Congratulations to the 2013-14 CRS Science Super Stars!

Learning, and a job well done, may indeed be their own rewards. Yet, a little recognition (and perhaps a prize) are nice sweeteners!

That’s the idea behind the CRS Science Super Star Challenge, a set of best practices developed to encourage, recognize, and reward excellence in elementary science teaching. Now in its third year, the program will recognize more than twice as many teachers – over 100! -- and whole schools as last year, and CRS will give away 5,000 science-related books, plus other prizes, to students and teachers. The successful teachers involved their students in hands-on learning activities, engaged in cross-curricular connections with reading and writing about science, participated in professional development, and took part in an in-school or field-trip science experience.

Generous donations from over a dozen publishers and resource partners (please see list) made it possible for every teacher to receive a prize package that included books for their students to take home, field trips, science materials, and in-school assemblies.

CRS is also recognizing the entire Science and Literacy Cohort of schools in Oakland. These schools are pioneering efforts to increase science teaching and learning in line with new educational standards and in connection with language arts. Congratulations to all of this year’s Science Super Stars.

Full list, as of press time (we know a few forms have not yet arrived in our office!):

**Individual Classrooms**
- **Cragmont Elementary, BUSD**: Sara Ellberg, Cathie Irwin, Cherene Fillingim-Selk, Eleanor Tiglao
- **Franklin Elementary, OUSD**: Neila von Essen, Lisa Lam, Sherry Jacobs
- **International Community School, OUSD**: Raquel Rodriguez Jones, Micaela Morse, Timothy Douglas, Nicol LaCava, Lindsay Daseler
- **Cleveland Elementary, OUSD**: Susan Tajima
- **Community United Elementary, OUSD**: Elizabeth Cooke, Linda Selph
- **Brookfield Village Elementary, OUSD**: Christina Economou
- **EnCompass Academy, OUSD**: Liz Cruger, Sarah Swanson-Hysell, Jamie Bowen, Marlene Klein-Atwood, Meaghan Matsuoka, Malayphet Insixiengmay, Katrina Jones
- **Bridges Academy at Melrose, OUSD**: Ann Park, Jessica Jung, Lorna Baird, Gloria Garcia
- **Lincoln Elementary, OUSD**: Allison McGuirk, Maria Motonaga, John Lee
- **Howard Elementary, OUSD**: Virak Sarouen, Freida Baker-Nash, Randy Sherren, Mary Hill
- **Berkeley Arts Magnet, BUSD**: Kristine Fowler
- **Place at Prescott, OUSD**: Constance Cobb-Zunino, Cicely Day, Lorraine Mann
- **Lafayette Elementary, OUSD**: Sharon Travers
- **Martin Luther King Jr. Elementary, OUSD**: Precious James, Michele Williams
- **Washington Elementary, BUSD**: Mindy Geminder
- **Laurel Elementary, OUSD**: Sarah Diamond, Grace Tse, Lisé Yskamp, Melissa Gale, Adriene Gale, Margaret LeWright, Lena Why
- **Thousand Oaks Elementary, BUSD**: Julie Brod
- **Joaquin Miller Elementary, OUSD**: Ifetayo Hill-Roy, Chaya Frash, Kathy Moran
- **Whole Schools**: New Highland Academy, OUSD; Chabot Elementary, OUSD; Sankofa Academy, OUSD; Burckhalter Elementary, OUSD
- **Special Recognition of Excellence**: OUSD Science & Literacy Cohort Schools: Burckhalter, Encompass Academy, Franklin, Hoover, Howard, International Community, Joaquin Miller, Lafayette, Laurel, Martin Luther King Jr., New Highland, Parker, PLACE @ Prescott

See list of publisher and prize donors on page 3
Because. It’s a powerful word in a teacher’s toolbox.

It’s key to getting students to “show” and explain their thinking.

But, it’s deceptively easy sounding. Young students may follow a sentence template meant to nudge them to explain their thinking (“I observed ___. I think ___ because ___”) with circular reasoning. “I observed the paper bend when I put a weight on it. I think the cardboard is stronger than the paper because it did not bend.” Yes, but why didn’t it bend? Can they go beyond describing what happened to begin to formulate an explanation for why?

Good teachers have been helping students develop their critical thinking skills for centuries. This is nothing new. What is new, or at least new-ish, in the new statewide education standards is the attempt to measure and evaluate through standardized testing how well students are developing these key skills, in addition to learning important content “facts.”

Science provides great opportunities for students to develop their skills in the art of “because.”

They conduct and investigation, carefully record and share their results, and — importantly — talk and write about why they got those results. It is a chance to make meaning from the learning activity, and to think about how this new information applies to their daily lives and the world they live in.

How do laws of motion, states of matter, the water cycle, animal life cycles, forms of energy, and other “topic” areas of elementary science connect with everyday life?

Whether it is delighting in the surprising result when simple ingredients like baking soda and vinegar are combined, or spending hours creating cardboard mazes for marbles, young children need these exciting learning experiences to build on their natural interest in exploring their world. But they also need more: great teachers who help them to build understanding from these enthusiastic investigations.

We at CRS are focused on helping teachers give their students opportunities to explore science and engineering, and helping teachers develop their own skills in guiding their students through making meaning from these rich experiences. And we too try to measure and evaluate the impact of our work.

We gather data, track our numbers against our strategic goals, and gather feedback from teachers who identify changing needs, suggest improvements, and express their appreciation.

In addition, this school year we have been fortunate to have Rockman et al conducting an external, research evaluation of the impact of our programs and services, thanks to a generous grant from the RGK Foundation.

We extend a heartfelt “thank you” to all the teachers, principals, and volunteers who have taken time to respond to surveys, participate in interviews, and allow observation of in-class lessons.

We look forward to sharing with you what we learn.

Our touchstone remains providing inspiration and access for young students as they develop their interests and identity, so that they see possible future opportunities in science. We love getting notes from students telling us “I want to be a scientist (or engineer) when I grow up, because they discover new things and solve problems.” These students have learned the power of “because.”

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**CRS by the Numbers**

*So far during the 2013-14 school year:*

**CRS serves 1,065 teachers**

at over 105 schools

**550+ BASIS volunteers**

**10,000 students enjoying BASIS in-class lessons**
Thank you to our Partners, Donors & Supporters

Foundations & other Grants:
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Rock Steady Juggling with StopWaste.org
Aquarium of the Bay
The Clorox Company
UC Botanical Gardens
Marine Science Institute
Cal Academy
The Marine Mammal Center
The Exploratorium
The Oakland Zoo

Publisher Donations for Science Super Star Prizes:
Arbordale Publishing
Flowerpot Press
Nomad Communications/Nomad Press
National Geographic Learning
Fulcrum Publishing
Bearport Publishing
Macmillan Children’s Publishing Group
Start Engineering
Lisa Gamboa
Candlewick Press
North Atlantic Books
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The Creative Company
Kids Can Press

Individuals:

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Robert G. and Wendy S. Bergman
Nancy Blachman and David desJardins
Susan Kattchee
Sung-Hou and Rosalind Kim
Lauren Luke
Adela Pang
Alan Poon
Amy and David Tick
Phoebe White
Drs. Myra and Burton Wise

$250-$499
Graham R. Fleming & Jean McKenzie
Sally and Ted Jennings
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Anne Jennings and Andy Stacklin
Laurel Przybylski
Deborah and Marshall Wais

$100-$249
John and Sharon Brauman
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Joe & Liza Eto
Jane Frommer and Steve Boyer
Kate Godfrey
Jack & Birthe Kirsch
Anne and Seymour Laporte
Sandra Lee-Takei

CRS is delighted to participate in regional, state, and national efforts to improve science education for young students, and to support teachers. Most recently, CRS has joined the 100K in 10 National Network, and the Change the Equation STEM Network. Learn more on our website!

Purple House Press
Crabtree Publishing
Highlights
Bellwether Media
Workman Publishing Co.
Dawn Publications
Sleeping Bear Press
Corwin
Owlkids Books

Steve Leone & Mary Gilles
Robert MacDonald
John McCarthy & Kathryn Barnhart
Michael Mcdougall
Scott Melin
Gregg and Ruth Morris
Kathy Selleck
Angelica Stacy and David Hodul
Herbert Strauss
Richard Takei
Leah Witus
College of Chemistry
Clorox Science Education Program

Up to $99
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Geoff and Patty Chin
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Chiaki Treynor
Claudio Vargas & Diana Velez
Raitza Zikatanova
Anonymous

Donors from Aug. 1, 2013 to April 30, 2014

Above: Microscopes provide students with a new view on things too small to see with the bare eye.
Keep Science Thriving in Schools: Spring Giving Goal $10,000!

It takes a lot of marbles, tape, baking soda, LED lights, mini-bug robots, plant seeds, and other supplies to keep a great science education program running! Help CRS to reach our Spring fundraising goal of $10,000!

Thanks to a generous challenge grant from the Dean Witter Foundation, your donation will be matched one-for-one. Double your impact -- it’s like a “half off sale for science”! If you give $100, CRS receives $200 -- and that can buy enough materials for several classroom visits.

"I love these programs, my students love them. They are so relevant to their lives and to our science standards. It is essential that my students see careers as scientists as something done by women as well as men, and also done by people of color! These volunteers bring a passion and curiosity that is really infectious and inspiring. The lessons are creative and experiential. Keep it up!"

--Berkeley Unified School District 3rd grade teacher

Please help keep science thriving in local schools!

Consider these examples of what your donation could do this year

$75: One science visit to a class of 25-30 students
$100: Customized support for 10 teachers, impacting science learning for 250-300 students
$250: Training sessions for 10-15 volunteers
$500: Field Trip for Teachers Event
$1,000: Workshop stipends for educators
$1,500: “Day of Science” event for the entire 6th grade at one school

To make a donation, go online to www.crscience.org/donate OR mail your check and the form below to: Community Resources for Science / 1611 San Pablo Ave. Suite 10 B / Berkeley, CA 94702

Name:___________________________________________________________
Address:_________________________________________________________________
City/State/Zip:_________________________________________________________________
Phone:_________________________ Email:___________________________
I/we would like to be acknowledged as follows:_____________________________________

To honor a specific teacher, please tell us his/her name, school, and address:___________________________

Above: Glow in the Dark Science fascinates 5th graders.
Exploring! Spring Field Trip for Teachers in SF

For the Spring CRS Field Trip for Teachers, we headed across the bay to explore a place made expressly for that purpose: The Exploratorium, at its beautiful, and accessible, new home at Pier 15 along the Embarcadero in San Francisco. Teachers enjoyed a light supper, wine and networking before taking guided tours led by the talented Explainers during kid-free after hours. Teachers and guides alike relished the rare chance focus their attention on testing the exhibits and talk about science concepts without also needing to supervise and answer students!

In addition to delicious pizza, The Exploratorium staff provided an overview of programs, field trips, professional development opportunities, and other resources. And, as an added bonus, after our official Field Trip was over, teachers were invited to stay and enjoy the exhibits during the special adults-only Thursday evening visitor hours.

CRS hosts Field Trips for Teachers twice a year in partnership with science education organizations in the Bay Area. The events allow teachers to learn about regional science centers in relaxed, behind-the-scenes settings, while providing host organizations the opportunity to connect with teachers outside of busy field trip and professional development program times.

Where would you like to visit on a CRS teacher field trip?

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Celebrating BASIS Volunteers with Appreciation Party

What’s a great way to thank volunteers and celebrate another great year of sharing science with nearly 10,000 students? The answer, of course, is with more questions!

Enthusiastic CRS volunteers took a break from the challenging questions posed by elementary students to ponder a series of brain twisters during the second annual BASIS Pub Quiz, during our end-of-year BASIS celebration in late April.

Volunteers swapped stories about their experiences in classrooms and in the lab while enjoying food and drinks at the festive Clif Bar Headquarters in Emeryville.

Kids of volunteers got into the fun too, enjoying assembling balloon rocket cars and building index card towers. Other highlights of the evening included a slideshow of photos from the year, a BASIS-themed trivia game, and spontaneous music on the piano from several of our multi-talented scientist volunteers.

Thanks to the fabulous CRS BASIS Steering Committee members: Professor Bob Bergman, Chemistry; Allison Schwartz, Plant & Microbial Biology; Anthony Fu, Chemistry; Arunan Skandarajah, Bioengineering; Ashley Gibb, Physics & Chemistry; Dan Goldman, Chemistry; Elizabeth Ferrer, Integrative Biology; Jesyka Melendez, Integrative Biology; Kate Alfieri, Chemistry/Chemical Biology; Natalie Mal, Cognitive Science & Art Practice.

Additional thanks to Mary Kate Cunniff and Janet Minix for all their help with the event planning; to Clif Bar for donating the space for the third year in a row; and to Acme Bread, the Graduate Student Assembly, and the UC Berkeley Department of Chemistry for their food and beverage donations.

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Above: BASIS volunteers Erin Brahm and Sumana Raj, UC Berkeley Chemistry Department, contemplate answers to the pub quiz.
Community Resources for Science

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Berkeley, CA 94702
(510) 527-5212 • www.crscience.org
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Above: Two Oakland students experiment with magnets during a BASIS lesson.
Program Deadlines

May 2014

5/15/2014  Field Trip Scheduling for 2014-15 School Year Open  Exploratorium
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.exploratorium.edu/visit/field-trips

5/15/2014  Registration for 2014-2015 Programs - Open  Lawrence Hall of Science
Grades:  K;1st;2nd;3rd;4th;5th
lawrencehallofscience.org/programs_for_schools

5/15/2014  FOSS Training - Transitioning to Next Generation Science Standards  Lawrence Hall of Science
Grades:  K;1st;2nd;3rd;4th;5th

5/15/2014  Reservations 2014-15 school year open - Fills Fast  Monterey Bay Aquarium
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.montereybayaquarium.org/lc/teachers_place/fieldtrip/filter_field_trip_form.aspx

5/15/2014  Fall 2014 Program Application Deadline  Slide Ranch
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.slideranch.org

5/16/2014  Registration for 2014-2015 Field Trips Open  California Academy of Sciences
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/teachers/plan_a_visit.php

5/30/2014  Project Astro Application Deadline  Astronomical Society of the Pacific
Grades:  3rd;4th;5th;6th;7th;8th
http://www.astrosociety.org/education/astro/bayarea/bay.html

June 2014

6/23/2014  Reg. Deadline - Summer 2014 #2- (July 7-Aug 17) - Online PD  American Museum of Natural History
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://learn.amnh.org/

August 2014

8/4/2014  Lottery Deadline for Fall Fieldtrips  East Bay Regional Park District
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ebparks.org/activities/educators/trips

8/4/2014  Field Trip Reservations Begin online @ 8:00am- fills fast  Point Reyes National Seashore
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.nps.gov/pore/forteachers/index.htm

8/11/2014  Program Registration Opens  Lindsay Wildlife Museum
Grades:  K;1st;2nd;3rd;4th;5th
http://wildlife-museum.org/education/atmuseum

8/14/2014  Field Trip Reservations BEGIN for SF Schools - date approx.  Aquarium of the Bay
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.aquariumofthebay.com/teachers

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

Printed 5/14/2014
8/15/2014  Pre-bookings for 2014-2015 Field Trips Deadline  
California Academy of Sciences  
http://www.calacademy.org/teachers/plan_a_visit.php

8/15/2014  Field Trip Reservations Deadline - date approx  
Golden Gate National Parks Conservancy  
http://www.parksconservancy.org/learn/educators/field-trips/

8/18/2014  Program Registration for 2014-15 Begins  
CuriOdyssey  
http://www.curiodyssey.org/schools-groups/schools

8/27/2014  Field Trip Reservations BEGIN - date approx  
Aquarium of the Bay  
http://www.aquariumofthebay.com

September 2014

9/1/2014  Begin Scheduling Fieldtrips for Grade 6-12 Lab Visits  
LBNL Center for Science and Engineering Education  
http://www.lbl.gov/Education/CSEE/Programs/k-12.html

9/1/2014  Begin Scheduling 5th Grade BLAZES field trips  
LBNL Center for Science and Engineering Education  
http://www.lbl.gov/Education/CSEE/Programs/k-12.html

9/1/2014  Begin Accepting Zoo-to-Community applications  
Oakland Zoo  
http://www.oaklandzoo.org/Zoo_to_Community.php

9/2/2014  Registration for Elementary Field Trips Begins - date approx  
Farallones Marine Sanctuary Association  
http://www.farallones.org/education/index.php

9/2/2014  Field Trip Reservations BEGIN - date approx  
Oakland Museum of California  
http://museumca.org/school-visits

9/2/2014  Registration Opens for Free Recycling Assemblies  
Rock Steady Juggling  
http://www.rocksteadyjuggling.com/index.html

9/3/2014  Registration opens for Fall Programs - date approx  
Hidden Villa  
http://www.hiddenvilla.org/programs/prek6

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Printed  5/14/2014  Program Deadlines
Professional Development

May 2014

5/17/2014  Education Center Open House  Wildlife Associates
For Grades:  1st;2nd;3rd;4th;5th
http://wildlifeassociates.org/index.html
Cost  FREE  Stipend:
10:00-3:00. Learn about the new education center. Learn about new adult and family programs. Lunch served Noon-2:00. RSVP at 650-712-0800 or info@wildlifeassociates.org

For Grades:  1st;2nd;3rd;4th;5th
http://wildlifeassociates.org/index.html
Cost  FREE  Stipend:
Become more confident in teaching science to your students. Learn step-by-step effective story telling techniques that engage your students and make science relevant and fun. Receive the “Science Teacher’s Toolkit” that will transform the way students learn through creating mysteries to be solved and instilling excitement for discovering and exploring science

For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.makerfaire.com/
Cost  $45-55  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.
Limited Number of FREE educator tickets at  http://eepurl.com/xiEXj

5/22/2014  Lighthouse Tour + Program Planning + Making  Lighthouse Community Charter School
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://lighthousecreativitylab.org/professional-development/
Cost  $54  Stipend:
This session is a great way to take your making program to the next level, whether you are just getting started or you are looking to grow. During this session, you will see making integrated into a classroom, discuss our programs and models for integrating making, participate in a project yourself, and work on a plan for your own project. The focus of this session is working with you to figure out what will work for your classroom, program, or site. Attend as an individual or a team. Lunch provided.

5/26/2014  Summer 2014 #1- (May 26 - July 6) - Online PD  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  $495  Stipend:
Summer 2014 - Session 1 - May 26, 2014 - July 6, 2014

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
5/27/2014 Nature Day Camp Training for Day Camp Leaders
East Bay Regional Park District
For Grades: K;1st;2nd;3rd;4th;5th
http://tinyurl.com/lb32ogv
Cost $35 Stipend:

Summer Camp Season is fast approaching! Learn fresh ideas for your summer camps from EBRPD Naturalists. We will present fun and exciting hands-on activities, games and skills that can be easily integrated into your nature and science camp curriculum. The training meets at the Sunol-Ohlone Regional Wilderness, Old Green Barn Visitor Center.

June 2014

6/5/2014 Webcast: Paleobotany: Climate Change Past and Present
Smithsonian
For Grades: 6th;7th;8th;9th;10th;11th;12th
https://qrius.si.edu/science-webcast-schedule
Cost FREE Stipend:
8AM and 11AM Pacific Time. These interactive webcasts will introduce your students to core science concepts through the lens of Smithsonian research and experts, providing students with positive STEM role models and a connection to science in their lives. Explore the topics in the schedule to access a package of classroom activities, lessons, readings and other related resources that support each webcast program.

6/6/2014 Tour (1 hour - 9:30 AM) – What does making look like in the classroom?
Lighthouse Community Charter School
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://lighthousecreativitylab.org/professional-development/
Cost FREE Stipend:
Tours are a great way to see what making looks like integrated into a classroom. We will discuss the Lighthouse Creativity Lab program, see making in at least one K-12 class, answer questions, and hear a little about your plans.

6/17/2014 Science Institute TK-2nd
Resource Area for Teachers (RAFT)
For Grades: K;1st;2nd
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members Stipend:
This session focuses on topics and practices in science & engineering appropriate for grades TK-2. Participants will learn how to teach several hands-on activities that cover core curriculum topics in physical, earth, and life science as well as how to effectively connect language arts and math tasks with science lessons. Examples of curriculum topics include pushes and pulls (forces), speed, animals, plants, environment, weather & climate, light & sound, patterns & cycles, structure and properties of matter, and more! RAFT instructors will model strategies for teaching content as well as methods of classroom management during hands-on instruction. The session will include a discussion and provide examples of application of Norman Webb’s Depth of Knowledge model and provide ideas regarding assessment. Lunch will be provided.

6/18/2014 Science Institute 3rd-5th
Resource Area for Teachers (RAFT)
For Grades: 3rd;4th;5th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members Stipend:
This session focuses on topics and practices in science & engineering appropriate for third to fifth grade. Participants will learn how to teach several hands-on activities that cover core curriculum topics in physical, earth, and life science as well as how to effectively connect language arts and math tasks with science lessons. Examples of curriculum topics include forces and interactions, magnetism, ecosystems, life cycles and traits, weather & climate, energy, waves, earth processes, cycles of matter, stars & the solar system, structure and properties of matter, and more! RAFT instructors will model strategies for teaching content as well as methods of classroom management during hands-on instruction. The session will include a discussion and provide examples of application of Norman Webb’s Depth of Knowledge model and provide ideas regarding assessment. Lunch will be provided.

We’re here to help you find the science resources you’re looking for. Email us at CRS@crscience.org
Printed: 5/14/2014 Professional Development
6/19/2014  Science Institute 6th-12th  
For Grades:  6th;7th;8th;9th;10th;11th;12th  
http://www.raft.net/workshops/in-house  
Cost  $20 for members; $40 for non-members  
Stipend:  
This session focuses on topics and practices in science & engineering appropriate for middle school. Participants will learn how to teach several hands-on activities that cover core curriculum topics in physical, earth, and life science as well as how to effectively connect language arts and math tasks with science lessons. Examples of curriculum topics include forces and interactions, chemical reactions, ecosystems, cells and inherited traits, weather & climate, matter & energy, waves & EM radiation, earth systems, cycles of matter, natural selection and adaptations, structure and properties of matter, and more! RAFT instructors will model strategies for teaching content as well as methods of classroom management during hands-on instruction. The session will include a discussion and provide examples of application of Norman Webb's Depth of Knowledge model and provide ideas regarding assessment.  
Lunch will be provided.

6/15/2014 - 6/21/2014  Forestry Institute for Teachers - Plumas County  
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.forestryinstitute.org/  
Cost  $25  
Stipend:  
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.

6/22/2014 - 6/24/2014  Bay Area Field Journaling Workshop  
For Grades:  2nd;3rd;4th;5th;6th  
http://www.calalive.org/?q=professionaldevelopment  
Cost  $100  
Stipend:  
Learn how to become a keen observer of the wild places in your neighborhood and help students unlock a love for the natural world in the process. Join naturalists and educators Emilie Lygren and John Muir "Jack" Laws as they show you how to actively observe and ask scientific questions about the natural world through sketching and creative writing exercises. This mix of art, science, and language arts as well as Emilie & Jack's unique teaching styles will give you the confidence and skills necessary to guide your students through journaling activities in your schoolyard and beyond.

6/23/2014 - 6/25/2014  Exploring to the NGSS (grades K - 12)  
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
Cost  $35  
Stipend:  $150 upon completion of all three Special Note: This is a three day workshop taking place on Monday June 23, Tuesday June 24, and Wednesday June 25. In order to participate, you must be able to attend all three sessions. How will science education be transformed by the Next Generation Science Standards (NGSS)? Dive into the Framework for K-12 Education to discover the principles underlying the NGSS. Gain experience with the scientific practices, cross-cutting concepts, and disciplinary core ideas that comprise the new framework, and learn how to read those NGSS tables! This beginner's-level overview will give you the tools and confidence to start preparing for the new standards.

6/26/2014  Innovation Institute - The Challenge  
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.raft.net/workshops/in-house  
Cost  $20 for members; $40 for non-members  
Stipend:  

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Printed:  5/14/2014  
Professional Development
The challenge - teaching 21st century skills to students whose minds have been literally rewired by 21st century technology! The skills of innovation cut across all subject and grade levels and must take into account how young minds now take in and process what they experience. Experience an intriguing and hands-on overview of research that provides new insights into the minds of young learners. Explore sample activities to increase persistence, creativity, team functioning and problem solving. Learn how to help students become aware of how their minds work and thus gain control over their own learning. Enhance your abilities to be an educational catalyst that creates learning experiences key to the addressing the needs of the new Common Core Standards. Lunch will be provided.

6/26/2014 The Making Space
Lighthouse Community Charter School
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://lighthousecreativitylab.org/professional-development/
Cost FREE to OUSD and title 1

The Creativity Lab can help! In addition to the space in our lab, we have developed mobile carts, we have utilized classroom spaces for making, and are developing mini-makerspaces for our K-4 classes. During the session you will have time to delve into the type of space you really want, to explore the possibilities of your actual space, and to map out a strategy that you can actually make happen.

Occidental Arts and Ecology Center
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
http://www.oaec.org/school-garden
Cost $800

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.

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

At the new Exploratorium on Pier 15, we’re collecting a wealth of data about the world around us and finding innovative ways to visualize this information. Come build and use classroom-friendly instruments to collect environmental data based on experiments that you design. Comparing this data with that collected by the Exploratorium, NOAA and other sites will give you a fuller understanding of what is happening in the San Francisco Bay. We’ll also show you how to use the Exploratorium’s data visualizations in your classroom to illustrate a variety of changes over time. This one week institute will cover topics connecting our bay, oceans, and atmosphere, including the carbon and water cycles, water chemistry, bay and ocean health, weather, and population growth. Building tools, collecting and analyzing data, and designing your own experiments directly support the science and engineering practices in the Next Generation Science Standards. You’ll leave with first hand experiences of using data to understand how the world changes over time.

This workshop is open to all middle and high school science teachers, and we strongly encourage you to sign up with a colleague from your school (even if they are not alumni of the Teacher Institute). Time will be provided each day to collaborate with other teachers to adapt course materials for your curriculum. Participants will receive a $325 stipend. This institute is generously funded through NOAA’s B-WET program.

6/19/2014 - 6/28/2014 Belize EcoTour
Save the Frogs
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.savethefrogs.com/ecotours/
Cost $1995.00

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Printed: 5/14/2014 Professional Development
Teachers seeking to fulfill professional development or continuing education requirements can claim our 2014 Eco-tour to Belize as a tax-deduction.

You are cordially invited to join SAVE THE FROGS! on a 10-day eco-tour of Belize in June 2014! Belize is a wonderful little country located east of Guatemala and nestled beneath the Yucatán Peninsula of Mexico. Like many countries in Central America, Belize is a hotspot of biodiversity. Belize is home to at least 37 amphibian species, as well as an array of bats, birds, lizards, corals and other amazing wildlife. The trip will be led by SAVE THE FROGS! Advisory Committee Chairman Michael Starkey, who has participated in, coordinated and led Belize eco-tours for 4 years! We will also be accompanied by SAVE THE FROGS! Ecologist Kathlyn Franco as well as Mayan naturalists and field guides. Group size is limited to 19 participants.

6/22/2014 - 6/28/2014
Forestry Institute for Teachers - Tuolumne County
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.forestryinstitute.org/
Cost $25 Stipend:
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.

6/28/2014
6th - 8th Grade Math Institute @ Redwood City
For Grades: 6th;7th;8th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members Stipend:
At our Redwood City location this Institute is a condensed version of topics, activities, discussions, and strategies covered in San Jose. What do good problem solvers do? Join us for a day of enriching 6th - 8th grade hands-on mathematics ideas that emphasize developing good student problem solving skills addressed in each of the 8 Common Core Mathematics Practices (1. Solve Problems; 2. Reason Abstractly and Quantitatively; 3. Create Viable Arguments and Critique the Reasoning of Others; 4. Model with Mathematics; 5. Use Appropriate Tools Strategically; 6. Attend to Precision; 7. Look For and Make Use of Structure; and 8. Look For and Express Regularity in Repeated Reasoning). Learn how to integrate real world models for creative hands-on exploration, group work, and organizational learning techniques that make mathematics relevant and come alive! RAFT assumes that participants have prior knowledge of 6th - 8th grade mathematical content before taking this course. Lunch will be provided.

6/28/2014
Nature Print Books
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.raft.net/workshops/in-house
Cost $20 for members; $35 for non-members Stipend:
This variation on the pamphlet book structure has interesting flaps, envelopes and hidden openings. It contains prints of natural elements such as leaves, pods, seeds, twigs, flowers, fruit rinds and rocks. The prints that we make in a variety of ways will become the subject of our books.
INSTRUCTOR: CJ Grossman has an MFA from California College of the Arts and a BS in social Welfare from San Francisco State. CJ works with mixed media, specializing in book arts, and exhibits her work nationally. CJ has taught thousands of children and adults how to make books and has a passion for teaching educators how to make books with kids. She lives in Berkeley and is former editor of "Kids Making Books."

6/20/2014 - 6/29/2014
Next Generation Science Standards and the Environment
For Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calalive.org/?q=professionaldevelopment
Cost $99 early bird reg. Stipend:
June 20-22 and June 27-29, 2014. The Institute will model the intersection of NGSS and key issues schools are challenged to address. Join California NGSS experts and science leaders for this unique 5 day institute to explore the philosophy, design, and implementation of the NGSS with a focus on connecting the new science standards, teaching practices, grade 4-12 learning progressions and resources, all in support of school and district implementation.

July 2014

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<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Cost</th>
<th>Stipend</th>
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</thead>
<tbody>
<tr>
<td>7/1/2014 - 7/2/2014</td>
<td>FOSS Training - Transitioning to Next Generation Science Standards</td>
<td>Lawrence Hall of Science</td>
<td>$175 or $150/team member</td>
<td>Stipend:</td>
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<td></td>
<td>FOSS California 2014 Two-Day Summer Institute</td>
<td>Lawrence Hall of Science</td>
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<td>The FOSS Leadership Team from the Lawrence Hall of Science can help you transition to the Next Generation Science Standards using your current FOSS CA Edition. We will share strategies and tools designed to help your team plan to meet the expectations of Next Generation Science Standards and Common Core ELA using your current materials. We will: Learn to build scientific and engineering practices, engage with crosscutting concepts, and develop disciplinary core ideas. Use Common Core ELA and the new CA ELD standards to further content knowledge, scientific practices, and academic literacy. Explore, analyze and interpret data within a FOSS lesson. Construct explanations, and engage in argumentation from evidence as tools to deepen student learning. Workshop meets Tuesday, July 1, 10:00am - 4:30pm and Wednesday, July 2, 8:30am - 3:30pm Registration deadline: May 15, 2014</td>
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<tr>
<td>7/7/2014</td>
<td>Summer 2014 #2- (July 7-Aug 17) - Online PD</td>
<td>American Museum of Natural History</td>
<td>$495</td>
<td>Stipend:</td>
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<td>For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td><a href="http://learn.amnh.org/">http://learn.amnh.org/</a></td>
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<td>Summer 2014 - Session 2 - July 7, 2014 - August 17, 2014</td>
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<td>Climate Change, Earth: Inside and Out, Evolution, In the Field with Spiders, Water, Genetics, Genomics, Genetics, The Diversity of Fishes, Space, Time and Motion</td>
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<tr>
<td>7/7/2014 - 7/9/2014</td>
<td>NGSS Spotlight: Unlocking Scientific and Engineering Practices</td>
<td>California Academy of Sciences</td>
<td>$35</td>
<td>$150 upon completion of all thre</td>
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<td>For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td><a href="http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar">http://www.calacademy.org/teachers/tiss/index.php?page=teacher-workshops-calendar</a></td>
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<td>Intermediate Workshop - Special Note: This is a three day workshop taking place on Monday July 7, Tuesday July 8, and Wednesday July 9. In order to participate, you must be able to attend all three sessions. NEW! How do you begin to integrate the Scientific and Engineering Practices (SEPs) of the NGSS into your classroom? We'll shine a spotlight on the SEPs in this intermediate-level NGSS workshop. Explore how the SEPs grow in depth and sophistication as students progress from grades K-12. Experience hands-on activities to discover what the Practices look like at different grade-levels. Leave with the skills to begin adapting your curriculum to the NGSS by using the SEPs as the gateway to reimagining science content. Each NGSS spotlight course includes presentations, hands-on activities, collaborative group discussions, and grade-level planning time. Join us to unlock the potential of the NGSS Scientific and Engineering Practices!</td>
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<td>7/8/2014 - 7/9/2014</td>
<td>Early Childhood Learning (2-day institute)</td>
<td>Resource Area for Teachers (RAFT)</td>
<td>$20 for members; $40 for non-members</td>
<td>$20 for members; $40 for non-members</td>
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<td>For Grades: K;1st;2nd</td>
<td><a href="http://www.raft.net/workshops/in-house">http://www.raft.net/workshops/in-house</a></td>
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<td>This 2-day institute will focus on hands-on science and math activities while incorporating all areas of STEM. Educators will use RAFT materials to participate in experimental and observational processes. These processes will help teach basic skills and build on young children's experiences and individual learning styles. Lunch will be provided.</td>
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<td>7/10/2014</td>
<td>Transitional Kindergarten Institute</td>
<td>Resource Area for Teachers (RAFT)</td>
<td>$20 for members; $40 for non-members</td>
<td>$20 for members; $40 for non-members</td>
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<td>For Grades: K</td>
<td><a href="http://www.raft.net/workshops/in-house">http://www.raft.net/workshops/in-house</a></td>
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Since 2010 Transitional Kindergarten has been a challenge for some. We will explore how to hybrid preschool to kindergarten learning using hands-on activities. We will provide various ways to set up and manage the classroom that will combine the essential foundations of preschool with the California Common Core Standards for kindergarten, nurturing each child’s intellectual and social-emotional growth.

Lunch will be provided.

7/7/2014 - 7/11/2014

**Splash Zone Teacher Institute**
Monterey Bay Aquarium

**Cost**  FREE  **Stipend:**

The Aquarium’s Splash Zone Teacher Institute is specifically designed for teachers of young children. This free program provides opportunities to:
- * Discover new ideas about teaching science and inquiry.
- * Experience inquiry-based activities that support the Common Core and Next Generation Science Standards.
- * 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.
- * Stay on campus at the beautiful Stevenson School in Pebble Beach, California

Follow-up Sessions November 22, 2014; February 21, 2015; May 9, 2015

7/7/2014 - 7/11/2014

**School Garden Training**
Occidental Arts and Ecology Center

**Cost**  $800  **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.

7/6/2014 - 7/12/2014

**Forestry Institute for Teachers - Shasta County**
Forestry Institute for Teachers

**Cost**  $25  **Stipend:**

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.

7/12/2014

**A Brief Introduction to DNA**
Resource Area for Teachers (RAFT)

**Cost**  $15 for members; $30 for non-members  **Stipend:**

The name DeoxyriboNucleic Acid was a wise choice for the name of the molecule which holds the genetic code. The workbook used in this presentation clearly and simply explains some very elementary chemistry concepts, includes student activities and will make clear the origin of this name.

7/14/2014 - 7/16/2014

**Outdoor Learning (grades 3-5)**
California Academy of Sciences

**Cost**  $35  **Stipend:** $150 upon completion of all three

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Printed: 5/14/2014  Professional Development
**Special Note:** This is a three day workshop taking place on Monday July 14, Tuesday July 15, and Wednesday July 16. In order to participate, you must be able to attend all three sessions.

Explore urban ecology and discover ways to engage your students in meaningful outdoor learning. Get to know some of San Francisco's native plants and animals and learn about our city's ecological history. Delve into activities that your upper elementary students can do on the schoolyard, in small urban green spaces near your school, or on field trips to larger spaces such as Golden Gate Park.

**6/16/2014 - 7/17/2014**

**3rd-5th Grade Math Institute (2-day institute)**

For Grades: 3rd;4th;5th

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

**Cost** $20 for members; $40 for non-members

**Stipend:**

What do good problem solvers do? Join us for 2 days of enriching 3rd - 5th grade hands-on mathematics ideas that emphasize developing good student problem solving skills addressed in each of the 8 Common Core Mathematics Practices (1. Solve Problems; 2. Reason Abstractly and Quantitatively; 3. Create Viable Arguments and Critique the Reasoning of Others; 4. Model with Mathematics; 5. Use Appropriate Tools Strategically; 6. Attend to Precision; 7. Look For and Make Use of Structure; and 8. Look For and Express Regularity in Repeated Reasoning). Learn how to integrate real world models for creative hands-on exploration, group work, and organizational learning techniques that make mathematics relevant and come alive! RAFT assumes that participants have prior knowledge of 3rd - 5th grade mathematical content before taking this course.

Lunch will be provided.

**7/7/2014 - 7/18/2014**

**Summer Institute for Middle School Science Teachers**

For Grades: 6th;7th;8th

http://www.nist.gov/iaao/teachlearn/

**Cost** FREE including travel & hotel

**Stipend:** $2000

July 7-18, 2014. in Gaithersburg, MD. The National Institute of Standards and Technology (NIST) Summer Institute for Middle School Science Teachers is a two-week workshop for middle school science teachers featuring hands-on activities, lectures, tours, and visits with NIST scientists and engineers in their laboratories. Teachers who participate in the NIST Summer Institute gain:

* Increased understanding of the subjects they teach
* Increased understanding of how scientific research is performed
* Materials and resources to implement what they learned at NIST in their classrooms
* Increased enthusiasm for science
* A network of scientists and engineers at NIST with whom to consult

**7/16/2014 - 7/18/2014**

**Seeds of Science/Roots of Reading**

For Grades: 2nd;3rd;4th;5th


**Cost** $475

**Stipend:**

This three–day workshop will provide participants with a deeper understanding of the Seeds of Science/Roots of Reading curriculum and philosophy. You can expect to enhance your understanding of the how, when and why of science and literacy integration. Special breakouts will be offered to support the range of participants, from potential users to those who have years of experience with the program and want to know even more.

* How Seeds/Roots supports the enactment of the Common Core English/Language Arts Standards
* How Seeds/Roots supports the vision of the NRC Framework for K-12 Science Education
* Firsthand experience with activities from Seeds/Roots units
* Review of the student books and the role they serve in supporting inquiry science
* Refining teaching practices through a closer look at the "Teaching Support and Considerations" features in the Seeds/Roots teacher guides
* Information about the Seeds/Roots effectiveness studies. * A sneak peak at units in development

**7/17/2014 - 7/18/2014**

**Designing Making Experiences**

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

http://lighthousecreativitylab.org/professional-development/

**Cost** FREE to OUSD and title 1

**Stipend:**

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Printed: 5/14/2014

Professional Development
Spend two days planning a K-12 making project or unit of your choice and leave with a project example made by you. While being immersed in a making environment, you will make and develop, test and troubleshoot the making curriculum or project of your choice for your K-12 classroom or school.

7/13/2014 - 7/19/2014
Forestry Institute for Teachers - Humboldt County
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.forestryinstitute.org/
Cost $25
Stipend:
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.

7/19/2014
Early Learning Math Institute
For Grades: K;1st;2nd
http://www.raft.net/workshops/in-house
Cost $20 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, activity models, literature links, and websites will be shared. Lunch will be provided. (A Spanish translator will be available for this institute.)

7/21/2014 - 7/23/2014
Exploring the Next Generation Science Standards
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost $35
Stipend: $150 upon completion of all three days
Special Note: This is a three day workshop taking place on Monday July 21, Tuesday July 22, and Wednesday July 23. In order to participate, you must be able to attend all three sessions. How will science education be transformed by the Next Generation Science Standards (NGSS)? Dive into the Framework for K-12 Education to discover the principles underlying the NGSS. Gain experience with the scientific practices, cross-cutting concepts, and disciplinary core ideas that comprise the new framework, and learn how to read those NGSS tables! This beginner’s-level overview will give you the tools and confidence to start preparing for the new standards.

7/14/2014 - 7/24/2014
Geoscape Bay Area for Earth Sciences Teachers
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://pangea.stanford.edu/academics/outreach-programs/teacher-programs/geoscape-workshop
Cost $50 deposit
Stipend: $100
July 14-17 and July 21-24, 2014 - (Monday through Thursday, all day) Learn about current scientific research and understanding of the local geoscape. A geoscape is a way to look at the geological landscape - water resources, natural hazards, and earth resources. This workshop is to enhance your skills, confidence, and knowledge of Earth sciences and invigorate classroom instruction, aligned with California State content standards. You will be taught to use to the Quake-catcher Network which turns your classroom computer into a seismometer. Special this summer, you will learn about climate change in California and the climate change curriculum. During the 8-day summer workshop, there will be lab time where you will create curriculum and materials for the coming school year that draw on what you have learned in the workshop. Teachers are supported by experts in content and pedagogy, and are provided with specific tasks that connect to the workshop. In addition, you will be introduced to teaching through evidence and argument as a pedagogical tool. Discussions and strategies for adapting instruction for English language learners are integrated across professional development courses and lab time.
Continuing Education Units (3 units available for $75) (quarter credits, not semester credits)

7/20/2014 - 7/24/2014
National Energy Education Conference 2014
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.need.org/summertraining
Cost $1250
Stipend:
We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/14/2014
Professional Development
Savannah, GA - 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.

7/23/2014 - 7/24/2014  
**Innovation Institute: Innovation in Action (2-day institute)**  
Resource Area for Teachers (RAFT)  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.raft.net/workshops/in-house  
Cost $20 for members; $40 for non-members  
Stipend:  
Encouraging kids to innovate sounds good, but how do we make it happen? We will briefly review the impact of distractions and the importance of creative persistence. Before jumping into action, participants will share their candid concerns about innovation. How can I prepare my students? How do I stay in control? Will this take time away from other goals I need to achieve? Where does innovation fit in the new standards? These and other questions will be answered. Practical tools for collaboration, brainstorming, prototyping, and project-based learning will be modeled. We will tie all techniques to the Common Core and NGSS. The over-arching theme of this session will be INTEGRATION - blending a little innovation every classroom experience to open the door for cross-disciplinary learning.  
Lunch will be provided.

7/24/2014 - 7/25/2014  
**The Growing Classroom: Intro. to Garden Based Learning - reg by 7/9/14**  
Life Lab Science Program  
For Grades: 2nd;3rd;4th;5th;6th  
http://www.lifelab.org/for-educators/workshops/gcworkshops/  
Cost $300  
Stipend:  
Find out how to bring learning to life in the garden. Using The Growing Classroom activity guide for grades 2-6, participants in this workshop experience hands-on activities connected to academic content standards, learn basic science concepts and gardening techniques, and develop management strategies for a school garden program.

7/21/2014 - 7/25/2014  
**BioBuilding 2014 Teacher Workshop @ Berkeley**  
BioBuilder  
For Grades: 9th;10th;11th;12th  
http://biobuilder.org/workshops/  
Cost $450  
Stipend:  
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 www.BioBuilder.org resource.  
- Lunchtime discussions with members of UC Berkeley’s synthetic biology community.  
- Activities that address human practice questions such as the safety, security, economics and wisdom of engineering novel biological systems.

7/25/2014 - 7/26/2014  
**Bay Area Project Astro Workshops - reg by May 30**  
Astronomical Society of the Pacific  
For Grades: 3rd;4th;5th;6th;7th;8th  
http://www.astrosociety.org/education/astro/bayarea/teacher.html  
Cost FREE  
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.

7/26/2014  
**Using Cartooning to Teach Curriculum (for the Artistically Challenged Teach**  
Resource Area for Teachers (RAFT)  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th  
http://www.raft.net/workshops/in-house  
Cost $20 for members; $35 for non-members  
Stipend:  
If you can't draw much more than stick figures, this is the workshop for you! We will find many ways to use cartooning to teach language, math, science, history, etc. while engaging students and helping them discover underlying concepts and structures.

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

Printed: 5/14/2014  
Professional Development
7/29/2014  Astronomy Kit Training
For Grades:  5th;6th;7th;8th
http://www.calacademy.org/teachers/tiss/?page=teacher-workshops-calendar
Cost  $15  Stipend:
NEW! How do we know what we know about the solar system? Get your hands on the Academy’s brand new Astronomy Kit and find out! Explore the planet Mars and discover how our knowledge about this red planet has been built over time. Start by observing the movement of a tiny red dot across the constellations, then see how telescopes transformed our observations. Consider the benefits and challenges of using rovers to learn about distant worlds, and find out how careful planning and critical thinking play a role in space exploration. After taking this workshop, you will be eligible to use the Astronomy Kit in your classroom.

August 2014

7/21/2014 - 8/1/2014  Teacher Institute on Science and Sustainability - reg by 3/15
For Grades:  3rd;4th;5th
http://www.calacademy.org/teachers/tiss/
Cost  FREE  Stipend:  $2000/year
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).

7/30/2014 - 8/1/2014  Techbridge Summer Training Institute 2014
For Grades:  5th;6th;7th;8th;9th;10th;11th;12th
http://www.techbridlegirls.org/index.php?id=31
Cost  $750 early bird  Stipend:
The Institute focuses on the development of STEM educators and offers strategies and curriculum for engaging girls in science, technology, and engineering. We will explore science, technology and engineering through inquiry-based activities. Techbridge’s experienced staff will guide you through:
• Recruiting and engaging girls in a STEM program
• Training on Techbridge’s hands-on curriculum for grades 5-12
• Planning field trips and visits with role models
• Supporting family outreach
• Developing STEM facilitation skills
• Integrating career exploration into your programming

Who should come? Teachers, after-school program staff, museum educators, youth development leaders, and any others interested in promoting girls in STEM.

8/2/2014 - 8/3/2014  Galileo Investigates the Solar System
For Grades:  3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.astrosociety.org/education/asp-annual-meeting/
Cost  $80 Early Bird rate through July 4  Stipend:
Explore the solar system through classroom-tested, standards-based, hands-on activities. Discover investigations and techniques to help teach earth and space science in the context of the Next Generation Science Standards and make connections with the Common Core. Participants receive a wealth of teaching resources, including The Universe at Your Fingertips 2.0 DVD-ROM (retail value $30), a large collection of resources for teaching astronomy. Part of the 125th Annual Meeting of the Astronomical Society of the Pacific
NGSS and the Solar System

For Grades: 3rd;4th;5th;6th;7th;8th;9th
http://www.astrosociety.org/education/asp-annual-meeting/

Cost  $80 Early Bird rate through July 4

Stipend: Scholarships are Available for California Teachers

Astronomical Society of the Pacific

An ASP Galileo Teacher Training Program Workshop
Location: Hyatt-Regency, Burlingame, CA
Explore the solar system through classroom tested, inquiry-rich activities designed to help students learn the processes of science through the study of the solar system.
Explicit alignment to the NGSS cross cutting theme of Scale, Proportion and Quantity and the practices of Developing and Using Models and Engaging in Argument from Evidence.
Connections to Literacy and the Common Core.
Participants receive a wealth of teaching resources, including The Universe at Your Fingertips 2.0 DVD-ROM, a large collection of resources for teaching astronomy.
*** Scholarships are Available for California Teachers ***
*** Academic Credit is Available ***
Part of the 125th Annual Meeting of the Astronomical Society of the Pacific

GEMS: Ocean Sciences Sequence for Grades 3–5

For Grades: 3rd;4th;5th

Cost  $345 (including lunch)

Stipend:

Lawrence Hall of Science

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 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.

GEMS: Space Sequence for Grades 3–5

For Grades: 3rd;4th;5th

Cost  $345 (including lunch)

Stipend:

Lawrence Hall of Science

GEMS Curriculum Sequences offer extensive benefits, including greater coherence as units build on one another; increased scientific depth, with science concepts presented in a manner that supports the teacher; increased educational depth with extensive pedagogical support; formative and summative assessment tools; and, readings and technology components for use with students. An overview of the GEMS Curriculum Sequences approach is provided in this brief 2-page document.

NGSS Spotlight: Unlocking Scientific and Engineering Practices

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

Cost  $35

Stipend: $150 upon completion of all three

California Academy of Sciences
Intermediate Workshop - Special Note: This is a three day workshop taking place on Monday August 4, Tuesday August 5, and Wednesday August 6. In order to participate, you must be able to attend all three sessions. NEW! How do you begin to integrate the Scientific and Engineering Practices (SEPs) of the NGSS into your classroom? We'll shine a spotlight on the SEPs in this intermediate-level NGSS workshop. Explore how the SEPs grow in depth and sophistication as students progress from grades K-12. Experience hands-on activities to discover what the Practices look like at different grade-levels. Leave with the skills to begin adapting your curriculum to the NGSS by using the SEPs as the gateway to reimagining science content. Each NGSS spotlight course includes presentations, hands-on activities, collaborative group discussions, and grade-level planning time. Join us to unlock the potential of the NGSS Scientific and Engineering Practices!

8/6/2014 Innovation Institute: Innovation in Action (Redwood City) Resource Area for Teachers (RAFT)
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members
Stipend:
At our Redwood City location this institute is a condensed version of topics, activities, discussions, and strategies covered in San Jose. Encouraging kids to innovate sounds good, but how do we make it happen? We will briefly review the impact of distractions and the importance of creative persistence. Before jumping into action, participants will share their candid concerns about innovation. How can I prepare my students? How do I stay in control? Will this take time away from other goals I need to achieve? Where does innovation fit in the new standards? These and other questions will be answered. Practical tools for collaboration, brainstorming, prototyping, and project-based learning will be modeled. We will tie all techniques to the Common Core and NGSS. The over-arching theme of this session will be INTEGRATION - blending a little innovation every classroom experience to open the door for cross-disciplinary learning. Lunch will be provided.

8/6/2014 Best Practices in Argumentation Workshop Lawrence Hall of Science
For Grades: 3rd;4th;5th;6th;7th;8th
Cost $195 (including lunch)
Stipend:
Join the Lawrence Hall of Science staff for a one-day Argumentation Workshop using exemplars from the Space and Ocean Sciences Sequences. Staff at the Lawrence Hall of Science are engaged with several NSF projects focused on developing teacher capacity to facilitate and improve students' use of argumentation in the science classroom. The latest understanding of how to effectively support argumentation will be featured. Spend the day learning best practices and successful argumentation strategies.

8/6/2014 Teaching Science through Citizen Science California Academy of Sciences
For Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/teachers/lounge/?p=6217
Cost FREE
Stipend:
Are you looking for ways to incorporate hands-on and inquiry–based learning into your STEM curriculum? Have you wondered how to engage your students in meaningful science research? Citizen science is an opportunity for students to make important contributions to ongoing investigations around the world. In this workshop, researchers and educators from the California Academy of Sciences will present a toolkit for integrating citizen science into your curriculum, including step-by-step guidance on how to design and implement authentic partnerships between your students and the scientific community. Special Note: This one-day workshop will be repeated on Wednesday, August 6 and Thursday, August 7. You only need to attend one session. Space is limited to the first 40 registrants per session. Light breakfast and lunch provided.

8/7/2014 Teaching Science through Citizen Science California Academy of Sciences
For Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/teachers/lounge/?p=6217
Cost FREE
Stipend:

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/14/2014 Professional Development
Are you looking for ways to incorporate hands-on and inquiry–based learning into your STEM curriculum? Have you wondered how to engage your students in meaningful science research? Citizen science is an opportunity for students to make important contributions to ongoing investigations around the world. In this workshop, researchers and educators from the California Academy of Sciences will present a toolkit for integrating citizen science into your curriculum, including step-by-step guidance on how to design and implement authentic partnerships between your students and the scientific community. Special Note: This one-day workshop will be repeated on Wednesday, August 6 and Thursday, August 7. You only need to attend one session. Space is limited to the first 40 registrants per session. Light breakfast and lunch provided.

8/7/2014 Science Institute @ Redwood City
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members

8/6/2014 - 8/7/2014 66th-8th Grade Math Institute (2-day institute)
For Grades: 6th;7th;8th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members

GEMS: Space Sequence for Grades 6-8
For Grades: 6th;7th;8th
Cost $345 (including lunch)

Transformational Geometry Institute
For Grades: 7th;8th;9th;10th;11th;12th
https://www.regonline.com/BAMP_TransGeo_Cupertino
Cost $200

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

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://lighthousecreativitylab.org/professional-development/

Cost FREE to OUSD and title 1

Stipend:

Spend two days planning a K-12 making project or unit of your choice and leave with a project example made by you. While being immersed in a making environment, you will make and develop, test and troubleshoot the making curriculum or project of your choice for your K-12 classroom or school.

GEMS: Ocean Sciences Sequence for Grades 6-8

For Grades: 6th;7th;8th

Cost $345 (including lunch)

Stipend:

Funded by NOAA, the Ocean Sciences Curriculum Sequences are in-depth, kit-based curriculum units that deliver rich science content correlated to the Next Generation Science Standards (NGSS), with an emphasis on the Practices of Science as called for in NGSS and the Framework for Science Education K–12, and significant overlap with the Common Core State Standards for English Language Arts. The curriculum provides numerous opportunities for students to engage in investigations and make evidence-based explanations. They are designed in accordance with the latest research on learning and were classroom-tested by teachers across the United States in a wide variety of settings.

Camping at the Presidio Training

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.parksconservancy.org/learn/educators/professional-development/cap-leadership-training.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.

STEM "mini-institute

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.chabotspace.org

Cost details coming soon

Stipend:

Save the Date – August 15, 2014 for the Chabot Space & Science Center Professional Development Mini-Institute. Chabot will be hosting numerous STEM focused workshops throughout the day for K-12 teachers to support teaching STEM, Common Core and NGSS. Participants will also learn about the many programs and resources that Chabot has to offer.

Teambuilding for Kids

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.raft.net/workshops/in-house

Cost $20 for members; $40 for non-members

Stipend:

Games can promote learning in the classroom, as well as cooperative learning on the playground. This collection of games and mixers is designed to connect students across diverse backgrounds, promote communication and enrich the classroom culture. Many of the concepts will also augment existing teaching techniques. Variations of these games are appropriate for students of all ages. The instructor will have his books and DVDs available for sale during the workshop.
Sowing the Seeds of Wonder: Discovering the Garden in Early Childhood -  Life Lab Science Program

For Grades: K;1st;PK

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.

September 2014

Camping at the Presidio Training - Golden Gate National Parks Conservancy

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

http://www.parksconservancy.org/learn/educators/camping-at-the-presidio/

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.

Plant It, Grow It, Eat It - Enhancing Nutrition Education - reg by 9/5/14 - Life Lab Science Program

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

http://www.lifelab.org

Cost  $150

Stipend:

Make the connection from seed to table in this fun and delicious one-day workshop. Explore ways to teach nutrition through gardening, harvesting and meal preparation in Life Lab’s Chez Panisse Garden Kitchen. You’ll learn how effective ways to encourage kids grades 2-8 to eat more fruits and vegetables as part of a healthy lifestyle. Participants will sample the bounty of the farm and harvest to prepare a nutritious lunch. You’ll receive an activity packet with gardening and nutrition lessons, recipes, and garden kitchen resources.

2nd Annual California STEM Conference 2014 (San Diego) - California Department of Education

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

http://cdefoundation.org/about-the-symposium/

Cost  $280 early bird registration

Stipend:

This Symposium will bring together 3000 teachers, administrators, students, higher education representatives, program providers, philanthropic representatives and industry representatives to engage them in STEM education by providing strategies and resources for program implementation. The Symposium will have a special focus on increasing and supporting the participation of women and girls—as well as other underrepresented groups—in STEM fields. It will also highlight leaders in classroom innovation from across the state and attract student teams to showcase critical thinking, problem solving, and teamwork.

Free Educators’ Open House and Fair - Lindsay Wildlife Museum

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

http://wildlife-museum.org/

Cost  FREE

Stipend:

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Printed: 5/14/2014  Professional Development
Tuesday, September 30, 3:30 - 6:00 pm - Free Educators’ Open House and Fair featuring STEAM resources for your classroom. Meet other organizations from the area that offer classroom presentations, field trip experiences, and resources. Bring your calendar to book a field trip or schedule a program. The afternoon includes food and wine, meeting other like-minded educators, exploring Lindsay Wildlife Museum and our live animal ambassadors. Shop in the Lindsay Wildlife Museum store and receive 15% discount. Invite your friends and colleagues. No reservations are needed. For more information, contact Melissa Strongman, director of education, at mstrongman@wildlife-museum.org or 925-627-2914.
Professional Development

By Arrangement at Your School or Available Ongoing on Your Own

By Arrangement

Your Own Design

Banana Slug String Band

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.

Wonders of Water Teacher Orientation

Bay Model Visitor Center

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.

Teach the Teachers - How to use the Bay Model with Your Class

Bay Model Visitor Center

http://www.spn.usace.army.mil/Missions/Recreation/BayModelVisitorCenter.aspx

Your personal tour is available year round to any teacher or group of teachers that want to conduct their own guided tours of the Bay Model for their students. Ranger Linda M. Holm will personally meet educators either on a one-on-one basis or as a group at their convenience. Teachers can call our main number: 415-289-3007 to set up an appointment to meet with Ranger Linda. Hours: Tuesday through Saturday 9AM - 1:30 PM.

* Educators will get a guided tour of the facility as if I was conducting an educational program for their class. It will be grade and subject specific based on the teacher’s requests. They can use the Bay Model Activity Tour, located on our website as a template
* Teachers will learn how to provide comprehensive educational programs using the art of interpretation to convey their message.
* Programs are designed to foster critical thinking.
* Teachers are not locked into the 10 AM or 1 PM ranger guided tour program hours and can conduct programs at a time more convenient for them between the hours of 9 AM and 4 PM. Teachers are still obligated to call the Bay Model and let us know the time of their arrival and with the number of students and chaperons. Self guided tour must not conflict with scheduled ranger led tours.
* Teachers can use the facility as an extension of their classrooms. There is no limit on how often a teacher can use the facility for learning purposes.
* Rangers will be available to answer any questions that might arise.

Project WILD and Project Aquatic Wild

CA Dept of Fish and Wildlife, Central Coast Region

http://www.dfg.ca.gov/

Project WILD is a wildlife-based conservation and environmental education program that fosters responsible actions toward wildlife and related natural resources. Project WILD Activity Guides provide curriculum especially designed for educators of kindergarten through high school youth. Professional development training and educational materials are available through workshop participation.

Project WILD core materials include three activity guides for educators: the Project WILD K-12 Activity Guide highlights wildlife and habitat, Project WILD Aquatic Education Activity Guide emphasizes aquatic wildlife and aquatic ecosystems, Science and Civics: Sustaining Wildlife for grade 9-12 involves inquiry investigations and decisions affecting people, wildlife and their shared habitat.

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

Printed: 2/13/2014

Bring Professional Development to your School
Professional Development at your School

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

Whole School Science Professional Development

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)

Educator Workshops

Friends of the Estuary

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.

Environmental Education Services

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

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

Common Core and FOSS: Building ELA Skills through Active Science

How is your school preparing to implement Common Core State Standards for English Language Arts? Have you considered building reading, writing, speaking, and listening skills through active science? Science is an ideal content area for students to develop the skills needed to meet the Common Core State Standards. The FOSS Leadership Team from the Lawrence Hall of Science can help you build your students' abilities to use language effectively. Our teacher workshops are designed to provide experiences modeling the overlap between science and the ELA Common Core State Standards. FOSS workshops focus on how active science provides a rich experience for students to:
- effectively communicate in collaborative discussions.
- acquire and use academic and domain-specific vocabulary to express their thinking.
- write a variety of text, including informative, narrative, and evidence-based arguments.
- read and comprehend informational text, integrating knowledge and ideas.
- conduct research, using a variety of resources and present their knowledge clearly

Brian Campbell 510-664-4747  brcampbell@berkeley.edu  or Joanna Totino 510-643-3478 jtotino@berkeley.edu

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

Printed: 2/13/2014

Bring Professional Development to your School
Customized Workshop
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
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
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
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
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

Teacher Training/Team Building - Physical Sciences
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
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
http://www.stopwaste.org

We’re here to help you find the science resources you’re looking for. Email us at CRS@crscience.org
Printed: 2/13/2014 Bring Professional Development to your School
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 and hands-on classroom materials that support teaching activities from the guide.

Private Workshops

http://www.thewatershedproject.org

The Watershed Project

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!

http://www.tomsnyder.com

Tom Snyder Productions

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

http://botanicalgarden.berkeley.edu/

UC Botanical Garden

Ongoing

Seminars on Science - Online Courses for Educators

http://learn.amnh.org/

American Museum of Natural History

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.

Online Teacher Professional Development

https://www.coursera.org/courses?cats=teacherpd

Coursera offers a wide range of courses designed for teacher professional development.

School of Professional Studies

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

Fresno Pacific School of Professional Studies

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."

Web Based Professional Development


Heinemann's webinar content is developed to help educators meet curricular standards. Live webinars deliver superior PD with no travel costs, and participants interact directly with our authors and consultants on crucial topics to enhance expertise.

* Heinemann's webinars offer a user-friendly, convenient format and the option for educators to gather as a group at school or to participate individually from home.
* Typical webinar series consist of five clock hours of streaming webcast including live discussion with the presenter, video demonstrations, presentation materials, and access to archived recordings.
* CEU credit is awarded for the completion of our webinar series.
* Individual tuition for our author-led and consultant-led webinar series is $219.00 per person. Please call for group pricing discount information.

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

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Bring Professional Development to your School
Edspace
http://education.kqed.org/edspace/
This blog from KQED has posts of great information to take straight to your classroom. Online self-paced tutorials. Lesson ideas and more. Search the blog for the topics of your choice

Free Webinars
http://neon.psu.edu/webinars/
The NASA Educator's Online Network offers webinars for teachers on a variety of science topics and how to bring these concepts into your classroom.

NSTA Professional Development Resources
http://www.nsta.org/pd/
The NSTA Learning Center has articles on science education, webinars (live and archived), lesson plans, books lists and so much more. Some resources are free, others are only available with NSTA membership. Membership is well worth it just to get their monthly journal

Online Courses for Educators in the Sciences
www.scientistteacher.org
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.

Online Professional Development Workshops
http://www.pbslearningmedia.org/
PBS Learning Media offers free online professional development on lots of different educational topics.
Teacher Grants: Specific Deadlines

June 2014

6/1/2014

Student Achievement Grants
The NEA Foundation

http://www.neafoundation.org/pages/nea-student-achievement-grants/

The proposed work should engage students in critical thinking and problem solving that deepen their knowledge of standards-based subject matter. The work should also improve students' habits of inquiry, self-directed learning, and critical reflection. Proposals for work resulting in low-income and minority student success with honors, advanced placement, or other challenging curricula are particularly encouraged.

6/1/2014

Learning & Leadership Grants
The NEA Foundation

http://www.neafoundation.org/pages/learning-leadership-grants/

Grant supports public school teachers, public education support professionals, and/or faculty and staff in public institutions of higher education for one of the following purposes:

- Grants to individuals fund participation in high-quality professional development experiences, such as summer institutes or action research; or
- Grants to groups fund collegial study, including study groups, action research, lesson study, or mentoring experiences for faculty or staff new to an assignment.

6/1/2014

Free Transportation program for Summer Classes
Oakland Zoo

http://www.oaklandzoo.org/Wildlife_Assembly.php

Free Transportation for summer school programs and organizations when the group books a Wildlife Assembly education program at Oakland Zoo. Our Wildlife Assembly program is a 45 minute up close encounter with some of our education program animals. This option is great for large groups and mixed age groups wanting to meet some animals not seen on exhibit at the zoo, as an additional treat to a normal zoo visit. This program is offered Tuesdays, Thursdays, and Fridays starting at 11:00 am and cost $8 per child and $6 per adult. This price also includes your admission into the zoo!

With this option you are free to arrive at normal opening hours to explore, but have a special presentation waiting for your campers as well as a covered space to eat lunch after your program ends. Take the rest of the day to explore on your own using your new knowledge as a guiding tool. This offer's deadline is June 1st and can be redeemed up until August 31st.

6/2/2014

Annie's Grants for Gardens
Annie's Homegrown

http://www.annies.com/school-gardens/grants-for-gardens/

A limited number of small grants to community gardens, school gardens and other educational programs that connect children directly to gardening. Funds can be used to buy gardening tools, seeds or other needed supplies. Focus is on giving to programs that meet the following guidelines:

- **Only to schools and non-profit organizations located within the United States.** Grants are only available to groups that focus on School and Community Gardens or Sustainable Agriculture.
- **Annie’s does not make grants or donations to individuals, athletic teams or events, or health fairs.

6/7/2014

FREE lab supplies - BIO-LINK Depot
City College of San Francisco


10AM-2 PM - Lab equipment give away for middle and high schools. Lots of great equipment, but you need to follow the rules. Don't forget to read their website.

6/15/2014

School Garden Grant
California Fertilizer Foundation

http://www.calfertilizer.org/Grant14.htm

Annually provides 24 grants for $1,200 each to schools throughout California (12 awarded twice a year). At the end of each year, winning schools can re-apply for a progress grant of $1,500 and a free agricultural field trip. Through the garden program, CFF provides direct funding to California schools for garden projects. The gardens provide an opportunity for students, teachers and parents to truly "grow" together.

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Printed: 5/14/2014
June 2014

6/27/2014  Best Buy Community Grants  Best Buy Community Relations
$500-10,000  http://www.bby.com/community-grants/
Community Grants are designed to support local efforts and are reviewed for consideration by Best Buy teams across the United States. The average grant amount is $5000 and will not exceed $10,000.

6/30/2014  Education Grants (Field Trips to Redwoods) Deadline  Save the Redwoods League
$1000-5000  http://www.savetheredwoods.org/what-we-do/study/edgrants_application.php
Funds schools, park cooperating associations, and other qualified nonprofits engaged in quality redwood education. The Education Grants Program was established to foster a deeper understanding of redwood forests through personal visits and educational experiences among a broad, diverse audience.

July 2014

7/1/2014  The Bauder Endowment for the Support of Physics Teaching  American Association of Physics Teachers
$500  http://www.aapt.org/Programs/grants/bauderfund.cfm
Supports activities for AAPT members, such as workshops at the local level, that promote physics education utilizing physics apparatus. Funds can purchase equipment and materials used by participants in the workshop. Does not reimburse indirect or administrative costs.

7/1/2014  Outstanding Achievement in Primary and Secondary Education  Entomological Society of America
$1600  http://entsoc.org/awards/professional/educational
Recognize educators who have gone beyond the traditional teaching methods by using insects as educational tools. One winner will be chosen from among primary teachers (grades K-6) and one from among secondary teachers (grades 7-12). These annual awards are presented at the ESA Annual Meeting. Teachers who win this award must be available to present a lesson plan at a symposium during the ESA Annual Meeting. The recipients will receive:
* A $400 donation to the winner’s school to purchase teaching materials required to expand the use of insects in the teaching curriculum;
* $400 for expenses associated with travel required to present a paper or poster on the use of insects in primary or secondary educational programs at a peer professional venue of their choosing;
* Gratis registration to attend ESA’s Annual Meeting; and $800 paid directly to the winner for expenses for travel, hotel, and other costs to attend the ESA Annual Meeting.

7/1/2014  Teacher Grant  American Chemical Society
$500  http://webapps.acs.org/findawards/detail.jsp?ContentId=CNBP_031001
Recognizing the financial challenges faced by many educational institutions, the California Section Educational Grants Program was created in 1995 as an annual program to award needy schools the funds to help purchase educational materials for the teaching of chemistry, whether these materials be in the form of lab equipment, books or other “paper” materials, electronic teaching aids, or teacher training such as registration fees for summer AP workshops. The funds are not meant to supplement compensation for teachers or payment to students. The annual grant cycle includes announcement of the program in the spring, grant applications due July 1, and awards announced in August for the coming academic year.

August 2014

8/1/2014  Grants For Grades 6 - 12  Toshiba America Foundation
$5000 +  http://www.toshiba.com/taf/612.jsp
Toshiba America Foundation is currently accepting applications from teachers who are passionate about making science and mathematics more engaging for their students. Do you teach 6-12 science or math? Do you have a wish list of instructional equipment that will make learning more exciting for your students?

8/1/2014  American Honda Foundation Grant  American Honda Foundation
$20,000-60,000  http://corporate.honda.com/america/philanthropy.aspx?id=ahf
Supports youth education with a specific focus on the STEM (science, technology, engineering and mathematics) subjects in addition to the environment.

8/1/2014  Field Trip Grants - First Day to apply  Target
May be used to fund trips ranging from visits to art museums and environmental projects to cultural events and civic experiences. Apply on-line. The Earlier you apply in the fall the better

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Printed:  5/14/2014
FREE lab supplies - BIO-LINK Depot
10AM-2 PM - Lab equipment give away for middle and high schools. Lots of great equipment, but you need to follow the rules. Don’t forget to read their website.

September 2014

9/1/2014
Begin Accepting Zoo-to-Community applications
Oakland Zoo
http://www.oaklandzoo.org/Zoo_to_Community.php
Zoo-to-Community applications start acceptance on September 1st, 2014. Oakland Zoo provides discounted and free science education programs through our Zoo-to-Community initiative for underserved students attending Title 1 schools in Alameda County.

9/14/2014
Melinda Gray Ardia Environmental Foundation Grant
Melinda Gray Ardia Environmental Foundation, Ltd.
$1500
http://www.mgaef.org/index.html
Supports curricula that empowers and encourages students to become involved in solving environmental and social problems. Eligible applicants are K-12 educators that wish to develop environmental curricula that integrates field activities and classroom teaching.

9/30/2014
GreenWorks! Grants for Registered PLT GreenSchools!
Project Learning Tree
$3000
http://www.plt.org/applyforagrant
• Applicants must meet all the parameters for traditional GreenWorks! grant funding
• Applicants must be a school (public or private)
• Applicants must be registered on the PLT GreenSchools! website (It’s free!)
• Applicants must have an established Green Team
• Applicants must have completed one of more of the PLT GreenSchools! Investigations
• The proposed project must be based on the findings of one or more of the PLT GreenSchools! Investigations

9/30/2014
Captain Planet Foundation Grant
Captain Planet Foundation
$250-2,500
http://captainplanetfoundation.org/apply-for-grants/
In order to be considered for funding, proposals must:
• Promote understanding of environmental issues
• Focus on hands-on involvement
• Involve children and young adults 6-18 (elementary through high school)
• Promote interaction and cooperation within the group
• Help young people develop planning and problem solving skills
• Include adult supervision
• Commit to follow-up communication with the Foundation (specific requirements are explained once the grant has been awarded)

9/30/2014
Berkeley USD ONLY - Classroom Grants Deadline - approx
Berkeley Public Schools Fund
$100-$5000
http://www.berkeleypublicschoolsfund.org/grants/classroom-grants/
Fall 2013 focus is on Math and Science. Details to be posted on their new website on the first day of school 2013. Classroom Grants are designed to meet the following goals: increase student engagement, motivation, and exposure to new concepts and ideas; bridge the "opportunity gap" to allow all students to reach their full potential through enriched learning environments; strengthen teaching tools and strategies in core academic subjects, including the arts; encourage collaboration and professional development among teachers; increase parent and community involvement in our schools.

9/30/2014
Traditional GreenWorks! Grant
Project Learning Tree
$1000
http://www.plt.org/applyforagrant
• Grants must be completed in one year
• Applicants must have attended a PLT workshop
• The proposed project must involve service-learning
• The proposed project must exemplify student voice
• The proposed project must involve at least one community partner
• The proposed project must secure at least 50% matched funds (in-kind acceptable)

October 2014

We’re here to help you find the science resources you’re looking for. Email us at CRS@crscience.org
Printed: 5/14/2014
Field Trip Grants - Deadline to apply

https://targetfieldtripgrants.target.com/rules.php

May be used to fund trips ranging from visits to art museums and environmental projects to cultural events and civic experiences. Apply on-line. The Earlier you apply in the fall the better.
## Teacher Grants: Rolling or Continuous Deadlines

<table>
<thead>
<tr>
<th>Teacher wishlist</th>
<th>Adopt-A-Classroom Grants</th>
<th>Adopt-A-Classroom</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher wishlist</td>
<td><a href="http://www.adoptaclassroom.org">http://www.adoptaclassroom.org</a></td>
<td>Adopt-A-Classroom</td>
</tr>
<tr>
<td>Adopt a Classroom</td>
<td>Register your public school classroom online. This site pairs you with people who want to give money to your classroom to support your teaching.</td>
<td></td>
</tr>
<tr>
<td>$250</td>
<td>AIAA Classroom Grants</td>
<td>AIAA Foundation</td>
</tr>
<tr>
<td>DEADLINE 30 days before quarterly meetings in JAN, MARCH, JUNE, SEPT.</td>
<td>Funding for materials needed to teach: a. Aerospace Technology; b. Biological and Physical Research; c. Earth Science; d. Human Exploration and Development; e. Space Science</td>
<td></td>
</tr>
<tr>
<td>$2500</td>
<td>Amy Chamberlain Scholarship Fund</td>
<td>Bay Area Wilderness Training</td>
</tr>
<tr>
<td><a href="http://www.bawt.org/programs/funding/scholarships/">http://www.bawt.org/programs/funding/scholarships/</a></td>
<td><a href="http://www.bawt.org/programs/funding/scholarships/">http://www.bawt.org/programs/funding/scholarships/</a></td>
<td>Bay Area Wilderness Training</td>
</tr>
<tr>
<td>Each scholarship provides full tuition to BAWT’s Wilderness Leadership Training (WLT), as well as additional post-course support including site visits by BAWT staff during the 12 months following WLT participation. Must apply one month prior to the class you desire to take.</td>
<td></td>
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<tr>
<td>Discount bus rental rate</td>
<td>Black Tie Community Bus</td>
<td>Black Tie Transportation</td>
</tr>
<tr>
<td>Discount bus rental rate</td>
<td><a href="http://www.blacktietrans.com/fleet-type/community/">http://www.blacktietrans.com/fleet-type/community/</a></td>
<td>Black Tie Transportation</td>
</tr>
<tr>
<td>Bus is offered to non-profit organizations and to schools to transport children ages K-12 for school outings. The bus is available at a discounted rate to those who apply in advance and meet the requirements of the application process. Seating: Grades K-4, 60 passengers (3 adults required) Grades 5-12, 42 passengers (2 adults required) Rates // $75.00 per hr (5 hour min.)</td>
<td></td>
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</tr>
<tr>
<td>$2500</td>
<td>California Casualty Academic Award</td>
<td>California Casualty</td>
</tr>
<tr>
<td>Enter to win $2500 to cover your out of pocket expenses</td>
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<td></td>
</tr>
<tr>
<td>Computer hardware</td>
<td>Classroom Computers</td>
<td>Computers for Learning</td>
</tr>
<tr>
<td>Computer hardware</td>
<td><a href="http://computersforlearning.gov/">http://computersforlearning.gov/</a></td>
<td>Computers for Learning</td>
</tr>
<tr>
<td>Schools register and request equipment on the Computers for Learning web site. Federal agencies match their surplus equipment to schools with those needs. Computers and equipment are not refurbished by the government before being shipped to schools, nor are they covered by warranty.</td>
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</tr>
<tr>
<td>Technology</td>
<td>Digital Wish List</td>
<td>Digital Wish</td>
</tr>
<tr>
<td>Technology</td>
<td><a href="http://www.digitalwish.com/dw/digitalwish/home">http://www.digitalwish.com/dw/digitalwish/home</a></td>
<td>Digital Wish</td>
</tr>
<tr>
<td>Site offers a place for teachers to create a technology wish list. Individuals can then go in to grant these wishes.</td>
<td></td>
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</tr>
<tr>
<td>$100-1000</td>
<td>Classroom Wishlist</td>
<td>DonorsChoose.org</td>
</tr>
<tr>
<td>$100-1000</td>
<td><a href="http://www.donorschoose.org/teachers">http://www.donorschoose.org/teachers</a></td>
<td>DonorsChoose.org</td>
</tr>
<tr>
<td>Teachers describe classroom needs. Contributors decide where they want to put their money. Many corporations including Disney, Chevron, and Horace Mann are now using DonorsChoose.org as the way they give away money to education. How it works: 1. Choose the exact items you need and describe how they'll benefit your students. 2. People, companies, and foundations can help fund your request. 3. Once funded, resources sent directly to your classroom.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$500</td>
<td>Do Something Seed Grants</td>
<td>DoSomething.org</td>
</tr>
<tr>
<td>$500</td>
<td><a href="http://www.dosomething.org/grants/seed-grants">http://www.dosomething.org/grants/seed-grants</a></td>
<td>DoSomething.org</td>
</tr>
</tbody>
</table>

*We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org*
Register your school to take part in the challenge! Get your friends to sign up too. Browse projects ideas for your school to tackle to increase recycling, save energy, promote green agriculture, and more! Report back on your completed projects to be judged by a panel of celebrity and expert judges! Bring the challenge home! You don’t have to just green your school, you can green your home too!

**discounted bus**  
Parks Express Transportation Services  
East Bay Regional Park District  
[http://www.ebparks.org/activities/educators/trips#parkex](http://www.ebparks.org/activities/educators/trips#parkex)  
Discount buses ($110) for fieldtrips to East Bay Regional Parks. Schools must have at least 30% of students in Free or Reduced Lunch Program. 40 passengers minimum. They start making assignments in December for the coming year. Apply ASAP even for programs in fall. Need not have naturalist program pre-arranged. They will help coordinate with naturalist program

**Free Admission**  
Free Admission to CA Title 1 Schools  
Exploratorium  
[http://www.exploratorium.edu/visit/field-trips](http://www.exploratorium.edu/visit/field-trips)  
Sign up Now for field trips during the first year that the Exploratorium is at Pier 15

**$100 to $500**  
Funds for Outdoor Field Trips  
Field Trip Foundation  
Grants for outdoor environmental education field trips for grades 3 - 5. Grants are provided to teachers in Bay Area schools with a majority of low-income students. Grants range from $100 to $500, but exceptional grants may be approved up to $1000. Grants with a lower cost per student will be more favorably evaluated. Can be used for program or bus fees.

**Varies**  
Education Grant Database  
GrantWrangler  
Check out this website for all types of grants for classrooms

**$500 in materials**  
Classroom Wishlist  
iLoveSchools.com  
Register your school with I Love Schools.com. The site matches you up with people wanting to donate equipment to your school

**$1000-$5000**  
Education Grants  
Kinder Morgan Foundation  
Due the 10th of each month. Academic programs, including tutoring; Arts education programs; Environmental education programs that work with local schools and meet curriculum standards

**$500-$5000**  
The LEGO Children’s Fund  
LEGO Children's Fund  
Areas of support: 1) Early childhood education and development that is directly related to creativity. 2) Technology and communication projects that advance learning opportunities. Awarded quarterly. Can NOT use funds to buy LEGOS.

**up to $150**  
Classroom Grant - begin accepting applications  
Pets in the Classroom  
Pets in the Classroom grants are offered to Pre-Kindergarten through Eighth grade classes only in both public and private schools. These grants are intended to support pets or aquariums in the classroom for the purposes of teaching children to bond with and care for their pets responsibly. The welfare of the small animals involved is of paramount importance. These grants must not be used for the purposes of research or experiments of any kind. There are five (5) grant types, including: 1- Rebate Grants in the amounts of $100 (for small animal or birds) or $150 (for reptiles or fish) for purchases at any pet store; 2- the Sustaining Grant in the amount of $50 to maintain an existing classroom pet; 3- Petco Grant, which provides coupons for the live animal, pet habitat and supplies purchased at Petco; and 4- a Petsmart Grant, which provides coupons for the live animal, pet habitat and supplies purchased at Petsmart. 5- Pet Supermarket Grant;which provides coupons for live animal and pet supplies purchased at Pet Supermarket.

**$1000 for fieldtrips**  
Excursion Grant - Alameda County  
Philanthropic Ventures Foundation  
Check back often to see if funding renewed. Grants of up to $1,000 to fund classroom excursions; funds can cover the cost of transportation, admission fees and food. Public school teachers for grades K-5, Alameda and San Mateo counties can apply for grant funding.

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<table>
<thead>
<tr>
<th>Grant Type</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>up to $2500</td>
<td><strong>After School Grant Program - Oakland Schools</strong></td>
</tr>
<tr>
<td></td>
<td>Philanthropic Ventures Foundation</td>
</tr>
<tr>
<td></td>
<td><a href="http://venturesfoundation.org/programs/teacher-grants">http://venturesfoundation.org/programs/teacher-grants</a></td>
</tr>
<tr>
<td></td>
<td>Who: Alum Rock, East Side Union High, Franklin-McKinley, Oakland and Redwood City school district teachers grades 6-12th are eligible to apply. There is a limit of two grants per school each school year. Teachers are encouraged to come up with new ideas for after school programs. Grants up to $2,500 are available to cover costs of equipment, teacher time, and/or refreshments.</td>
</tr>
<tr>
<td>free science boards and more</td>
<td><strong>Science Project Support Application</strong></td>
</tr>
<tr>
<td></td>
<td>Synopsys Outreach Foundation</td>
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<td><a href="http://www.outreach-foundation.org/cgi-bin/other_cc1.cgi?c=Alameda">http://www.outreach-foundation.org/cgi-bin/other_cc1.cgi?c=Alameda</a></td>
</tr>
<tr>
<td></td>
<td>In order to assist as many teachers at as many schools as possible the foundation is limiting requests for science project poster boards to a maximum of 100 boards per teacher and a maximum of 300 boards per school. Each teacher may request: up to 100 science project poster boards (maximum 300 per school), up to 300 round, adhesive &quot;I Did It&quot; stickers, up to 5 &quot;science-o-rama&quot; event posters</td>
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<tr>
<td>Varies</td>
<td><strong>Grants for Teachers</strong></td>
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<td></td>
<td>Teacher Planet</td>
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<td></td>
<td><a href="http://grants4teachers.com/">http://grants4teachers.com/</a></td>
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<tr>
<td></td>
<td>Database of education grants of all types and amounts.</td>
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<tr>
<td>$5000 of less</td>
<td><strong>Mini-Grants For Grades 6 - 12</strong></td>
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<td></td>
<td>Toshiba America Foundation</td>
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<td><a href="http://www.toshiba.com/taf/612.jsp">http://www.toshiba.com/taf/612.jsp</a></td>
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<td>Wanted: Classroom Innovators! Toshiba America Foundation is accepting applications from teachers who are passionate about making science and mathematics more engaging for their students. Do you have a wish list of instructional equipment that will make learning more exciting for your students?</td>
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<td>$5000</td>
<td><strong>Education Grants</strong></td>
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<td>Wells Fargo Foundation</td>
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<td></td>
<td><a href="https://www.wellsfargo.com/about/charitable/ca_guidelines">https://www.wellsfargo.com/about/charitable/ca_guidelines</a></td>
</tr>
<tr>
<td></td>
<td>Rolling Deadline. San Francisco Bay Region accepts grant proposals from January through October 31st Supports educational programs promoting academic achievement by low- to moderate-income students in the key areas of: Math and science; Literacy; History of the American West</td>
</tr>
</tbody>
</table>

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Printed: 2/3/2014   Teacher Grants - Rolling Deadlines
Temporary & New Science Exhibits Around the Bay Area

Bay Area Discovery Museum

Broken? Fix it! Getting Inside Repairs  
http://www.baykidsmuseum.org/about/press/special-exhibitions/  
(May 24 - September 8, 2014) Broken? Fix it invites visitors to embrace the broken as they discover the joy and satisfaction in making things whole or usable again. The exhibit encourages children and adults to learn together to diagnose problems, then roll up their sleeves and get inside the repair process. Visitors try their hand at a variety of fix-it activities, including figuring out why the car thumps and clangs, getting a bike rolling again, repairing a shoe and fixing a toy train track. The exhibit looks at cultural “fixes” from around the world, and explores the emotional consequences of breaks as well. Videos are embedded throughout; highlighting the repair process and the people who “embrace the broken.” Broken? Fix it! builds creative thinking and problem solving skills and fosters cooperation and teamwork as families and groups solve broken things together.

Broken? Fix it!  
Bay Area Discovery Museum, Sausalito  
http://www.baykidsmuseum.org/about/press/special-exhibitions/  
(May 24 - September 8, 2014) Broken? Fix it invites visitors to embrace the broken as they discover the joy and satisfaction in making things whole or usable again. The exhibit encourages children and adults to learn together to diagnose problems, then roll up their sleeves and get inside the repair process. Visitors try their hand at a variety of fix-it activities, including figuring out why the car thumps and clangs, getting a bike rolling again, repairing a shoe and fixing a toy train track. The exhibit looks at cultural “fixes” from around the world, and explores the emotional consequences of breaks as well. Videos are embedded throughout; highlighting the repair process and the people who “embrace the broken.” Broken? Fix it! builds creative thinking and problem solving skills and fosters cooperation and teamwork as families and groups solve broken things together.

Bay Model Visitor Center

Stitched Together – Art Exhibit  
(May 6 - June 8, 2014) The Muir Beach quilters meet weekly. They make quilts to be raffled for charity, to be displayed and sold at an annual Art and Craft Fair and other venues, and for the joy of making quilts together. Enjoy the show!

Stitched Together – Art Exhibit  
Bay Model Visitor Center, Sausalito  
(May 6 - June 8, 2014) The Muir Beach quilters meet weekly. They make quilts to be raffled for charity, to be displayed and sold at an annual Art and Craft Fair and other venues, and for the joy of making quilts together. Enjoy the show!

Summer Paintings – Art Exhibit  
(June 10 - July 13, 2014) Sausalito painter, Muriel Schmalberg Ullman, paints on location and will be showing mostly watercolors and a few acrylics of the shimmering sun drenched views of everyday life in France, the Hamptons and the Bay Area. Favorite subjects are farmers markets, beaches, gardens, village and cafe views, flowers and bicycles. Ms. Ullman has a B.A. & M.A. in Art Education from Hunter College in NYC. In 1980 she decided to just paint and has been doing so ever since.

Summer Paintings – Art Exhibit  
Bay Model Visitor Center, Sausalito  
(June 10 - July 13, 2014) Sausalito painter, Muriel Schmalberg Ullman, paints on location and will be showing mostly watercolors and a few acrylics of the shimmering sun drenched views of everyday life in France, the Hamptons and the Bay Area. Favorite subjects are farmers markets, beaches, gardens, village and cafe views, flowers and bicycles. Ms. Ullman has a B.A. & M.A. in Art Education from Hunter College in NYC. In 1980 she decided to just paint and has been doing so ever since.

Big Break Regional Shoreline

New Exhibits Open in Visitor Center  
http://www ebparks.org/parks/big_break  
New exhibits are being installed 5/4-7/1, during which time the Big Break Visitor Center at the Delta will be closed, except for our science room and previously scheduled programs. Come see us after the 4th of July to see the new exhibits and explore the park!

New Exhibits Open in Visitor Center  
Big Break Regional Shoreline, Oakley  
http://www ebparks.org/parks/big_break  
New exhibits are being installed 5/4-7/1, during which time the Big Break Visitor Center at the Delta will be closed, except for our science room and previously scheduled programs. Come see us after the 4th of July to see the new exhibits and explore the park!

California Academy of Sciences

Dark Universe - Planetarium Show  
http://www.calacademy.org  
(January 31-October 9, 2014) Playing daily in Morrison Planetarium. Seats in the 11:30am show available for middle and high school students. Educator Guide available! An exhilarating voyage through the known and unknown. Dark Universe plunges audiences into two of today’s biggest cosmic mysteries—dark matter and dark energy—and the scientific discoveries that led up to them. Narrated by astrophysicist Neil deGrasse Tyson, this immersive planetarium show features exquisite renderings of enigmatic cosmic phenomena, seminal scientific instruments, and spectacular scenes in deep space. Hurtle through Jupiter’s atmosphere, sail out to the far reaches of space, and be there for the birth of our own galaxy while exploring how our understanding of the Universe has evolved over time. Celebrate what we don’t yet know by confronting the invisible. 95% of the cosmos that scientists continue to grapple with, but which may in fact govern how the Universe behaves. Developed by the American Museum of Natural History (www.amnh.org), in collaboration with the California Academy of Sciences and GOTO Inc.

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California Academy of Sciences, San Francisco  
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Skulls
http://www.calacademy.org/newsroom/releases/2013/skulls.php
(Open May 16-November 30, 2014) Every skull tells a story. As unique as a thumbprint, skulls act as roadmaps in the scientific quest to understand how vertebrate animals live, die, and ultimately, evolve. In this new exhibit at the California Academy of Sciences, explore the science of skulls—from teeth and jaws that allow animals to hunt and consume food, to eye sockets that support advanced vision to escape predators. Walk along a wallscape of sea lion skulls, watch a live colony of dermestid beetles demonstrate just why they're known as “bone cleaners,” and discover how scientists use the Academy’s collection of skulls to uncover evolutionary clues about our natural world. Skulls is generously supported by Lakeside Foundation.

Children's Discovery Museum of San Jose
San Jose

Storyland
Exhibit Opens May 17th - In this highly immersing and engaging exhibition, families discover the joy and power of reading at any age. Young visitors will step into the world of favorite storybooks including The Snowy Day, Chicka Chicka Boom Boom, Abuela, If You Give a Mouse a Cookie, and more. Irresistable exhibits set the foundation for literacy by encouraging children to love books, learn words, tell stories, read everything, know letters, and hear sounds.

Endangered Species Day
San Francisco

Endangered Species Day - May 16, 2014
www.endangeredspeciesday.org
Celebrate Endangered Species Day May 16th, 2014. Endangered Species Day is an opportunity for people of all ages to learn about the importance of protecting endangered species and everyday actions they can take to help protect them.

Fine Arts Museums of San Francisco
San Francisco

The Bay Bridge: A Work in Progress, 1933–1936
http://deyoung.famsf.org/deyoung/exhibitions/bay-bridge-work-progress-1933-1936
(February 1, 2014 - June 8, 2014) - Celebrating the completion of the new eastern span of the San Francisco–Oakland Bay Bridge, this exhibition presents a newly acquired group of photographs by Peter Stackpole (1913–1997) documenting the bridge’s original construction in the 1930s—the first works by this important Bay Area photographer to enter the Museums’ collection. Scaling the dizzying heights of the unfinished structure over the course of three intense years, this young photographer moved freely among the construction workers, telling their story of death-defying labor in a series of striking photographs that record one of the most ambitious public works projects in California history. In the midst of the Great Depression, many artists were drawn to the spectacular site, inspired by the bridge’s modern engineering, to capture its bold industrial forms and commemorate the heroism of the American workforce. This exhibition juxtaposes Stackpole’s photographs with prints and drawings of the Bay Bridge construction by his contemporaries, many of whom earned their living under the auspices of San Francisco’s Federal Art Project.

Hayward Area Historical Society
Hayward

Center for History & Culture Grand Opening
http://www.haywardareahistory.org/
Grand Opening festivities on Saturday, June 28, 2014! The new HAHS Center for History & Culture will welcome visitors to an expansive 43,000 square foot, three level facility. The history gallery, Your Story, will feature the narratives of people and cultures that comprise the Hayward area. A children’s interactive play space, titled Our Town, will give families with young children a place to explore history with re-creations of Hayward’s Hotel and the historic Hunt’s Cannery. Archives and Research will provide students and scholars the opportunity to access the recently acquired Oakland Tribune Clipping Files, Pete Stark Congressional Papers, and much more with archivists available to answer questions and assist with any requests. Environmentally-secure Collections Storage will enable the continued acquisition of artifacts that represent our shared past. The Community Gallery will offer a space for innovative programming and to partner with local organizations to host meetings, prototype displays and to rent for events. Added amenities will include a museum store and café.

Helix
Los Altos

Loomalites
http://helixlosaltos.org/upcoming-programs/march-time/loomalites/

We're here to help you find the science resources you're looking for. Email us at CRS@csrcience.org
Printed: 5/14/2014
Temporary Exhibits
Mid March through May: Romy Randev of Loomalites will install his most recent piece, Penumbra. Penumbra is an interactive installation that responds to movement in its environment. Without any human interaction, Penumbra is disguised as a decorative glass wall. However, each colored glass tile illuminates individually as sensors that respond to movements control LEDs behind the glass. Romy will be on site at Helix to talk about his work and lead workshops to reveal its inner workings. More details coming soon.

Lawrence Hall of Science  Berkeley

Xtreme BUGS
http://www.lawrencehallofscience.org/visit/exhibits/featured/xtreme_bugs
(February 1 through September 1) — Xtreme BUGS are marching, flying, and crawling into the Hall! Get ready to encounter these massive, moving, and buzzing insect and arthropod models. They're Larger Than Life! Explore the fascinating world of bugs on an extreme scale to understand why, even though they're small, bugs play a critical role in our environment, culture, and the global economy.

Monterey Bay Aquarium  Monterey

Tentacles: The Astounding Lives of Octopuses, Squid and Cuttlefishes
http://www.montereybayaquarium.org/animals-and-experiences/exhibits/tentacles
Journey to a world of undersea magicians, masters of disguise and quick-change artists. Our special exhibition is the largest, most diverse living exhibit ever created to showcase these amazing animals. You won't believe your eyes.

Oakland Museum of California  Oakland

Bay Motion: Capturing San Francisco Bay on Film
http://museumca.org/natural-sciences
(November 9, 2013–June 29, 2014) This unique exhibition of film and video from Prelinger Archives—a collection of over 60,000 "ephemeral" (advertising, educational, industrial, and amateur) films—explores how the San Francisco Bay and the surrounding region was captured by amateur, professional and industrial camera people. Bay Motion: Capturing the San Francisco Bay on Film complements the major exhibition Above and Below: Stories From Our Changing Bay, exploring how the San Francisco Bay has been shaped by humans and natural forces over time. On view in the Gallery of California Art, this multiple-screen installation presents a rich and often surprising selection of archival images, many long unseen, choreographed to provide an immersive and entertaining story of the Bay from the beginning of cinema through the 1970s.

A Cinematic Study of Fog in San Francisco
http://museumca.org/natural-sciences
(November 9, 2013–June 29, 2014) Acclaimed filmmaker Sam Green and cinematographer Andy Black present a video work in OMCA's Gallery of California Art based on their ongoing investigation of fog—a remarkable weather phenomenon that profoundly characterizes the San Francisco Bay. Known for their work together on the Academy Award-nominated film The Weather Underground and other pioneering, experimental documentary features, Green and Black showcase a visually compelling experience of fog and the rich feelings it evokes. At once sublime, quirky, and deeply existential, A Cinematic Study of Fog in San Francisco heightens our awareness of our environment and highlights how the complex systems of wind, air, and water around us engage the life of our minds and stir emotions. A Cinematic Study of Fog in San Francisco is presented in partnership with the Exploratorium's Bay Observatory and Cinema Arts Program.

Save the Frogs  Berkeley

SAVE THE FROGS! Education Center
www.savethefrogs.com/berkeley
Opening in February 2014, the SAVE THE FROGS! Education Center will serve as a space to hold educational presentations, classes and workshops. SAVE THE FROGS! is the world’s leading amphibian conservation organization whose mission is to protect amphibian populations and to promote a society that respects and appreciates nature and wildlife. The SAVE THE FROGS! Education Center will be located at 2524 San Pablo Avenue, Berkeley, CA 94702.

SF Botanical Garden & Strybing Arboretum  San Francisco

Art Exhibit: Etchings of Eden: Plants from California's Wild and Cultivated Gardens
http://www.sfbotanicalgarden.org/library/art-exhibit.html
(May – August, 2014) Etchings of Eden: Plants from California's Wild and Cultivated Gardens by Stephanie Martin. The remarkable and rigorous art of etching will be featured in the exhibition Etchings of Eden: Plants from California's Wild and Cultivated Gardens by Stephanie Martin. Martin's intaglio etchings depict some of the state's most exquisite native and cultivated flora – their lovely architecture and design rendered in fine detail.

The Tech Museum of Innovation

REBOOT: music

http://www.thetech.org/plan-your-visit/special-exhibitions

(Through Sunday August 17) Unleash your inner music-maker at The Tech’s new exhibition, here for a limited engagement March 7 – August 17, 2014. Explore what it means to make music in the digital age. Interact with unexpected musical interfaces and visualizations of sound that enable you to create and inspire