, Kismet. And what would you like to know about how the universe works? A group of New York City high school students will get the rare opportunity to interview Nobel Laureate physicist Leon Lederman and ground-breaking robotic Engineer Cynthia Breazeal in front of a live audience. The students will probe the discoveries and breakthroughs that these noted scientists have contributed, on subjects as big and baffling as the Big Bang, or as tiny and mysterious as quarks.

To take advantage of this unique opportunity to attend *Pioneers in Science* and apply for a limited contingent of sponsored tickets allowing free entry for high school students and their teachers, email pioneers@worldsciencefestival.com.

Youth & Family Street Fair - FREE

Saturday, May 31, 10 a.m. - 6 p.m., Washington Square Park / NYU Campus

The World Science Festival takes to the streets with a non-stop program of interactive exhibits, experiments, games, and shows including:

- Hands-on horticulture with the New York Botanical Garden.
- Saul Griffiths and the Howtoons guys show you how to make extraordinary experiments from everyday things.
- Stop by and see Miss Frizzle and the Scholastic Magic School Bus.
- Travel to the Gobi desert and reconstruct the lives of dinosaurs in the American Museum of Natural History's Paleontology of Dinosaurs Movable Museum.
- For a shocking experience, get hooked up at Liberty Science Center's electricity exhibit.

Special Ticket Offer:

The New York City Dept. of Education is partnered with the World Science Festival. All Tickets for NYV school students and staff are \$12.

To purchase tickets at this low price (or for a complete list of all WSF programs with event details), visit: www.worldsciencefestival.com and use discount code WSFSTUD3 when buying student tickets.

Girls! Balance the Equation

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

Thursday, May 29th, 10:00 a.m.-12:00 p.m.

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 Science, Technology, Engineering and Math in conjunction with the weekend-long World Science Festival coming to New York City. The conversation, open to science educators from all NYC schools and keynoted by Margaret Spellings, United States Secretary of Education, 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 STEM careers.

Speakers include:

Dr. Kathie Olsen, Deputy Director & Chief Operating Officer, National Science Foundation

Dr. Luisa Balasta, Director of the Patents Group, L'Oreal USA

Linda Descano, President and COO, Citigroup Women & Co.

Diana Eng, Author and Fashion Designer, Victoria's Secret

Dr. Margaret M. Wallace, Professor of Forensic Science, John Jay College of Criminal Justice



SCONYC

Science Council of New York City



On Saturday, April 12, 2008, the 31st Annual Conference was held and was a great success. There were over 75 workshops presented and the keynote speaker was Dr. Joseph Levine. His presentation PowerPoint, “**Global Warming: Why is it Such a Big Deal for Biologists?**”, has been posted on his website at www.millerandlevine.com He also included the notes from his workshop the same day. Both are excellent tools for teaching about Global Warming.

STANYS Excellence in Science Teaching Award for 2008



STANYS

SCIENCE TEACHERS
ASSOCIATION OF
NEW YORK STATE



STANYS
NURTURES
INQUIRY
FOR ALL
STUDENTS

The Science Teachers Association of New York State (STANYS) is again sponsoring the STANYS Excellence in Science Teaching Award for 2008. An elementary, intermediate level and high school teacher will be honored at the annual conference in November. The awardees will be recognized at the annual meeting in Rochester and at a special awards dinner. These teachers will be the guests of STANYS during the conference, which covers the conference registration, hotel room and some meals. Recipients will receive plaques for themselves and for their school. Please see the STANYS website <http://stanys.org/excelteach.htm> for specific details for the application. This application, together with all supporting documents, must be received by **JULY 1, 2008**.

Science Brain Teaser

Water in the Cup

A man in a restaurant asked a waiter for a juice glass, a dinner plate, water, a match, and a lemon wedge. The man poured enough water onto the plate to cover it. “If you can get the water on the plate into this glass without touching or moving this plate, I will give you \$100,” the man said. “You can use the match and lemon to do this.”

A few minutes later, the waiter walked away with \$100 in his pocket. How did the waiter get the water into the glass?

Answers to April Scramble Corner:

Fraternal Twins

Diffusion

Chromosome

Wheel and Axel

STANYS Fall Conference Moves to Rochester

In case you haven't heard, the STANYS Conference is moving to the Rochester Riverside Convention Center. Please join us at the new venue November 1 - 4, 2008! November 1 will be a day for field trips and special events. Regular sessions begin Sunday morning and end at noon on Tuesday.

Conference brochures will be sent to all NY science teachers at the beginning of the next school year. STANYS members will receive additional information about the conference in the upcoming newsletters.

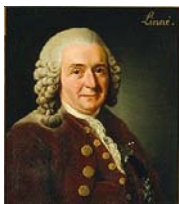
For information about the conference visit

<http://www.stanys.org/>

May Birthday Corner



Carolus Linnaeus, May 13, 1707



Carolus Linnaeus was a Swedish botanist, physician and zoologist who laid the foundations for the modern scheme of nomenclature. He is known as the father of modern taxonomy. He is also considered one of the fathers of modern ecology.

Alvin Poussaint, May 15, 1934



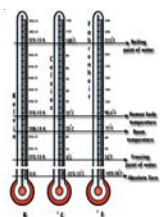
Dr. Alvin F. Poussaint is Director of the Media Center of the Judge Baker Children's Center in Boston. He is also a Professor of Psychiatry and Faculty Associate Dean for Student Affairs at Harvard Medical School. Born in East Harlem, he attended Columbia and received his M.D. from Cornell University in 1960. He completed his postgraduate training at the University of California at Los Angeles (UCLA) Neuropsychiatric Institute, where he served as Chief Resident in Psychiatry in 1964-65. At UCLA, he pursued research in psychopharmacology.

Pierre Curie, May 15, 1859



Pierre Curie was a French physicist, a pioneer in crystallography, magnetism, piezoelectricity and radioactivity. He shared the 1903 Nobel Prize in physics with his wife, Marie Curie, and Henri Becquerel, in recognition of the extraordinary services they have rendered by their joint researches on the radiation phenomena discovered by Professor Henri Becquerel. In 1880, Pierre and his older brother Jacques demonstrated that an electric potential was generated when crystals were compressed, i.e. piezoelectricity. Shortly afterwards, in 1881, they demonstrated the reverse effect: that crystals could be made to deform when subject to an electric field. Almost all digital electronic circuits now rely on this phenomenon in the form of crystal oscillators.

Gabriel D. Fahrenheit, May 24, 1686



Gabriel D. Fahrenheit was a German physicist and instrument-maker. He invented the alcohol thermometer (1709), the first mercury thermometer (1714) and devised the Fahrenheit temperature scale. He also showed that boiling points of liquids vary with changes in pressure and that water can remain liquid below its freezing point.

Interesting Science Facts

- The average person accidentally eats 430 bugs each year of their life.
- If every star in the Milky Way was a grain of salt they would fill an Olympic swimming pool.
- Tuberculosis is the biggest global killer of women.
- A pinhead-sized piece of a neutron star weighs 1 million tons.
- Scientists have discovered over 20 planets outside our solar system.
- Human fetuses react to loud rock music by kicking.
- A human heart beats 100,000 times a day.
- More babies are born at night than in the day.
- Apart from humans the only land animal that cries is the elephant.
- Twins have a higher than usual rate of left handedness.

Congratulations

Joan Monroe, Principal of **P.S. 120 in Flushing, Queens** is pleased to announce the acceptance of science teacher, Diane Weisen into the Honeywell Educators at Space Academy program in Huntsville, Alabama.

Weisen has been a New York City teacher for 16 years and resides in Nesconset, New York. She is currently teaching second and third grade science, as well as coordinating the P.S. 120 Enrichment Academy at the school which services approximately 35% English Language Learners.



With over 1000 teachers competing for this prestigious scholarship, Weisen was chosen as one of 8 New York State teachers, and the only New York City school teacher to participate this year. The program includes 45 hours of intensive classroom, laboratory and space science and space exploration training.

Weisen will have the opportunity to participate in astronaut training exercise including a high performance jet simulation, scenario-based space missions, land and water survival training, and a state-of-the-art flight dynamics programs.

The program begins June 17 and ends on June 23 at the U.S. Space and Rocket Center in Huntsville, Alabama. During this time, Weisen will journal her daily activities on a web site/blog for the students and staff at P.S. 120 to follow along.

All teachers applying for the Honeywell scholarships were required to submit a 500-word essay describing the tools and techniques they use to motivate students to study science and science related fields. Nearly 250 teachers have graduated from the program since its inception in 2004. Honeywell science and math programs have reached nearly 100,000 students in 26 countries and 41 U.S. states. This program is possible because of the partnership between Honeywell Hometown Solutions and with the U.S. Space and Rocket Center.

Congratulations to **Townsend Harris High School in Flushing, New York**, which was one of the three finalist schools in the high school category. As described by Intel, the finalist schools provide a rich science curriculum incorporating hands-on investigative experiences that prepare students for 21st century jobs. Programs encourage student achievement in sciences and engineering, while simultaneously helping students to become knowledgeable consumers of news and data in order to be active and informed citizens. Programs are designed to meet the needs of all students, incorporating a variety of instructional strategies, and meeting rigorous education industry standards and assessment benchmarks. For more information about the Intel Schools of Distinction Awards, visit www.schoolsofdistinction.com.

New York City Public schools had two honorable mentions in the **2008 DuPont Science Essay Challenge**.

Maureen Saint-Jean

Midwood High School

Brooklyn, NY

Cerebral Palsy

Mr. Michael McDonnell, Teacher

You can find more information about the DuPont Challenge at the website below.

<http://thechallenge.dupont.com/>

Ken Ho

Stuyvesant High School

New York, NY

Nature's Reformed Attitude

Mr. Jerry Citron, Teacher

The celebration of Earth Day at **Tottenville High School** included planting on the grounds of the school campus as well as a beach cleanup at Wolfe's Pond Park. In addition, the students and faculty planted donated trees for Arbor Day.



Mountaintop to Tap

Opening Reception: May 16, 2008

Queens Museum of Art

12 students. 3 weeks. A 200 mile journey. Trace the path of New York City's drinking water and share the experience with these exceptional students, whose journal excerpts and photographs tell the compelling story of what it takes to quench the thirst of 9 million New Yorkers.

Please click on the link below for the upcoming exhibition, "Mountaintop to Tap" at the Queens Museum of Art in Flushing Meadows-Corona Park. The photographs and journal entries will be on view from May 17 – June 29. It will be a wonderful show so please be sure to set aside some time to visit the Queens Museum and the watershed trek exhibition.

<http://schools.nycenet.edu/offices/teachlearn/science/rh/PostcardFinal.pdf>



Urban Advantage Applications are Online

The Urban Advantage initiative is a unique opportunity for 7th and 8th grade science teachers to receive professional development and materials to assist with the required 8th grade science exit projects. Applications are now being accepted for the 2008-09 school year. Urban Advantage, a New York City Department of Education collaboration with New York City's museums, zoos, botanical gardens, and aquarium, is an integrated program for middle school science that includes professional development for teachers, resources for students and schools, and visits to the eight participating scientific and cultural institutions. Current Urban Advantage teachers who wish to participate next year must complete continuing teacher recommitment forms. Please visit www.urbanadvantagenyc.org for applications, forms, and more information. If you have any questions, please contact John Tom at JTom3@schools.nyc.gov

Central Park Rocks - Saturday, May 24, 2008 -Middle and High School Students

On Saturday, May 24, 2008, the Central Park Conservancy invites youth throughout New York City to discover what an amazing resource for young people the Park can be. Planned and hosted by our 9th grade Central Park Scholars, this event helps to recruit future Central Park Scholars (7-9th grade) and Youth Leadership (high school) students by exposing them to educational and recreational activities that they would experience as program participants. The event will take place in and around the North Meadow Recreation Center from 12:00 p.m. to 3:00 p.m. Attendees will learn about what it means to be a 7th, 8th, or 9th grade Scholar; meet students from the Youth Leadership program; rock-climb; play basketball; engage in science and art; listen to music; eat food; compete for prizes; and participate in community service. Last year over 300 youth attended this free event.

For more information, please contact:

Curtis Dann-Messier, CDann-Messier@centralparknyc.org Or call 212-360-1460

Professional Development Opportunities

Spring and the Full Moon at Plumb Beach – Thursday, May 29th, 2008- All Grade Level Teachers

This is a Spring Field Trip for teachers to explore the Salt Marsh, observe the Annual Horseshoe Crab Mating and meet some of the other salt marsh inhabitants. The walk will be conducted by Alan Ascher and participants are asked to dress casually (old sneakers are recommended) for the ¾ mile round trip hike. For registration and further information, please email Alan Ascher at aascher@schools.nyc.gov

Learn all about Charles Darwin in a New Interactive Children's Exhibit

April 25–June 29, 2008

This spring, children will explore Charles Darwin's groundbreaking work in a new exciting hands-on program at the Everett Children's Adventure Garden from April 25 to June 29, 2008. The children's program will be a major component of the Darwin's Garden: An Evolutionary Adventure exhibition across The New York Botanical Garden. An interactive exhibit in the Children's Adventure Garden will display plants important to the development of evolution, a re-creation of Darwin's research laboratory, and a timeline of his life. The display will include a replica of Darwin's ship, the HMS Beagle, which took him on a five-year voyage to South America and around the world. Children's activities include potting up a vegetable plant, creating a herbarium specimen using the primrose flower (one of the plants that Darwin himself studied), and exploring various bogs. At an interactive Tree of Life, focused on the oak family, children will be invited to create their own evolutionary tree to show simple relationships among different species of oak trees. For information on family and after-school programs at The New York Botanical Garden, call (718) 817-8181.



Master of Science in Teaching Adolescence Biology/Conservation Life Science (Grades 7-12)

Signature features of the program:

- The program is the first graduate education degree that is an equal partnership between an informal science institution and a degree-granting institution.
- The program responds to widespread concern about the state of science education in the United States.
- The 36-credit program leads to a Fordham Master of Science degree in Teaching with an emphasis on conservation life science education.
- The program also leads to initial New York State teacher certification in adolescence biology for grades 7 through 12.
- Degree Candidates will be able to utilize the rich resources of the Bronx Zoo and The New York Aquarium, as well as the other local Wildlife Conservation Society facilities: the Central Park, Prospect Park and Queens Zoos.

For more information, please visit the website at www.fordham.edu/gse.

Cornell Physical Science Summer Institute for Middle School Science Teachers

Making Connections: What Science Research and your Middle School Curriculum Have in Common (Grades 5-8)

Will take place July 13-18th at Cornell University. Please contact Lora Hine if you have any questions.

Applications deadline: May 26, 2008

Send to: Lora Hine

Director of Educational Programs

Cornell Laboratory for Accelerator-based Sciences and Education

319 Wilson Laboratory, Ithaca NY 14853

Phone: (607) 255-2319 Fax: (607)-255-8062 Click on the link for description and application:

<http://www.lepp.cornell.edu/Education/WebHome.html>

The New York Botanical Garden Introduces An Interactive Botany Curriculum for Children

Forensic Botany Investigations (FBI) curriculum introduces sixth through eighth graders to the vital roles plants play in culture, commerce and in our daily lives. Students are presented with fun and challenging scenarios and investigations, and work in teams to solve plant-based mysteries while learning about plant science, ecology and conservation. The lessons are accompanied by a documentary-style DVD which features New York Botanical Garden scientists and their long-term research projects.

Forensic Botany Investigations is published by Glencoe/McGraw-Hill, a leading publisher of print and digital education materials for grades 6-12. The curriculum includes classroom lessons, a teacher's guide and handouts, a 24 minute documentary style DVD and materials for hands-on activities and investigations. Lessons found in the curriculum include understanding different plant parts and their functions; the important role bees play in maintaining balance with forest ecosystems; analyzing ecological and botanical data; and learning the important variables for growing rice.

"We are excited to be allied with such a well-respected organization as the New York Botanical Garden. We look forward to building upon the current success in curriculum development and giving this program the national exposure it deserves," says Charlotte Frank, Senior Vice President for Research and Development at McGraw-Hill Education.

Funded through a generous grant from Bristol-Myers Squibb, the curriculum was developed in collaboration with Education Development Center, (EDC) a leading science curriculum development firm. FBI can be purchased by schools for \$19.98 online at www.glencoe.com/catalog.

"While FBI is a great resource for teaching plant science and other science topics, we are thrilled that these lessons have such high appeal among students and teachers," says Chrissy Colon, Ph.D., Curator of Curriculum Development and Evaluation at The New York Botanical Garden.

A similar curriculum unit on ethnobotany focusing on the ongoing search for medicinal plants has been created for high school students. Slated for release next year, this publication would provide useful and innovative resources for high school teachers.

Media contact: Dachell McSween, (718) 817- 8136 or dmcsween@nybg.org

AMERICAN MUSEUM OF NATURAL HISTORY

Chancellor's Day Programs at the American Museum of Natural History on June 5, 2008

9:00 a.m. - 3:00 p.m.

Elementary and Secondary Opportunities for Teachers

Click here for information and description of programs offered:

<http://schools.nycenet.edu/offices/teachlearn/science/rh/ChancellorsDay2008atAMNH.pdf>

Free day-long bus tour of the New York City Water Supply Watersheds

You can participate in a free, day-long bus tour of the New York City Water Supply Watersheds on **Tuesday, June 24, 2008 (7 a.m. – 6 p.m.)**. Your day in the Catskills will include a visit to a reservoir, stream, watershed forest, logging site and education center. You will meet with a DEP engineer, police officer, scientist and forester and a local historian, community member, forest landowner, artisan and educators.

This special bus tour has been designed as a professional development opportunity to help you develop, enhance and implement NYC water supply lessons and activities for young people and adults.

You will have an opportunity to learn about the history of the New York City water supply system and ongoing watershed protection and remediation programs related to: land management and acquisition, watershed forestry and agriculture, stream and riparian buffer management, watershed monitoring, watershed regulations and enforcement, water quality monitoring, environmental education and community outreach.

Transportation will be by coach bus; lunch is included.

Space is limited, so please reserve today by emailing educationoffice@dep.nyc.gov.

College Board Advanced Placement Program

The fee for AP exams this spring (2008) is \$84.00 per examination. The College Board offers a fee waiver of \$22.00 per examination for low-income students. If the waiver is taken, schools also forfeit the \$8.00 administration fee for that examination. Therefore, the College Board's charge per examination, for qualified students, is reduced to \$54.00. This is the amount that the Federal Fee Waiver will cover. The College Board will send detailed information on waivers to each AP Coordinator. In order for the federal fee waiver to be applied to your billing from the College Board it is essential that you send this office the State copy of the invoice you send to the College Board after the exams are administered, as well the names of all qualified fee waiver students and the number of exams they took. You may use this AP roster

<http://www.emsc.nysed.gov/nyssa/ap/NYAPRoster08.doc> to provide the student list and be sure it is signed and verified by the School Principal. Failure to do his will result in a loss of the waiver funds. Questions about the Federal Fee Waiver program should be directed to: Mary Daly, Room 866 EBA, State Education Department, Albany, NY 12234. Phone (518) 474 – 8773 Email mdaley@mail.nysed.gov Fax (518) 473 – 0770. Other questions may also be directed to the Advance Placement Program at 1- 888 – 225 – 5427 or email: apexams@info.collegeboard.org Remember: If a student qualifies for the College Board fee waiver, he/she also qualifies for the federal Fee Waiver.

Registration Open For Antarctic Research Challenge

Students who would like to become scientists and propose Antarctic research! The Lands at Image Mosaic of Antarctica (LIMA) is the first true-color, high-resolution satellite view of the Antarctic continent. Using this view of Antarctica, students are asked to develop a research question surrounding a chosen feature of Antarctica and to debate the value of studying that area. Registration is now open to educators and club or program leaders wishing to have their students participate in the LIMA Quest Challenge. Further instructions will be sent upon receiving your registration. Visit the challenge page at:

<http://quest.nasa.gov/challenges/lima>. Register at:

http://www.surveymonkey.com/s.aspx?sm=R052zai3Fr_2bl3W1Zculh8Q_3d_3d

Important Information for Lab Specialists

ABC's fire extinguishers are in the process of being replaced. However, Rita from Cardozo has informed me that in the process of replacing the ABC's they are removing all Class D's. If your school stores or uses active metals you still need a Class D extinguisher. Do not let them remove all Class D's if you still need one. Make sure you keep at least one.

Spring and the Full Moon at Plumb Beach

Thursday, May 26, 2008

This is a Spring Field Trip for teachers to explore the Salt Marsh and observe the Annual Horseshoe Crab Mating and meet some of the other salt marsh inhabitants. The walk will be conducted by Alan Ascher and participants are asked to dress casually (old sneakers are recommended) for the ¾ mile round trip hike. For registration and further information, please email Alan Ascher at ascher@schools.nyc.gov

Educators across New York State will gather to “**get smart**” about energy education through the New York Energy Smart Students program. Energy Smart Students focuses on how to raise the level of students’ knowledge of energy efficiency and its impact on the environment. This unique program was created by NYSERDA (New York State Energy Research and Development Authority).

The FREE workshops are open to K–12 teachers, educators in not-for-profit agencies, pre-service teachers, college professors, and other educational professionals. They offer:

- *FREE NYSED (New York State Education Department)-aligned curriculum
- *FREE materials to use in the classroom
- *Professional development credit
- *Substitute reimbursement for workshops during school hours (up to \$125 per teacher)
- *FREE lunch and snacks

Additionally, once you’ve attended a workshop you gain access to a wealth of additional resources and opportunities such as:

FREE Energy Smarts newsletter, Applications for energy education grants, Teacher and student competitions, On-line resources and access to information on what is new and exciting in the world of energy!

Each of the three workshops is targeted at students’ different educational levels.

ABCs of Energy Grades K–3

The ABCs are one of the building blocks of primary students. Why not teach the ABCs of energy at the same time? This hands-on workshop introduces basic energy content through fun and engaging activities that will lay the ground work for energy education at an early age. Students will apply classroom learning to their own lives through a family-oriented take-home activity.

The 4 Es of Energy Grades 4–6

Do you know the 4 Es of energy? This interactive workshop promotes an understanding of energy’s relationship with the environment, our economy, efficiency AND the all-important “E” – education. You will use hands-on activities to explore energy forms and sources, global climate change and actions we can take to address the energy challenges we face.

Energy Trilogy Grades 7–12

Energy – we all depend upon it every day, but what are the consequences for the global community’s growing demand for it? This interactive workshop will highlight the Energy Trilogy – how economics, efficiency and the environment relate to the energy challenges before us. Don’t miss this exciting opportunity to introduce your students to the impacts of their energy use and explore actions we can take to make a difference.

Each workshop centers on an innovative new curriculum created by the NEF (National Energy Foundation), a not-for-profit organization dedicated to the development and dissemination of supplementary educational programs and materials. Engaging hands-on activities that apply learning to a student’s life and experiences are modeled.

By attending, you will receive: an Energy Education Teacher’s Guide; an information-packed CD that includes the Conceptual Framework for Energy Education, basic information on energy and an energy glossary; color posters; and class sets of the Energy Action Challenge to use with your students. Instructional materials are correlated in an integrated manner to New York State learning standards in math, science, technology, global studies, English language arts, and family and consumer science. Workshop presenters are excellent, experienced educators from throughout New York who were selected to attend NYSERDA’s Energy Educator Institute in Albany last summer. To learn who will be leading workshops in your area, read the Energy Educators’ bios at www.getenergysmart.org. Click on Energy Education.

For More Information on NYSERDA: New York State Energy Research and Development Authority—can help you, whether or not you’re a member of the education community call 1-(877)- NYSMART.

The Free World of Science

WaterPartners Curriculum- Elementary, middle and high school

www.water.org

Ice Stories – Webcast Series begins May 22nd

<http://icestories.exploratorium.edu>

Seeds for Space Crops

www.usu.edu/cpl/outreach.htm.

The Kindergarten Initiative – to help promote healthy communities

www.thefoodtrust.org/php/programs/kindergarten.

Optics for Kids – Over 30 downloadable lesson plans

www.opticalres.com/kidoptx_f.html.

Bilingual Science resources – Lesson plans in english and spanish for topics like renewable energy, optics, heat transfer.

<http://iridescentlearning.org> select “For Educators”

The EPA has some free stuff. One booklet titled “What’s Up with Our Nations Waters?” is a good one with a couple of activities included. You can download or get from publications section. One activity is on pH testing and one is building a wetland model. www.epa.gov

Technology brings NOAA Monterey Bay National Marine Sanctuary to classrooms nationwide. More

information and educational resources are available <http://www.education.noaa.gov/>

The Sloan Career Cornerstone Center website is free and contains no advertising. It offers a free monthly newsletter; a weekly podcast series, and extensive PDF and PowerPoint files on each field which can be used by teachers, counselors, students, and parents. The site also includes comprehensive preparation tips, salary data, job hunting ideas, personal interviews with hundreds of people who offer candid insight into their own diverse careers, and updated lists of summer camps, national programs and projects, and scholarship opportunities for high school students. Find out more <http://www.careercornerstone.org/>

Forest Protection Portal - www.Forests.org works to end deforestation, preserve primary and old-growth forests, conserve and sustainably manage other forests, and to commence the age of ecological restoration.” The site has news, a large collection of links arranged by topic, action alerts, a blog and other features about forest conservation around the world.

High School – Check out www.terrificscience.org - This is the website of the Center for Chemical Education (but it’s much more than chemistry) at Miami University Middletown in Middletown, Ohio. Their resources are “terrific.”

Middle School – this is a great site for Middle School Forensics activities, go to: Community Learning at www.Commlearning.com

Animations – Go to <http://spaceplace.nasa.gov/en/kids/tes/gases> There are a number of great animations that can be used to enhance your lessons on Newton’s Laws of Motion and many other Physical Science concepts.

The Grant World

May 31, 2008: Deadline to apply for chemistry teachers to apply for grants and scholarships from the Hach Chemical Foundation. For more information, please visit:

<http://www.hachscientificfoundation.org/outreach.shtml>

July 1, 2008: Deadline to apply to become an astronaut. For more information, please visit:

<http://www.nasa.gov/astronauts/recruit.html>

February 12, 2009: Charles Darwin Bicentennial Day. For more information, please visit:

<http://darwinday.org/englishL/assistevent/index.html>

Young Scientist Challenge Grades K-12 Teachers and Grades 5-8 Students –June 15th deadline for both grants

<http://youngscientist.discoveryeducation.com/about/about.html>.

Garden Crusader Award Contest – June 15th deadline

www.gardeners.com Select “Community” tab

The Mickelson ExxonMobil Teachers Academy Expands Opportunities for Teachers to Attend the 2009 Program

The Mickelson ExxonMobil Teachers Academy recently announced a new way for elementary school teachers to get a chance to attend the 2009 Mickelson ExxonMobil Teachers Academy and improve their math and science teaching skills.

Students can nominate teachers from Grades 3, 4, and 5 or urge them to apply for an all-expense paid trip to the Academy’s math and science professional development program by logging on to www.sendmyteacher.com, an interactive website.

Developed in conjunction with the National Science Teachers Association and Math Solutions, the Mickelson ExxonMobil Teachers Academy enables teachers to hone their science and math teaching skills, enhance their curricula, and discover innovative new ways to inspire students.

The teachers will spend five days next July at the Liberty Science Center in Jersey City, NJ, deepening their understanding of mathematics and science content, building expertise in facilitating student learning through problem solving and inquiry, and using links between math and science that support student learning and understanding in the classroom.

Teacher applications are due by October 31, 2008. The National Science Teachers Association and the National Council of Teachers of Mathematics will convene a panel of math and science experts to evaluate the entries and announce the selections in February 2009.

The 2008 Mickelson ExxonMobil Teachers Academy will host more than 600 teachers in Houston, Texas; Baton Rouge, Louisiana; and Jersey City, New Jersey. To date, nearly 1000 teachers have attended the Mickelson ExxonMobil Teachers Academy.

To nominate a teacher or to learn more about the program, visit <http://www.sendmyteacher.com>.

Summer Professional Development Opportunities

The New Hall of Science is offering the following summer workshops for educators:



- 1) Biotech Training Institute (designed for grades 6-12)
- 2) MicroLab Training Institute (designed for grades K-12)
- 3) StarLab Training Institute (designed for grades K-12)

Follow the link for information and applications: <http://www.nyscience.org/teacherconnections/>

Complete Weather and Climate Curriculum

Do you want to learn more about weather and climate? Are you interested in lesson plans and supplies for your classes? The NYC Center for Space Science Education and the American Museum of Natural History have teamed up to create an exciting new curriculum called *Airplanes & the Atmosphere: Investigating Human Impact on Earth's Climate*. This summer they are offering a p-credit course to support the use of this curriculum.



Participating teachers will receive the complete curriculum, including all lesson plans, student sheets, overheads, and assessments; AMNH Membership; AMNH Science Bulletins DVD; PBS DVD "Dimming the Sun"; a classroom set of stop watches; and a digital scale.

The course will meet Monday through Friday, 9 a.m. – 4 p.m., from August 4 through August 8. Course sessions will be either at the NYCCSSE or the AMNH. P-credits can be applied towards salary differential (3 credits) or professional development hours (30 hours). The curriculum is intended for Regents Earth Science classes. For more information, check out www.nyccsse.org/atmosphere or call (212) 608- 6164 x112. To register, go to <https://www.nyasdpdp.org/nyasdpdp.php>. To register, go to <http://www.nycenet.edu/aspdp/>. The course number is P17-200SS08 and the course title is "Teaching Weather and Climate Through Airplanes and the Atmosphere."

If you are interested in piloting the curriculum, but cannot take the p-credit course, please email kbrown@schools.nyc.gov.

Summer Science Discovery Institute with NYC DOE and NYS Education Department

The New York State Education Department and the New York City Department of Education will be presenting the Summer Science Discovery Institute at Stuyvesant High School from July 8 through July 10, 2008. The K – 12 grade level sessions will be held from 8:30 a.m. – 2:30 p.m. and focus on a variety of scientific inquiry skills. For further information about attending or presenting at the Institute, please contact Joe Selch at: JSelch@mail.nysed.gov or Denise McNamara at: dmcnama@schools.nyc.gov

The Rochester Area Colleges Center for Excellence in Math and Science

Summer institutes for teachers. <http://raccems.org/educators/institutes/>

2008 Cyber Engineering Workshop for Young Women – July 14 – 18, 2008

The New York Center for Engineering Design and Industrial Innovation (NYSCEDI) at the University of Buffalo invites your female students entering grades 10-12 to apply for participation in the 2008 Cyber Engineering Workshop for Young Women, July 14 - 18.

All application materials and additional information are available at: www.nyscedii.buffalo.edu Application materials are due by **May 16, 2008**. Accepted applicants will be notified by May 30, 2008. There is no cost to participants for the workshop.

GLOBE Opportunity for Teachers

The GLOBE Program Office and Watershed Dynamics ESSP would like to bring the following teacher professional development opportunity to your attention. This August we are hosting a 3-day workshop in Boulder Colorado introducing our second curriculum module on watershed dynamics and the inter-relationship between landcover and stream flow.



We are looking for pilot teachers from across the country that can implement a three-week curriculum in the fall of 2008 and are willing to provide feedback and suggestions. Travel funding is available.

Please go to www.globe.gov/watersheds and select the workshop link under activities to read about the opportunity to participate and submit an online application.

We would welcome GLOBE partners who can work with a local teacher in implementing this curriculum in a classroom. The deadline to apply is May 21. If you have any questions regarding this opportunity, please contact the Watershed Team by sending an email to watershedworkshop@globe.gov. All applicants will be notified by May 31 regarding the outcome of their application.

AMERICAN MUSEUM OF NATURAL HISTORY

The American Museum of Natural History is offering the Tree of Life Summer Institute for High School Teachers for a third and final year this year. July 22-30, 2008 10:00 AM - 5:00 PM

It is a great opportunity for teachers to meet the scientists who work at the Museum and learn first hand about their work and the tools that they use. The program is a small audience format of 15 teachers and 15 high school students, this provides a great opportunity to learn and see how students respond to this material. There are some great activities for use in the Museum and in your classroom for teaching about Evolution and systematics.

Attached is the schedule and application. If you have any questions or concerns please contact Jay Holmes at: jholmes@amnh.org Click on the link for more information and registration:

http://schools.nycenet.edu/offices/teachlearn/science/rh/TOL_Inst_Agenda08_A.pdfAMNH.pdf

<http://schools.nycenet.edu/offices/teachlearn/science/rh/TreeofLifeApplication08.pdf>

Summer SMART Board Academy 2008

Equipment offers free courses throughout the summer to learn about instruction with SMART Boards in the classroom. This summer they have created a new series of courses that they hope you find to be exciting, informative, and immediately useful to your daily work.

Please go to <http://www.tequipment.com/summer> to see the full course offering as well as to register for these free classes.

They will be offering a new three-part administrators series of courses that all should find very useful.

They will also have courses such as:

SMART Boards + content areas (social studies, math, ela, or science)

SMART Boards + the UDL classroom

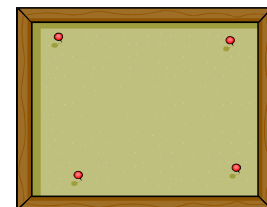
SMART Boards + Web 2.0

The SMART-Centric/Learner-Centric Classroom

Say Hello to Notebook 10

and more...

They are pleased to offer courses in 2 locations this summer. They will have courses in both our showroom in Manhattan as well as our showroom in Farmingdale (Long Island). Please feel free to register for courses at whichever place/dates are most convenient for you.



Click here for information: <http://schools.nycenet.edu/offices/teachlearn/science/rh/SMARTBoardAcademy.pdf>

Summer Professional Development Opportunities for Middle/High School

Methods of Teaching AP Biology for Novice AP Biology Teachers

Methods of Teaching AP Chemistry for Novice AP Chemistry Teachers

Math of Chemistry for Teachers

Date: June 30 – July 3, 2008

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

Cost: \$595.00 (includes Breakfast and Lunch)

Place: Science Wing, Mahopac HS

Methods of Teaching Physics 2008

Date: July 7-July 10, 2008

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

Cost: \$595.00 (includes Breakfast and Lunch)

Place: Science Wing, Ossining HS

Please go to: <http://www.manhattan.edu/programs/ap/courses.shtml> for further info.

New York City Area Teachers can take our trio of earth science courses for P-Credit Go to <http://www.nyasdpd.org/> and find us in the on-line course catalog under “science”. If you have any questions call: (800)-649-6715

The DNA Learning Center is holding a 3-week workshop of high school biology teachers July 14-August 1, 2008. It includes room and board in Cold Spring Harbor and a stipend for participants. It would be a great way to get a few New York teachers revved up in molecular biology. The brochure and application is online with our other workshops descriptions at this link: http://www.dnalc.org/ddnalc/teacher_training/

May 31 – Applications due for 2008 Penn State Science Workshops for Educators (Grades 6-12),

<http://teachscience.psu.edu>. Workshops include: Earth’s History: Interactions Between Life and the Environment; Exploring Renewable Energy Technologies and the Materials that Make it Happen; Extreme Particle Astrophysics; Evolution - How important is it to a good science education?; Telescopes: The Tools of Astronomical Inquiry; and Black Holes: Gravity’s Fatal Attraction.

May 31, 2008: Deadline to apply for Chemistry teachers to apply for Grants and Scholarships from the Hach Chemical Foundation. For more information, please visit:

<http://www.hachscientificfoundation.org/outreach.shtml>

July 1, 2008: Deadline to apply to become an astronaut. For more information, please visit: <http://www.nasa.gov/astronauts/recruit.html>

February 12, 2009: Charles Darwin Bicentennial Day. For more information, please visit:

<http://darwinday.org/englishL/assistevent/index.html>

Science Core Curriculum Professional Development Registration -Summer 2008

Below is the schedule for Science Professional Development Summer 2008 and the registration links are open!

Week of July 28 – July 31:

- 5th Grade FOSS, Harcourt and Blend
- Accelerated 8th Grade

Week of August 4 – August 7:

- 7th Grade FOSS, SEPUP, Glencoe and Blend
- High School Science - Earth Science, Living Environment, Forensics, Science Research, Data Analysis

Week of August 11 – August 14:

- 8th Grade SEPUP, Glencoe and Blend

Teachers who missed training this past year for Grades 3, 4 and 6 will be offered training on **Friday, August 29** (Chancellor's Conference Day) as well as sessions in Fall, 2008.



The registration links for grades 5,7,8 and accelerated 8 for Summer PD are ready!!

Please make sure to speak to your Principal about registration and read the information carefully before you register.

The link is:

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

All the professional development is at either IS 89M or across the street at Stuyvesant High School.

FOSS Website:

NYC FOSS Website

www.fossweb.com/nyc

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

fossnyc@berkeley.edu

Updates from our Publishers



Redeeming Coupons: If you did not redeem your coupons from FOSS this year they are good for four years.



The Planning Guides are on the FOSS website.

Click on: <http://www.fossweb.com/NYC/>

Use fossnyc for your username and your password.

Summer 2008 FOSS Middle School Institutes

NYC Middle School FOSS teachers have the opportunity to take weeklong intensive courses this summer from the Lawrence Hall of Science. Check the following courses and the links for details:

Populations and Ecosystems: August 6-10, 2008

http://schools.nycenet.edu/offices/teachlearn/science/rh/PopEco_Workshop_Flyer_plus.pdf

Chemical Interaction: July 21-25, 2008 http://schools.nycenet.edu/offices/teachlearn/science/rh/Chem_Int_Workshop_07-08.pdf

Weather and Water: July 20 - 25, 2008 <http://schools.nycenet.edu/offices/teachlearn/science/rh/WWApplication08.pdf>

Make sure to check out the FOSS website for planning guides and many other needed resources. The Spanish translation for Populations and Ecosystems (units 3-4, grade 6) is available now on

<http://www.fossweb.com/NYC/>. The translations for the remaining three titles (Chemical Interactions, Weather and Water, and Planetary Science) will be available online in August.



Glencoe Website: The NYC Glencoe site is up and ready!

When an item on the right Teacher Tools navigation tab is selected the user is prompted for a UN/PW:

UN: NYCTEACH

PW: GlencoeSci

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

Harcourt Website:

NYC Harcourt Website:

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

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



The Lab-Aids NYC website:

<http://nyc.lab-aids.com/>

Jeanette.Watley-Wilson@harcourt.com

You should follow these easy steps to download the Harcourt planning guide:

First click on the Teachers Link.

Then click on the NYC Planning Guides.

Then click on the Grade and Unit you want to view.

When asked for a password type in the following:

NYCPG

The password works for all NYC teachers.

Website World



NATIONAL GARDENING ASSOCIATION

When you garden, you grow

http://www.nationalgardenmonth.org/index.php?page=nyc_grows

Research Resources in Science

http://centeroninstruction.org/resources.cfm?category=science&subcategory=&grade_start=&grade_end=

Teacher to Teacher - The Teacher-to-Teacher Initiative has been created by and for America's teachers. It supports teachers' efforts in the classroom through professional development workshops and digital workshops and by sharing relevant information through email updates.

<https://www.t2tweb.us/Workshops/Sessions.asp?Content=Science>

Summer 2008 Workshops and Schedules for Teacher to Teacher

<https://www.t2tweb.us/Workshops/Schedule.asp>



Energy Smarts Newsletter

<http://www.getenergysmart.org/files/newsletters/Energy%20Smart%20April%20-%202008.pdf>

High School – www.terrificscience.org - This is the website of the Center for Chemical Education

Middle School – this is a great site for Middle School Forensics activities www.Commlearning.com

Ancient Forest to Modern City <http://earthobservatory.nasa.gov/Study/AncientForest/>

To understand how local weather shifted when the towering forests of the eastern United States gave way to fields and cities, scientists must reconstruct the region's historical landscapes.

Amazon Fires on the Rise <http://earthobservatory.nasa.gov/Study/AmazonFireRise/>

Earth Observations from Space: The First 50 Years <http://www.nationalacademies.org/earthobservations>

The Vanishing Rings of Saturn http://science.nasa.gov/headlines/y2008/18mar_saturn.htm?list1022025

Amateur astronomers around the world have noticed, something is happening to Saturn. The planet's rings are rapidly narrowing and, if this continues, before too long they will be reduced to a wafer-thin line invisible to backyard telescopes. What's going on?

NASA Satellite measures Pollution from East Asia to North America

<http://earthobservatory.nasa.gov/Newsroom/NasaNews/2008/2008031726358.html> NASA researchers offer the first measurement-based estimate of the amount of pollution from East Asian forest fires, urban exhaust, and industrial production that makes its way to western North America.

NASA Selects Scientists and Investigations for Robotic Moon Mission

http://www.nasa.gov/home/hqnews/2008/mar/HQ_08079_LRO.html

NASA has selected 24 scientists to initiate new investigations and assist with planned measurements to be conducted by the agency's Lunar Reconnaissance Orbiter (LRO). Scheduled for launch later this year, LRO represents NASA's first step toward returning humans to the moon.

Trout in the Classroom <http://www.troutintheclassroom.org>

Avalanches on Mars

http://science.nasa.gov/headlines/y2008/03mar_avalanche.htm?list1022025

A NASA spacecraft in orbit around Mars has taken the first ever image of avalanches in action near the Red Planet's North Pole.

Exploring Nature Educational Resource website. <http://www.exploringnature.org>

Animal Links: http://www.exploringnature.org/database/wildlife_index.php