



CRS

COMMUNITY RESOURCES FOR SCIENCE
practical support for great science teaching

1611 San Pablo Avenue, Suite 10B
Berkeley, California 94702
(510) 527-5212 • www.crscience.org

SCIENCE RESOURCE GUIDE - FALL 2011

CRS prepares and sends this Science Resource Guide three times a year to keep you up to date about science education happenings (professional development, grant opportunities, program deadlines and special exhibits) around the Bay. We send you updates every month via our Science e-NewsBlasts. **Make sure CRS has a reliable email address for you** so that you will receive Science e-NewsBlasts and invitations to have Scientist Volunteer science lessons in your classroom. **Please make sure that Community_Resources_for_Science@mail.vresp.com is on your safe email list.**

ARE YOU A SCIENCE SUPER STAR?

- Do you enthusiastically bring science experiences across the curriculum into your classroom?
- Do all your students participate in hands-on lessons and read and write about science?
- Do you and your colleagues collaborate to bring engaging science experiences to your classrooms?
- Does your school's staff take full advantage of the services that CRS provides to them?

If you've answered "yes", you're ready to take the Science Super Star Challenge!

Win recognition and prizes for you and your class!

For more information and to sign up <http://www.crscience.org/sciencesuperstarprogram>

BERKELEY, EMERYVILLE, AND OAKLAND PUBLIC ELEMENTARY SCHOOL TEACHERS:

We are able to extend **FREE** CRS membership benefits to you and your colleagues thanks to generous grant funding. Please be sure to contact us at CRS@crscience.org with your name, email address, grade level and school site, so that you are "in our system" to receive the monthly Science e-NewsBlasts, invitations for BASIS in-class scientist presentations, invitations to CRS Field Trips for Teachers events at local museums and science centers, and more.

SCIENCE NOTEBOOKS

Are you looking for ways to increase literacy math and science skills all at the same time? Science notebooks are an effective way to get students to record what they observe in their scientific inquiries, demonstrate their science and writing skills, and allow you a chance to see where any misconceptions may be happening.

FOSS's folio "Science Notebooks" offers practical support on the how and why of science notebooks and is available online at

http://lhsfoss.org/fossweb/news/pdfs/Science_Notebook_FOLIO.pdf

The FOSS Science and Literacy resource page offers a host of links to other science notebook resources

<http://lhsfoss.org/sciencelit.html#literacy> . Check out

<http://www.sciencenotebooks.org/> for more practical support.

Are you already using science notebooks in your classroom? Take this brief online survey for a chance to win a \$50 Target card. It's part of a statewide study on effective use of science notebooks.

<http://www.surveymonkey.com/s/3NTS6MY>

Look for more on science notebooks in the October CRS e-NewsBlast. **Find these links and detailed versions of the Science Resource Guide Reports at**

www.crscience.org/ResourceGuideOct11.pdf



SCIENCE IS COOL!

Ashley Gibb makes liquid nitrogen ice cream at the CRS Founders' Celebration.



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Program Deadlines

October 2011

- 10/1/2011 **Applications for Teacher at Sea program BEGINS**
National Oceanic and Atmosphere Administration
<http://teacheratsea.noaa.gov/about/index.html>
- 10/3/2011 **Lottery Deadline for 2011-12 School Programs**
Marina Education Programs
<http://www.ci.berkeley.ca.us/ContentDisplay.aspx?id=11922>
- 10/4/2011 **Registration opens for Spring Programs**
Hidden Villa
<http://www.hiddenvilla.org/HVEEP.php>
- 10/10/2011 **Deadline for Oct. 24-Dec 4, 2011 Online Professional Development**
American Museum of Natural History
<http://learn.amnh.org/>
- 10/14/2011 **Registration for Feildtrips and training ENDS**
Golden Gate National Recreation Area
<http://www.nps.gov/goga/forteachers/index.htm>
- 10/15/2011 **Spring 2012 Program Sign-up Deadline**
Slide Ranch
<http://www.slideranch.org>

December 2011

- 12/1/2011 **Spring Fieldtrip Sign up Begins**
Don Edwards San Francisco Bay National Wildlife Refuge
<http://desfbay.fws.gov/environ.htm>
- 12/1/2011 **Spring Fieldtrip Lottery ENDS**
SF Botanical Garden & Strybing Arboretum
<http://www.strybing.org>
- 12/5/2011 **Lottery Deadline for Winter & Spring Fieldtrips**
East Bay Regional Parks District
<http://www.ebparks.org>

January 2012

- 1/2/2012 **Camping at the Presidio - Camp Site Sign up Begins**
Golden Gate N.P. Conservancy
<http://www.parksconservancy.org/our-work/crissy/programs/camping-at-the-presidio.html>
- 1/2/2012 **Spring Fieldtrip reservations begin**
Hayward Shoreline Interpretive Center
<http://www.haywardrec.org/hayshore.html>

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Professional Development

October 2011

- 10/1/2011 Estuary Ecology Day** **Romberg Tiburon Center for Environmental Studies**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://rtc.sfsu.edu/prof_dev.htm
Would you like to learn more about climate change research happening right here in San Francisco Bay? San Francisco State University's San Francisco Bay National Estuarine Research Reserve and Romberg Tiburon Center would like to invite you to a free professional development workshop designed for science teachers. The workshop will include talks by scientists who are studying the impact of sea level rise on the Bay's marshes and a field trip to China Camp State Park, where some of the research is happening. The research is compelling, the scientists are good speakers, and we'll have lots of chocolate, too!
Romberg Tiburon Center, Tiburon CA and China Camp State Park, San Rafael CA 8:30 am – 4:30 pm
Saturday, October 1st We have limited space, so please register early by emailing Sarah Ferner at "daviess@sfsu.edu" and include your name, grade level and
- 10/1/2011 Packing for Mars** **Resource Area for Teachers (RAFT)**
For Grades: 3rd;4th;5th;6th;7th;8th
<http://www.raft.net/workshops/in-house>
Join the Astronomical Society of the Pacific (ASP) for a 3-hour workshop of engaging hands-on activities to introduce some of the topics addressed in the book, *Packing for Mars: the Curious Science of Life in the Void* by Mary Roach. The book has been selected by San Mateo County libraries as their October "One Book, One Community" initiative to support the up-coming Bay Area Science Festival to be held Oct. 29 - Nov. 8. All activities presented during the workshop are appropriate for presentations in libraries, community centers, museums, and classrooms.
INSTRUCTORS: Juanita Ryan is a recently retired elementary school teacher. She has taught first through fifth grades at Toyon School in the Berryessa Union School District.
Suzanne Gurton is the Astronomy Education Manager for the Astronomical Society of the Pacific (ASP), located in San Francisco.
- 10/1/2011 - 10/2/2011 Frontcountry Leadership Training (FLT)** **Bay Area Wilderness Training**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.bawt.org/programs/training/leadership-training/frontcountry-leadership-training/>
Frontcountry Leadership Training (FLT) is an entry level course covers all the basic skills you will need to successfully take youth on car-camping based overnight trips. Skills covered include: camping safety, day-hiking, tent and stove-set up, clothing requirements, nutrition and team building activities. All learning is experiential. After the weekend training, to get access to our gear libraries, participants also need to complete the Gear Orientation (GO!) training. The cost of the course covers all course materials, meals and camping. Participants will have to provide their own transportation to get to the location. The price is \$40 per person. For additional participants from the same organization the price is \$25.

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- 10/5/2011** **IWorm Composting: San Mateo County** **Resource Area for Teachers (RAFT)**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
 At Redwood City RAFT: This workshop is perfect for teachers and school staff interested in establishing a worm composting program. Worm composting, or vermicomposting, is using worms and microorganisms to convert organic waste into a rich fertilizer? Ready to use in the garden! Workshop participants will receive red worms and a teacher guide. Information on educational tools, case studies, and troubleshooting will be presented. Please bring a Rubber Maid container so you can bring the worms home with you.
 INSTRUCTOR: Gerald Schwartz is the Resource Conservation Specialist for the RecycleWorks Schools Program in San Mateo County.
- 10/6/2011** **Focus Your Field Trip: Our California Coast** **California Academy of Sciences**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
 Learn the significance of our local marine ecosystem and get ready to make a splash on your field trip. Discover the Farallon Marine Sanctuary and its importance for coastal organisms while meeting some of these aquatic inhabitants in our California Coast Exhibit.
- 10/6/2011 -** **The Growing Classroom: An Introduction to Garden Based Le** **Life Lab Science Program**
10/7/2011
 For Grades: 2nd;3rd;4th;5th;6th
<http://www.lifelab.org/for-educators/workshops/gcworkshops/>
 This two-day workshop, located at the amazing Garden Classroom or at your school site, is ideal for those interested in supplementing their existing science program with garden-based learning. Using The Growing Classroom activity guide for grades 2-6, you'll experience hands-on activities, learn basic science concepts and gardening techniques, and develop management strategies for a school gardening program. Find out how to teach the standards while you guide students through the natural cycles of the garden. You'll receive Life Lab's 480 page book, The Growing Classroom as well as many other ideas and resources. Two days 9:00-3:30. One-day Growing Classroom workshops can also be arranged.
- 10/8/2011** **Bay Area Geology/Field Trip to Mt. Diablo** **Bay Area Earth Science Institute**
 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.baesi.org/>
 Tim McHargue (Stanford University, Chevron (Retired)), Angela Hessler (Earth Science Department, Chevron Energy Technology Company), Will Schweller (Chevron consultant), and Ellen Metzger (SJSU/BAESI). Classroom exploration of the geologic history of California and the Bay Area will be followed by an afternoon field trip to investigate geology firsthand at Mt. Diablo State Park. This workshop will meet at Chevron, 6101 Bollinger Canyon Road, San Ramon, CA Bay Area Earth Science Institute (BAESI) workshops for teachers of grades 4-12 are free, address California science standards, and present a blend of earth science concepts and ready-to-use classroom activities for teaching them. Each workshop or field trip meets from 8:30 am - 4:30 pm and will take place in room 306 Duncan Hall on the San José State University (SJSU) campus unless otherwise noted. If you need SJSU credit, you may combine any two sessions to earn 1 unit of Geology 104 for \$50
- 10/12/2011** **Teachers Night Out** **Aquarium of the Bay**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.aquariumofthebay.org/education.aspx?q=10024&c=10023>
 Aquarium of the Bay's Teachers Night Out is a great opportunity to get an exclusive tour of the Aquarium, learn about our FREE, standards-based K-12 classroom programs, and enjoy food, beverage, and marine life. It's perfect if you're thinking of planning a field trip and want to get ideas for how to incorporate a trip to the Aquarium into your class this year. It's also great if you're signed up for a self-guided tour and want to learn how to make the most of your visit. We promise a fun, relaxed, and informative evening!
- 10/13/2011** **Science Fair Success** **Resource Area for Teachers (RAFT)**
 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>

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Most teachers will say that the hardest part about running a science fair is getting the students started; figuring out the topic and helping them turn the ideas into an effective project. In this workshop, you will work with a "science fair expert" to brainstorm ideas for science fair projects using RAFT materials. You will also get a multitude of science fair survival tools: time lines, resource books and web sites, with ideas on how to get funding for your fair and plenty of helpful tips for managing projects. Everything you need to run a successful science fair!

INSTRUCTOR: Heidi Black has been teaching for 20 year, including working as a naturalist at an outdoor environmental education camp, teaching high school biology and physics, and serving as Teacher in Residence at the Exploratorium. Heidi serves on the county science fair board and has spent the last 3 years as the science fair coordinator for the East Side Union High School District where she has been instrumental in creating a 1400-student district fair and in running a small fair at her son's middle school.

- 10/13/2011 Owl Pellets and Beyond - Classroom Kit Training California Academy of Sciences**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Owl Pellets and Beyond - Revised! What do barn owls eat? Learn how to identify the skulls of prey found in owl pellets by using a simple dichotomous key. Students will love this simple discovery lesson that is appropriate for all ages. This activity follows the scientific process by creating a hypothesis, following a procedure, collecting data, and creating a graph to show the class results. A brand new board game that includes fun trivia focuses on the prey of barn owls.
- 10/13/2011 Schools and Food: Invitation to a Revolution Center for Ecoliteracy**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ecoliteracy.org/events/schooling-sustainability-leadership-academy-2010-2011>
This special one-day Bioneers pre-conference intensive presents resources and strategies for improving school meals; supporting wellness and achievement; and understanding food, culture, health and the environment.
- 10/14/2011 Fall Teacher Feature Oakland Museum**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.museumca.org>
RSVP 510-318-847 Education staff will assist you in discovering new opportunities for engaging your students in the explore the Art and History Galleries on this special evening of light refreshments and lively ideas. art and culture of California. View the Days of the Dead exhibition and meet participating artists. Enjoy hands-on activities and examine classroom materials you can use to prepare students for their visit. Check our website for more details www.museumca.org
- 10/15/2011 Rocketing to New Heights Resource Area for Teachers (RAFT)**
For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
Use balloons and simple activities to explore how rockets work. Explore simple inexpensive designs for rockets, both commercial and non-commercial.
INSTRUCTOR: Tom Gates is a former Aerospace Education Specialist, now with RAFT's Education Department. He traveled extensively in the Western U.S. giving teacher workshops, classroom visits, and assembly programs with NASA for over 30 years. Tom teaches many of RAFT's Outreach workshops.
- 10/8/2011 - 2011 Nature Journaling: SF North Bay California Institute for Biodiversity**
10/15/2011
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://eureka-series.org/main/node/125>
Awaken a love for the environment through the creation of a nature journal. Are your students uninterested in the outside world? Do they know little of the flora and fauna that inhabit their backyard? If so, get them excited about nature by having them create their own journal! With our workshop you will gain the skills and confidence to incorporate nature journaling in your classroom. Learn from naturalist, artist, and author John Muir (Jack) Laws (California Academy of Sciences) how to best observe the natural world and record your observations in your own nature journal. Discover language arts exercises and English language development standards that will help connect your journal to California content standards. By completing this workshop, you will have a journaling tool for your curriculum that will finally get your students to slow down in this technological age and appreciate the natural world.
October 8 @ Samuel P. Taylor State Park & October 15 @ Tomales Bay State Park

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- 10/15/2011 A Geologic Walk in Downtown San Francisco - Tracing the 19 Northern California Geological Society**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ncgeol.org/EducatorsDay/2011%20NCGS%20-%20Walk%20SF.pdf>
 A TEACHER'S WORKSHOP - NCGS FIELD TRIP FOR THE NATIONAL EARTH SCIENCE WEEK - Saturday October 15, 2011
 Field Trip Leader: Dr. Raymond Sullivan, Professor Emeritus, Department of Geosciences, San Francisco State University
 San Francisco, CA 94132
 Field Trip Coordinator –Dr. Paul Henshaw
 9:00am
- 10/15/2011 Saturday Seminar Series - Using Literacy Strategies in Math & Bay Area Science Project**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://us1.campaign-archive1.com/?u=91a158a024c3e3325aa3b84bc&id=e40b3d095e&e=6dff2>
- 10/15/2011 Project WET and Waves, Wetlands, and Watersheds California Coastal Commission, Public Education Program**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://www.coastal.ca.gov/publiced/waves/suisun.pdf>
 At this workshop, you will receive FREE copies of the California Coastal Commission's science activity guide for teachers, Waves, Wetlands, and Watersheds and the awardwinning Project WET activity guide. You'll try some of the activities in the guides and get an overview of other free educational resources and programs available from the sponsoring organizations. The workshop will include a short interpretive walk and a presentation by the USGS on local research. Light breakfast items and lunch will be provided. Space is limited. Please register before October 5th with Annie Kohut Frankel at afrankel@coastal.ca.gov, (415) 597-5888, or (800) Coast4U. Include the spelling of your name, email, phone number, grade(s) taught and your school or organization as applicable. Workshop is open to formal and informal educators. Professional growth credit offered through the University of the Pacific
- 10/15/2011 Cirque Des Sciences - Lab Open house LBNL Center for Science and Engineering Education**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.lbl.gov/openhouse/>
 Registration required! Discover 'The Greatest Science on Earth' Ladies and gentlemen, boys and girls, and children of all ages are invited to experience amazing feats of cutting-edge science at Berkeley Lab's Open House. A three-ring circus under the Big Top, surrounded by nearly an acre of exciting exhibits, will delight and entertain families, community members, and all who want to learn more about the Lab's stupendous scientific research.
- 10/16/2011 Sowing the Seeds of Wonder: Discovering the Garden in Early Life Lab Science Program**
 For Grades: K;1st
<http://www.lifelab.org/for-educators/workshops/gcworkshops/>
 Spend a day looking at the garden through the eyes of a pre-school student. Sample many activities that can encourage young children to learn about their world using all their senses. Learn how to implement garden activities in a pre-school setting. We'll also discuss basic gardening skills, appropriate garden design, safe plants for pre-school gardens, and garden art projects and songs. You'll receive a pre-school activity packet with activities and songs for teaching throughout the year. Coffee and bagels at 8:45, workshop from 9:00-3:00. Please bring a sack lunch.
- 10/17/2011 - California Green Schools Summit & Exhibition Green Technology**
10/18/2011 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.green-technology.org/gcschools/>

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PASADENA - One out of five Americans spends the day in a school building. From economy and student performance to health and responsible resource management, there are many reasons why these facilities should take advantage of green building innovations. The home state of the nation's first green building rating program especially designed for K-12 schools, California has long been on the leading edge of the green schools movement. The Green California Schools Summit was created to address the unique needs and challenges of this growing sector, from funding sources to curriculum. In 2011, the Summit will be held in conjunction with the Green California Community Colleges Summit, giving registrants access to additional education sessions and a larger Expo!

- 10/20/2011 Schooling for Sustainability Leadership Academy 2011-2012 - Center for Ecoliteracy**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ecoliteracy.org/events/schooling-sustainability-leadership-academy-2010-2011>
Application deadline for 2011–2012: September 9, 2011
The Center for Ecoliteracy invites visionary educators to apply to participate in the Center's 2011–2012 Schooling for Sustainability Leadership Academy. The Academy will meet for four all-day sessions, scheduled for Thursday, October 20, 2011; Thursday, December 1, 2011; Thursday, February 9, 2012; and Thursday, May 3, 2012.
As a prerequisite, participants must have attended at least one previous Center for Ecoliteracy seminar. Participants may meet this requirement by attending our one-day Bioneers pre-conference intensive "Schools and Food: Invitation to a Revolution" in San Rafael, California on October 13.
- 10/22/2011 Science Through Gadgets Resource Area for Teachers (RAFT)**
For Grades: 1st;4th;5th;6th
<http://www.raft.net/workshops/in-house>
Learn to make a series of fascinating gadgets and toys that children will enjoy using to discover a variety of underlying science principles. Join us for an instructive, fast-paced, and entertaining workshop which combines the "Science Through Gadgets" approach with the interesting materials available at RAFT. Be ready to carry your new gadgets home!
INSTRUCTOR: Glen Kimoto has been a science educator for 38 years, has conducted numerous science workshops in the Bay Area and has presented for the California Science Teachers Association and for the California League of Middle Schools.
- 10/22/2011 Earth Art Resource Area for Teachers (RAFT)**
For Grades: K;1st;2nd
<http://www.raft.net/workshops/in-house>
Earth Art lessons create environmental motivation through creativity. A simple drawing of a Redwood tree can lead to talk about native species and the carbon dioxide/oxygen cycle we share with trees. An art project about endangered species is an opportunity to teach about deforestation and our choice of farming over rain forest preservation. Participants will have the opportunity to try out four different art projects including basic drawing lessons.
INSTRUCTOR: Kate Rone is the Cultural Kaleidoscope Coordinator at The Palo Alto Art Center and has spent the past eight years developing children's art lessons. She has taught Kinder - Jr. High students, led teacher workshops and has created kid's art projects for festivals.
- 10/21/2011 - 2011 California Science Education Conference - Pasadena California Science Teachers Association**
10/23/2011 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.cascience.org/csta/conf_home11.asp
Pasadena - This annual event is the premier annual professional development event for science teachers and educators in California. Conference events address all areas of science education, including life science, earth/space science, physical science, environmental science, literacy, English language development, and assessment. Ed Begley, Jr. is the key note speaker
- 10/24/2011 Oct 24 - Dec 4, 2011 Online Professional Development American Museum of Natural History**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://learn.amnh.org/>

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These six-week courses developed by Museum scientists and educators incorporate the Museum's rich resources including three-dimensional virtual specimens, videos from the field, and interactive simulations. Teachers participate in discussions and activities with the Museum's scientists and educators. Continuing education units and graduate credits are available. For more information go to <http://learn.amnh.org>. Summer 2011 - Session 2 July 4 2011 - August 14 2011. Offerings are: Earth: Inside and Out, Genetics, Genomics, Genethics, The Link Between Dinosaurs and Birds, The Ocean System, Evolution, The Solar System, Water, Climate Change,

- 10/27/2011 Plant Biology (grades 4-8) California Academy of Sciences**
For Grades: 4th;5th;6th;7th;8th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Explore the Natural World - Enhance your understanding of key science concepts and learn how to integrate them into your classroom curricula. Each three-part series deeply explores a science topic, including content knowledge; standards-based, hands-on activities; and collaboration with peers. Participants must attend all three sessions. Tickets: \$35
» Session One: Thursday, October 27, 2011
» Session Two: Thursday, November 3, 2011
» Session Three: Thursday, November 10, 2011
Each session is from 4:00 – 6:00 pm. You must attend all three sessions.
- 10/29/2011 Science of Yo-Yos and Tops Resource Area for Teachers (RAFT)**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
@ RAFT Redwood City. Learn about the science of spinning things by building and experimenting with yo-yos, tops, and other fun toys. These are simple toys, yet they are also excellent tools for teaching science concepts
INSTRUCTOR: Modesto Tamez is on staff at the Exploratorium's Center for Teaching and Learning.
- 10/29/2011 Teaching Climate Change in Your Classroom 10/29 & 11/12 Headlands Institute**
For Grades: 6th;7th;8th
<http://www.naturebridge.org/headlands/teacher-professional-development>
Learn about climate change impacts and solutions from a local scientist. Discover hands-on climate change lessons and activities for your classroom. Develop an action plan and project for your classroom or school. Explore Golden Gate National Park while spending two days and one night at our campus.
- 10/29/2011 Geology: Classroom Kit Training California Academy of Sciences**
For Grades: 2nd;3rd;4th;5th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
When did you last feel an earthquake? Discover a beautiful rock? Contemplate the structure of hills or mountains? In this workshop, you will participate in hands-on activities that illuminate the hidden processes of our planet. Learn about Earth's layers, the rock cycle, minerals, fossils, plate tectonics, and more.

After taking this workshop, you will be eligible to use the Geology Kit in your classroom.
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- 10/29/2011 Stars & Constellations Resource Area for Teachers (RAFT)**
For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
Make inexpensive star and planet locators. Explore understanding seasonal stars and constellations, circumpolar constellations, and ways to understand the concept of constellations.
INSTRUCTOR: Tom Gates is a former Aerospace Education Specialist, now with RAFT's Education Department. He traveled extensively in the Western U.S. giving teacher workshops, classroom visits, and assembly programs with NASA for over 30 years. Tom teaches many of RAFT's Outreach workshops.

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- 11/3/2011 Educators Open House Chabot Space and Science Center**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.chabotspace.org>
 4:00-7:00pm - Explore the entire facility, experience activity options, and meet Chabot's dynamic education staff. Learn about new program offerings including our Tap the Wind class, where students design wind turbine blades for maximum efficiency.
- 11/5/2011 Climate Change and Its Impact on California and the Bay Area Bay Area Earth Science Institute**
 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.baesi.org/>
 Miriam Andres and Angela Hessler (Earth Science Department, Chevron Energy Technology Company) and Ellen Metzger (SJSU/BAESI). Basic climate science, the carbon cycle, and the consequences of climate change with a focus on California's coast, water resources, agriculture and more. You will also meet the Green Ninja, a climate action superhero who fights global warming by inspiring personal action. This workshop will meet at Chevron, 6101 Bollinger Canyon Road, San Ramon, CA
 Bay Area Earth Science Institute (BAESI) workshops for teachers of grades 4-12 are free, address California science standards, and present a blend of earth science concepts and ready-to-use classroom activities for teaching them. Each workshop or field trip meets from 8:30 am - 4:30 pm and will take place in room 306 Duncan Hall on the San José State University (SJSU) campus unless otherwise noted. If you need SJSU credit, you may combine any two sessions to earn 1 unit of Geology 104 for \$50
- 11/5/2011 Educator Extravaganza - Open house California Academy of Sciences**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/science/educator_extravaganza_2011/
 Join fellow educators to explore the California Academy of Sciences inside and out, and walk away with resources, activities and inspiration to bring science into your classroom in exciting new ways. Participate in workshops and behind-the-scenes tours, converse with scientists, and dive deeper into the Academy's exhibits and research collections. FREE FOR BAY AREA TEACHERS! More information and the opportunity to RSVP online coming soon!
- 11/5/2011 Water: A Chemical Solution Resource Area for Teachers (RAFT)**
 For Grades: 3rd;4th;5th;6th;7th;8th
<http://www.raft.net/workshops/in-house>
 @ RAFT Redwood City. Join the Santa Clara Valley Section of the American Chemical Society in celebrating the International Year of Chemistry 2011. This year, students around the world are invited to explore one of Earth's most critical resources, water. The results of their investigations will contribute to a Global Experiment, which will possibly become the biggest chemistry experiment ever. This workshop will provide teachers with background information, instructions, and materials to perform water experiments (on acidity, salinity, filtration, solar still, etc.) with their students. The data obtained from the experiments can then be uploaded to a website (optional) to contribute to the global data collection. Students will be able to compare their data with data from students throughout the world. No science background is needed to attend this workshop.
 INSTRUCTOR: Juanita Ryan is a recently retired elementary school teacher. She has taught first through fifth grades at Toyon School in the Berryessa Union School District.
- 11/12/2011 Environmental Science in the City Resource Area for Teachers (RAFT)**
 For Grades: K;1st;2nd;3rd;4th;5th
<http://www.raft.net/workshops/in-house>
 Join Guadalupe River Park Conservancy for a fun-filled workshop all about how to teach hands-on environmental science lessons in the outdoors! Participate in hands-on activities that fulfill California State Standards, pick up helpful outdoor classroom management techniques, and learn how to utilize even the smallest natural area near your school or home for science education. Then, find out all about the Guadalupe River Park & Gardens, a natural oasis located in the heart of downtown San Jose that provides a natural outdoor laboratory for science experiments and a creative, dynamic atmosphere for learning. Finally, learn about the Conservancy's exciting environmental science field trip opportunities! Scholarships are available to Title 1 schools for these trips.
 INSTRUCTOR: Stephanie Lind is the Education Coordinator at the Guadalupe River Park Conservancy.

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org

- 11/4/2011 - 2011 Sacramento - San Joaquin Delta Ecology Institute** **California Institute for Biodiversity**
11/13/2011 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://eurekaseries.org/main/node/127>
 November 4 - 6 & 11 - 13 (Dates Subject to Change)
 Join us in this unique California habitat where we will introduce you to the delta watershed and its diverse flora and fauna. Participants will perform inquiry-based experiments; interact with engaging multimedia; and model literacy-linked activities at East Bay Regional Park District locations. Receive the tools necessary to leave your students with a comprehensive understanding of the delta.
- 11/17/2011** **Skulls: Study of Structure & Function - Kit Based Workshop** **California Academy of Sciences**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
 An animal skull can be an amazing resource for exploring natural history and practicing skills such as observation and interpretation. In this workshop, participants will investigate the skulls of seven Northern Californian mammals and learn some of the critical differences that distinguish herbivores, omnivores, and carnivores. Discover the significance of eye placement and learn to infer what animals eat from the shapes of their teeth.
- After taking this workshop, you will be eligible to use the Skulls Kit in your classroom.
- 11/19/2011** **Rocks, Minerals, Soils, and Society** **Bay Area Earth Science Institute**
 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.baesi.org/>
 LeAnne Teruya and Ellen Metzger (SJSU Geology/BAESI). Hands-on investigation of Earth materials including their classification, uses, and the processes that form and recycle them through time. We'll explore how society is influenced by the natural resources made available by the local geology of an area and take a rock collecting field trip to a local gravel bar. Bay Area Earth Science Institute (BAESI) workshops for teachers of grades 4-12 are free, address California science standards, and present a blend of earth science concepts and ready-to-use classroom activities for teaching them. Each workshop or field trip meets from 8:30 am - 4:30 pm and will take place in room 306 Duncan Hall on the San José State University (SJSU) campus unless otherwise noted. If you need SJSU credit, you may combine any two sessions to earn 1 unit of Geology 104 for \$50
- 11/19/2011** **Geology: Classroom Kit Training** **California Academy of Sciences**
 For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
 When did you last feel an earthquake? Discover a beautiful rock? Contemplate the structure of hills or mountains? In this workshop, you will participate in hands-on activities that illuminate the hidden processes of our planet. Learn about Earth's layers, the rock cycle, minerals, fossils, plate tectonics, and more.
- After taking this workshop, you will be eligible to use the Geology Kit in your classroom.

December 2011

- 12/3/2011** **Project WET** **Resource Area for Teachers (RAFT)**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
 Project WET is a curriculum and activity guide that is designed to give educators a comprehensive resource for providing water-related activities and information for use in the classroom, the field, or wherever you have eager students! During this workshop, you will receive the Project WET guide book, along with training on how to use the guide. You will also get a chance to practice some of the activities that apply to a range of subjects and grade levels.
 INSTRUCTOR: Eric Mckee is the 'Slow the Flow' Program Coordinator at the Don Edwards S.F. Bay NWR Environmental Education Center.

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12/3/2011 Little Scientist Resource Area for Teachers (RAFT)
For Grades: K;1st;2nd
<http://www.raft.net/workshops/in-house>
If you introduce science concepts at an early age, children will understand those concepts better when they reach the age where they will actually study them. Learn some basic, hands-on projects that you can use to teach science to even the youngest of children.
INSTRUCTOR: Shalek Chappill has worked with children of all ages, backgrounds, and abilities. She currently works for Santa Clara Unified School District in the autism program. Concurrently, Shalek is attending Santa Clara University to receive an M.A. and credential in Special Education.

January 2012

- 1/7/2012 Rainforests of the World - Classroom Kit Training California Academy of Sciences**
For Grades: K;1st;2nd;3rd
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Prepare to lead your students on an exploration of tropical rainforests, one of the most fascinating ecosystems on the planet. This workshop will enhance your understanding of the structure of tropical rainforests, bird adaptations, rainforests soils, plant-animal interactions, and many other topics. Explore the California Academy of Sciences' Rainforests of the World exhibit and discover ways to connect this unique exhibit with your classroom curriculum. After taking this workshop, you will be eligible to use the Rainforests of the World Kit in your classroom.
- 1/12/2012 Owl Pellets and Beyond - Classroom Kit Training California Academy of Sciences**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Owl Pellets and Beyond - Revised! What do barn owls eat? Learn how to identify the skulls of prey found in owl pellets by using a simple dichotomous key. Students will love this simple discovery lesson that is appropriate for all ages. This activity follows the scientific process by creating a hypothesis, following a procedure, collecting data, and creating a graph to show the class results. A brand new board game that includes fun trivia focuses on the prey of barn owls.
- 1/13/2012 - California Kindergarten Conference in San Jose California Kindergarten Association**
1/15/2012
For Grades: K
<http://www.ckanet.org/>
January 13-15, 2012. Two day conference with varied topics to support kindergarten teaching and learning. San Jose
- 1/19/2012 Focus Your Field Trip: Explore Africa California Academy of Sciences**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Explore life-size displays representing the biomes of Africa! The dioramas of Tusher African Hall depict realistic scenes from all over Africa with preserved animals and their ecosystems. Have your students observe and collect evidence from their expedition to Africa and apply their new knowledge to their own local habitat.
- 1/21/2012 BAEER Fair BAEER Fair**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.baeerfair.org>
Over 100 resources dedicated to environmental education will be on hand for the Annual Bay Area Environmental Education Resource Fair (BAEER Fair) January 21st, at the Marin Center Exhibit Hall in San Rafael. From 10 a.m. to 4:30 p.m., teachers, students, parents, and community educators can take in exhibits, events, and demonstrations from organizations across the spectrum of environmental education. The Lawrence Hall of Science is proud to be a major sponsor of this year's BAEER Fair.

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- 1/26/2012 Astronomy California Academy of Sciences**
For Grades: 3rd;4th;5th;6th;7th;8th
<http://www.calacademy.org>
Explore the Natural World
Enhance your understanding of key science concepts and learn how to integrate them into your classroom curricula. Each three-part series deeply explores a science topic, including content knowledge; standards-based, hands-on activities; and collaboration with peers. Participants must attend all three sessions.
Tickets: \$35
» Session One: Thursday, January 26, 2012
» Session Two: Thursday, February 2, 2012
» Session Three: Thursday, February 9, 2012
Each session is from 4:00 – 6:00 pm. You must attend all three sessions.
- 1/28/2012 Coral Reefs - Classroom Kit Trainings California Academy of Sciences**
For Grades: 3rd;4th;5th;6th;7th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Dive into the world of the coral reef ecosystem through a variety of engaging, hands-on activities and games. Learn about the anatomy of a coral polyp by making an edible model. Discover the importance of coral reefs and the critical environmental conditions necessary for coral survival through interactive games. Take all these exciting activities and materials back to the classroom to prepare your students for a visit to the California Academy of Sciences' Philippine coral reef exhibit.



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Professional Development: Customized for Your School

Your Own Design

<http://www.bananaslugstringband.com/pages/workshops.html>

Banana Slug String Band will collaborate with you to develop a workshop that fits your needs by combining concepts, songs and strategies from a wide range of material.

Banana Slug String Band

Wonders of Water Teacher Orientation

<http://www.spn.usace.army.mil/bmvc>

The teacher and field trip leader workshops are designed for the option of having their own guided tours around the model. This workshop provides knowledge about the model for their students with essential tools of preparation before their visit. This session will include the integration of hands-on activities using concepts of water quality, a tour of the model, current events, and pre-classroom activities for students. Please call for more information (415)-332-3871.

Bay Model Visitor Center

Professional Development at your School

<http://www.calacademy.org>

Many different workshops are available to come to your school for professional development. Examples are: Sketching and Journal Keeping for the Science Classroom, Owl Pellets and Beyond, Herbivore, Omnivore, Carnivore: A study of Structure and Function

California Academy of Sciences

Whole School Science Professional Development

<http://www.crscience.org>

CRS workshops are designed to help build knowledge, skills and confidence in science teaching. Our workshops are fast-paced sessions that provide teachers with techniques, resource connections, tools, and planning time. Workshops are offered to both teacher groups of ten or more and whole faculties. Whole-school workshops are offered on-site to let faculties work together as a school community to accomplish their science goals and understand student learning. We support the development of teachers who are able to plan, teach, and refine strong, subject-integrated science lessons using an inquiry-based approach to their teaching and their own professional development. Standards-based Science Lesson Planning (three 90-minute sessions), Articulated Lesson Demonstration (three 120-minute sessions), Using Internet Resources for Science (one to three 90-minute sessions), Using Inquiry to Teach Science (three 90-minute sessions), Retaining Science Knowledge (two 90-minute sessions), Understanding Student Learning (three 90-minute sessions), On-Site Science Enrichment (as requested)

Community Resources for Science

Educator Workshops

<http://www.abag.ca.gov/bayarea/sfep>

Friends of the Estuary will work with you to design and present a tailored workshop for 10-100 educators. Workshop topics include: wetlands, endangered species, wildlife, bats, plants, Adopt a Watershed, Marine Debris, Project Learning Tree, Project Wild and Aquatic Wild, as well as new topic areas.

Friends of the Estuary

Environmental Education Services

<http://www.kidsforthebay.org>

Kids for the Bay

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org

Grade level and whole faculty workshops, One-on-one support, Lesson modeling in teachers' classrooms, Curricula, resources, and equipment. Week-Long Summer Institute for Educators, Lesson planning consultations in the following areas: Implementing a community-based student-led action project, Thematic integration, Developing and implementing critical thinking questioning strategies, Addressing the diverse learning needs of students, Teaching State Standards , Addressing the needs of English language learners.
Content Options: Local Watershed Studies, Developing Action Projects, Waste Reduction and Sustainable Practices, Safe Bay Fish Consumption, Studying and Learning in the Outdoors, Point Source & Non-Point Source Pollution Reduction, Environmental Justice, Water Conservation, Scientific Process Skill Development

Using Video and Web resources in your classroom

KQED

<http://www.kqed.org/ednet/>

KQED offers a wide range of professional development workshops focusing on the use of video in the classroom. They can focus on curriculum areas of your choice. Workshops can focus on making videos in the classroom or how to effectively use existing video and web resources in the classroom

Customized Workshop

Life Lab Science Program

<http://www.lifelab.org>

Life Lab trainers will work with you to develop a customized workshop to meet your specific needs. Resolving issues with your garden site, working effectively with the special needs of your student population, and facilitating parent/community involvement are some of the many topics on which to focus your workshop.

Discovery Voyage on the Bay

Marine Science Institute

<http://www.sfbaymsi.org>

The day begins aboard the Institute's research vessel, the ROBERT G. BROWNLEE, participating in hands-on activities that examine the fish, plankton, benthic invertebrates, and physical oceanography of an estuarine ecosystem. The afternoon is spent in our Discovery Classroom, exploring curriculum ideas and activities while developing lesson plans that bring science to your curriculum.

Custom Designed Workshop - many topics

Oakland Zoo

<http://www.oaklandzoo.org>

Zoo staff can design customized workshops to fit your teaching needs covering a broad range of science related subject areas. The current programs include:

Rain Forest Review (Grades 3-8) - A closer look at essential functions of a tropical rain forest; Suitcase For Survival (Grades 3-12) - Learn to use the U.S. Fish and Wildlife biofacts to teach about endangered animals and the illegal wildlife trade; There Are Treasures At Your Zoo (Grades K-8) - Use the classic treasure hunt to learn about adaptations, habitats, and animals; Biodiversity (Grades 6-12) Learn what biodiversity is; the threats facing it and what you can do; Conservation (Grades 5-12) Learn about conservation through group activities and small group discussions taken from Project Wild.

Habitats and Adaptations (Grade6-12) Learn about animal adaptations during a scavenger hunt in the zoo!

Staff Development Workshops

Randall Museum

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

Project WET (water resources stewardship), Project WILD & Aquatic WILD (wildlife), Project Learning Tree (forests and trees), and Population Education (population study, exponential growth, and demographics) workshops emphasizes hands-on activities and integrated teaching strategies consistent with the New Science Standards.

RAFT Outreach Workshops

Resource Area for Teachers (RAFT)

<http://www.raft.net>

RAFT offers a variety of hands-on science workshops for teachers. They can be scheduled at your school. Topics include - THE POWER OF HANDS-ON TEACHING, On The Move: Science Workshops: (Catch a Wave , A Model Science Class, Let's Mix Things Up , Attractive Science! Exploring Magnetism). Price includes teaching kits

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Teacher Training/Team Building - Physical Sciences**Rock-It Science**

<http://www.rockitscience.org>

Teachers, learn to do Rock-it Science lessons yourself. Our group experiments also make great team building/diversity training activities. We'll customize a program to suit your needs. Pick from a wide variety of Physical Science topics (Matter, Energy, Chemistry, Force and Motion, Simple Machines, Electricity). Maximum: 40 teachers Price: \$250/hr, minimum 3 hrs

Group Workshops**San Francisco Zoo**

<http://www.sfzoo.org>

San Francisco Zoo staff is available to present workshops on Biodiversity, Animal Behavior, and other Zoo topics for already organized groups.

Teaching the 4Rs - Reduce, Reuse, Recycle & Rot/Compost **StopWaste.org**

<http://www.stopwaste.org>

Gain valuable skills in leading your students through classroom activities that demonstrate the 4Rs: Reduce, Reuse, Recycle and Rot/Compost while teaching science concepts and ways to reduce waste and conserve natural resources. During the two-day workshop, teachers will experience and analyze activities from a new Teacher Guide; Doing the 4Rs, A Classroom Activity Guide to Teach Reduce, Reuse, Recycle and Rot. In addition to a copy of the activity guide, participants will also receive videos and other hands-on classroom materials that support teaching activities from the guide.

Private Workshops**The Watershed Project**

<http://www.thewatershedproject.org>

One or multiple day workshops can be scheduled with different focuses. Teachers can choose to receive professional development in watershed educational standards, or learn to apply curriculum units to local environments. Facilitators can also demonstrate a field study or mapping with students.

Using Technology to Meet California State Standards!**Tom Snyder Productions**

<http://www.tomsnyder.com>

This software training bundle includes 1 full-day workshop in which teachers learn to: (1) evaluate how different software, Internet activities, and lesson plans correlate to state frameworks, (2) find, evaluate, and utilize Internet sites that support teaching objectives, (3) align software and Internet resources with state standards in K-8 Math, Science, Social Studies, and English Language Arts. Workshops can be tailored to meet your Internet and computer in the classroom needs.

School Site Specific Trainings**UC Botanical Garden**

<http://botanicalgarden.berkeley.edu/>



Ongoing Professional Development

Seminars on Science - Online Courses for Educators

<http://learn.amnh.org/>

These six-week courses developed by Museum scientists and educators incorporate the Museum's rich resources including three-dimensional virtual specimens, videos from the field, and interactive simulations. Teachers participate in discussions and activities with the Museum's scientists and educators. Continuing education units and graduate credits are available. For more information go to <http://learn.amnh.org>.

American Museum of Natural History

School of Professional Studies

<http://ce.fresno.edu/cpd/courses/>

Courses are delivered through a combination of modalities to better serve the school community's needs: printed materials and texts, audiotapes, videotapes, CD-ROM, and online distance learning. These are not on-campus courses. They may be taken any place and any time. Over 20 course offerings including: "Science for the Elementary School," "Physical Science Activities for the Primary Grades," "Astronomy: For All Ages."

Fresno Pacific School of Professional Studies

Online Courses for Educators in the Sciences

www.scienceteacher.org

Montana State University's National Teachers Enhancement Network (NTEN) has over 10 years experience delivering high quality Internet learning opportunities directly to K-12 science teachers. Educators can access electronic teacher resources, discuss issues with other educators online, and participate in high-quality graduate courses all from convenient home or work locations via the Internet. An average of 15 online graduate level science and science education courses are available each semester. NTEN courses are designed to help teachers improve and enhance their understanding of science content. Courses can be taken for professional development or as part of a graduate degree program. MSU's Master of Science in Science Education (MSSE) degree is an intercollege, interdisciplinary graduate program that integrates learning and the discovery of knowledge in a collaborative academic environment. Over 80% of MSSE degree course work is available online. For more information on courses go to: www.scienceteacher.org or for the graduate program go to: www.montana.edu/msse/

National Teacher Enhancement Network

PBS TeacherLine

<http://www.pbs.org/teacherline/>

PBS offers on-line professional development opportunities on a wide range of content areas including science. Additional graduate credit is available.

PBS



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Teacher Grants: Specific Deadlines

October 2011

- 10/1/2011** **Grants for K-5**
Toshiba America Foundation
\$1000 <http://www.toshiba.com/taf/k5.jsp>
Eligible projects must: advance the teacher's science and math K-5 education, occur during the school day, take place over at least three class sessions, not be based solely on the purchase of a pre-packaged kit, and be completed by May 1st.
- 10/1/2011** **Science Project Support Application**
Synopsys Outreach Foundation
free science http://www.outreach-foundation.org/cgi-bin/other_cc1.cgi?c=Alameda
boards and Acceptance of Science Project Support is subject to the following conditions: Each teacher may
more request a maximum of 150 science project poster boards. Each teacher may request a maximum of
one Edison UV Meter. Science Project Support is available only to teachers at public schools or
private not-for-profit schools located in California. Science project poster boards are DONATED by
the Synopsys Outreach Foundation. The boards MAY NOT be re-sold to students or parents.
Teachers and school administrators will recognize the Foundation's donation in any science fair
related materials and publicity. In order to insure equitable distribution of the science project poster
boards, the Foundation may reduce the number of boards allotted for your school. All materials
provided by the Synopsys Outreach Foundation are donations made to the school and not to any
teacher as an individual.
- 10/1/2011** **2011 Subaru Healthy Sprouts Awards**
KidsGardening.org
\$500 in <http://www.kidsgardening.org/grants/2011-subaru-healthy-sprouts-award>
materials To be eligible for the 2010 Healthy Sprouts Awards, your school or organization must plan to garden
in 2011 with at least 15 children between the ages of 3 and 18. The selection of winners is based on
the demonstrated relationship between the garden program and education related to environmental,
nutrition and hunger issues in the United States. Awards to 30 schools or organizations. Each
program will receive: a \$500 gift certificate to the Gardening with Kids catalog and online store for
basic youth gardening supplies and supporting educational materials NGA's Eat a Rainbow Kit of
engaging taste education and nutrition lessons.
- 10/1/2011** **Ocean Guardian School Grant**
National Marine Sanctuaries
\$2,000-5,000 http://sanctuaries.noaa.gov/education/ocean_guardian/welcome.html
Applications are reviewed based on five criteria, each criteria weighted equally:
a. The number of classes and grades involved;
b. The impact of the project on the school and/or the impact of the project on the community;
c. The school is an underserved/underrepresented school;
d. The outreach plan for communicating to others about your project and its goals;
e. The connection of the project to the health and conservation of the watershed, ocean and/or
national marine sanctuary due date OCTOBER 1 (for a January 1st project start date).

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- 10/4/2011** **Bay Watershed Education and Training Program (B-WET)**
National Marine Sanctuaries
 \$30,000-60,000 <http://sanctuaries.noaa.gov/news/bwet/welcome.html>
 Competitively based program that supports existing environmental education programs, fosters the growth of new programs, and encourages the development of partnerships among environmental education programs throughout the San Francisco Bay, Monterey Bay, and Santa Barbara Channel watersheds.
- 10/14/2011** **Lowe's Toolbox for Education Grant**
Lowe's Charitable & Education Foundation
 \$5000 <http://www.toolboxforeducation.com/>
 Lowe's Charitable and Educational Foundation is focusing on basic, one-time project needs. In 2010, basic needs will take priority.
- 10/15/2011** **The Lorrie Otto Seeds for Education Grant Program**
Wild Ones
 funds to <http://www.for-wild.org/seedmony.html>
 purchase native The Lorrie Otto Seeds for Education Grant Program gives small monetary grants to schools, nature
 plants centers, and other non-profit and not-for-profit places of learning in the United States, including
 houses of worship, with a site available for a stewardship project.
- 10/15/2011** **Disney Planet Challenge - Grades 3-8**
DonorsChoose.org
 \$500 <http://www.donorschoose.org/blog/2011/09/08/full-funding-available-for-3-8th-grade-hands-on-enviror>
 Teachers who submit a hands-on project request for up to \$500 in materials focused on benefiting the environment (water conservation and watershed protection, recycling, composting, restoring/creating community gardens, etc.) are eligible to receive full funding if they complete three steps of registration on the Disney Planet Challenge website. To qualify, teachers must visit <http://disney.go.com/planetchallenge/> anytime after September 15th and sign up for Disney's Planet Challenge, using the same email address you use for your DonorsChoose.org account. Complete the following three steps on the Disney Planet Challenge website: Register on the site -- Fill out your teacher profile -- Add a team!
- 10/15/2011** **Learning & Leadership Grants**
The NEA Foundation
 \$2000-5000 <http://www.neafoundation.org/pages/educators/grant-programs/learning-and-leadership/>
 Our Learning & Leadership grants support public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education for one of the following two purposes:
 •Grants to individuals fund participation in high-quality professional development experiences, such as summer institutes or action research; or
 •Grants to groups fund collegial study, including study groups, action research, lesson study, or mentoring experiences for faculty or staff new to an assignment.
- 10/15/2011** **Student Achievement Grants**
The NEA Foundation
 \$5000 <http://www.neafoundation.org/pages/educators/grant-programs/student-achievement-grants/>
 The proposed work should engage students in critical thinking and problem solving that deepen their knowledge of standards-based subject matter. The work should also improve students' habits of inquiry, self-directed learning, and critical reflection. Proposals for work resulting in low-income and minority student success with honors, advanced placement, or other challenging curricula are particularly encouraged.
- 10/17/2011** **Shell Science Teaching Award**
National Science Teachers Association

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\$10,000 and Expenses to attend NSTA conference

<http://www.nsta.org/about/awards.aspx>

This award recognizes one outstanding classroom science teacher (K–12) who has had a positive impact on his or her students, school, and community through exemplary classroom science teaching. Award: \$10,000 and an all-expense paid trip to attend NSTA's National Conference; two finalists will also receive all-expense-paid trips to the conference

November 2011

11/1/2011

Environmental Education Grants

The Lawrence Foundation

\$5000

<http://www.thelawrencefoundation.org/grants/>

The foundation is focused on making grants to support environmental, education, human services and other causes although our interests are fairly diverse and may lead us into other areas on an occasional basis.

11/1/2011

American Honda Foundation Grant

American Honda Foundation

\$20,000-60,000

<http://corporate.honda.com/america/philanthropy.aspx?id=ahf>

We support youth education with a specific focus on the STEM (science, technology, engineering and mathematics) subjects in addition to the environment.

11/9/2011

Educator Grants

Air Force Association

\$250

<http://www.afa.org/aef/aid/educator.asp>

The Educator Grant program promotes aerospace education activities in classrooms from kindergarten through twelfth grades. The program encourages development of innovative aerospace activities within the prescribed curriculum.

11/15/2011

School Garden Grants

Western Growers Foundation

\$1500+

<http://www.wga.com/default.php?id=138>

Funds for growing gardens at school sites. Funds must be used for supplies, curriculum, resources or other materials related to starting or maintaining a garden. Examples include tools, seeds and plants, soil, irrigation related items, materials for raised beds, gloves, composting materials etc. A small portion of the funds may be used for a garden coordinator, but not the entire cash award. Funds should not be spent strictly on butterfly or other ornamental gardens.

11/28/2011

2012 Youth Garden Grants

KidsGardening.org

\$1000 in materials

<http://www.kidsgardening.org/grants/2012-youth-garden-grants-1>

NGA awards Youth Garden Grants to schools and community organizations with child-centered garden programs. In evaluating grant applications, priority will be given to programs that emphasize one or more of these elements: * educational focus or curricular/program integration. * nutrition or plant-to-food connections, * environmental awareness/education, * entrepreneurship * social aspects of gardening such as leadership development, team building, community support, or service-learning.

11/30/2011

Annie's Grants for Gardens

Annie's Homegrown

\$250

http://www.annies.com/grants_for_gardens

A limited number of small grants to community gardens, school gardens and other educational programs that connect children directly to gardening. Funds can be used to buy gardening tools, seeds or other needed supplies. Focus is on giving to programs that meet the following guidelines:
**Only to schools and non-profit organizations located within the United States. Grants are only available to groups that focus on School and Community Gardens or Sustainable Agriculture.
**Annie's does not make grants or donations to individuals, athletic teams or events, or health fairs.

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- 11/30/2011** **Faraday Science Communicator Award**
National Science Teachers Association
 Expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
 The individual will not be a classroom teacher, but will work in, or have developed a compatible setting for science communication: i.e., museum, nature center, zoo, state park, aquarium, radio, television, internet, or other science-rich institutions or media. The individual may also be connected to a science setting through his or her involvement with civic organizations and child-education facilities: e.g., preK child-development centers, 4-H clubs, Girl and Boy Scouts, Girls and Boys Clubs of America, and so on. Organizational—The organization will facilitate and provide exemplary opportunities for science communication to the public. The organization will desire to instill in the public an appreciation for science through communication efforts at the local, state, and national levels. Award: Honored at the Awards Banquet during NSTA National Conference; all-expense-paid trip (up to \$2,500) to attend the Conference;
- 11/30/2011** **Wendell G. Mohling Outstanding Aerospace Educator Award**
National Science Teachers Association
 \$3,000 & \$2,000 in expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
 This award recognizes excellence in the field of aerospace education. Individuals nominated for this award and have a minimum of three years teaching experience. Self-nominations will be accepted. Award: \$3,000, and \$2,000 in expenses to attend NSTA's national conference
- 11/30/2011** **Fuel Your Schools Grant**
Chevron
<http://www.fuelyourschool.com/CA/education.html>
 Available to teachers in Alameda and Contra Costa Counties. Chevron is funding teacher projects posted on DonorsChoose.org. See the "Fuel Your Schools" web page for more details.
- 11/30/2011** **NSTA Fellow Award**
National Science Teachers Association
 Expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
 This award recognizes NSTA members who have made extraordinary contributions to science education through personal commitment to education, specifically science teaching or science; educational endeavors and original work that position recipients as exemplary leaders in their field; significant contributions to the profession that reflect dedication to NSTA as well the entire educational community.
 Eligibility: This award is open to longstanding (at least 10 years) NSTA members
 Award: Awardees will be recognized at the NSTA Awards Banquet in conjunction with the NSTA National Conference
- 11/30/2011** **STEM Educator Award**
National Science Teachers Association
 \$3000 and Expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
 Sponsored by PASCO scientific, with NSTA; this award recognizes excellence and innovation in the field of STEM education at the elementary, middle school, and high school levels. The applicant must be a K–12 STEM educator. Individuals must have a minimum of 3 years teaching experience in the STEM fields, who implement innovative inquiry-based, technology infused STEM programs. One elementary, two middle level, and two high school level recipients will be awarded annually. 5 awardees will be selected annually. Each awardee will receive up to \$1500 to cover travel expenses to attend the NSTA national conference and be part of a STEM share-a-thon workshop, a \$1000 monetary gift, and a \$2000 certificate for PASCO scientific products. The recipient of the award will be honored during the Awards Banquet at the NSTA national conference.
- 11/30/2011** **Distinguished Informal Science Education Award**
National Science Teachers Association

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Expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
Honors one NSTA member who has made extraordinary contributions to the advancement of science education in an informal or nontraditional school setting, such as a science-technology center, museum, or community science center. Eligibility: NSTA members who are not classroom teachers and who have demonstrated their dedication to informal science education Award: Formal citation, three nights' hotel accommodation, and \$500 towards expenses to attend the NSTA National Conference

**11/30/2011 Zula International–NSTA Early Science Educator Award
National Science Teachers Association**

Expenses to attend NSTA conference <http://www.nsta.org/about/awards.aspx>
The Zula International–NSTA Early Science Educator Awards will recognize and honor two (2) full-time PreK–2 teachers who successfully use innovative inquiry-based science to enhance science teaching and learning in their classroom.
Eligibility: PreK–2 teachers with membership in one of the following: NSTA, CESI, NAEYC, or NHSA
Award: \$1,000 toward expenses to attend the NSTA National Conference and \$400 for the awardee

December 2011

**12/1/2011 Environmental Excellence Awards
SeaWorld Education Department**

\$10,000 <http://www.seaworld.org/conservation-matters/eea/index.htm>
Award for students & teachers working at the grass roots level to protect and preserve the environment. Eight winning groups are selected each year to win \$10,000. One environmental educator/leader each year receives \$5,000.

**12/1/2011 Outstanding Leadership in Science Education
National Science Education Leadership Association**

\$1000 and recognition http://www.nsela.org/index.php?option=com_content&view=article&id=75:olise&catid=63:awards&Itemid=1
Award to an outstanding member who leads the school, school district, region, state, or area as science supervisor. Any member is invited to nominate a worthy colleague. Both nominator and nominee must be NSELA members in good standing.

**12/1/2011 PITSCO/Hearlihy/FTE Grant
International Technology Education Association**

\$2000 <http://www.iteaconnect.org/Awards/granthearlihy.htm>
Its purpose is to recognize and encourage the integration of a quality technology and engineering education program within the school curriculum. Criteria include: (1) evidence of an effective quality technology and engineering education program, (2) documented success in the integration of technology and engineering education with other academic subjects, and (3) plans for professional development via the anticipated grant Applicant must be an ITEEA member and register for the ITEEA Annual Conference. (Membership may be enclosed with scholarship application).

**12/1/2011 The Bauder Endowment for the Support of Physics Teaching
American Association of Physics Teachers**

\$500 <http://www.aapt.org/Programs/grants/bauderfund.cfm>
Supports activities for AAPT members, such as workshops at the local level, that promote physics education utilizing physics apparatus. Funds can purchase equipment and materials used by participants in the workshop. Does not reimburse indirect or administrative costs.

**12/15/2011 Career Development Grants
American Association of University Women**

\$2,000-12,0000 http://www.aauw.org/learn/fellowships_grants/career_development.cfm

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Career Development Grants support women who hold a bachelor's degree and are preparing to advance their careers, change careers, or re-enter the work force. Special consideration is given to women of color, and women pursuing their first advanced degree or credentials in nontraditional fields. Grants provide support for course work beyond a bachelor's degree, including a master's degree, second bachelor's degree, or specialized training in technical or professional fields. Funds are available for distance learning.

12/31/2011

**Teacher Induction Program
The National Teachers Hall Of Fame**

\$1000 +

<http://www.nthf.org/nominate.htm>

The National Teachers Hall of Fame serve as ambassadors both for the NTHF and the teaching profession, and are expected to uphold the standards of excellence set forth by the educational community.

12/31/2011

**Albert Einstein Distinguished Educator Fellowship
Einstein Fellowship**

\$7000/month in stipend and housing expenses

<http://www.einsteinfellows.org/application>

Einstein Fellows usually spend a school year in a professional staff position in the U.S. Senate or House of Representatives, at the Department of Energy (DOE), or at other federal agencies such as the National Aeronautics and Space Administration (NASA), the National Science Foundation (NSF), or the National Institute of Standards and Technology (NIST).

January 2012

1/15/2012

**School Garden Grant
California Fertilizer Foundation**

\$1200

<http://www.calfertilizer.org/grant.htm>

Annually provides 24 grants for \$1,200 each to schools throughout California. At the end of each year, winning schools can re-apply for a progress grant of \$1,500 and a free agricultural field trip. Through the garden program, CFF provides direct funding to California schools for garden projects. The gardens provide an opportunity for students, teachers and parents to truly "grow" together.

1/15/2012

**Community Action Grants
American Association of University Women**

\$2,000-10,000

http://www.aauw.org/learn/fellowships_grants/community_action.cfm

Community Action grants provide funds to individuals local community-based nonprofit organizations for innovative programs or non-degree research projects that promote education and equity for women and girls. •One-year grants (\$2,000-\$7,000) provide seed money for new projects. •Two-year grants (\$5,000-\$10,000) provide start-up funds for longer-term programs that address the particular needs of the community and develop girls' sense of efficacy through leadership or advocacy opportunities. Topic areas are unrestricted, but should include a clearly defined activity that promotes education and equity for women and girls. Applicants must be women who are U.S. citizens or permanent residents. Special consideration is given to projects focused on K-12 and community college girls' and women's achievements in science, technology, engineering or math.



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Teacher Grants: Rolling or Continuous Deadlines

Approximate value - \$1000

Amy Chamberlain Scholarship Fund

Bay Area Wilderness Training

<http://www.bawt.org/amy-chamberlain/>

Each scholarship provides full tuition to BAWT's to the Wilderness Leadership Training (WLT), as well as additional post-course support services including site visits by BAWT staff or scholarship committee members during the 12 months following WLT participation. Must apply one month prior to the class you desire to take.

Teacher wishlist

Adopt-A-Classroom Grants

Adopt-A-Classroom

<http://www.adoptaclassroom.org>

Register your public school classroom online. This site pairs you with people who want to give money to your classroom to support your teaching.

\$200

AIAA Classroom Grants

AIAA Foundation

<http://www.aiaa.org/content.cfm?pageid=216>

DEADLINE 30 days before quarterly meetings in JAN, MARCH, JUNE, SEPT. Funding for materials needed to teach: a. Aerospace Technology; b. Biological and Physical Research; c. Earth Science; d. Human Exploration and Development; e. Space Science

discount bus rental rate

Black Tie Community Bus

Black Tie Transportation

<http://www.blacktietrans.com/fleet.php#bus>

The Black Tie Community Bus is offered to non-profit organizations in our community and for schools to transport children ages K-12 for school outings. The bus is available at a discounted rate to those who apply in advance and meet the requirements of the application submission process. Seating: Grades K-4, 60 passengers (3 adults required) Grades 5-12, 42 passengers (2 adults required) Rates // \$75.00 per hr (5 hour min.)

computer hardware

Classroom Computers

Computers for Learning

<http://computersforlearning.gov/>

The federal government has placed hundreds of thousands of surplus computers in schools across the country on a needs-first basis. Schools register and request equipment on the Computers for Learning web site, and federal agencies match their surplus equipment to schools with those needs. Most of the donated machines are older models, but as the government continues to upgrade its computer systems. Computers and equipment are not refurbished by the government before being shipped to schools, nor are they covered by warranty.

\$100-1000

Classroom Wishlist

DonorsChoose.org

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

Teachers describe classroom needs. Contributors decide where they want to put their money. Many corporations including Disney and Chevron are now using DonorsChoose.org as the way they give away money to education.

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org

- \$1000** **Small Grants & Product Donations**
Dreyer's Grand Ice Cream Foundation
http://www.dreyersinc.com/dreyersfoundation/small_grants.asp
 The Foundation makes small grants (\$1,000 or less) and donates ice cream products and gift certificates/auction items to bona fide nonprofit organizations for events. These proposals are reviewed on a monthly basis.
- discounted bus** **Parks Express Transportation Services**
East Bay Regional Parks District
http://www.ebparks.org/files/ebrpd_Parks_Express_Brochure_01-01-2011.pdf
 Discount buses (\$110) for fieldtrips to East Bay Regional Parks. Schools must have at least 30% of students in Free or Reduced Lunch Program. 40 passengers minimum. They start making assignments in December for the coming year. Apply ASAP even for programs in fall. Need not have naturalist program pre-arranged. They will help coordinate with naturalist program
- \$100 to \$500** **Funds for Outdoor Field Trips**
Field Trip Foundation
http://www.fieldtripgroup.org/for_teachers.html
 Field Trip Foundation (FTF) provides grants for outdoor field trips for grades 3rd through 5th which provide environmental education opportunities for Bay Area students. Grants are provided to teachers in Bay Area schools with a majority of low-income students. Grants range from \$100 to \$500, but exceptional grants may be approved up to \$1000. Grants with a lower cost per student will be more favorably evaluated (e.g. a grant for \$500 for 50 students is more likely to be approved than a \$500 grant for 30 students). Grants requests are evaluated on their educational quality and ability to enhance/leverage in-class curriculum. Can be used for program or bus fees.
- Education Grant Database**
GrantWrangler
<http://www.grantwrangler.com/>
 Check out this website for all types of grants for classrooms
- up to \$500** **Horace Mann Classroom Projects**
Horace Mann Educators Corporation
<https://www.facebook.com/HoraceMannInsurance>
 Horace Mann is funding classroom projects each week through DonorsChoose.org. Then you need to friend them on facebook and submit your DonorsChoose Project number.
- \$500 in materials** **Classroom Wishlist**
iLoveSchools.com
<http://www.iloveschools.com/>
 Register your school with I Love Schools.com. The site matches you up with people wanting to donate equipment to your school
- \$5000-25,000** **Jordan Fundamentals Grant Program**
Nike - Jordan Fundamentals
<http://www.nike.com/jumpman23/features/fundamentals/overview.html>
 Applicants must develop and implement an educational approach that supports improved student academic achievement and/or social/emotional/behavioral interventions. Proposals may attempt to do this through any of the following program objectives: *student engagement *student - teacher relationships *building the capacity of teachers

**bus
transportation
to Oakland
Museum**

Bus Transportation Scholarship for Oakland and Richmond

Oakland Museum

http://museumca.org/files/uploads/SPG_11-12_FINAL_6-4_B_T_S.pdf

A limited number of scholarships are available: Must be in the Oakland Unified School District (includes charter schools) or a Richmond public school. At least 70% of students at the school qualify for the free or reduced lunch program. One scholarship per teacher each school year. Scholarships are awarded to classrooms on a first-come, first-served basis. Teachers who qualify will receive a Bus Transportation Authorization, with a scheduling code. Teachers will contact the bus company directly to book the transportation, using the code as authorization. The museum will be billed for the bus, so no district purchase order will be necessary. The bus must be used between the hours of 8:30 a.m. and 2:00 p.m. Any fees arising from the use of a bus after 2:00 p.m. will be charged back to you.

**\$1000 for
fieldtrips**

Geballe Excursion Grant

Philanthropic Ventures Foundation

<http://www.venturesfoundation.org/programs/teacher-grants>

Grants of up to \$1,000 are available now to fund classroom excursions; funds can cover the cost of transportation, admission fees and food. Invited public school teachers for grades K-5, Alameda and San Mateo counties can apply for grant funding. Supported by funding from The Geballe Family.

\$5000 of less

Mini-Grants For Grades 6 - 12

Toshiba America Foundation

<http://www.toshiba.com/taf/612.jsp>

Wanted: Classroom Innovators! Toshiba America Foundation is accepting applications from teachers who are passionate about making science and mathematics more engaging for their students. Do you have a wish list of instructional equipment that will make learning more exciting for your students?



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Temporary & New Science Exhibits Around the Bay Area

Bay Area Science

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

Bay Area Science Festival

From October 29th to November 6th, the Bay Area will come alive with science & technology activities – lectures, debates, exhibitions, concerts, plays, workshops, and more. This ambitious collaborative public education initiative brings together our leading academic, scientific, corporate, and non-profit institutions to showcase the region as an international leader in innovation. Science happens all around us and directly impacts our daily lives – are you ready to unleash your inner scientist?

East Bay Discovery Day at Cal State East Bay – Hayward: 10/29/11

North Bay Discovery Day at Infineon Raceway – Sonoma: 11/05/11

Festival Finale at AT&T Park – San Francisco: 11/06/11

More information coming soon.

Bay Model Visitor Center

Sausalito

<http://www.spn.usace.army.mil/bmvc>

Ground Swell - An Art Exhibit

(September 13 - October 17) This exhibit is dedicated to the art of surfing and features artists from as far away as Hawaii and Mexico who span three generations. A strong and enduring influence on their work is reflected through surfing and their intimate connection to the sea. Artist Reception will be on Sat, September 24 from 1pm - 3:30pm

Children's Discovery Museum of San Jose

San Jose

<http://www.cdm.org>

Mammoth Discovery!

NEW EXHIBIT (Opens June 11, 2011) A thirteen-foot tall mammoth replica based on bones found in the Guadalupe River near San Jose Airport, this large creature gives us a sense of the way life used to be in Silicon Valley. Mammoth Discovery!, will spark the scientist within each of us to make discoveries, dig for more information, and tell the world about what has been found. Uncover a new world as you dig for fossils, compare teeth, learn about the creatures that roamed San Jose during the Ice Age, and become a citizen scientist!

Junior Center of Art and Science

Oakland

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

California Native Americans

(September 19, 2011 – January 13, 2012) - This exhibit will explore the culture of California Native Americans through displays of their tools, baskets, food, games, hunting techniques, shelter, and creation myths. Students will enhance their awareness of Native Americans through an exhibit tour, demonstrations, play with authentic games, and an interactive art project crafted from native materials.

African American Inventors

(January 24 – March 24, 2012) This exhibit will highlight a selection of the many contributions that African-American inventors and scientists have made to American society. The featured inventors are credited with the creation of items we see around us every day such as the traffic light, the elevator, the fountain pen, and much more. Historical and contemporary inventors will be represented.

Lawrence Hall of Science

Berkeley

<http://www.lhs.berkeley.edu>

Dinosaurs Unearthed

(May 28, 2011 - January 1, 2012) Explore their world like never before in Dinosaurs Unearthed. Scientists, engineers, and artists designed these creatures to be as lifelike as possible. The gigantic animals open their jaws, blink their eyes, move their limbs ... and more. You will walk among roaring, stomping, realistic-looking robotics.

Monterey Bay Aquarium

Monterey

<http://www.mbayaq.org>

The Open Sea

NEW EXHIBIT. With heads like horses, tails like monkeys and pouches like kangaroos, these fascinating fishes are anything but ordinary. More than 15 species of seahorses and their kin—one of the nation's largest collections of these charismatic animals. Meander through four multimedia galleries and discover how these shy and secretive animals grow up, attract mates and give birth—this is the only family in the animal kingdom in which the males get pregnant! Learn how you can help save seahorses and the vulnerable marine habitats they call home.

Oakland Museum

Oakland

<http://www.museumca.org>

Day of the Dead Exhibit

Classes interested in scheduling a tour for the Days of the Dead exhibition (October 12–December 11) can call 510-238-3514 beginning August 1. Scheduling for all other tours and programs begins September 1, 2011.

A Walk in the Wild: Continuing John Muir's Journey

(August 6, 2011 - January 22, 2012) Explore the legacy of John Muir's life and how he continues to influence our relationship with the natural world in this special exhibition presenting both a historical and a contemporary lens on the natural environment of California. Spotlighting the life of the radical environmentalist as well as eight Modern Day Muirs, A Walk in the Wild: Continuing John Muir's Journey highlights Californians currently involved in environmental research and activism—including a Yosemite National Park geologist, a bighorn-sheep biologist, and an Oakland tree-planter/activist. Through interactive, multisensory displays and digital mash-ups, visitors will experience a simulation of Muir's exploration behind Yosemite Falls, his trek from Yosemite to Mount Whitney, and even his night spent in a hollow giant sequoia observing the forest burning around him. Told through OMCA's collections of art, history, and natural science, interactive digital technology, and select loans—journals, manuscripts, and original drawings—the exhibition is a tribute to Muir's legacy and to the importance of continued environmental stewardship.

Natural Sciences Hall Re-Opens

(Opens June 2012) - Hotspot California: Bringing Dioramas to Life Through Community Voices. The transformed Gallery will feature innovative displays about California places that exemplify the state's great biological and geological diversity as well as its complex environmental challenges, such as climate change, urbanization, pollution, and invasive species. The gallery will infuse formerly static dioramas with emerging technologies and dynamic stories of real places to engage museum visitors in the natural world and to affect positive attitudes and behaviors toward conservation. Interactive displays, learning stations, and testimony from scientists and local residents will inspire visitors to learn more about California hotspots, five real places in our state that exemplify high biological diversity and complexity.

SF Botanical Garden & Strybing Arboretum

San Francisco

<http://www.strybing.org>

Treasures from San Francisco Botanical Garden at Strybing Arboretum- An Art Exhibit

(September 1 - December 30, 2011) The original watercolors in this exhibit have all been painted from plants that the artists have chosen as treasures from the San Francisco Botanical Garden. Mary Harden has been teaching Botanical Illustration for many years at the Botanical Garden using the plants in the gardens as the primary subjects. Many of her advanced students have studied with her for years and their group has had two previous successful shows at the Helen Crocker Russell Library. Mary decided to work towards this exhibit with her students over a year ago as a tribute to the Garden they love. It is now dedicated to the memory of former Head Librarian Barbara Pitschel who had helped select the theme for the exhibit.

The Marine Mammal Center

Sausalito <http://www.marinemammalcenter.org/>

Washed Ashore: Plastics, Sea Life and Art exhibit

(now through October 15) These incredible sculptures are made from plastic trash found along beaches in southern Oregon. In the beauty of the art is a powerful message - many marine mammals get entangled and die in this "plastic soup" every year and through the art we are empowered to make a positive change which includes rethinking our use of plastics and cleaning up our trash.

The Tech Museum of Innovation

San Jose <http://www.thetech.org>

Islamic Science Rediscovered

(Opens Saturday September 3, 2011 through February 26, 2012)

Did the Wright brothers soar in the sky first? Was Leonardo da Vinci the first to describe "machines of the future"? Centuries before Orville and Wilbur Wright took flight, Abbas ibn Farnas was soaring over the hilly Spanish countryside in a one-man glider - a thousand years before the famed Wright flight in North Carolina. Al-Jazari busied himself laying the foundations of modern engineering and writing the Book of Knowledge of Ingenious Mechanical Devices in 1206, where he described fifty mechanical devices along with instructions on how to build them, more than 200 years before Leonardo da Vinci became revered for his technological ingenuity. Long overlooked or often misattributed, the remarkable contributions of Muslim scholars in science and technology have quietly floundered as no more than common footnotes of world history. Designed to unearth the scientific know-how of an Islamic Golden Age that is all too strange and unfamiliar to Western culture, discover the innovation, science, and technology mastery of one of today's most misunderstood cultures in Islamic Science Rediscovered.