Science teaching and learning is on the upswing in most of the 130+ schools CRS serves, with more young students having increasing opportunities to explore the mysteries of caterpillars, solar energy, magnets, and much more.

Each year CRS encourages teachers to “up their game” by meeting the best practices set forth in our Science Super Star Challenge. We are delighted to congratulate and recognize this year’s nearly 100 honorees at 23 schools for Excellence in Elementary Science Teaching.

These teachers led hands-on science investigations that embodied the practices of science and engineering. They also took field trips or had in-class science presentations and participated in professional development and planning to connect science across the curriculum in their classrooms.

Congratulations! (Full list of this year’s honorees below, and details at: http://www.crscience.org/educator/SSS2015 )

Thanks to generous contributions from partner organizations and publishers, we will be delivering a wide range of recognition prizes to these teachers and schools which are serving as models for effective integration of science teaching and learning into their elementary programs. We will be giving every student in every winning classroom a science-themed book of their very own – that’s over 3,000 students this year! And, teachers will receive classroom prizes ranging from book sets, science teaching materials, field trips, museum or zoo admissions, microscopes, and more. (See donor list on page 4.)

In addition, several schools earned the coveted “whole school” recognition, which will bring them whole school assembly presentations or visits from scientist teams from Clorox or Bayer.
**What do Robots, Owls, Space, and Donuts Have in Common?**

**CRS Spring Field Trip for Teachers & Resource Fair**

On a sunny Saturday morning in March, Chabot Space and Science Center was bustling with activity as representatives from 21 partner organizations greeted teachers who arrived for the Science Education Resource Fair that was part of our spring Field Trip for Teachers.

During a special teacher-only time, attendees were able to nibble on donuts and chat with science experts from a range of museums, outdoor education, professional development, and other organizations about the programs and services they offer for students and teachers.

Teachers learned about animals from Lindsay Wildlife Museum, the Oakland Zoo, Sulphur Creek Nature Center, and the Natural History Museums of UC Berkeley. They explored space with Chabot Space and Science Center and the Astronomical Society of the Pacific. And, they magnified their vision with a nifty iphone CellScope developed by a CRS BASIS volunteer.

Other organizations on hand included: California Academy of Sciences, Marine Science Institute, CREEC, Point Bonita YMCA, East Bay Regional Parks, CSU East Bay, Promoting Energy Action & Knowledge, California Coastal Commission, Oakland Museum of California, the Exploratorium, and KQED Learning Media.

A highlight of the day was a lively talk by the amazing and prolific children's science author Jon Scieszka (*Math Verse, Science Curse, The True Story of the Three Little Pigs,* and the *Frank Einstein* book series). Jon shared about his adventures and love for all things science and nerdy as a kid, and about the winding process that led him from pre-med studies, to classroom teaching, to writing science books for kids. Attendees also received a free preview copy of the newest science and engineering themed book.

Chabot Space and Science Center wowed the attendees with some amazing fire demonstrations, and shared about the many programs and services they offer to bring science support to schools and teachers.

After a tasty light lunch, teachers were free to continue to explore the museum exhibits and public programs at their leisure. Many teachers walked away with prizes including digital cameras, museum passes, and even free field trips and school programs!

Thank you to our amazing partner organizations, and especially our host Chabot Space & Science Center!

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**Paper airplanes, Jelly Beans, and Dancing Oobleck, all in the Name of Science**

This semester, 7th grade classrooms at King Middle School in Berkeley were once again bustling with unconventional activities as students donned noseclips or blindfolds to taste foods such as yogurt or candy, or worked with mentors to test metal-salt solutions for flammability, or sent paper airplanes or mini cars zipping along. It was all part of the innovative Be a Scientist pilot program, developed with UC Berkeley Professor Mary Wildermuth, in which Cal grad students and post docs guided each 7th grader through the process of conducting their own scientific investigation.

For six weeks, 37 enthusiastic Cal mentors from a range of science and engineering disciplines came to King to meet with small groups of 7th graders, helping each student to successfully navigate each step of a scientific investigation on a self-selected topic. This was the second semester of the pilot year for the program. Over the course of the 2014-15 school year, a total of 64 Cal mentors worked with more than 300 King 7th grade students.

The volunteers exceeded our expectations, staying after class to talk with teachers and students, taking time to purchase supplies or bring them from their own labs, and testing experiments outside of class to make sure they were feasible and safe!

**Spring 2015 mentors:** Claire Kunkle, Jordan Axelosn, Sarah King, Allegra Liberman – Martin, Erika Warrick, Nicholas Esker, Carrie Levine, Amy Tresenrider, Ben Adler, John Canty, Mark Pavlin, Nicholas Brickner, Yongling Yao, Maria Tonione, Leah Rubin Shen, Alex McInturff, Allegra Mayer, Ben Ricca, David Garfield, Despina Lympopoulou, Elena Kassianidou, Emilia Esposito, Kevin Pollock, Jessica Nichols, Yuxin Zhang, Erin Brandt, Esma Redouane, Han Teng Wong, Kevin Ding, Veronica Huang, Rachel Woods-Robinson, Rebecca Triano, Riva Bruenn, Tess Scavuzzo-Dugan, Yeonbae Lee, Katie Pfeiffer
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!

On May 5, join with thousands of community minded people in the East Bay by making your online gift to CRS through the East Bay Gives campaign. For every gift received, CRS will be entered in a special raffle for a chance at additional funds, meeting space, and other prizes!

Please help CRS keep exciting science and engineering learning happening in local elementary schools!

In the words of one of our teachers:
“Teaching science is about helping students understand how the world around them works. From what happens when you make pancakes to why you need sunlight to grow a garden, science helps students make sense of their lived experience and exposes them to life beyond their own community. CRS is such a valuable resource – especially their BASIS program which brings real-life scientists into public school classrooms like mine to "do science" with students. The hands-on lessons that they tailor to the needs of each classroom allowed my students to make sense of some difficult science concepts we've been studying this year.”

www.crscience.org/events/SpringGiving

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 teacher, please tell us their name, school and address:________________________________
Thank you to our 2015 Partners, Donors & Supporters

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Donations from Sept. 2014 through March 2015

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Simon and Schuster
Workman Publishing Co.
Tundra Books

During 2014-15 school year:
CRS served 1,370 teachers at over 135 schools
540+ BASIS volunteers
10,000 students enjoying BASIS in-class lessons

Students use luminol to detect the presence of iron in synthetic blood

Thank you to Patxi’s Pizza, Marina, San Francisco, for their generous donation of over $600 to CRS through their community giving program! And thanks to everyone who joined us at Patxi’s on April 2 to eat delicious pizza to benefit science!
Curiosity, Discovery, Inspiration

Questioning, tinkering, testing, and exploring – elementary children share many traits with scientists and engineers. Somewhere along the education pipeline, too many students fall away from that early, natural inclination to wonder about the world in which they live.

For years, as students progressed to upper grades, science in school was relegated to lists of vocabulary words, following instructions, and getting the “right” answers on experiment results and tests. The magic of discovery replaced by drudgery and a sense of “not being good” at what has been labeled science.

Now, seeds of change sown over several years of hard work are starting to sprout a new kind of science teaching and learning in more classrooms, from Kindergarten through high school. A vision for making science – and engineering – relevant to students’ lives, engaging, and exciting is beginning to take shape.

Scientists and engineers have an important role to play, advocating for strong science education and helping teachers understand and engage their students in rich, meaningful practices of inquiry and communication.

We are delighted to see examples of excellence in science teaching that have been arriving in a steady stream this Spring as teachers send in their Science Super Star Challenge materials. We've seen videos of students earnestly using words like data and evidence as they discuss the meaning of experimental results, science notebook entries describing careful observations of crayfish or moon cycles, and photos of students carefully measuring, mixing, testing.

Teachers are pushing themselves to embrace a transitioning role. Together, we can keep the momentum going, and inspire the next generation of thinkers, problem solvers, and environmental stewards.

Providing Time for Teachers to Learn, Share Together

Chatting over snacks while puzzling over group challenges, teachers have gathered throughout the year in afterschool workshops facilitated by CRS to increase their professional skills in science teaching. In classrooms abuzz with thoughtful conversation, testing new activities, or laughter at shared struggles and successes, teachers explore, learn about new standards, and plan lessons.

Our professional development efforts this year have involved teachers from more than 25 schools. Topics have ranged from specific aspects of the new science standards, elementary engineering, science fair and festivals, to literacy connections and helping students learn how to “talk like scientists.” We customize the session to meet the specific needs of each school or cohort we work with.

In the West Contra Costa Schools District we have teamed up with Lawrence Hall of Science, the Bay Area Science Project, and the Berkeley Natural History Museums for a two year pilot project with a group of elementary schools eager to increase science teaching and learning. The work includes school year workshops, summer institutes with field work alongside graduate student scientists, and of course opportunities for BASIS in class presentations.

In Oakland, teachers from the four West Oakland STEM Corridor elementary schools have gathered monthly to deepen their science teaching practice, and to bring newer teachers up to speed with work that has been building over the past several years. Guest scientists have shared presentations about space, biology and climate, and energy, highlighting connections between classroom and “real world” applications.

In Berkeley, our long-standing professional development support for the teachers who serve as the science specialists for 4th and 5th grade has included explorations of new engineering lessons and ways to engage students in meaningful academic discussions.

Now is the time for principals and lead science teachers to book workshops for the 2015-16 school year!
BASIS Volunteers Inspire Exploration

Each school year, the enthusiastic scientists and engineers who volunteer through the BASIS (Bay Area Scientists in Schools) program bring their passion for exploring questions and tackling challenges directly into local classrooms. Together they make over 450 presentations, sharing with and inspiring over 10,000 young students! To celebrate this impact, CRS hosted a volunteer appreciation event at the Exploratorium in April. Thank you to all our amazing volunteers for another great year!

Bruce Alberts greets BASIS volunteers following his inspiring, well-attended talk at UC Berkeley on the importance of scientists working together with teachers to give young students meaningful science learning experiences. From left: Teresa Barnett, Bruce Alberts, Ashley Gibb, Allison Schwartz, Kate Alfieri, Erin Creel, Elizabeth Ferrer, Rachel Woods-Robinson, Robert Bergman
Program Deadlines

May 2015

5/15/2015  FOSS Summer Trainings -Elementary & Middle School
Grades: K;1st;2nd;3rd;4th;5th

5/15/2015  Fall 2015 Program Application Opens
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.slideranch.org

5/16/2015  Field trip Reservations Open for 2015-2016: first come first served
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/educators/field-trips

5/16/2015  Reservations open for Fall 2015 in school programs
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ebparks.org/activities/educators/Mobile_Education_Outreach

June 2015

6/22/2015  Reg. Deadline - Summer 2015 #2- (July 6-Aug 16) - Online PD
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://learn.amnh.org/

6/24/2015  K-12 Science Institute for Leadership Development & Strategic Planning
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ssec.si.edu/Services/Upcoming-Events#2015SPI

6/30/2015  FREE Summer Salmon Institute for Teachers - Deadline to apply
Grades: 3rd;4th;5th
https://seaturtles.org/events/summer-salmon-institute-professional-development-teachers/

August 2015

8/3/2015  Lottery Deadline for Fall Fieldtrips
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ebparks.org/activities/educators/trips

8/18/2015  Registration - FREE Field trips & training BEGINS - Date Approx
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.nps.gov/goga/forteachers/index.htm

8/20/2015  Field Trip Reservations BEGIN for San Francisco Schools - Date Approx.
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.aquariumofthebay.com/teachers

8/26/2015  Field Trip Reservations BEGIN - date approximate
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.aquariumofthebay.com

September 2015

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

Printed 5/13/2015  Program Deadlines
9/1/2015  Begin Scheduling Fieldtrips for Grade 6-12 Lab Visits
Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.lbl.gov/Education/CSEE/Programs/k-12.html

9/2/2015  Registration for Elementary Field Trips Begins - date approx
Grades: K;1st;2nd;3rd;4th;5th
http://www.farallones.org/education/index.php

9/8/2015  Begin Scheduling 5th Grade BLAZES field trips - date approximate
Grades: 5th
http://www.lbl.gov/Education/CSEE/Programs/k-12.html

9/8/2015  Field Trip Reservations BEGIN - date approximate
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://museumca.org/school-visits

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Printed 5/13/2015
Program Deadlines
Professional Development

May 2015

5/16/2015 - 5/17/2015  Maker Faire - The World's Largest DIY Festival  Maker Faire
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

For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.bawt.org/programs/training/leadership-training/wilderness-leadership-training/
Cost  $195-$700  Stipend:
Apply by April 24. The Wilderness Leadership Training (WLT) is a five day intensive entry-level backpacking course at the heart of BAWT's programs. It is designed to give you the tools you need to lead youth on multi-day backpacking adventures. After completing the course, you will gain full access to our gear libraries. The Wilderness Leadership Training consists of a pre-trip meeting and five days of backpacking in the Sierra Nevada Mountains. Skills learned include: clothing requirements, nutrition, equipment use, map and compass reading, basic wilderness first aid, leadership styles, group dynamics and more. Role playing exercises are used to give participants a realistic backcountry leadership experience. Food and transportation are provided and no previous experience is necessary. Pre-trip meeting: September 8, 2012 Oakland Cost:  Fees for the WLT are on a sliding scale. Please choose the appropriate registration fee by selecting your agency's annual budget (total support and revenue for the past fiscal year.) Please note: training costs for one individual are waived for organizations in exchange for the use of a 15-person passenger van.
$199,999 and under — $195.00
$200,000-$999,999 — $295.00
$1,000,000+ — $395.00
Unaffiliated Individual — $695.00
If financial constraints prohibit you from signing up for the WLT, please consider applying for the full tuition Amy Chamberlain Scholarship Fund.  For more information please contact us at programs@bawt.org.

5/25/2015  Summer 2015 #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  $520  Stipend:
Summer 2015 - Session 1 - May 25 - Jul 5 205

5/27/2015  Monthly Lecture  Northern California Geological Society
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ncgeolsoc.org/meetings.htm#Meetings
Cost  $1 for K-12 Teachers  Stipend:

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Printed:  5/13/2015  Professional Development
DINNER MEETING: 6:00 pm - B. Lynn Ingram, UC Berkeley - The West without Water. The NCGS meets each last Wednesday of the month in Orinda at the Masonic Center, 9 Altarinda Rd. There is a social period at 6:30 p.m. At 7 p.m. a talk (no dinner). Cost is $5 per regular member; $1 per student member, and $1 per K – 12 teachers.

5/29/2015  Tour Middle & High School  
For Grades: 6th;7th;8th;9th;10th;11th;12th  
http://www.eventbrite.com/o/lighthouse-creativity-lab-5950964179  
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.

5/30/2015  FEAST -Fun Exchanges & Activities for Science Teachers  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.chabotspace.org/feast.htm  
Cost  $50.00 annual fee or $10.00 per FEAST session.  
Stipend:  
(9am - 12pm) - Have you been looking for new, exciting, teacher-tested ideas for your science classroom? Perhaps you’ve wanted to connect with others on science resources, safety in the lab or how other teachers manage certain science demonstrations and activities? Or maybe you simply want to network with and build relationships with other local science educators.

5/30/2015  Next Generation Science in the Garden Workshop- reg by 5/16/15  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th  
http://www.lifelab.org/for-educators/workshops/gcworkshops/  
Cost  $150  
Stipend:  
@ UC Davis - 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.

June 2015

6/8/2015  Introduction to the NGSS  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.calacademy.org/events/teacher-workshops  
Cost  $15.00  
Stipend:  
9:00 AM to 3:00 PM - 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.

6/9/2015  Introduction to the NGSS  
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://www.calacademy.org/events/teacher-workshops  
Cost  $15.00  
Stipend:  
9:00 AM to 3:00 PM - 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.

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Printed: 5/13/2015  Professional Development
6/10/2015  Introduction to the NGSS  California Academy of Sciences
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/events/teacher-workshops
Cost  $15.00
Stipend: 
9:00 AM to 3:00 PM - 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.

6/17/2015  Webinar: Plants and Animals - STEM Professional Dev. from WGBH  PBS TeacherLine
For Grades: K;1st;2nd;3rd;4th
http://www.pbs.org/teacherline/catalog/browse/
Cost  $355
Stipend: 
June 17 - July 28, 2015 - A topic immersion course on Teaching Elementary Life Science. Lead your students' examination of how the structures and functions of plants and animals help them meet their needs as living things. Explore strategies for the use of concept maps and effective uses of live plants and animals in the classroom to present plants as producers and animals as consumers. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback.
Graduate credit available for an additional fee.

6/17/2015  Webinar: Teaching Reading in the Content Areas - June 17 - July 28  PBS TeacherLine
For Grades: 3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.pbs.org/teacherline/catalog/browse/
Cost  $355
Stipend: 
June 17 - July 28, 2015 - Master new strategies to address students' reading and learning across grade levels and content areas, explore environments that promote effective learning, and examine necessary skills for reading content material successfully. This course shares essential techniques to support independent reading and learning and identifies opportunities for students to access prior knowledge, set a purpose or target for reading, organize and summarize ideas, take notes, and reflect on their discoveries with satisfaction. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback.
Graduate credit available for an additional fee.

6/17/2015  Webinar: Structure of the Earth System - STEM Professional Development for Teachers  PBS TeacherLine
For Grades: 5th;6th;7th;8th;9th;10th;11th;12th
http://www.pbs.org/teacherline/catalog/browse/
Cost  $355
Stipend: 
June 17 - July 28, 2015 - A topic immersion course on Teaching Earth and Space Science. Develop content knowledge about landform processes, data sets, and mapping tools while you learn effective teaching methodologies, strategies, and tools for use in teaching earth and space science concepts. Uncover the processes that account for the Earth's ever-changing appearance and investigate how the rock cycle connects to these processes. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback.
Graduate credit available for an additional fee.

6/14/2015 - 6/19/2015  2015 Smithsonian Science Education Academies for Teachers  Smithsonian
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ssec.si.edu/Services/Upcoming-Events#sseats
Cost  $2,000
Stipend: includes the cost of materials &

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Printed: 5/13/2015  Professional Development
Biodiversity Academy - This year’s academy on Biodiversity will enable K–12 teachers to interact directly with Smithsonian scientists, curators, and collections on topics ranging from the origins of biodiversity to monitoring, measuring, and conserving it. Participants will meet Smithsonian staff from a variety of sites and be introduced to concepts and activities to bring back to their schools and classrooms.

The SSEATs Academies provide teachers with an opportunity to take part in a week-long professional development course behind-the-scenes at Smithsonian museums and other world class research facilities throughout the greater Washington, DC area. The academies help to bridge the gap between the formal science education programs of the SSEC and the informal science education that exists throughout the Smithsonian, and combine training in science pedagogy with content presented by scientists and researchers who are experts in their fields.

Tuition for each Academy is $2,000 and includes: Course materials and resources; Accommodations for 5 nights (Sunday – Thursday); Daily continental breakfasts, breaks, and lunches (Monday – Friday); Welcome dinner on Sunday and celebratory dinner later in the week; All local travel (excluding airport transit)

6/14/2015 -  6/20/2015
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.

6/24/2015
STEM Institute: Technology for the 21st Century Classroom
For Grades: 3rd;4th;5th;6th;7th;8th
http://www.raft.net/workshops/in-house
Cost $20 for members; $40 for non-members
Stipend:
Technology provides effective methods for students and professionals to collect and share data, facilitate collaborative discussions, and create ongoing libraries of knowledge. The Technology session of the STEM Institute focuses on the use of technology as a means of making instruction efficient and modern. Participants will learn how to use various applications and tools to facilitate student learning, increase teacher productivity, and provide a tech-based means of classroom management. The instructor will also model ways of using technology to facilitate and assess group collaboration and learning experiences. Participants will have exclusive access to the information, tools, and other supporting documents on the session website. Register today!

NGSS Spotlight: Connecting with the Crosscutting Concepts
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/events/teacher-workshops
Cost $35
Stipend: $150 upon completion of all three
Special Note: This is a three day workshop series taking place on June 23, 24, and 25. Each session is from 9:30 am - 3:30 pm. In order to participate, you must be able to attend all three sessions. How should the Crosscutting Concepts of the Next Generation Science Standards (NGSS) be used in the classroom? Are they just a way to categorize activities or can they actually be used to support and deepen student learning? Join us to explore these questions and build your understanding of this NGSS dimension. Get familiar with each Crosscutting Concept and discover what they might look like at different grade levels. Experience sample activities and engage in discussion with colleagues about how to make the best use of this teaching tool. Leave with inspiration and ideas for implementing the Crosscutting Concepts in your classroom.

6/25/2015
STEM Institute: Engineering
For Grades: 3rd;4th;5th;6th;7th;8th
http://www.raft.net/workshops/in-house
Cost $20 for members; $150 for non-members
Stipend:

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

Printed: 5/13/2015
Professional Development
Engineering is a discipline focused on the development of design solutions that solve particular problems or meet specific societal needs. Engineers apply technology, scientific knowledge, and computational thinking in the design process as well as several 21st century competencies such as teamwork, brainstorming, the 4 C's, and communicating ideas and evidence to support the effectiveness of their design solutions. The Engineering session of the STEM Institute focuses on applying the engineering design process and the science and engineering practices of the Next Generation Science Standards. Participants will experience several hands-on activities that emphasize design principles, identification & analysis of material attributes, and building prototypes. Activity formats will include individual, group, and design challenge to provide participants ideas for incorporating the engineering design process in a variety of contexts. The instructors will model and explain activity set-up and procedures that will increase efficiency and help avoid potential pitfalls. Participants will have exclusive access to the information, tools, and other supporting documents on the session website.

### Science Institute 3rd-8th

**For Grades:** 3rd;4th;5th;6th;7th;8th

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

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.

### STEM Institute: Math

**For Grades:** 3rd;4th;5th;6th;7th;8th

**Cost**
- $20 for members; $150 for non-members

STEM Institute: Math

STEM is a common term used to describe a curriculum designed to teach science, technology, engineering, and math with an interdisciplinary approach, allowing students to apply knowledge and practices from all four fields into one blended methodology of problem-solving used in the real world. The Mathematics session of the STEM Institute focuses on important aspects of mathematics education such as engaging activities that teach math content, methods for teaching problem-solving strategies, methods for management in practice-oriented classrooms, and more. Special emphasis is placed on identifying opportunities and methods of applying the mathematics practices in the Common Core Mathematics standards. These practices provide the action-oriented language required of effective STEM instruction. Participants will learn how to conduct and assess the activities presented as well as how to design PBL and challenge-type learning experiences around each activity. The instructor will model ways of using technology to facilitate and assess group collaboration and learning in these experiences. Participants will have exclusive access to the information, lesson plan templates, formative assessment tools, and other supporting documents on the session website.

### Next Generation Science in the Garden Workshop- reg by 6/12/15

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

**Cost**
- $150

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.
6/21/2015 - 6/27/2015  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.

6/25/2015 - 6/27/2015  Teacher Open House  
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
https://www.naturebridge.org/teacher-professional-development-coastal-science-explorations  
Cost  FREE  
Stipend:  $125 Stipend upon completion
Coastal Science Explorations with NOAA and NatureBridge will include three days of outdoor hands-on science learning in Marin County, California. This workshop will be great for your teaching and fun for you! We will explore three beautiful coastal parks – China Camp State Park, Marin Headlands, and Point Reyes National Seashore – to study the San Francisco Estuary and Pacific Ocean. At the end of the workshop, teachers will feel more confident in their ability to incorporate citizen science projects into their classrooms and connect their in-class and outdoor learning. Links to the Next Generation Science Standards will be made throughout the course. Registration is limited to 20 teachers.

6/28/2015  Facilitation Academy: Genes & Traits  
For Grades:  5th;6th;7th;8th;9th;10th;11th;12th  
http://we-mss.weebly.com/facilitation-academy-registration.html  
Cost  $1800  
Stipend:  breakfast and lunch
June 28- July 2 2015 - Making Sense of SCIENCE Facilitation Academies prepare staff developers, district science leaders, and other teacher educators to effectively lead a Making Sense of SCIENCE course for teachers. Facilitation academies provide an opportunity to experience a teacher course first-hand, while also exploring the art of facilitation. $1,800 per person (or $1,500 per person for groups of two or more) includes the professional development along with Making Sense of SCIENCE course materials. Breakfast and lunch each day.

For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th  
http://rootsandshoots.org/onlinecourse  
Cost  FREE  
Stipend:
June 29 - August 2, 2015 - Free and open to everyone, this course will teach participants how to identify and implement a local service-learning campaign using the new Roots & Shoots program model. Complete the course and mentor young people to lead change in their communities by mapping needs, collaborating with stakeholders, and designing practical solutions in the form of campaigns. Connect young people to Dr. Goodall’s message of hope while facilitating a sense of empowerment that comes from helping others!
6/30/2015  Project Learning Tree (PLT) Schoolyard Habitat Training
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://1.usa.gov/1JlCfrH
Cost $25  Stipend:
This 1-day workshop on June 30, 2015 begins at 9 a.m. at Stone Lakes National Wildlife Refuge and then heads to Alice Birney Schoolyard Habitat, ending at 3 p.m. It focuses on activities from the Project Learning Tree curriculum guide that can be done in a schoolyard habitat. This training is recommended for schools that already have a project in the ground, as well as schools in the planning stages. Participants that attend will be eligible to apply for PLT’s Greenworks and Greenschools grants.

July 2015

6/30/2015 - 7/1/2015  Making Sense of Student Work Facilitation Academy
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost $400  Stipend:  breakfast and lunch
The Making Sense of Student Work Facilitation Academy is a 2-day training designed to prepare educators to collaboratively examine student work in a professional learning community. Academy participants will:
* Explore the 5 sessions of the Making Sense of Student Work protocol — Mental Models, Learning Gaps, Next Steps, Analyzing Tasks, and Modifying Tasks
* Examine the qualities of good formative assessment tasks and what these tasks reveal about student thinking
* Engage in learning that promotes evidence-based, sense-making discussions focused on unpacking and evaluating student work
* Discuss and analyze key principles of effective facilitation
$400 per person includes the professional development along with Making Sense of Student Work materials. Breakfast and lunch each day of the academy are also included in the registration fee.

7/2/2015  Systems & Systems Thinking workshop
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://we-mss.weebly.com/teacher-workshop-registration.html
Cost $100  Stipend:
Half-day workshop focuses on two cross-cutting concepts that are integral to the work of scientists — systems thinking and modeling. The Systems & Systems Thinking workshop takes a multi-disciplinary look at biological systems in terms of their boundaries, components, inputs and outputs of matter and energy and interactions, while allowing participants to practice applying five principles of systems thinking.

7/2/2015  Models & Modeling workshop
For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://we-mss.weebly.com/teacher-workshop-registration.html
Cost $100  Stipend:
Half-day workshop focuses on two cross-cutting concepts that are integral to the work of scientists — systems thinking and modeling. In the Models & Modeling workshop, teachers will explore various types of models, from physical and conceptual models to mathematical models and simulations, in the context of our Earth-Sun system and apply the practice of modeling to explain the fascinating question of why we have seasons.

For Grades:  4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.tsgc.utexas.edu/liftoff/
Cost $650 registration fee + travel to Houston, Texas  Stipend:
The 2015 LiftOff Summer Institute is a weeklong professional development training sponsored by NASA's Texas Space Grant Consortium. This year's event will be held June 28-July 3, 2015, at NASA's Johnson Space Center in Houston. The theme is "Living in Freefall" and will focus on the International Space Station and what it's like to live and work in space. Applicants must be U.S. citizens currently employed as classroom teachers of grades 4-12 with at least one year teaching experience prior to the institute. Applications are due April 1, 2015.

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Printed: 5/13/2015  Professional Development
Summer 2015 #2 - (July 7-Aug 17) - Online PD
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://learn.amnh.org/
Cost $520  Stipend: Summer 2015 - Session 2 - Jul 6 - Aug 16, 2015 Climate Change, Earth: Inside and Out, Evolution, In the Field with Spiders, Water, Genetics, Genomics, Genetics, The Diversity of Fishes, Space, Time and Motion

FOSS Training - Transitioning to Next Generation Science Standards
For Grades: K;1st;2nd;3rd;4th;5th https://www.regonline.com/builder/site/Default.aspx?EventID=1666596 Cost $175 or $150/team member  Stipend: FOSS California 2015 Two-Day Summer Institute - 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.
* 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 Monday, July 6, 10:00am - 4:30pm and Tuesday, July 7, 8:30am - 3:30pm Registration deadline: May 15, 2015

NGSS Spotlight: Unlocking Scientific and Engineering Practices
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th http://www.calacademy.org/events/teacher-workshops Cost $35  Stipend: $150 upon completion of all three registrations Special Note: This is a three day workshop series taking place on July 6, 7, and 8. Each session is from 9:30 am - 3:30 pm. In order to participate, you must be able to attend all three sessions. 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!

STEM Institute: Technology - Redwood City
For Grades: K;1st;2nd;PK http://www.raft.net/workshops/in-house Cost $20 for members: $150 for non-members  Stipend: STEM is a common term used to describe a curriculum designed to teach science, technology, engineering, and math with an interdisciplinary approach, allowing students to apply knowledge and practices from all four fields into one blended methodology of problem-solving used in the real world. T-Time is tech time for PreK-2! In this session we will focus on tools specifically for PreK-2 grade. Participants will experience how to use a variety of technology applications and tools to facilitate student learning, increase teacher productivity, and make learning fun for young learners! Special emphasis is placed on identifying opportunities and methods of applying the science, engineering, and mathematics practices in the Next Generation Science Standards, the Common Core Mathematics standards and the new Desired Results Development profile (DRDP) 2015 because the practices provide the action-oriented language required of effective STEM instruction. The instructor will also model ways of using technology to facilitate group collaboration and learning experiences. Participants will have exclusive access to the information, tools, and other supporting documents.

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Printed: 5/13/2015  Professional Development
2015 Summer Teacher Institute Workshops

For Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.exploratorium.edu/education/teacher-institute

Cost  Stipend available

Stipend: $2500

Three-week institutes focusing on physics, middle school–high school general science, life science, and mathematics for teachers new to the Exploratorium Teacher Institute. These institutes support the content and pedagogy described in the National and California State Standards. After completing one of these three-week professional development institutes, you become an alumnus of the Teacher Institute and are eligible to attend alumni institutes and workshops. The library also becomes available for project research.

STEM Institute: Engineering - Redwood City

For Grades: K;1st;2nd;PK
http://www.raft.net/workshops/in-house

Cost  $20 for members; $150 for non-members

STEM is a common term used to describe a curriculum designed to teach science, technology, engineering, and math with an interdisciplinary approach, allowing students to apply knowledge and practices from all four fields into one blended methodology of problem-solving used in the real world. Engineering is a discipline focused on the development of design solutions that solve particular problems or meet specific societal needs. Engineers apply technology, scientific knowledge, and computational thinking in the design process as well as several 21st century competencies such as teamwork, brainstorming, the 4 C’s, and communicating ideas and evidence to support the effectiveness of their design solutions. STEM Institute focuses on applying the engineering design process and the science and engineering practices of the new Desired Results Development profile (DRDP) 2015 and Next Generation Science Standards. Participants will experience several hands-on activities that emphasize design principles, identification & analysis of material attributes, and building prototypes. Come join the fun and be the engineer you have always wanted to be.

Educator Academy in the Amazon Rainforest

For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.amazonworkshops.com/educator-academy.html

Cost  $2240 land only

Stipend:

The July 1-11, 2015 Educator Academy in the Amazon Rainforest of Peru is a cross-curricular professional development workshop for K-12 formal and informal educators. Deadline to apply for one of three $1,000 scholarships is March 1, 2015. Get all the details and download a syllabus and scholarship application

Forestry Institute for Teachers - Shasta 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.

Science Institute K-2 @ Redwood City

For Grades: K;1st;2nd
http://www.raft.net/workshops/in-house

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

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Printed: 5/13/2015
Professional Development
At our Redwood City location the Science Institute is a condensed version of topics, activities, discussions, and strategies covered in San Jose for grades TK-8. 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, animals, plants, environment, 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.

7/11/2015 Teambuilding

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

Cost $20 for members; $35 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.

7/11/2015 STEM Institute: Math - Redwood Coity

For Grades: K;1st;2nd;PK
http://www.raft.net/workshops/in-house

Cost $20 for members; $150 for non-members

Stipend:

STEM is a common term used to describe a curriculum designed to teach science, technology, engineering, and math with an interdisciplinary approach, allowing students to apply knowledge and practices from all four fields into one blended methodology of problem-solving used in the real world. Bored with the basic math routine? Come join the fun in Magical Math. We will learn how to create games and activities to unlock the magic in basic math. Special emphasis is placed on identifying opportunities and methods of applying the mathematics practices in the Common Core Mathematics standards and the new Desired Result Development Profile (DRDP). Participants will learn how to conduct and assess fun and exciting activities that will enhance young student’s experiences while weaving in other areas of learning domains (science, literacy, social emotional, etc.).

7/14/2015 - 7/15/2015 Preparing Your Team for the Next Generation Science Standards

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

Cost $35

Stipend: $100 upon completion of both days

Special Note: This is a two day workshop series taking place on July 14 and 15. Each session is from 9:30 am - 3:30 pm. In order to participate, you must be able to attend both sessions. This workshop is only open to participants who have attended previous NGSS trainings at the Academy. Are you planning to lead professional development for your colleagues around the Next Generation Science Standards (NGSS)? Could you use a thought partner in your planning? Spend some time working with Academy educators and with your peers to prepare to lead your own PD. We will help you craft your workshop goals, adapt Academy activities to your needs, and brainstorm new activities to round out your PD. We will share planning resources, answers to frequently asked questions, and our PD best practices. Join us to benefit from what we’ve learned during two years of running NGSS trainings, and to share your own experiences, successes, and challenges with your peers. Because parts of this workshop will focus on implementing or adapting Academy activities, this pilot workshop is only open to participants who have previously attended our NGSS trainings. We may be able to offer this to a wider audience in future.
Webinar: Plants and Animals - STEM Professional Dev. from WGBH
PBS TeacherLine
For Grades: K;1st;2nd;3rd;4th
http://www.pbs.org/teacherline/catalog/browse/
Cost $355
Stipend:
July 15 - August 25, 2015 - A topic immersion course on Teaching Elementary Life Science. Lead your students' examination of how the structures and functions of plants and animals help them meet their needs as living things. Explore strategies for the use of concept maps and effective uses of live plants and animals in the classroom to present plants as producers and animals as consumers. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback. Graduate credit available for an additional fee.

Webinar: Teaching Reading in the Content Areas
PBS TeacherLine
For Grades: 3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.pbs.org/teacherline/catalog/browse/
Cost $355
Stipend:
July 15 - August 25, 2015 - Master new strategies to address students' reading and learning across grade levels and content areas, explore environments that promote effective learning, and examine necessary skills for reading content material successfully. This course shares essential techniques to support independent reading and learning and identifies opportunities for students to access prior knowledge, set a purpose or target for reading, organize and summarize ideas, take notes, and reflect on their discoveries with satisfaction. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback. Graduate credit available for an additional fee.

Webinar: Structure of the Earth System - STEM Professional Development
PBS TeacherLine
For Grades: 5th;6th;7th;8th;9th;10th;11th;12th
http://www.pbs.org/teacherline/catalog/browse/
Cost $355
Stipend:
July 15 - August 25, 2015 - A topic immersion course on Teaching Earth and Space Science Develop content knowledge about landform processes, data sets, and mapping tools while you learn effective teaching methodologies, strategies, and tools for use in teaching earth and space science concepts. Uncover the processes that account for the Earth's ever-changing appearance and investigate how the rock cycle connects to these processes. Note: This is a facilitated course. Learners submit coursework and participate in asynchronous discussions throughout the course term, and receive graded feedback. Graduate credit available for an additional fee.

2015 Smithsonian Science Education Academies for Teachers
Smithsonian
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ssec.si.edu/Services/Upcoming-Events#sseats
Cost $2,000
Stipend: includes the cost of materials &
Energy's Innovations And Implications Academy
This year, the Energy's Innovations and Implications Academy will explore the history of energy development and use in the United States, current energy needs, and alternative energy sources for the future. Topics will include fossil fuels, solar power, wind power, nuclear energy, and alternative energy sources. K-12 teachers will have opportunities to explore the history of Energy as well as learn from experts in the field of energy development who are carrying out research in the greater Washington, DC area. Teachers will develop skills and knowledge to bring back to their students and classrooms.

The SSEATs Academies provide teachers with an opportunity to take part in a week-long professional development course behind-the-scenes at Smithsonian museums and other world class research facilities throughout the greater Washington, DC area. The academies help to bridge the gap between the formal science education programs of the SSEC and the informal science education that exists throughout the Smithsonian, and combine training in science pedagogy with content presented by scientists and researchers who are experts in their fields.

Tuition for each Academy is $2,000 and includes: Course materials and resources; Accommodations for 5 nights (Sunday – Thursday); Daily continental breakfasts, breaks, and lunches (Monday – Friday); Welcome dinner on Sunday and celebratory dinner later in the week; All local travel (excluding airport transit)

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**7/14/2015 - 7/17/2015**
**FOSS Middle School Summer Institutes - Diversity of Life**
Lawrence Hall of Science
For Grades: 6th;7th;8th
**Cost** $325
**Stipend:**

**7/12/2015 - 7/18/2015**
**Forestry Institute for Teachers - Humboldt County**
Forestry Institute for Teachers
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.

**7/18/2015**
**Tunnel Books for Science**
Resource Area for Teachers (RAFT)
For Grades: 2nd;3rd;4th;5th;6th
http://www.raftbayarea.org/workshops
**Cost** $20 for members; $35 for non-members
**Stipend:**
Tunnel Books are a fascinating and popular form of book with a long history. They were once referred to as "peep show books". The viewer looks through a hole or window to see the pictures on the rest of the pages. It is a unique way of layering images providing a 3D effect. Text can be utilized too. We are going to focus on how tunnel books can be used for science in Grades 2-6.

**7/20/2015 - 7/23/2015**
**FOSS Middle School Summer Institutes - Weather & Water**
Lawrence Hall of Science
For Grades: 6th;7th;8th
**Cost** $325
**Stipend:**

**7/23/2015 - 7/24/2015**
**Designing Making Experiences @ Castilleja, Palo Alto**
Lighthouse Community Charter School
For Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.eventbrite.com/e/designing-making-experiences-castilleja-registration-16002854970?aff=eac2
**Cost** FREE to OUSD and title 1 - $300
**Stipend:**

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/13/2015
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.

**RESTORE Institute: creating wildlife habitat in your schoolyard**

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

http://1.usa.gov/1JlCfrH

**Cost**: $50

**Stipend:**

Held at Soil Born Farms in Rancho Cordova on July 20-24, 2015, this is a 5-day training for any teachers and community members interested in creating a schoolyard habitat project. It is designed for schools getting started in the planning process, but is relevant during any stage of the project. Throughout the week we hear from local naturalists and follow the steps of the Schoolyard Habitat Project Guide with accompanying activities from the Earth Partnerships for Schools curriculum. Schools are encouraged to send a team to the training to build support and camaraderie around their project. Participants that go through this training are eligible to apply for project funding through the Service's Schoolyard Habitat Program.

**Resource Area for Teachers (RAFT)**

**Teambuilding II**

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

http://www.raftbayarea.org/workshops

**Cost**: $20 for members; $35 for non-members

**Stipend:**

Join us to further build your repertoire of games designed to promote teambuilding in the classroom and to augment existing teaching techniques. All new and different games than we played in Teambuilding I. Note that both of the Teambuilding workshops offered at RAFT are different. You do not need to take Teambuilding I to take Teambuilding II.

**Techbridge Summer Training Institute 2015**

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

http://www.techbridgegirls.org/index.php?id=31

**Cost**: $800

**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.

**K-12 Science Institute for Leadership Development & Strategic Planning**

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

http://www.ssec.si.edu/Services/Upcoming-Events#2015SPI

**Cost**: $7,000 per 5-person team. 1,500 for each additional individual

**Stipend:** includes the cost of materials &

Apply by June 24, 2015. Are you looking to improve your science education program but don’t know where to begin? At this intensive week-long Institute, you and your team of dedicated educators, administrators, and stakeholders will gain an in-depth understanding of the LASER Model. We address the elements necessary for a quality science education program from the research behind how children learn to the mechanics of implementing an inquiry-based science curriculum. Content-driven sessions and activities delivered by a range of experienced professionals in the field are balanced with opportunities to plan strategically as a team.
2015 Smithsonian Science Education Academies for Teachers

For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ssec.si.edu/Services/Upcoming-Events#sseats

Cost  $2,000

Stipend:  includes the cost of materials &

Earth's History And Global Change Academy - This year, our Earth's History Academy will explore change from the perspective of the history of Earth from its formation through the origin of life. Geologist Ian MacGregor will lead K-12 teachers in hands-on content sessions that take them behind the scenes of the Smithsonian Institution and other prominent science facilities to explore current research on our planet's past environments. Teachers will interact with Earth scientists and science educators to explore the history of our solar system, planet, and human life, and acquire new tools that they can bring back to the classroom. The SSEATs Academies provide teachers with an opportunity to take part in a week-long professional development course behind-the-scenes at Smithsonian museums and other world class research facilities throughout the greater Washington, DC area. The academies help to bridge the gap between the formal science education programs of the SSEC and the informal science education that exists throughout the Smithsonian, and combine training in science pedagogy with content presented by scientists and researchers who are experts in their fields.

Tuition for each Academy is $2,000 and includes:  Course materials and resources; Accommodations for 5 nights (Sunday – Thursday); Daily continental breakfasts, breaks, and lunches (Monday – Friday); Welcome dinner on Sunday and celebratory dinner later in the week; All local travel (excluding airport transit)

Wilderness Leadership Training Tahoe National Forest

For Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.bawt.org/programs/training/leadership-training/wilderness-leadership-training/

Cost  $195-$700

Stipend:

Apply by July 3.. The Wilderness Leadership Training (WLT) is a five day intensive entry-level backpacking course at the heart of BAWT's programs. It is designed to give you the tools you need to lead youth on multi-day backpacking adventures. After completing the course, you will gain full access to our gear libraries. The Wilderness Leadership Training consists of a pre-trip meeting and five days of backpacking in the Sierra Nevada Mountains. Skills learned include: clothing requirements, nutrition, equipment use, map and compass reading, basic wilderness first aid, leadership styles, group dynamics and more. Role playing exercises are used to give participants a realistic backcountry leadership experience. Food and transportation are provided and no previous experience is necessary.  Pre-trip meeting: September 8, 2012 Oakland

Cost:  Fees for the WLT are on a sliding scale. Please choose the appropriate registration fee by selecting your agency’s annual budget (total support and revenue for the past fiscal year.) Please note: training costs for one individual are waived for organizations in exchange for the use of a 15-person passenger van.
$199,999 and under — $195.00
$200,000-$999,999 — $295.00
$1,000,000+ — $395.00
Unaffiliated Individual — $695.00

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

August 2015

The Growing Classroom: Intro. to Garden Based Learning - reg by 7/17/15

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.

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

Printed:  5/13/2015

Professional Development
The Building Blocks of Creative Thinking
Bay Area Discovery Museum
8/3/2015 - 8/5/2015
For Grades: K; 1st; 2nd; 3rd; PK
http://www.centerforchildhoodcreativity.org/advisory-services/professional-development/
Cost $595: Title 1 $199
Stipend:
Participants will learn:
• how current neuroscience research applies to our work as educators;
• a framework for facilitating learning environments that promote creativity;
• strategies to increase student engagement and deepen learning across content areas.

Summer Astronomy Institute: Space Science and the NGSS
Astronomical Society of the Pacific
8/3/2015 - 8/6/2015
For Grades: 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
https://www.astrosociety.org/education/k12-educators/
Cost $300
Stipend: Scholarships are Available for C
This 4-day workshop will cover classroom tested, inquiry-rich activities designed to help students learn the processes of science through the study of space science with explicit alignment to the three dimensions of the Next Generation Science Standards and connections to literacy and the Common Core. Workshop strands include: Astronomy and the NGSS, Tools of the Astronomer, Exploring the Solar System, and the Sun-Earth Connection. Two units of academic credit available through The University of the Pacific. In addition to 4-days of activities, participants receive The Universe at Your Fingertips 2.0 DVD, a $30 value and a class set of 10 Galileoscopes, a $250 value. A limited number of scholarships are available for classroom teachers. The scholarships are $300 and cover the registration fee.

NGSS Spotlight: Connecting with the Crosscutting Concepts
California Academy of Sciences
8/4/2015 - 8/6/2015
For Grades: K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://www.calacademy.org/events/teacher-workshops
Cost $35
Stipend: $150 upon completion of all three workshops
Special Note: This is a three day workshop series taking place on August 4, 5, and 6. Each session is from 9:30 am - 3:30 pm. In order to participate, you must be able to attend all three sessions. How should the Crosscutting Concepts of the Next Generation Science Standards (NGSS) be used in the classroom? Are they just a way to categorize activities or can they actually be used to support and deepen student learning? Join us to explore these questions and build your understanding of this NGSS dimension. Get familiar with each Crosscutting Concept and discover what they might look like at different grade levels. Experience sample activities and engage in discussion with colleagues about how to make the best use of this teaching tool. Leave with inspiration and ideas for implementing the Crosscutting Concepts in your classroom.

Designing Making Experiences
Lighthouse Community Charter School
8/6/2015 - 8/7/2015
For Grades: K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://www.eventbrite.com/e/designing-making-experiences-registration-15998963330?aff=es2
Cost $300
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.

FREE Summer Salmon Institute for Teachers - Dates approx.
Turtle Island Restoration Network
8/3/2015 - 8/7/2015
For Grades: 3rd;4th;5th
https://seaturtles.org/events/summer-salmon-institute-professional-development-teachers/
Cost FREE
Stipend:
We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/13/2015
The hands-on Institute integrates Next Generation Science Standards and Common Core-Based curriculum. Teachers will leave with everything they need to meaningfully engage students in understanding their local watersheds using endangered salmon as an entry-point. The workshop will focus on developing unique unit plans to implement in the 2015-16 school year. Ongoing staff support will be available for participants. Schools that serve low-income students may qualify for field trip funding during the school year. August classroom and field training are located in beautiful West Marin and include exploring creeks, redwoods, and other wild places within the Lagunitas Creek Watershed. Teachers will work collaboratively throughout the week as they develop unique units adapted for use in their own classroom. SPAWN will provide teacher training and student field experiences in sciences such as restoration techniques, native plant identification, rainwater harvesting and constructing rain gardens, aquatic invertebrate monitoring, and performing salmon audits at your school. In-depth, standards-based curriculum materials will be distributed daily with a focus on ocean ecology, the natural history of coho salmon, and how water and land-use practices affect the health of inland watershed and coastal marine ecosystems.

8/6/2015 - 8/7/2015  
**High Engagement Mathematics in the Early Elementary Classroom**  
Bay Area Discovery Museum  
http://www.centerforchildhoodcreativity.org/advisory-services/professional-development/  
**Cost** $395: Title 1 $115  
Stipend:

Participants will learn:
- how to create a classroom climate that provides a foundation for deep and lasting learning in all content areas;
- research-based pedagogical approaches and concrete strategies that make Common Core math content meaningful and engaging for every student;
- interdisciplinary curriculum design that develops students’ creative thinking skills and content knowledge.

8/8/2015  
**Easy Engineering for 2nd - 5th Grade Educators**  
Resource Area for Teachers (RAFT)  
http://www.raft.net/workshops/in-house  
**Cost** $10 for members; $25 for non-members  
Stipend:

Easy engineering projects based on RAFT activity kits that help teach Common Core Math Standards and reinforce the Next Generation Science Standards engineering practices.

8/8/2015  
**Easy Engineering for 6th - 8th Grade Educators**  
Resource Area for Teachers (RAFT)  
http://www.raft.net/workshops/in-house  
**Cost** $10 for members; $25 for non-members  
Stipend:

Easy engineering projects based on RAFT activity kits that help teach Common Core Math Standards and reinforce the Next Generation Science Standards engineering practices.

**September 2015**

9/15/2015 - 9/16/2015  
**NGSS Symposium Awareness to Transition Rollout Training**  
California Department of Education  
**Cost** $250  
Stipend:

Hayward - join science leaders at the second in a series of statewide professional learning symposia exploring the philosophy, design, awareness of and transition to the Next Generation Science Standards (NGSS).

9/16/2015 - 9/20/2015  
**Wilderness Leadership Training Tahoe National Forest**  
Bay Area Wilderness Training  
http://www.bawt.org/programs/training/leadership-training/wilderness-leadership-training/  
**Cost** $195-$700  
Stipend:
Apply by August 28. The Wilderness Leadership Training (WLT) is a five day intensive entry-level backpacking course at the heart of BAWT’s programs. It is designed to give you the tools you need to lead youth on multi-day backpacking adventures. After completing the course, you will gain full access to our gear libraries. The Wilderness Leadership Training consists of a pre-trip meeting and five days of backpacking in the Sierra Nevada Mountains. Skills learned include: clothing requirements, nutrition, equipment use, map and compass reading, basic wilderness first aid, leadership styles, group dynamics and more. Role playing exercises are used to give participants a realistic backcountry leadership experience. Food and transportation are provided and no previous experience is necessary. Pre-trip meeting: September 8, 2012 Oakland

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$199,999 and under — $195.00
$200,000-$999,999 — $295.00
$1,000,000+ — $395.00
Unaffiliated Individual — $695.00

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

By Arrangement at Your School or Available Ongoing on Your Own

By Arrangement

2014-15 STEM Professional Development Offerings
ASSET STEM EDUCATION is a national Science, Technology, Engineering and Math (STEM) education improvement nonprofit established by Bayer Corporation and several community partners in 1994. It fosters STEM fluency and college/career readiness by providing educators with highly effective professional development, hands-on educational materials and consulting services — impacting students pre-K through career. All of its programs are results oriented, research and inquiry based and align with national and state standards.

Your Own Design or Pick one of their topics
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.

Already Designed Workshops:
* Dirt Made my Lunch
* Sun, Soil, Water, and Air
* Feathers, Fur, Scales, and Skin

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

Project WILD and Project Aquatic Wild
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.

Professional Development at your School
http://www.calacademy.org
Many different workshops are available to come to your school for professional development. Examples are: Sketching and Journal Keeping for the Science Classroom, Owl Pellets and Beyond, Herbivore, Omnivore, Carnivore: A study of Structure and Function

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

Printed: 5/13/2015
Bring Professional Development to your School
Whole School Science Professional Development
http://www.crscience.org/educators/workshops
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
http://www.abag.ca.gov/bayarea/sfep
Friends of the Estuary will work with you to design and present a tailored workshop for 10-100 educators. Workshop topics include: wetlands, endangered species, wildlife, bats, plants, Adopt a Watershed, Marine Debris, Project Learning Tree, Project Wild and Aquatic Wild, as well as new topic areas.

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

Using Video and Web resources in your classroom
http://www.kqed.org/ednet/
KQED offers a wide range of professional development workshops focusing on the use of video in the classroom. They can focus on curriculum areas of your choice. Workshops can focus on making videos in the classroom or how to effectively use existing video and web resources in the classroom

Common Core & 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

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.

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/13/2015 Bring Professional Development to your School
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.

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://rockitscience.com/teacherworkshops/
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:$1000 for 3 hours

Teaching the 4Rs - Reduce, Reuse, Recycle & Rot/Compost
http://www.stopwaste.org
Gain valuable skills in leading your students through classroom activities that demonstrate the 4Rs: Reduce, Reuse, Recycle and Rot/Compost while teaching science concepts and ways to reduce waste and conserve natural resources.

School Site Specific Trainings
http://botanicalgarden.berkeley.edu/education/k12.shtml#etpdanchor
Our Education staff offer unique tools and support for diverse school communities to transform gardens into enriched educational resources. Teachers, parents, garden educators and community members can all be a part of the process in accomplishing learning goals for children through garden-based education. Our fee-based workshops can be customized to meet your needs. Past topics include:
* Botany on Your Plate curriculum
* Math in the Garden curriculum
* Using the Garden Environment for Afterschool Programs
* School Garden Planning and How-To’s
* Integrating Academics into the Garden
* Nutrition from Fruits and Vegetables
* Linking Garden Activities to State Standards
For more information, contact the Education Program Coordinator

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

Online Teacher Professional Development
https://www.coursera.org/courses?cats=teacherpd
Coursera offers a wide range of courses designed for teacher professional development.

Fresno Pacific School of Professional Studies
http://ce.fresno.edu/cpd/courses/

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed: 5/13/2015 Bring Professional Development to your School
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


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.

**Edspace**

KQED

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**

NASA Education


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**

National Science Teachers Association

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**

National Teacher Enhancement Network

www.scienceteacher.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**

PBS Learning Media

http://www.pbslearningmedia.org/

PBS Learning Media offers free online professional development on lots of different educational topics.

**Rock-it Science Teacher Community**

Rock-It Science

http://rockitscience.com/teachercommunity/

This online community is for adventurous teachers and homeschool parents who want to teach science the Rock-it Science way. Registration is FREE. As a registered member of our Teacher Community, you can:

* Read introductory Teacher's Guide, "How to Present a Rock-it Science Lesson".

* View our Lesson Videos. See the lessons as they were presented in our laboratory classroom with hands-on experiments.

* Download the corresponding Teacher Guides, which contain a complete transcript of the video, photos, an equipment list, and Quick Reference Guides.

* View our Teacher Workshop videos, where adults get to experience our lessons exactly the way students do, including the crazy stories and hands-on experiments. But they also get to ask questions about the equipment and materials, discuss any concerns they may have about how their own students might respond to the lesson, and get ideas about how to present the lessons themselves.

* Read Mr. Mac's Blog

* Get answers to your questions and share ideas with other teachers in our Teacher Support Forum.

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

Printed: 5/13/2015

Bring Professional Development to your School
Teacher Grants: Specific Deadlines

June 2015

6/1/2015  Student Achievement Grants  The NEA Foundation
$5000  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.

6/1/2015  Learning & Leadership Grants  The NEA Foundation
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.

6/1/2015  Sol Hirsch Education Fund Grants  National Weather Association
$750  http://www.nwas.org/grants/solhirsch.php
Awarded annually to teachers/educators of grades K-12 to help improve the education of their students, school and/or community in the science of meteorology. The Grant is intended to allow teachers to: •Purchase scientific materials and / or equipment for the classroom, school or community. •Begin new school and / or community science outreach and education programs. •Enhance and / or expand existing meteorology / science education programs. •Attend accredited courses, workshops and /or conferences related to meteorology that will significantly enhance their teaching activities.

6/15/2015  School Garden Grant  California Fertilizer Foundation
$1200  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.

6/22/2015  Champion Creatively Alive Children Grant  Crayola
$2,500 and $100 in Crayola products  http://www.crayola.com/for-educators/ccac-landing/grant-program.aspx
Form a collaborative team to plan innovative ways of infusing creativity throughout the school. Brainstorm a leadership program that will enrich the creative capabilities and confidence within the school community. Plan how and who will lead this collaborative effort. Complete the application. Submit application by June 22, 2015 (the principal must be a member of NAESP). Receive a gift — every Early Bird application submitted before midnight on Monday, June 8, 2015 will receive a Crayola product Classpack®.

July 2015

7/1/2015  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.
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.

**Kids In Need Teacher Grants - Applications Available**

Multiple funders and grants. Similar applications. Get a packet of materials just for applying. You can submit a different project to each of the funders. Funds projects that make creative use of common teaching aids, approach curriculum from an imaginative angle, or tie nontraditional concepts together for the purpose of illustrating commonalities. Innovation and merit account for 40% of the evaluation.

**Outstanding Achievement in Primary and Secondary Education**

Recognize educators who have gone beyond the traditional teaching methods by using insects as educational tools. One winner 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. 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.

**Grants For Grades 6 - 12**

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?

**American Honda Foundation Grant**

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

**Field Trip Grants - Applications open - date approx**

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.

**Fulbright Distinguished Awards in Teaching Apps Open**

The Distinguished Fulbright Awards in Teaching Program is designed to recognize and encourage excellence in teaching in the U.S. and abroad. Twenty-four highly talented U.S. and international teachers are selected to receive a grant to study at a university, conduct research, teach classes and workshops, and develop a project pertaining to their field of educational inquiry during their semester overseas.

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*We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org*
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 "I Did It" stickers, up to 5 "science-o-rama" event posters.

Field Trip Grants - Deadline to apply

$700

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.

GreenWorks! Grants for Registered PLT GreenSchools!

$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

Captain Planet Foundation Grant

$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)

Traditional GreenWorks! Grant

$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)

Kids In Need Teacher Grants - Deadline

$100-500

http://www.kinf.org/grants/

Multiple funders and grants. Similar applications. Get a packet of materials just for applying. You can submit a different project to each of the funders. Funds projects that make creative use of common teaching aids, approach curriculum from an imaginative angle, or tie nontraditional concepts together for the purpose of illustrating commonalities. Innovation and merit account for 40% of the evaluation.
Teacher Grants: Rolling or Continuous Deadlines

- **Science Project Support Application**
  - Synopsys Outreach Foundation
  - 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 "I Did It" stickers, up to 5 "science-o-rama" event posters

- **Adopt-A-Classroom Grants**
  - [http://www.adoptaclassroom.org](http://www.adoptaclassroom.org)
  - Register your public school classroom online. This site pairs you with people who want to give money to your classroom to support your teaching.

- **$10,000+ Amgen Foundation Grant**
  - Amgen Foundation
  - [http://wwwext.amgen.com/citizenship/apply_for_grant.html](http://wwwext.amgen.com/citizenship/apply_for_grant.html)
  - Science Education - The Foundation is committed to raising the value of science literacy on a national and local level. The areas given priority consideration within science education are:
    - Teacher quality and professional development in math and science: Comprehensive programs that enhance the quality of math and science teachers entering the classroom, and support teachers with meaningful professional development opportunities that have a positive impact on student achievement
    - Pivotal hands-on science experience: Support programs that provide students and teachers with opportunities for hands-on, inquiry-based learning experiences that significantly impact students' excitement about science and scientific careers

- **Amy Chamberlain Scholarship Fund**
  - Bay Area Wilderness Training
  - [http://www.bawt.org/programs/funding/scholarships/](http://www.bawt.org/programs/funding/scholarships/)
  - 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.

- **Friends & Family Grants - BERKELEY Schools only**
  - Berkeley Public Schools Fund
  - [https://schoolsfund-friendsandfamily.herokuapp.com/](https://schoolsfund-friendsandfamily.herokuapp.com/)
  - This new crowd-funding platform allows teachers to submit grant applications to fund a new project, materials, or equipment anytime throughout the year. Anyone can donate to a grant, and the site is searchable by teacher, school, and subject area. Teachers have already started using Friends & Family, and some projects have already been successfully funded. Take a look and help support your favorite teacher, school, or project!
  - Highlights of Friends and Family Grants:
    * Similar to DonorsChoose but with fewer barriers for funding and exclusively for Berkeley teachers
    * Teachers can submit brief applications for grants at anytime throughout the year
    * Friends and Family Grants are administered by the Schools Fund but projects are funded by community donors through crowdfunding
    * Share grants quickly and easily through email, Facebook, or Twitter
    * The Schools Fund annual Classroom Grants process will not change

- **Black Tie Community Bus**
  - [http://www.blacktietrans.com/fleet-type/community/](http://www.blacktietrans.com/fleet-type/community/)
  - 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.)

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Printed: 5/13/2015  Teacher Grants - Rolling Deadlines
<table>
<thead>
<tr>
<th>Resource/Program</th>
<th>Website/URL</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classroom Computers</td>
<td><a href="http://computersforlearning.gov/">http://computersforlearning.gov/</a></td>
<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>
</tr>
<tr>
<td>Digital Wish List</td>
<td><a href="http://www.digitalwish.com/dw/digitalwish/home">http://www.digitalwish.com/dw/digitalwish/home</a></td>
<td>Site offers a place for teachers to create a technology wish list. Individuals can then go in to grant these wishes.</td>
</tr>
<tr>
<td>$100-1000 Classroom Wishlist</td>
<td><a href="http://www.donorschoose.org/teachers">http://www.donorschoose.org/teachers</a></td>
<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>
</tr>
<tr>
<td>Parks Express Transportation Services</td>
<td><a href="http://www.ebparks.org/activities/educators/trips#parkex">http://www.ebparks.org/activities/educators/trips#parkex</a></td>
<td>Discount buses ($110) for fieldtrips to East Bay Regional Parks. Schools must have at least 50% 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</td>
</tr>
<tr>
<td>Science By Nature Transportation Fund</td>
<td><a href="http://www.sciencebynature.org/news/">http://www.sciencebynature.org/news/</a></td>
<td>For San Francisco Bay Area schools - Science-based field trip destination in San Francisco Bay Area (for overnight field trips, only one day of the trip or one direction will be eligible for reimbursement). Applications are only online and reimbursement forms must be submitted in addition to invoices after the field trip has occurred. Eligible applicants are teachers and educators associated with the applying school, and the school must be at 70% FRPM or higher to qualify for the grant.</td>
</tr>
<tr>
<td>Free Admission to CA Title 1 Schools</td>
<td><a href="http://www.exploratorium.edu/visit/field-trips">http://www.exploratorium.edu/visit/field-trips</a></td>
<td>Sign up Now for field trips during the first year that the Exploratorium is at Pier 15.</td>
</tr>
<tr>
<td>Funds for Outdoor Field Trips</td>
<td><a href="http://www.fieldtripgroup.org/or/teachers.html">http://www.fieldtripgroup.org/or/teachers.html</a></td>
<td>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.</td>
</tr>
<tr>
<td>Education Grant Database</td>
<td><a href="http://www.grantwrangler.com/">http://www.grantwrangler.com/</a></td>
<td>Check out this website for all types of grants for classrooms</td>
</tr>
<tr>
<td>Education Grants</td>
<td><a href="http://www.kindermorgan.com/community/km_foundation_guidelines.cfm">http://www.kindermorgan.com/community/km_foundation_guidelines.cfm</a></td>
<td>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.</td>
</tr>
<tr>
<td>Classroom Grant</td>
<td><a href="http://www.petsintheclassroom.org/teachers/">http://www.petsintheclassroom.org/teachers/</a></td>
<td></td>
</tr>
</tbody>
</table>
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.

**Philanthropic Ventures Foundation**

**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.

**After School Grant Program - Oakland Schools**

*http://venturesfoundation.org/programs/teacher-grants*

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.

**Excursion Grant - Alameda County**

*http://venturesfoundation.org/programs/teacher-grants/excursion-grants-program*

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.

**Get to the Coast discount**

*https://docs.google.com/forms/d/1Jl-DSSgYDORjbs5pVLYRxbCzeOZ4Zu6xikzLkw7B0/viewform*

Funding from the Coastal Conservancy to help subsidize a three day residential OE program for middle and high school students, Programs:

- Build community through safe, meaningful and fun learning experiences
- Develop students’ knowledge of the natural world and inspire inquiry and wonder while meeting state standards
- Empower students to be environmental stewards & make healthy living choices

**Teacher Planet**

**Database of education grants of all types and amounts.**

**Healthy Environments grant**

*http://kresge.org/programs/health/healthy-environments*

Low-income communities often are located in areas with higher exposure to environmental hazards due to the condition and proximity of their homes, schools and workplaces to polluting industries and aging urban centers. These multiple exposures range from air pollution and chemical contaminants to the toxins associated with substandard housing and the additives in unhealthy foods. The healthy food initiative invests in efforts to improve food-system policies and practices, especially those that provide better access to fruits, vegetables and other healthful foods and that reduce the emphasis on products without nutritional benefits.

**Toshiba America Foundation**

**Mini-Grants For Grades 6 - 12**

*http://www.toshiba.com/taf/612.jsp*

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

**Wells Fargo Foundation**

**Education Grants**

*https://www.wellsfargo.com/about/charitable/ca_guidelines*

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

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

Printed: 5/13/2015
Temporary & New Science Exhibits Around the Bay Area

Bay Model Visitor Center

**Watercolor Meditations In Nature and Community – Art Exhibit**


(April 28 - May 31, 2015) Sim Van der Rijn is an architect, author, & artist, a Sausalito houseboat resident for 22 years. Professor of Architecture at UC Berkeley for thirty five years, he initiated a Watercolor Class for students focusing on the natural environment. He says, “watercolor sketching outdoors helps me see inward and outward. Being in the moment, a fluid flow capturing form and light.”

**Sausalito Collage Artist Jean Varda – Art Exhibit**


(June 2–July 12, 2015) The Sausalito Historical Society and Betsy Stroman will jointly be presenting a major exhibit of the work of Jean Varda, an acclaimed artist, bon vivant, and all around outsized personality who lived and worked on an old Sausalito ferryboat, the Vallejo, from the late 1940s until his death in 1971. The exhibit, which includes major works from private collections that have never previously been available for public viewing, coincides with the publication of Stroman’s book, The Art and Life of Jean Varda. There will be a combined official “opening” and book launch party at the Bay Model on Sunday, June 14, 2015 from 3-5 p.m.

California Academy of Sciences

**Habitat Earth - Planetarium Show**

http://www.calacademy.org

(opens January 16, 2015) We think of ourselves as self-sufficient, but humans live within an intricate network of plants, animals, and other life forms that support us in myriad ways. In this new show, discover the beauty, variety, and vast complexity of these relationships—from the food webs of San Francisco Bay to the mutually beneficial partnerships in a Douglas-fir forest community. You’ll learn how life changes our planet—and how we benefit from our connections to the life that surrounds us. Planetarium shows are free, but advance reservations are required for student groups. A total of 150 seats are available for schools each weekday in our 11:30 am and 1:30 pm showtimes shared with public visitors.

**Whales: Giants of the Deep**

http://www.calacademy.org/academy/exhibits/skulls/

(April 3 - November 29, 2015) Marvel at enormous sperm whale skeletons, crawl through a life-sized replica of a blue whale heart, and “dive” to great depths with a mighty sperm whale wrestling giant squid. It’s too big to miss. Developed and presented by the Museum of New Zealand Te Papa Tongarewa.

**Color of Life**

http://www.calacademy.org/exhibits

New Exhibit opens June 12, 2015 - There’s more to color than meets the eye. Color of Life, a major new exhibit that explores the connection between charismatic colors and their starring role in the natural world. Explore an eye-popping array of organisms—from jewel-toned insects and birds with dazzling plumage, to multi-hued reptiles and amphibians—and discover how scientists use the diversity of life’s colors to understand and illustrate the interconnectedness of life on Earth. Cutting-edge interactives allow visitors to immerse themselves in a symphony of color and view the world through the eyes of an animal, visualizing how color communicates, attracts, and camouflages within and between species.

Chabot Space and Science Center

**Art or Science: Unveiling Sculptures by Ryon Gesnik & Orion Fredericks**

http://www.chabotspace.org

Explore the interplay of science and art with two new installations by local artists Ryon Gesink and Orion Fredericks. We’re altering our views with these unearthly visionary sculptures inspired by science.
audiences to begin to understand the enormity of the world they can't see—a world that exists in the air they breathe, on their own
Titan, and anticyclones whirling at hundreds of miles per hour on Jupiter.

comes a new appreciation of the wonders and possibilities of science.

*Mysteries of the Unseen World: Visually stunning and rooted in cutting-edge research, Mysteries of the Unseen World 3-D will enable
your eyes. Plus, experience teleportation, robotics, augmented reality and much more. See how much of science fiction is becoming our
Science Fiction | Science Future

* Mind Control Isn't Just in the Movies - If you thought invisibility and mind control were only in the movies — think again. At
Scitech’s latest feature exhibition Science Fiction, Science Future you can move objects with your mind and turn invisible right before
your eyes. Plus, experience teleportation, robotics, augmented reality and much more. See how much of science fiction is becoming our
science future. * Are You Ready for Science Fiction to Become a Reality? - In this exhibit, you'll see how science and technology are
advancing all the time, and changing the way we live. With your curiosity and imagination (critical elements of scientific discovery) you'll
will start to envision what you might create to improve our world.

5/13/2015

Temporary Exhibits
**Monterey Bay Aquarium**

**Tentacles: The Astounding Lives of Octopuses, Squid and Cuttlefishes**


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.

**New Exhibit: Mission to the Deep**


Join a virtual dive and discover an amazing underwater world. A 360-degree video projection takes you far below the ocean's surface, where amazing animals inhabit the dark, cold depths. You'll learn about the cutting-edge science of the Monterey Bay Aquarium Research Institute (MBARI), where scientists and engineers are working together to monitor the pulse of the ocean.

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**Oakland Museum of California**

**Bees: Tiny Insect, Big Impact**

[http://museumca.org/exhibit/bees](http://museumca.org/exhibit/bees)

(December 1–September 20, 2015) - This new exhibition in the Gallery of California Natural Sciences takes a look at the wildly diverse and intricate world of one of the most important creatures to human agriculture and the natural environment. Through family-friendly experiences, hands-on activities, and media, Bees: Tiny Insect, Big Impact touches on topics of honeybees and Bay Area beekeeping, the diversity of California native bee species, citizen science projects, and the similarities between bees and humans. Discover real bee specimens under a microscope, crawl through a human-sized beehive, and try on a beekeeper suit. The exhibition continues outside of the Gallery: get involved with citizen science organizations, check out bee hotels installed in the OMCA gardens, and take home guides on planting a bee-friendly garden and building bee hotels for your own garden. In an immersive gallery environment, explore the causes of bee population decline, learn about the significance of bees to California's economy and ecosystems, and discover how simple but powerful actions by Californians can help bees to survive in a changing world. Docent-led tour for K-6 on bees and other pollinators are available.

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**The Tech Museum of Innovation**

**Body Metrics - new permanent exhibit**


Body Metrics leverages the latest developments in an industry that is constantly changing. Wearable technology — combined with data collection and analysis that once seemed unimaginable — allows museum visitors a window into their physical and emotional selves of today as well as the most promising health care techniques of tomorrow. "What we are doing is much more than wearable tech like Fitbit, NikeFuel band and Zamzee, which measure physical activity," says Lath Carlson, Vice President of Exhibits at The Tech. "We're exploring physical metrics, as well as social and emotional. This is way beyond anything that's commercially out there." When visitors explore important metrics within their own bodies, they learn to make small but meaningful changes to their physical and mental well-being. These lessons aim to spark new momentum to help people feel empowered and motivated to improve their overall health.

**Genome: Unlocking Life’s Code**

[http://www.thetech.org/genome](http://www.thetech.org/genome)

Opens January 22 - Do you have your mother's dimples? Or your father's hairline? What is it about us that makes us us? And how much of it actually sets us apart from not only other human beings but from every other living thing on Earth? Genome: Unlocking Life's Code begins to unravel the mystery behind the complete set of instructions needed for every living thing on Earth to grow and function: the genome. Your genome is a roadmap that can help you trace your ancestral past and take charge of your future health. Discover how our newfound ability to identify thousands of genes that contribute to disease has helped open the way to more personalized healthcare. Weigh in on the legal and ethical issues surrounding cutting-edge genomic research and its implications on society. See yourself in a new way: as an individual, as a member of a family, and as part of the diversity of life on Earth.