



Professional Development

May 2012

- 5/17/2012** **Science Inquiry in the Garden - Reg by 5/3/12** **Life Lab Science Program**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.lifelab.org/for-educators/workshops/gcworkshops/>
Cost \$150 **Stipend?**
This one-day workshop will offer a process for developing science inquiries in your schoolyard or garden. Designed for K-8 teachers, you will learn strategies to encourage your students to explore the world around them. Based on the current content standards in science, we will use a model that can adapted to any grade level.
- 5/19/2012** **Sowing the Seeds of Wonder: Discovering the Garden in Earl** **Life Lab Science Program**
For Grades: K;1st
<http://www.lifelab.org/for-educators/workshops/gcworkshops/>
Cost \$150 **Stipend?**
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.
- 5/19/2012** **Homer: Computer-Based Energy Projects** **Resource Area for Teachers (RAFT)**
For Grades: 6th;7th;8th
<http://www.raft.net/workshops/in-house>
Cost \$20 for members; \$35 for non-members **Stipend?**
Computer modeling need not be confined to the realm of engineers and programmers. HOMER is a modeling program that can be simplified so that middle school and high school students can use it. HOMER models renewable, hybrid or stand-alone systems to allow the user to construct the most economically feasible power system. The website also provides tutorials that could be used in the middle school classroom. For high school students, a project in which they model their own homes, powered by renewable energy resources would send a very important message about the feasibility of employing renewable power in small-scale, domestic situations. INSTRUCTOR: Claudia Medina is the co-founder and owner of TerraVert Inc.
- 5/19/2012 -** **Maker Faire - The World's Largest DIY Festival** **Maker Faire**
5/20/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.makerfaire.com/>
Cost \$20-40 **Stipend?**
A two-day, family-friendly event to MAKE, create, learn, invent, CRAFT, recycle, think, play and be inspired by celebrating arts, crafts, engineering, food, music, science and technology.

5/19/2012 - Frontcountry Leadership Training (FLT) Bay Area Wilderness Training
5/20/2012 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/>
Cost \$65 Stipend?
 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. Prior to the weekend training, to get access to our gear libraries, participants also need to complete the Gear Orientation (GO!) training. This can be completed during the pre-trip meeting. Please note that Gear Orientations are offered in both our Oakland and Milpitas offices. Cost: 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 \$65 for the first participants, and \$50 for each additional participant from the same organization (Limit: 2 Discounts per organization). All registrations include a Gear Orientation and pre-trip meeting.

June 2012

6/6/2012 - Camping at the Presidio Training Golden Gate N.P. Conservancy
6/7/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.parksconservancy.org/our-work/crissy/programs/camping-at-the-presidio.html>
Cost \$45 Stipend?
 The CAP Leadership Training is designed to provide group leaders with the skills and resources to plan and lead a youth camping trip in the Presidio and beyond. During the two-day, one-night training session, group leaders acquire technical camping skills and become familiar with the Presidio's natural and cultural resources. They are trained to lead place-based nature hikes and other outdoor activities as well as learn about the process for reserving a camping trip through the CAP program. After participants complete the CAP Leadership Training program, they can begin to prepare for their camping trip to the Presidio's Rob Hill Campground.

6/11/2002 - School Garden Training - register by 4/2/12 Occidental Arts and Ecology Center
6/15/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.oaec.org>
Cost \$500 Stipend?
 This five-day intensive residential training offers hands-on skills and theoretical approaches to promote and support the creation of school gardens. The course will focus on integrating the school garden into all curricula and state standards, as well as exploring nutrition, recycling, project-based learning, art, team building, and fundraising. This course is designed for teams of teachers, parents, administrators, and volunteers who have a relationship with a specific school and wish to create or improve a school garden. Involvement in the training entitles participating teams to school garden curricula, an extensive resource binder, two skills workshops, and follow-up site visits by OAEC staff at schools throughout the following year.

6/10/2012 - Forestry Institute for Teachers - Plumas County Forestry Institute for Teachers
6/16/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.forestryinstitute.org/>
Cost \$20 Stipend?
 It's not too early to plan for the summer! These week-long workshops provide participants with Forestry curriculum resources guides, Project Learning Tree and Project Aquatic WILD training, and a \$100 stipend, plus housing, meals and curriculum materials.

6/16/2012 The Creating and Sustaining Your School Garden Workshop Life Lab Science Program
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.lifelab.org/for-educators/workshops/collaborative-workshops/csgt/csystg-workshop/>
Cost FREE Stipend?

The Creating and Sustaining Your School Garden Workshop is a FREE, one-day training for teams working to create or enhance a school garden program. This workshop covers planning and designing a school garden, basic gardening skills, curricular connections and outdoor classroom management.
Modesto – Harvest Hall, 3800 Cornucopia Way, Modesto, 95358

- 6/15/2012 - 6/17/2012** **Eureka! Series-Sierra Nevada Institute-Climate Change** **California Institute for Biodiversity**
For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.calalive.org/professionalDevelopment.php>
Cost \$200/\$375 **Stipend?**
June 15-17 & 22-24, 2012 - Early-bird Registration Special \$200 (Ends March 30, 2012 at 5:00pm) Regular Registration Fee \$375 explore the causes and effects of climate change in the Sierra Nevada landscape. This institute will accommodate teachers of upper-grade sciences by concentrating on the more advanced topics of climate change and experimental design. After the success of our 2009 pilot program, we are excited to offer this course again with even more activities incorporating the latest scientific research. Two encore days are now included to help you incorporate institute materials into your curricula.
- 6/18/2012 - 6/20/2012** **Summer Math Institute** **Resource Area for Teachers (RAFT)**
For Grades: 3rd;4th;5th
<http://www.raft.net/workshops/in-house>
Cost \$0 for members; \$40 for non-members **Stipend?**
The RAFT Math Institute introduces educators to the fundamentals of visual based learning of math concepts through hands-on approaches. Learn a 'hands-on' approach to modeling daily word problems that will help students visualize the math concepts involved.
-One Day Elementary topics Plus
-Perimeter, Area, Solids, & Symmetry
-Visual Thinking
-Word Problems
INSTRUCTOR: Tsing Bardin has been working with elementary school teachers and in university teacher training programs for many years. She has retired from teaching physics at SJSU and at City College of San Francisco.
ADDITIONAL DATES:
Tuesday, June 19, 9:30 AM - 4:00 PM
Wednesday, June 20, 9:30 AM - 4:00 PM
- 6/20/2012 - 6/22/2012** **The Systems View of Life** **Center for Ecoliteracy**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ecoliteracy.org/events/systems-view-life>
Cost \$495 **Stipend?**
June 20–22, 2012: Join the Center for Ecoliteracy for a rare opportunity to hear Fritjof Capra, one of the world's leading systems theorists, in a seminar based on The Systems View of Life, the Cambridge University Press textbook he is currently writing with Pier Luigi Luisi, professor of biology at the University of Rome (publication date 2013).
Fritjof will discuss his latest thinking about the dynamics of living systems and the implications for understanding our major global problems and their interconnections in order to address the challenges of building sustainable communities.
Other presenters currently scheduled include Richard Heinberg of the Post Carbon Institute, author of Peak Everything and The End of Growth.
- 6/18/2012 - 6/22/2012** **2012-2013 BaySci Science Champions Academy** **Exploratorium**
For Grades: K;1st;2nd;3rd;4th;5th;6th
http://gallery.mailchimp.com/649e0670fdaaf19c99da30ef1/files/2012_Champions_Flyer_and_Aj
Cost FREE **Stipend?** \$150/each full day session and \$75 for each

One 5-Day Summer Workshop - Monday - Friday June 18 - 22, 2012

and...Four Half-Day Follow-up Sessions 9:00am - 12:00pm Oct 13, 2012 / Dec 1, 2012 / Feb 9, 2013 / Apr 13, 2013

- Practice science inquiry as it relates to scientific practices in the forthcoming Next Generation Science Standards—asking questions, planning and carrying out investigations, analyzing and interpreting data and arguing from evidence.
- Experience hands-on activities and videos of classrooms that illuminate scientific practices in action.
- Examine the links between the Common Core Standards for English Language Arts and the Next Generation Science Standards.
- Explore strategies for the effective use of science notebooks and classroom discourse.
- Network with like-minded BaySci teachers to share strategies and support each other in growing both your classroom practice and your leadership in science.

6/23/2012 The Creating and Sustaining Your School Garden Workshop Life Lab Science Program

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.lifelab.org/for-educators/workshops/collaborative-workshops/csgt/csystg-workshop/>

Cost FREE

Stipend?

The Creating and Sustaining Your School Garden Workshop is a FREE, one-day training for teams working to create or enhance a school garden program. This workshop covers planning and designing a school garden, basic gardening skills, curricular connections and outdoor classroom management.

Hayward – Ochoa Middle School, 2121 Depot Road, Hayward, CA 94545-2428

6/20/2012 - Wilderness Leadership Training Yosemite Bay Area Wilderness Training

6/24/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.bawt.org/programs/training/leadership-training/wilderness-leadership-training/>

Cost \$150-\$700

Stipend?

The Wilderness Leadership Training (WLT) is a five day intensive entry-level backpacking course at the heart of BAWT's programs. It is designed to give you the tools you need to lead youth on multi-day backpacking adventures. After completing the course, you will gain full access to our gear libraries. The Wilderness Leadership Training consists of a pre-trip meeting and five days of backpacking in the Sierra Nevada Mountains. Skills learned include: clothing requirements, nutrition, equipment use, map and compass reading, basic wilderness first aid, leadership styles, group dynamics and more. Role playing exercises are used to give participants a realistic backcountry leadership experience. Food and transportation are provided and no previous experience is necessary. Pre-trip meeting: June 16, 2012 Oakland

Cost: Fees for the WLT are on a sliding scale. Please choose the appropriate registration fee by selecting your agency's annual budget (total support and revenue for the past fiscal year.) Please note: training costs for one individual are waived for organizations in exchange for the use of a 15-person passenger van.

\$199,999 and under — \$150

\$200,000-\$999,999 — \$250

\$1,000,000+ — \$400

Unaffiliated Individual — \$700

If financial constraints prohibit you from signing up for the WLT, please consider applying for the full tuition Amy Chamberlain Scholarship Fund. For more information please contact us at programs@bawt.org.

6/26/2012 - RAFT Redwood City Innovation Institute Resource Area for Teachers (RAFT)

6/27/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.raft.net/workshops/in-house>

Cost Free to members; \$40 for non-members

Stipend?

RAFT Innovation Institute is a professional and personal development offering that helps educators create an environment to think freely and encourage imagination and curiosity. The course focuses on Critical Thinking, Communication, Collaboration, and Creativity: the 4C's that are the backbone for 21st Century learning and innovation skills. The Institute introduces educators to concepts and ideas which reinforce these skills with hands-on activities that is engaging and encourage problem-solving with children.

INSTRUCTORS: Edith Barr

Eric Welker Eric Welker is a former high school science and math teacher with 13 years of classroom experience. As both a master teacher and instructional coach, Eric has supervised and mentored several student teachers. Eric holds a bachelor's degree in organismal biology with an emphasis on science education and is currently pursuing a master's degree in teacher leadership. He works full-time as an education specialist and teacher mentor here at RAFT and helps teachers incorporate RAFT activities into their curriculum as well as assist in answering epistemological and pedagogical questions. Eric organizes and conducts demonstrations at RAFT San Jose on Saturdays.

Greg Brown is the current Director of Education at Resource Area For Teaching (RAFT), in San Jose, CA.

ADDITIONAL DATES: Wednesday, June 27, 9:30 AM - 4:00 PM

- 6/24/2012 - 6/27/2012** **The Edible Schoolyard Academy** **Edible Schoolyard**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://edibleschoolyard.org/#>
Cost \$500 **Stipend?**
Creating Garden and Kitchen Classrooms in Every Community
The Chez Panisse Foundation presents The Edible Schoolyard Academy: Creating Garden and Kitchen Classrooms in Every Community. Each two-day academy will provide kitchen, garden, and classroom educators with tools for teaching Edible Education - an integrated approach to hands-on education in the kitchen, classroom, lunchroom and garden.
- 6/28/2012** **July 2 - August 12, 2012 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/>
Cost \$445 **Stipend?**
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,
- 6/24/2012 - 6/28/2012** **National Marine Educators Association 2012 conference - Anchorage** **National Marine Educators Association**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.marine-ed.org/>
Cost \$325 **Stipend?**
North to Alaska's Seas: A Confluence of Science and Culture • University of Alaska Anchorage Campus. Join fellow NMEA-ers in Anchorage, or "Tikatnu," the "big ocean river" place of the Dena'ina Athabaskan Indians, on Cook Inlet.
Hosted by: Northwest Aquatic and Marine Educators (NAME) and Alaska Center for Ocean Sciences Education Excellence (COSEE AK)
Registration Begins: April 15, 2012
Special Events:
June 24—Opening reception and keynote speech by Fran Ulmer, former Lieutenant Governor of Alaska and current Chair of the Arctic Research Commission
June 25—Reception at the Anchorage Museum of History and Culture
June 26—Banquet, auction, and Stegner Lecture by Ray Troll, conference artist
June 27—Day Field Trips to Seward and Anchorage area, Anchorage Coastal Trail walk and seafood barbecue
Three plenary sessions, six speakers: scientists, artists, and Alaska Native and other indigenous culture bearers

- 6/24/2012 - 2012 NSTA/NSELA Summer Leadership Institute** **National Science Education Leadership Association**
6/28/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.nsela.org/>
Cost \$450 early bird registration **Stipend?**
 Austin, Texas - The National Science Education Leadership Association (NSELA) and the National Science Teachers Association (NSTA) invite you to attend a Summer Leadership Institute. This immersive experience will bring together scores of individual science educators, teams (leaders and teachers), and administrators to explore the K–12 Framework and draft Next Generation Science Standards, determine key features of each, noting comparisons, contrasts and shifts in focus.
- 6/25/2012 - Climate Literacy - reg by March 30** **Bay Area Earth Science Institute**
6/29/2012 For Grades: 6th
<http://www.baesi.org/>
Cost FREE **Stipend?** \$500 + an additional \$400 for implementing v
 In this workshop keyed to the California science standards, you'll learn about
 Natural and human-caused climate change and its environmental, societal and economic impacts
 The greenhouse effect and the carbon cycle
 NASA's contributions to climate change science
 How to adapt materials and approaches you currently use to support climate change education
 Newly-developed multimedia educational tools featuring climate-action superhero, The Green Ninja!
 Earn a \$500 stipend (you must attend all five days) + an additional \$400 for implementing workshop. Materials in your classroom and attending two half-day Saturday follow-up sessions. Earn 2 units of Geology 104 for \$50/unit (optional). Receive classroom materials and ready-to-use teaching activities
 9:00 am – 3:30 pm each day!, San José State University
 Instructors: Eugene Cordero (SJSU Meteorology and Climate Science), Grinell Smith (SJSU K-8 Education), Ellen Metzger (SJSU Geology/Science Education) and Cynthia Schmidt (NASA Ames Research Center)
 For more information and application materials, call Ellen Metzger at (408)924-5048 or send email to ellen.metzger@sjsu.edu. First preference will be given to applications received by March 30.
- 6/24/2012 - Middle School Project-Based Science - FREE** **Monterey Bay Aquarium**
6/29/2012 For Grades: 6th;7th;8th
http://www.mbayaq.org
Cost FREE **Stipend?** \$50/day
 Follow-up Sessions (online for non-locals) - September 29, 2012; January 12, 2013; May 4, 2013
 Are you looking for dynamic experiences to invigorate your teaching practice and your students' learning? Are you looking to enhance your curriculum with student-driven projects and inquiry-based activities? Are you interested in equipping your students with 21st Century skills to help them succeed in this ever-changing world? Come have fun with us this summer! You'll stay at the beautiful Stevenson School campus in Pebble Beach. This free institute provides opportunities to:
 Collaborate with colleagues and learn about the project-based science process and how it fits into your classroom. Use hand-held technologies such as mobile phones and netbooks to explore local field sites and engage in standards-based classroom activities. Go behind the scenes to learn about our current research projects, new exhibits and the operation of a world-class aquarium.
 Engage in discussions with scientists and experts in the field.
 Participate in an online professional community and network with other middle school teachers for support and advice throughout the year!
 Stay on campus at the beautiful Stevenson School in Pebble Beach, California.
- 6/23/2012 - Forestry Institute for Teachers - Tuolumne County** **Forestry Institute for Teachers**
6/29/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.forestryinstitute.org/>
Cost \$20 **Stipend?**
 It's not too early to plan for the summer! These week-long workshops provide participants with Forestry curriculum resources guides, Project Learning Tree and Project Aquatic WILD training, and a \$100 stipend, plus housing, meals and curriculum materials.

- 6/28/2012 - 2012 California's Water Resources and Climate Change: Foot** **California Institute for Biodiversity**
6/29/2012 For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.calalive.org/professionalDevelopment.php>
Cost \$75 **Stipend?**
 As water flows out of the Sierra Nevada we come to the foothills of California. Here we will explore the relationship between water flow in the San Joaquin River, Central Valley agriculture practices, and climate change. Participants will divide their time between CSU Fresno and Millerton Lake State Recreation Area while also learning about riverbeds, dissolved oxygen, and local fish. With the help of California State Parks, our educational team will guide you through hands-on activities, multimedia simulations, and a boat tour of Millerton Lake. Through these methods we will give you up-to-date resources that you can take back to your classroom and engage your students in the dynamic nature of California's water resources. This course is focused on 6th through 12th grades and all content is California standards-based.
- 6/28/2012 - RWC Summer Math Institute** **Resource Area for Teachers (RAFT)**
6/30/2012 For Grades: 3rd;4th;5th
<http://www.raft.net/workshops/in-house>
Cost Free to members; \$40 for non-members **Stipend?**
 Aligned to the California state standards, this institute covers the math concepts for Upper-Elementary using hands-on manipulatives. Day 1: Whole #'s and Word Problems - Use Base-10 blocks and other math manipulatives to explain the concept of all arithmetic operations. Learn a hands-on approach to modeling daily word problems that will help your students visualize the math concepts involved.
 Day 2: Fractions, Decimals & Applications - Teach fractions and decimals in a meaningful way by using Base-10 blocks and fraction tiles. Apply these concepts to solve real-life problems with your students.
 Day 3: Geometry - Use a hands-on approach to learn and teach geometry in a fun way. Combine geometry and RAFT materials to create art with your students.
 INSTRUCTOR: Tsing Bardin has been working with elementary school teachers and in university teacher training programs for many years. She has retired from teaching physics at SJSU and at City College of San Francisco.
 ADDITIONAL DATES:
 Friday, June 29, 9:30 AM - 4:00 PM
 Saturday, June 30, 9:30 AM - 4:00 PM
- 6/22/2012 - Spirit of the Rockies: Songbirds, Mountain Lions, and More -** **Earth Watch Institute**
6/30/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.earthwatch.org/edopp>
Cost \$1995 **Stipend?**
 Monitor migratory and resident songbirds to discover the reasons for their declining numbers. Many songbird populations in the Jackson Hole area are declining, and you can help researchers study these birds and their habitats in an effort to stop this decline. You'll search for migratory birds' nests and relocate color-banded birds, providing much-needed information on seasonal survivorship and productivity. Some teams will spend one morning at the bird-banding station and will have the opportunity to observe birds up-close as project staff remove them from mist-nets and band them. Other teams will assist with vegetation measurements near bird nests. In the evenings you'll enjoy dinner followed by a speaker or time to relax and socialize. During your recreational time you may choose to explore Jackson Hole, tour the National Parks, or visit the National Museum of Wildlife Art.

July 2012

- 7/7/2012** **RAFT RWC Science Institute** **Resource Area for Teachers (RAFT)**
 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
Cost Free to members **Stipend?**

Redwood City Science Institute: During this fast-moving Science Institute, RAFT instructors will present ten specific hands-on activities that cover core curriculum topics in Physical Science, Life Science, and Earth Science. Participants will be able to try the activities that most interest them, and take home a set of classroom materials ready for immediate use. A thought-provoking guest speaker will also be featured. Fellows Program Description: Shortly after the Institute, RAFT will select up to five "Science Fellows" to showcase their new skills and enthusiasm for science. Working in collaboration with the RAFT Education Team, the Fellows will offer a series of informal demos and hands-on lessons both at RAFT and in their schools. The Fellows will earn modest stipends for these activities.

INSTRUCTORS: Michael Pollock taught hands-on science to both mainstream and special needs elementary students for 25 years. He currently works at RAFT helping to produce educational kits.

Eric Welker Eric Welker is a former high school science and math teacher with 13 years of classroom experience. As both a master teacher and instructional coach, Eric has supervised and mentored several student teachers. Eric holds a bachelor's degree in organismal biology with an emphasis on science education and is currently pursuing a master's degree in teacher leadership. He works full-time as an education specialist and teacher mentor here at RAFT and helps teachers incorporate RAFT activities into their curriculum as well as assist in answering epistemological and pedagogical questions. Eric organizes and conducts demonstrations at RAFT San Jose on Saturdays.

Greg Brown is the current Director of Education at Resource Area For Teaching (RAFT), in San Jose, CA.

**6/29/2012 - Amazon Rainforest Workshop & Machu Picchu Extension Environmental Expeditions - Travel 2
7/8/2012 Learn**

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.travel2learn.com>

Cost \$1850 + airfare

Stipend?

K-12 teachers and environmental educators can win one of three \$1000 scholarships to travel with scientists to one of the most diverse environments in the world. Join group leader Donna Krabill, Norfolk Botanical Garden and scientists Dr. Steve Madigosky, Widener University and Randy Morgan, Entomologist, Cincinnati Zoo on a rainforest discovery June 29- July 8, 2012. Experience a 1/4-mile Rainforest Canopy Walkway, Yagua Culture & Crafts, Village Service Project, ReNuPeru Ethnobotanical Garden, Birdwatching, Night Hikes, and Monkey Island Conservation Project. Open registration through May. Land cost is \$1850, plus air. Machu Picchu Extension is optional. Academic Credit is available. Land cost is \$850 for scholarship winners. Submit simple scholarship application by March 8. For program and scholarship information, visit <http://www.travel2learn.com/amazon.htm> (case sensitive). Contact Dr. Frances Gatz, 1-800-669-6806 or frances@ee-link.net

**7/9/2012 - Solar System Investigations California Academy of Sciences
7/10/2012**

For Grades: 3rd;4th;5th

<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>

Cost \$35

Stipend? \$150

In order to participate, you must be able to attend both sessions. Do you ever have a hard time explaining why the moon has phases? Can you create a model to show why the earth has seasons? What if you were in charge of traveling to another planet? Join the Academy in this tour of the solar system. Learn kinesthetic models for teaching astronomy, ways to engage your students in using books for research and see our special student planetarium show.

**7/10/2012 - Ocean Acidification = Trouble for Shelled Species? Farallones Marine Sanctuary
7/11/2012 Association**

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

http://www.farallones.org/education/teacher_workshops_climate.php

Cost FREE

Stipend? \$50 stipend per class

Where: July 10th - Romberg Tiburon Center, Tiburon, CA. July 11th - Tomales Bay area.

Day 1: Learn about ocean acidification and how calcifying organisms respond.

Day 2: Field trip to Hog Island Oyster Company, to learn about how ocean acidification could impact the aquaculture industry and what research is being done with UC Davis Bodega Marine Lab.

Our ocean and estuaries are facing uncertain times. Multiple stresses compounded by climate change are changing our coast and ocean now.

This series will connect you with local climate and marine/estuarine science, broaden your understanding of climate change impacts along our coast, and help you bring these issues to life in your classrooms. Classroom kits and activities will be provided. Each workshop will feature local marine/estuarine scientists from San Francisco State University and University of California Davis, and others.

7/10/2012 - Educating for Sustainability

Bay Area Earth Science Institute

7/12/2012

For Grades: 6th

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

Cost FREE

Stipend? \$450 stipend plus \$300 more if you implement

Education for sustainability (EfS) is an international movement that aims to prepare citizens to contribute to the ecological, social, and economic well-being of the community and larger world. In this standards-based workshop, you'll learn how to help your students explore fundamental questions about well-being, community interdependence, and their connections to the larger world, build interdisciplinary knowledge about human-environmental interactions, and explore decision-making strategies and action projects focused on increasing individual and community well-being. Topics include energy and water resources, ecological footprint analysis, food systems, and climate change.

Receive a \$450 stipend plus \$300 more if you implement workshop materials in your classes and attend 2 Saturday follow-up sessions (1 in fall 2012 and 1 in spring 2013). Qualify for 1 unit of Geology 104 (a \$50 unit SJSU fee applies). Receive a year's subscription to the Creative Change Educational Solutions' on-line library of lessons, course modules, assessment tools, and curriculum frameworks for teaching sustainability. Creative Change Educational Solutions

(www.creativechange.net) is a national leader in sustainability education. 9:00 am – 3:30 pm each day, San José State University

Instructors: Grinell Smith (SJSU K-8 Education), Eugene Cordero (SJSU Meteorology and Climate Science) and Ellen Metzger (SJSU Geology/Bay Area Earth Science Institute)

For more information and application materials, call Ellen Metzger at (408)924-5048 or send email to ellen.metzger@sjsu.edu

Funded by a grant from the Clarence E. Hell

7/8/2012 - Energy: Past, Present, & Future

Smithsonian

7/13/2012

For Grades: 5th;6th;7th;8th;9th;10th;11th;12th

<http://www.scienceteachersacademies.si.edu/earth/earth.html>

Cost \$1990

Stipend?

In Washington DC - As our planet's population continues to grow and energy needs increase it will become crucial that we teach students how to prepare for energy needs of the future. This *new Energy: Past, Present, & Future Academy looks at this history of energy development and use in the United States, current energy needs, and alternative energy sources for the future. Topics will explore fossil fuels, solar power, wind power, nuclear energy, and alternative energy sources. Each day participants will engage with scientists, curators, engineers, and educators at the Smithsonian Institution museums and other local venues. Participants will engage in hands-on content sessions that take them behind the scenes, and will learn of current research in sustainable energy resources.

6/25/2012 - 2012 Summer Teacher Institute Workshops

Exploratorium

7/13/2012

For Grades: 6th;7th;8th;9th;10th;11th;12th

<http://www.exploratorium.edu>

Cost Stipend available

Stipend? \$1000

two-week institutes focusing on physics, middle school–high school general science, life science, and mathematics for teachers new to the Exploratorium Teacher Institute. These institutes support the content and pedagogy described in the National and California State Standards. After completing one of these two-week professional development institutes, you become an alumnus of the Teacher Institute and are eligible to attend alumni institutes and workshops. The library also becomes available for project research. Participants are required to study at the Exploratorium for seven-and-a-half hours each day, Monday through Friday, for two weeks, following a Saturday orientation. Each participant will be awarded a stipend of \$1,000 after completing an institute. In past years, three units of credit from San Francisco State University or six units of graduate credit from the University of the Pacific were awarded through the program. Registration and paying for university credit takes place during the institutes. We anticipate the same types of credit to be offered during Summer 2011.

- 7/9/2012 - 7/13/2012** **Splash Zone Teacher Institute** **Monterey Bay Aquarium**
 For Grades: K;1st;2nd
<http://www.mbayaq.org>
Cost FREE **Stipend?**
 July 9–July 13, 2012 - Follow-up Sessions Saturdays: October 27, 2012; February 9, 2013; April 13, 2013.
 The Aquarium's Splash Zone Teacher Institute is specifically designed for teachers of young children. Discover new ideas about teaching science and inquiry. Implement new teaching strategies and standards-based activities. Integrate language arts, math, technology, social studies and science. Wonder, discover, share, learn and play! Network with Aquarium educators and colleagues.
 Receive a stipend upon completion of the program.
- 7/9/2012 - 7/13/2012** **2012 California's Water Resources and Climate Change: San Francisco Bay Area** **California Institute for Biodiversity**
 For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.calalive.org/professionalDevelopment.php>
Cost \$75 **Stipend?**
 The San Francisco Bay Area is one of California's most important ecological areas. A diverse collection of flora and fauna make this estuary their home, and it is also the drainage point for the main rivers of California into the Pacific. Join us as we look at the unique water resources found in this region as well as how climate change can affect these resources through sea level rise, salinity changes, and extreme weather patterns, like El Niño. With the help of East Bay Regional Park District and California State Parks, participants will explore various habitats at Angel Island State Park, Crab Cove Regional Park, and other East Bay parks. Our educational team will present a wide variety of hands-on activities, outdoor explorations, and field investigations that will give you accurate information that you can then take back to your students. This institute covers California Science Standards for 6th through 12th grades. By participating in this course, you will be able to teach your students about the unique San Francisco Estuary and the impacts it will face due to climate change.
- 7/9/2012 - 7/13/2012** **School Garden Training - register by 4/2/12** **Occidental Arts and Ecology Center**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.oaec.org>
Cost \$400 **Stipend?**
 This five-day intensive residential training offers hands-on skills and theoretical approaches to promote and support the creation of school gardens. The course will focus on integrating the school garden into all curricula and state standards, as well as exploring nutrition, recycling, project-based learning, art, team building, and fundraising. This course is designed for teams of teachers, parents, administrators, and volunteers who have a relationship with a specific school and wish to create or improve a school garden. Involvement in the training entitles participating teams to school garden curricula, an extensive resource binder, two skills workshops, and follow-up site visits by OAEC staff at schools throughout the following year.
- 7/11/2012 - 7/13/2012** **Seeds of Science/Roots of Reading** **Lawrence Hall of Science**
 For Grades: 2nd;3rd;4th;5th
<http://www.scienceandliteracy.org/professionaldevelopment>
Cost \$625,(includes lunch),\$560!per!person!for!group!of!12!or!more **Stipend?**
 A three day workshop designed for those who are interested in using the new Seeds of Science/Roots of Reading curriculum for Grades 2–5, and are looking for a deeper understanding of how to present the Seeds of Science/Roots of Reading units and maximize their effectiveness. Attendees evaluating the program will gain a deeper understanding of the Seeds of Science/Roots of Reading philosophy and the benefits of integrating science and literacy. Topics and activities to be covered:
- Review of the Seeds of Science/Roots of Reading philosophy and of our approach to integrating science and literacy.
 - How Seeds of Science/Roots of Reading addresses benchmarks and standards in both science and literacy.
 - Firsthand experience with inquiry activities from a Seeds of Science/Roots of Reading unit.
 - Review of the student books and the role they serve in the curriculum.
 - The benefits of the "Teaching Support and Considerations" features in the teacher guides and how to implement them.
 - We will have a sneak peek at units under development for other grade levels.
 - Attendees will receive a Seeds of Science/Roots of Reading certificate of completion of the professional development session.

- 7/12/2012 - San Jose Innovation Institute** **Resource Area for Teachers (RAFT)**
7/13/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
Cost Free to members **Stipend?**
 San Jose Innovation Institute: RAFT Innovation Institute is a professional and personal development offering that helps educators create an environment to think freely and encourage imagination and curiosity. The course focuses on Critical Thinking, Communication, Collaboration, and Creativity: the 4C's that are the backbone for 21st Century learning and innovation skills. The Institute introduces educators to concepts and ideas which reinforce these skills with hands-on activities that is engaging and encourage problem-solving with children.
 INSTRUCTORS: Edith Barr
 Eric Welker Eric Welker is a former high school science and math teacher with 13 years of classroom experience. As both a master teacher and instructional coach, Eric has supervised and mentored several student teachers. Eric holds a bachelor's degree in organismal biology with an emphasis on science education and is currently pursuing a master's degree in teacher leadership. He works full-time as an education specialist and teacher mentor here at RAFT and helps teachers incorporate RAFT activities into their curriculum as well as assist in answering epistemological and pedagogical questions. Eric organizes and conducts demonstrations at RAFT San Jose on Saturdays.
 Greg Brown is the current Director of Education at Resource Area For Teaching (RAFT), in San Jose, CA.
 ADDITIONAL DATES: Friday, July 13, 9:30 AM - 4:00 PM
- 7/14/2012 Summer Math Institute: Early Ed level** **Resource Area for Teachers (RAFT)**
 For Grades: K;1st;2nd
<http://www.raft.net/workshops/in-house>
Cost \$0 for members; \$40 for non-members **Stipend?**
 Start the new school year with activities and ideas that address Pre-K through 2nd grade math concepts. Games and materials to extend lessons beyond the workbook page and support the transition kindergarten student will be presented. All are appropriate for use in the classroom or as a take-home activity. A resource list, samples, literature links, and websites will be shared.
 INSTRUCTORS: Juanita Ryan Juanita Ryan is employed as an Education Associate at the RAFT Redwood City where she is in charge of all things science. She retired from the Berryessa Union School District in San Jose after 36 years of teaching 1st-5th grades at Toyon School. Juanita has worked as a curriculum writer/workshop presenter for NASA, SETI, the American Chemical Society (ACS), and the American Institute of Aeronautics & Astronautics (AIAA). She is the recipient of several awards, including the Berryessa Union School District Teacher of the Year Award, The Tech Museum's Dreambuilders Award, and the AMGEM Award for Science Teaching Excellence in California. Her personal "claim to fame" was when, at the age of 50, she spent 4 weeks camping on an Antarctic glacier as a research team member of ANSMET (Antarctic Search for Meteorites). Susan Sakaguchi is a former special education teacher. Her experience includes working with K-5th grade students level with a variety of learning disabilities.
- 7/8/2012 - Forestry Institute for Teachers - Shasta County** **Forestry Institute for Teachers**
7/14/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.forestryinstitute.org/>
Cost \$20 **Stipend?**
 It's not too early to plan for the summer! These week-long workshops provide participants with Forestry curriculum resources guides, Project Learning Tree and Project Aquatic WILD training, and a \$100 stipend, plus housing, meals and curriculum materials.
- 7/6/2012 - Spirit of the Rockies: Songbirds, Mountain Lions, and More -** **Earth Watch Institute**
7/14/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.earthwatch.org/edopp>
Cost \$1995 **Stipend?**

Monitor migratory and resident songbirds to discover the reasons for their declining numbers. Many songbird populations in the Jackson Hole area are declining, and you can help researchers study these birds and their habitats in an effort to stop this decline. You'll search for migratory birds' nests and relocate color-banded birds, providing much-needed information on seasonal survivorship and productivity. Some teams will spend one morning at the bird-banding station and will have the opportunity to observe birds up-close as project staff remove them from mist-nets and band them. Other teams will assist with vegetation measurements near bird nests. In the evenings you'll enjoy dinner followed by a speaker or time to relax and socialize. During your recreational time you may choose to explore Jackson Hole, tour the National Parks, or visit the National Museum of Wildlife Art.

7/17/2012 San Jose Science Institute Resource Area for Teachers (RAFT)

For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.raft.net/workshops/in-house>

Cost FREE to members

Stipend?

During this fast-moving Science Institute, RAFT instructors will present ten specific hands-on activities that cover core curriculum topics in Physical Science, Life Science, and Earth Science. Participants will be able to try the activities that most interest them, and take home a set of classroom materials ready for immediate use. A thought-provoking guest speaker will also be featured. Fellows Program Description: Shortly after the Institute, RAFT will select up to five "Science Fellows" to showcase their new skills and enthusiasm for science. Working in collaboration with the RAFT Education Team, the Fellows will offer a series of informal demos and hands-on lessons both at RAFT and in their schools. The Fellows will earn modest stipends for these activities.

INSTRUCTORS: Michael Pollock taught hands-on science to both mainstream and special needs elementary students for 25 years. He currently works at RAFT helping to produce educational kits.

Eric Welker Eric Welker is a former high school science and math teacher with 13 years of classroom experience. As both a master teacher and instructional coach, Eric has supervised and mentored several student teachers. Eric holds a bachelor's degree in organismal biology with an emphasis on science education and is currently pursuing a master's degree in teacher leadership. He works full-time as an education specialist and teacher mentor here at RAFT and helps teachers incorporate RAFT activities into their curriculum as well as assist in answering epistemological and pedagogical questions. Eric organizes and conducts demonstrations at RAFT San Jose on Saturdays.

Greg Brown is the current Director of Education at Resource Area For Teaching (RAFT), in San Jose, CA.

7/17/2012 - California Geology & Geologic Hazard - FREE Bay Area Earth Science Institute

7/19/2012 For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th

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

Cost FREE

Stipend? \$450

This three-day workshop (w/field-trip day) will examine various aspects of the geology of California. Significant parts of the workshop and field trip will focus on geologic hazards such as earthquakes, tsunamis, coastal erosion, and the impacts of climate change. When? 9:00 am – 3:00 pm on Tuesday 7/17 and Thursday 7/19 - 8:30 am - 4:30 pm on Wednesday 7/18 (field trip day) Where? San José State University. Earn 1 unit of Geology 104 for \$50/unit (optional). Receive classroom materials and ready-to-use teaching activities.

Instructors: LeAnne Teruya and Ellen Metzger (SJSU Geology/Bay Area Earth Science Institute), Will Schweller (Chevron Consultant) - Tim McHargue (Consulting Professor at Stanford). For more information and application materials, call Ellen Metzger at (408)924-5048 or send email to ellen.metzger@sjsu.edu

7/15/2012 - National Energy Education Conference 2012 National Energy Education

7/19/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th **Development Project**

<http://need.org/summertraining>

Cost \$1100

Stipend?

Arlington, VA - Conference participants receive training and materials to implement innovative hands-on energy units for their classrooms, multi-disciplinary teams, and after-school programs. They also receive the materials, training, and support to conduct in-services in their areas to introduce the NEED program to others. NEED leaders at the conferences help participants develop specialized units that meet state standards and can be utilized with students of all learning styles.

- 7/15/2012 - Forestry Institute for Teachers - Humboldt County Forestry Institute for Teachers**
7/21/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.forestryinstitute.org/>
Cost \$20 **Stipend?**
 It's not too early to plan for the summer! These week-long workshops provide participants with Forestry curriculum resources guides, Project Learning Tree and Project Aquatic WILD training, and a \$100 stipend, plus housing, meals and curriculum materials.
- 7/23/2012 - Ocean Sciences Sequence for Grades 3–5 Lawrence Hall of Science**
7/24/2012 For Grades: 3rd;4th;5th
<http://lhsgems.org/gemsworkshops.html>
Cost \$320 (including lunch) or \$280/person for 2 or **Stipend?**
 This workshop will focus on the Ocean Sciences Sequence for Grades 3–5, with a brief overview and review of the content in the other units in the series. (Note that the workshop is held the same week as the three-day GEMS Associate session, special pricing is offered to attendees of both, which provides for a 20% discount.)
 Topics and activities covered at the workshop include:
 An in-depth review of the sequences concept, and how the the Ocean Sciences Sequence for Grades 3–5 and all of the units provide both in-depth coverage of the subject matter, and great flexibility of implementation. How sequences are developed to address standards, and how the Ocean Sciences Sequence for Grades 3–5 specifically addresses benchmarks, National Science Educational standards, and the Ocean Literacy Essential Principles.
 Firsthand experiences with inquiry activities from the Ocean Sciences Sequence for Grades 3–5.
 How you can teach your students the language of “scientific argumentation” by stating claims and evidence throughout the investigation process.
 Review of the strong teacher support features of the curriculum and how to implement them.
 A discussion of the effectiveness studies done with the Ocean Sciences Sequence for Grades 3–5 and how those validate the curriculum and inform your approach to teaching the units.
- 7/23/2012 - Project EAT Summer Institute 2012 for K-6 Teachers/Administ Alameda County Office of Education**
7/25/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.acoe.org/acoe/Home/ProfessionalDevelopment>
Cost \$150 - FREE for OUSD **Stipend?**
 Three days of exciting sessions to learn how to design and promote standards aligned nutrition education within your existing curricula. Learn how to teach students in the garden and outdoor areas. Receive free lessons, books, posters, online resources and other materials. Learn how to promote nutrition education and environmental literacy. You will also receive ideas for incorporating Golden State Energizers in the classroom as well as visit school sites with school gardens and active nutrition education programs.

 OUSD Teachers: Thanks to a State Farm Grant, in affiliation with EEI (Education and the Environment Initiative) OUSD Teachers attend for free. Please do not pay via PayPal or any method.
 Presenter(s): Catherine Cook and Marie Brown
 Location: ACOE, 313 W. Winton Ave., Hayward, CA Rm 142
 Cost: \$150 for 3 day attendance includes all materials, lunch and snacks each day.
 For more information, contact: Catherine Cook, (510) 670-7713
- 7/23/2012 - Sustainability Education Summer Institute Center for Ecoliteracy**
7/25/2012 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ecoliteracy.org/events/sustainability-education-summer-institute>
Cost \$350 **Stipend?**
 The Center for Ecoliteracy is cosponsor for the fourth annual Sustainability Education Summer Institute, to be held July 23–25 on beautiful Bainbridge Island in Washington. The conference, located at IslandWood, a sustainably built outdoor education center, offers an inspiring array of workshops and presentations for K–12 educators wanting to cultivate their knowledge of sustainability education and apply it to their schools and programs. There will be plenty of time as well to explore the breathtaking 255-acre campus.
 CEL's Lisa Bennett and Carolie Sly will offer presentations, including the opening keynote address, based on the Center's forthcoming book *Ecoliterate: Cultivating Emotional, Social, and Ecological Intelligence*, written by Daniel Goleman, Lisa Bennett, and Zenobia Barlow, with professional development sections by Carolie Sly (Jossey-Bass, 2012).

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- 7/16/2012 - Teacher Institute on Science and Sustainability** **California Academy of Sciences**
7/27/2012
 For Grades: 3rd;4th;5th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Cost FREE **Stipend?** \$2000
 TISS is an intensive two year professional development opportunity for 3rd - 5th teachers where teachers learn how to incorporate sustainability themes into their science curriculum. TISS teachers receive an annual \$2000 stipend, a membership to the Academy, a class set of science journals, classroom support, and more. Preference to teams of teachers (3-5 per school).
- 7/23/2012 - Summer Institute for Middle School Teachers** **Stanford University**
7/27/2012
 For Grades: 6th;7th;8th
<http://www.stanford.edu/group/cpn/education/simst.html>
Cost FREE **Stipend?** \$650 stipend & PD units (\$550 after completion)
 The Center for Probing the Nanoscale (CPN) offers the one-week Summer Institute for Middle School Teachers (SIMST) annually. At the Institute teachers learn about the physical concepts underlying concept of nanotechnology and nanoscience in simple terms. Daily sessions focus on content lectures and inquiry-based modules that explicitly address California's 5-8th grade physical science content standards. Teachers will also receive a hands-on activity classroom kit with many fun activities that bring nanoscience into the classroom.
- learn about nanoscience and nanotechnology in simple terms
 develop and receive hands-on activities targeting CA 5-8th grade science content standards
 interact with scientists at Stanford University
 gain hands-on experience in research labs
 receive a \$650 stipend and professional development units (\$550 after completion of SIMST, \$100 after implementing a nano lesson in the classroom)
- 7/25/2012 - GEMS Associate training** **Lawrence Hall of Science**
7/27/2012
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
<http://lhsgems.org/gemsworkshops.html>
Cost \$475 (including lunch), \$425/person for groups **Stipend?** more.
 This session is designed for teachers with some familiarity with GEMS units who would like to take a leadership role in science teaching at their school and contribute to the professional development of their peers.
- 7/22/2012 - Earth's History & Global Change** **Smithsonian**
7/27/2012
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.scienceteachersacademies.si.edu/earth/earth.html>
Cost \$1990 **Stipend?**
 In Washington DC - Global climate change will impact the lives of all inhabitants of our planet and is becoming a key issue taught in our classrooms. This new Earth's History and Global Change Academy looks at change from the perspective of the history of the earth from its formation, through the origins of life and its impacts. Topics will include planetary processes, volcanism and plate tectonics, the changing oceans, and atmosphere. Each day participants will engage earth scientists at the Smithsonian museums and elsewhere in hands-on content sessions that take them behind the scenes, to look at how current research provides evidence of our planet's past environments.
- 7/23/2012 - Coastal Systems Teacher Institute** **Monterey Bay Aquarium**
7/27/2012
 For Grades: 3rd;4th;5th
<http://www.mbayaq.org>
Cost FREE **Stipend?**
 July 23-July 27, 2012 - Follow-up Sessions: Saturdays: September 15, 2012; February 23, 2013; April 27, 2013
 The aquarium's Coastal Systems Teacher Institute is specifically designed for teachers of 3rd-5th grade students. The program provides opportunities for teachers to: Engage in learning about science, Use coastal ecosystems to teach state content standards, Explore, question, investigate, collaborate, create, Integrate content and process skills, Facilitate language acquisition, Eligibility: 3rd through 5th grade classroom teachers. Requirements: Attend all sessions, Use the curriculum materials with your students, Conduct a coastal system or classroom project with your students and share the project at the final follow-up session, Conduct an in-service for your colleagues or a family discovery event at your school site or district.

7/27/2012 - Bay Area Project Astro Workshops - reg by May 27 **Astronomical Society of the Pacific**
7/28/2012 For Grades: 3rd;4th;5th;6th;7th;8th
<http://www.astrosociety.org/education/astro/bayarea/teacher.html>
Cost \$40 **Stipend?**
 These workshops are required in order to be paired up with an astronomer for a minimum of four in-class visits during the coming school year. Popular program. Sign up early. No prior astronomical teaching required.

August 2012

7/30/2012 - Inquiry **California Academy of Sciences**
8/1/2012 For Grades: K;1st;2nd
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Cost \$35 **Stipend?** \$150
 NEW! Join us in exploring the science inquiry process by investigating the characteristics and behavior of live plants and animals. Leave with confidence and excitement to bring these simple and effective scientific practices into your classroom. . In order to participate, you must be able to attend both sessions.

8/1/2012 - Techbridge Summer Training Institute 2012 - reg by May 1 **Techbridge**
8/3/2012 For Grades: 5th;6th;7th;8th;9th;10th;11th;12th
<http://www.techbridgegirls.org/Educators/SummerInstitute.aspx>
Cost \$750 or \$1000 for 2 teachers **Stipend?**
 Are you interested in developing a program to encourage girls in technology, engineering and science? Would you like to gain girl-tested, hands-on curriculum and learn strategies for success? This 3-day workshop will teach participants strategies for encouraging girls in technology, science and engineering.

Techbridge has served over 2,000 girls through after-school and summer programs over the past 8 years, working closely with teachers, parents, role models and corporate partners. Founded by Chabot Space & Science Center, Techbridge offer hands-on projects developed for girls and career exploration activities such as field trips to companies and role model visits. The Summer Training Institute shares our best practices and curriculum while providing the tools and framework for achieving success to engage girls in technology and science.

7/30/2012 - BioBuilding 2012 Teacher Workshop @ Berkeley **BioBuilder**
8/3/2012 For Grades: 8th;9th;10th;11th;12th
http://openwetware.org/wiki/BioBuilding2012_workshop_@_UC_Berkeley
Cost FREE **Stipend?**
 March 16, 2012. This week long, professional development class will prepare educators to bring biological engineering and synthetic biology into their classrooms and laboratories. The workshop will include
 * lectures that connect the engineering/science/math and technology aspects of these fields
 * labs and classroom activities taught from the online BioBuilder.org resource, lunchtime discussions with members of MIT's synthetic biology community activities that address human practice questions such as the safety, security, economics and wisdom of engineering novel biological systems
 Attendees will receive lunch each day and 67.5 PDPs. Attendees must commit to carry out a BioBuilder activity in the 2012-2013 academic year, and provide feedback on the effort.

7/30/2012 - Think Evolution IV: A summer institute for science educators **Museum of Paleontology**
8/3/2012 For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.ucmp.berkeley.edu/about/institute12.php>
Cost \$75 **Stipend?**
 Put on your evolution eyeglasses and your nature of science thinking cap and join us for (yet another) fun-filled five days of evolutionary explorations with biologists and educators at the University of California. The Think Evolution Summer Institute, returning for its fourth year, will combine lectures by prominent evolutionary biologists with sessions focused on hands-on activities for the middle school, high school, and community college classroom.

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

- 7/25/2012 - 8/4/2012** **Climate Change and Caterpillars in Ecuador - Reg by 2/13/12** **Earth Watch Institute**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.earthwatch.org/edopp>
Cost \$1995 **Stipend?**
 Explore the fascinating world of caterpillars to see how they protect themselves and respond to changes in their habitats. You'll work with Principal Investigator Dr. Lee Dyer and a team of researchers to find and collect caterpillars and their host plants. In the open-air laboratory, you'll help raise caterpillars at all stages of their life cycles and record their relationships with plants and parasites. When you're not unrolling leaves in search of telltale caterpillar signs or labeling specimens in the lab, you can enjoy striking views of the cloud-covered Andes, scan the trees in the neighboring Antisana Reserve for some of Ecuador's over 1,550 bird species, or chat with other researchers staying at the station.
- 8/4/2012 - 8/5/2012** **Camping at the Presidio Training** **Golden Gate N.P. Conservancy**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.parksconservancy.org/our-work/crissy/programs/camping-at-the-presidio.html>
Cost \$45 **Stipend?**
 The CAP Leadership Training is designed to provide group leaders with the skills and resources to plan and lead a youth camping trip in the Presidio and beyond. During the two-day, one-night training session, group leaders acquire technical camping skills and become familiar with the Presidio's natural and cultural resources. They are trained to lead place-based nature hikes and other outdoor activities as well as learn about the process for reserving a camping trip through the CAP program. After participants complete the CAP Leadership Training program, they can begin to prepare for their camping trip to the Presidio's Rob Hill Campground.
- 8/6/2012** **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>
Cost \$15 **Stipend?**
 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. While appropriate for grades 2 - 5, this kit emphasizes 4th grade science content standards. After taking this workshop, you will be eligible to use the Geology Kit in your classroom.
- 8/7/2012** **Coral - 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>
Cost \$15 **Stipend?**
 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.
- 8/4/2012 - 8/8/2012** **124th Annual Meeting: "Communicating Science"** **Astronomical Society of the Pacific**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.astrosociety.org/events/meeting.html>
Cost \$325 **Stipend?**

Plenary speakers include: Michael Mann, of Pennsylvania State University, a pioneer in the study of global climate change, who will address "Science Denial in the U.S." and his experiences on the front lines of the public climate debate.

Sheila Tobias, nationally renowned author, who will discuss the state of K-12 teaching in the U.S. and the challenges of being a science teacher in our times.

Charles Petit, prize-winning science journalist and former president of the National Association of Science Writers, who will report on the state of science journalism in the era of Twitter.

Philip Christiansen, Professor at Arizona State University, an investigator for several Mars missions, and a leading expert on Mars, who will report the latest news about the red planet just as the Curiosity Rover is landing.

A Panel on Diversity and Evaluation and how to address cultural differences in designing programs with impact.

A Panel on Doomsday 2012 (and Cosmophobia -- the fear of astronomical events -- in general): how to address bogus science and assure the frightened public, featuring David Morrison of NASA's "Ask an Astrobiologist" website.

- 8/8/2012** **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>
Cost \$15 **Stipend?**
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.
- 8/9/2012** **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>
Cost \$15 **Stipend?**
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.
- 6/18/2012 - 8/10/2012** **IISME Summer Fellowships** **IISME - Industry Initiatives for Science and Math Education**
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.iisme.org/AboutSummerFellowships.cfm>
Cost FREE **Stipend?** \$8,200
Places K-16 teachers of all subjects into high-performance work sites for the summer. Teachers complete a project for their sponsors and are paid \$8,200 for their work. Teachers also spend time focusing on ways to transfer their Summer Fellowship experience back to their students and colleagues.
- 8/8/2012 - 8/10/2012** **SJ Summer Math Institute: Middle School** **Resource Area for Teachers (RAFT)**
For Grades: 6th;7th;8th;9th;10th;11th;12th
<http://www.raft.net/workshops/in-house>
Cost FREE to members **Stipend?**

Aligned to the California state standards, this institute covers the math concepts for Middle School students using hands-on manipulatives. Day 1: Developing Number Sense with a Hands-on Approach - Model the number relationships of whole numbers, fractions, and percentages with Base-10 manipulatives. Make sense of the way numbers are used in the everyday world. Do hands-on activities including estimating in actual measurements, mental math, and finding short-cuts using number relationships.

Day 2: Developing Number Sense with a Hands-on Approach - Model the number relationships of whole numbers, fractions, and percentages with Base-10 manipulatives. Make sense of the way numbers are used in the everyday world. Do hands-on activities including estimating in actual measurements, mental math, and finding short-cuts using number relationships.

Day 3: Geometric Concepts - Teach geometric concepts by making artistic designs with angles and circles. Study surface area and volume by building a variety of solids. Help students make sense of patterns and algebraic functions by using hands-on manipulatives.

Day 4: Algebraic Functions and Formulas - Learn to derive algebraic formulas in a concrete way that will relate to your students and the real world. Explore hands-on ways to teach functions and patterns of change.

INSTRUCTOR: Tsing Bardin has been working with elementary school teachers and in university teacher training programs for many years. She has retired from teaching physics at SJSU and at City College of San Francisco.

ADDITIONAL DATES:

Thursday, August 9, 9:30 AM - 4:00 PM

Friday, August 10, 9:30 AM - 4:00 PM

8/7/2012 - 8/17/2012 **Climate Change and Caterpillars in Arizona - Reg by 2/13/12** **Earth Watch Institute**

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://www.earthwatch.org/edopp>

Cost \$1995

Stipend?

Explore the fascinating world of caterpillars to see how they protect themselves and respond to changes in their habitats. Come search for and collect caterpillars and their host plants in Arizona's beautiful riparian forest. You'll help scientists at the Southwest Research Station determine what types of caterpillars you've found, whether they've been attacked by parasites, and which plants they seem to favor. Principal Investigator Dr. Lee Dyer and his staff will teach you how to recognize all these things and join you in the forest, the lab, and around the dinner table. In your recreational time, you can explore the trails around the station and take in the beautiful world where forest meets desert.

6/18/2012 - 8/17/2012 **Teachers at Sea/On-board Education Officer - Deadline 1/15/12** **Joides Resolution**

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th

<http://joidesresolution.org/node/453>

Cost FREE - Grant

Stipend?

JOIDES Resolution Education Officers have the opportunity to learn shipboard science alongside the expedition's science party and translate their learning experiences for students, families and the general public through creation of blogs, videos, social networking sites, live video conferencing from the ship and classroom activities. All expenses for education officers for travel to and from the ports of call are paid by Deep Earth Academy. In addition, a stipend will be paid. Education officers are selected through a competitive application and interview process.

We invite informal educators from the United States to apply to sail as Education Officer on IODP Expedition 342: Paleogene Newfoundland Sediment Drifts. This expedition will focus on extreme climate events and will be drilling near to the site of the sinking of the Titanic on the 100th anniversary of that event. It is scheduled to leave St. George, Bermuda on 18 June, 2012 and return to port in St. John, Newfoundland on 17 August, 2012. A preference will be given to applicants with backgrounds in working with museum and family audiences, as well as the general public. Background information on this expedition can be found here.

8/13/2012 - 8/17/2012 **2012 Energy and Climate Science Program** **Chabot Space and Science Center**

For Grades: 4th;5th

<http://www.chabotspace.org/feast.htm>

Cost FREE

Stipend? \$1000 stipend (\$500 each summer)

An exciting 10-day (5 days, 2 summers) professional development experience! This opportunity is for 4th and 5th grade teachers interested in becoming part of an educators' community that recognizes the importance and timeliness of climate science as a core curriculum topic. As California moves forward with the development of the new core science standards, climate science study and related activities promote the skills and critical thinking strategies necessary for success in STEM. Qualified candidates have taught science for at least 3 years and teams will preferably be comprised of 4th and 5th grade teachers, though we will consider multiple teachers from the same grade level.

8/15/2012 - 8/17/2012 **Cultivating Emotional, Social, and Ecological Intelligence** **Center for Ecoliteracy**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.ecoliteracy.org/events/cultivating-emotional-social-and-ecological-intelligence>
Cost \$495 **Stipend?**
 August 15–17, 2012: This seminar introduces the "secret sauce" for teaching and learning about some of the most important ecological issues of the day. It presents a new integration of emotional, social, and ecological intelligence developed by the Center for Ecoliteracy in collaboration with Daniel Goleman, author of the bestselling books Emotional Intelligence and Social Intelligence and the more recent Ecological Intelligence. The seminar is based on the Center's forthcoming book, Ecoliterate: How Educators Are Cultivating Emotional, Social, and Ecological Intelligence, coauthored by Daniel Goleman, Center communications director Lisa Bennett, and executive director Zenobia Barlow, with professional development sections contributed by director of education programs Carolie Sly (Jossey-Bass, September 2012).

8/18/2012 - 8/19/2012 **Growing Classroom: Workshop - reg by 8/2/12** **Life Lab Science Program**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.lifelab.org>
Cost \$300 **Stipend?**
 Garden-based workshop in the Life Lab Garden Classroom includes learning to guide children in a garden setting, how to apply standards for today's accountability requirements and basic gardening and composting instruction. Workshop participants receive a copy of The Growing Classroom, handouts, and continental breakfast.

September 2012

9/5/2012 **Water Planet** **California Academy of Sciences**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Cost \$15 **Stipend?**
 Discover interesting adaptations for locomotion, feeding, and the reproductive strategies of aquatic life. Leave with a comprehensive educator exhibit guide to the Water Planet exhibit in the Steinhart Aquarium to help your field trip memories last a lifetime.

9/6/2012 - 9/7/2012 **Camping at the Presidio Training** **Golden Gate N.P. Conservancy**
 For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.parksconservancy.org/our-work/crissy/programs/camping-at-the-presidio.html>
Cost \$45 **Stipend?**
 The CAP Leadership Training is designed to provide group leaders with the skills and resources to plan and lead a youth camping trip in the Presidio and beyond. During the two-day, one-night training session, group leaders acquire technical camping skills and become familiar with the Presidio's natural and cultural resources. They are trained to lead place-based nature hikes and other outdoor activities as well as learn about the process for reserving a camping trip through the CAP program. After participants complete the CAP Leadership Training program, they can begin to prepare for their camping trip to the Presidio's Rob Hill Campground.

9/8/2012 **Rainforests of the World - Classroom Kit Training** **California Academy of Sciences**
 For Grades: 4th;5th;6th;7th;8th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Cost \$15 **Stipend?**

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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.

- 9/12/2012 Earthquake - Life on a Dynamic Planet 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>
Cost \$15 Stipend?
NEW! Explore the Academy's new exhibit "Earthquake: Life on a Dynamic Planet" and learn how geological processes have shaped life over time. Experience the historic earthquake events of the Bay Area and leave with an educator exhibit guide that will explore these topics and help you prepare your students for future quakes at home and at school.
- 9/15/2012 Coral - 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>
Cost \$15 Stipend?
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.
- 9/12/2012 - Wilderness Leadership Training Tahoe National Forest Bay Area Wilderness Training**
9/16/2012
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
<http://www.bawt.org/programs/training/leadership-training/wilderness-leadership-training/>
Cost \$150-\$700 Stipend?
The Wilderness Leadership Training (WLT) is a five day intensive entry-level backpacking course at the heart of BAWT's programs. It is designed to give you the tools you need to lead youth on multi-day backpacking adventures. After completing the course, you will gain full access to our gear libraries. The Wilderness Leadership Training consists of a pre-trip meeting and five days of backpacking in the Sierra Nevada Mountains. Skills learned include: clothing requirements, nutrition, equipment use, map and compass reading, basic wilderness first aid, leadership styles, group dynamics and more. Role playing exercises are used to give participants a realistic backcountry leadership experience. Food and transportation are provided and no previous experience is necessary. Pre-trip meeting: September 8, 2012 Oakland
Cost: Fees for the WLT are on a sliding scale. Please choose the appropriate registration fee by selecting your agency's annual budget (total support and revenue for the past fiscal year.) Please note: training costs for one individual are waived for organizations in exchange for the use of a 15-person passenger van.
\$199,999 and under — \$150
\$200,000-\$999,999 — \$250
\$1,000,000+ — \$400
Unaffiliated Individual — \$700
If financial constraints prohibit you from signing up for the WLT, please consider applying for the full tuition Amy Chamberlain Scholarship Fund. For more information please contact us at programs@bawt.org.
- 9/19/2012 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>
Cost \$15 Stipend?
Enjoy the unique opportunity to explore beneath the waves of our own California Coast. Engage in activities that explore this biodiversity hot spot and leave with an educator exhibit guide that illustrates this natural wonder.

- 9/22/2012 Evolution- Classroom Kit Training California Academy of Sciences**
 For Grades: 7th;8th;9th;10th;11th;12th
<http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar>
Cost \$15 Stipend?
 Evolution is happening all around us! Take part in a workshop that brings the concepts of evolution to life. Engage in hands-on activities that explore reproductive fitness, genetic variation, natural selection, predation, and many more concepts of evolution. Current scientific publications are included to support student learning on each concept. Participants leave with a wealth of activities to enhance student learning about evolution.
- 9/26/2012 Astronomy Workshop Series California Academy of Sciences**
 For Grades: 3rd;4th;5th;6th;7th;8th
<http://www.calacademy.org>
Cost \$35 Stipend?
 Wednesday September 26
 Wednesday October 3, and
 Wednesday October 10.
 In order to participate, you must be able to attend all three sessions. Investigate our Solar System in this 3-part workshop. Participants will gain an introduction into astronomy and learn to use inquiry based methods and science notebooks to teach their students about the motions in outer space. By building planets scaled to size and plotting the distance of these objects from our Sun, you'll better understand the size and scale of the solar system. We'll then shift from hands-on models to kinesthetic ones. Orbit around a light source to better grasp the movement of constellations, the reason for the seasons, the phases of the Moon, the path of comets, and how rotations and revolutions relate to days and years, respectively.
- 9/29/2012 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>
Cost \$15 Stipend?
 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.
- 9/29/2012 - Frontcountry Leadership Training (FLT) Bay Area Wilderness Training**
9/30/2012 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/>
Cost \$65 Stipend?
 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. Prior to the weekend training, to get access to our gear libraries, participants also need to complete the Gear Orientation (GO!) training. This can be completed during the pre-trip meeting. Please note that Gear Orientations are offered in both our Oakland and Milpitas offices.
 Cost: 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 \$65 for the first participants, and \$50 for each additional participant from the same organization (Limit: 2 Discounts per organization). All registrations include a Gear Orientation and pre-trip meeting.



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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

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



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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/>

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