Field Trip for Teachers in partnership with Science at Cal

Celebrating the Nature of California

October 25, 5:30 to 8:00 pm

Discover how the University of California Natural Reserves System is cultivating tomorrow’s field scientists, providing environmental forecasting, and serving the people of California. Find more details at http://scienceatcal.berkeley.edu/celebrating-the-nature-of-california/

This event is open to teachers and family and friends. Children 6th grade and above are welcome as well.

- Tour UC Berkeley’s natural history museums
- Meet scientists working at UC Natural Reserves
- Learn about the technology used to listen to the “heartbeat” of California
- Explore ways to participate in citizen science
- Plan a field trip to the UC Berkeley campus with your students
- And learn about the future of land conservation in California.

RSVP at https://forms.gle/wksgvY33mAi3VDqs8

This event is kicks off the two week long Bay Area Science Festival. www.bayareasciencefestival.org/

Come find CRS at our activity table at the free Discovery Day event at Oracle Park in San Francisco on Saturday, November 2.

Science provides students with access to learning across all curriculum subjects, including social/emotional areas. Motivation for learning, critical thinking, and creativity are enhanced. Science allows students to deepen their appreciation and awareness of the world around them. These values provide, in the bigger perspective, a better world for everyone.

—Teacher, Oakland Unified School District

Not Receiving our Emails?

Don’t miss out on BASIS invitations and updated listings of Professional Development, Grants, Programs Deadlines, and more. If you aren’t receiving these emails it means one of two things

1. We don’t have an active email for you—Please email us at CRS@crscience.org to give us your best email address.

2. Our emails may be hiding in your junk mail folder. Add Community_resources_for_science@mail.vresp.com to your contact list.

To Contact CRS - Call 510-527-5212 or Email CRS@crscience.org
Tracking Progress!

Congratulations! We salute you, the teachers and principals, who may not realize from the day-to-day vantage point of busy classrooms, that real progress on science and engineering is taking place!

Each year, CRS conducts evaluation and assessment, collecting quantitative and narrative data about teaching practices, transition to new standards, and most importantly, opportunities for young learners to engage in exploration and discovery and to meet inspiring STEM role models. And, over the past seven years, we’re delighted to report that the data points to steady, significant strengthening of science teaching and learning in our member teachers’ classrooms and schools.

In some new partner schools, teachers who three years ago indicated they taught “little or no” science, or, that their science teaching was “mostly reading text and watching video” have made significant strides, with 75% now reporting they teach 1-2 hours of hands-on science each week – a huge jump!

We’re happy to support our teacher and principal members in bringing exciting learning experiences that connect science content and students’ real-world experiences together. Here’s a small sampling of our most recent evaluation results:

As a result of CRS support and services, teachers indicated they:

97% Taught more science after having BASIS in-class lesson
95% Discovered new strategies for engaging struggling learners
88% Became more enthusiastic about teaching science
82% Added new lessons, field trips, learning experiences
80% Became more confident in planning and teaching science
75% Effectively connected science with math & language arts

More than 16,000 K-8 students met and learned from 700+ scientists, engineers our education outreach programs

“I was specifically impressed with the answer a volunteer gave to a student question. The student asked when the volunteers became scientists. The volunteer flipped the question and asked students when they started asking questions and searching for answers -- explaining we are all scientists. It was a truly beautiful moment.”

We are heartened by feedback like this:

I love CRS! All of the support and resources have definitely made me more confident and willing to teach science. Every year when we get a first year teacher I always tell them to look at CRS for any and all science resources!

I greatly appreciate CRS’s tireless efforts to meet teachers “where they are” in order to build our scientific literacy and teaching capacity. I also appreciate their readiness to provide resources that will enrich and deepen our instruction!
Tell us about Your Science Super Star Students.

Start the CRS Science Super Star Challenge Today!

To earn recognition for excellence in science teaching, all you need to do is document some of the ways you are engaging your students in inquiry between now and Feb. 14. Pro tip from past Science Super Star honorees: Take a few moments each month to answer a question or two on the Science Super Star Challenge form, so it doesn’t feel like a huge task when it is due in February. **Fill the forms out with a colleague – you will probably be surprised to discover how much science learning you are actually facilitating!**

Join teachers across California who are transforming how they plan and lead science and engineering lessons in their classrooms to meet Next Generation Science Standards. This year’s Science Super Star Challenge shines the spotlight on the impact of that transformation: how have the changes to your science teaching result in deeper, more thoughtful, engaged learning opportunities for your Science Super Star Students? The Science Super Star Challenge offers you a chance to reflect on your science teaching and how it is impacting your students’ learning.

**Eligibility:** The Science Super Star Challenge is open to CRS teacher members who are either general Kindergarten through 6th grade classroom teachers or elementary science specialists.

Completed form and examples of student work due February 14, 2020. Email, mail, or fax them in to CRS as soon as you are done.

**Prizes and Recognition:** Receive recognition including a digital badge and certificate of excellence. Be listed on the CRS Science Super Star web page, in press releases, social media, and messages to your district leadership. You will also be entered into a drawing for prizes ranging from classroom books to field trips and in-school programs.

Find the forms, and more information, at www.crscience.org/ sciencesuperstarprogram

---

**The joy of Making in the Classroom**

CRS teamed up with MakerEd (located in West Berkeley) to host a special Field Trip for Teachers. Since space was very limited, invitations were offered to Spring 2019 Science Super Star honorees and teachers who had indicated on our year end survey that they were interested in learning more about how to incorporate making into their classrooms.

Our hosts included Aaron Vanderwerff, a national leader in Maker Education, and his colleague Dora Medrano Ramos. They provided a tour of the amazing creative studio where they offer workshops for teachers throughout the year. They led our group through a fun exploration of light and shadows, modelling how to use simple, inexpensive materials to bring maker explorations to support science discoveries in elementary classrooms.

MakerEd hosts professional development in their Berkeley lab and at school sites locally and around the country. You can find out more about them and some great classroom resources at [https://makered.org/](https://makered.org/)

Teachers experimented with an assortment of materials to explore shadows and light, using simple LED-clothespin-battery mini flashlights – leading to lots of “lightbulb moments” for how to bring this kind of exploration into their own classrooms.
Curated Just for You:

Online Resources at your Fingertips!

Where do you turn to find information about grants, field trips, or lesson resources? Before you open the “fire hydrant” of information overload with a general internet search, remember that CRS curates custom, up-to-date resource listings to help our member teachers find just what they need, when they need it, so you spend less time on searching and more time on teaching!

Here are a few of the most frequently visited resources available to you anytime:

Upcoming Deadlines – This page has the links to the up-to-date reports that you find here in this resource guide. Here’s where you can find deadlines for grants, programs, professional development workshops, and temporary and special science exhibits.
www.crscience.org/educators/upcomingdeadlines

K-5 Programs and Websites – Looking for field trips or in-class programs? How about websites with videos, learning activities, grade-level appropriate kid-friendly content, aligned to standards for your grade level.
www.crscience.org/educators/helpfulreports

Middle School FOSS NGSS Resources – For middle school teachers implementing NGSS FOSS modules, this webpage hosts a collection of resources related to lesson topics, as well as sources to find citizen science and student action projects that tie in with your lessons. We will continue to update this resource with additional modules throughout the year.
www.crscience.org/educators/KSES

Field Trip Funding – Need grants to pay for transportation and entry fees? Look here!
www.crscience.org/educators/FieldTripFunding

Doing Science Outdoors – Getting outside and letting kids observe the world around is a great way to help inspire the love of nature and process of discovery. Here are some resources to help your students explore in nature even in their own urban neighborhoods.
www.crscience.org/educators/ScienceOutdoors

Citizen Science - Find resources to help your students contribute to ongoing local, national, and international data collection.
www.crscience.org/educators/CitizenScience

Need Planning Help? Ask CRS!

CRS is here to help you find science resources for your classroom.

- Looking for just the right field trip or in-class program?
- Want help finding a grant to fund microscopes or other science equipment?
- Interested in finding online resources for you or your students?
- Want to bounce lesson ideas off of someone?
- Trying to figure out where do get butterflies or pH paper or a recipe for “slime?”

We can help with that. All you need to do is ask! Pick the mode that is easiest for you

Fill out our online form. Need Help?Ask Us!
www.crscience.org/educators/requestform/

Email us at CRS@crscience.org or Call at 510-527-5212

In the words of a Richmond elementary teacher:

I was very impressed with how positive, encouraging, respectful, and engaging the scientists were. My students had a lot of fun. Being able to observe my students engaging with content, having scientific conversations, and interacting with the volunteers was truly incredibly helpful for my teaching practice. Thank you SO much!!

BASIS (Bay Area Scientists in Schools)

It’s not magic, it’s science! But, it feels like magic to watch the excitement and engagement of young learners when a team of diverse, enthusiastic graduate students from UC Berkeley, or employees from local industry, walk into an elementary classroom to lead a science or engineering exploration.

Bay Area Scientists in Schools (known as BASIS) presentations are free for CRS member teachers in public elementary schools from Pinole to Oakland. BASIS volunteers are scientists, engineers, and other STEM professionals, including graduate students and post-docs at UC Berkeley, and employees from local science-based companies. CRS recruits, prepares, and coaches these volunteers to be effective ambassadors for science teaching and learning. They bring exciting one-hour lessons directly into classrooms, engaging students in hands-on investigations and engineering challenges that are age-appropriate and aligned to standards.

Want a BASIS team to come to your classroom? Here’s how it works:

- Watch your email! As BASIS teams notify us of their availability, CRS sends email invitations to eligible teacher members at the appropriate grade level for specific dates and times (i.e. invitations for 3rd grade BASIS lessons are sent out only to 3rd grade teachers).
- Reply promptly! Presentations are scheduled generally on a first come, first served basis. Because demand for BASIS presentations often exceeds supply, we give priority to teachers who have not yet received a lesson during the current school year.
- Watch your email again! We will send you a confirmation of which program, date and time you have received.
- Connect with your scientists before the lesson. If you haven’t heard from your scientists yet, please reach out to them to give them so that you can ask each other questions and be fully prepared for their visit.

More details available at:
www.crscience.org/educators/BASIS
# Program Deadlines

## October 2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Grades</th>
<th>Location</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/11/19</td>
<td>Registration Opens for free outdoor field trips East Bay Municipal</td>
<td>TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td>Castro Valley, El Sobrante, Pinole, Moraga.</td>
<td><a href="http://www.ebmud.com/about-us/teacher-resources/">http://www.ebmud.com/about-us/teacher-resources/</a></td>
</tr>
<tr>
<td></td>
<td>Utility District</td>
<td></td>
<td>Hands-on learning provides children experiences that help them to better understand what it takes to protect the environment, how natural systems function and how our drinking water supply relates to those systems. EBMUD rangers work with school age children to enhance habitats, stabilize soils, and restore natural conditions for creeks and disturbed areas in the East Bay.</td>
<td></td>
</tr>
<tr>
<td>10/25/19</td>
<td>Lottery Deadline for 2019-20 School Programs Marina Education Programs</td>
<td>K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td>City of Berkeley</td>
<td><a href="https://www.cityofberkeley.info/environmental_education_programs/">https://www.cityofberkeley.info/environmental_education_programs/</a></td>
</tr>
<tr>
<td></td>
<td>- City of Berkeley</td>
<td></td>
<td>sign up for on land and on the bay programs.</td>
<td></td>
</tr>
<tr>
<td>10/30/19</td>
<td>Tech Challenge Registration is Open The Tech Interactive</td>
<td>4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td>The Tech Interactive</td>
<td><a href="https://www.thetech.org/thetechchallenge">https://www.thetech.org/thetechchallenge</a></td>
</tr>
<tr>
<td></td>
<td>This signature program of The Tech invites teams of students in Grades 4-12 to use the engineering design process to solve a real-world problem. Participants spend months collaborating and becoming deeply engaged in the challenge while documenting their progress and designs. The program culminates in an exciting two-day showcase in March when teams put their solutions to the test in front of judges.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## November 2019

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Grades</th>
<th>Location</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>11/1/19</td>
<td>Educator Academy in the Amazon Rainforest - Apply Now The Morpho</td>
<td>K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td>Institute</td>
<td><a href="https://morphoinstitute.org/educator-academy/">https://morphoinstitute.org/educator-academy/</a></td>
</tr>
<tr>
<td></td>
<td>Institute</td>
<td></td>
<td>July 1-11, 2020 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 $1,1250 scholarships is Feb 1, 2019. Get all the details and download a syllabus and scholarship application</td>
<td></td>
</tr>
<tr>
<td>11/4/19</td>
<td>Reservations for Spring School Programs Begin Lindsay Wildlife Experience</td>
<td>K;1st;2nd;3rd;4th;5th</td>
<td><a href="https://lindsaywildlife.org/programs-at-the-museum/">https://lindsaywildlife.org/programs-at-the-museum/</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>School program sign ups begin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/15/19</td>
<td>CDC Science Ambassadors Application for 2020 opens Center for Disease</td>
<td>6th;7th;8th;9th;10th;11th;12th</td>
<td><a href="https://www.cdc.gov/careerpaths/scienceambassador/">https://www.cdc.gov/careerpaths/scienceambassador/</a></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control and Prevention</td>
<td></td>
<td>During the 5 day workshop summer 2020, you will have the opportunity to:</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Interact and collaborate in teams with CDC scientists</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Participate in multiple sessions on selected public health topics led by CDC experts</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Collaborate with fellow educators and CDC staff to develop model public health lesson plans for use in classrooms and publication on the Science Ambassador website</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Enhance your professional network of educators and public health officials</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Tour CDC facilities (including the David J. Sencer CDC Museum)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>* Present draft lesson plans to your colleagues and CDC staff</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Educators who complete and meet the expectations of the workshop will earn three (3) Professional Learning Units. PLEASE NOTE: The Science Ambassador Workshop is limited to a maximum of 16 participants. Submit your documents for consideration early. No registration fee is required; however, selected participants are responsible for travel and accommodation expenses.</td>
<td></td>
</tr>
</tbody>
</table>

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

Printed 10/10/2019
11/23/2019  Deadline to complete the Google Form project proposal  Synopsys Outreach Foundation
Grades: 6th;7th;8th;9th;10th;11th;12th
acsef.org
SAVE THE DATES FOR ACSEF 2020 - Chabot College, Hayward
Friday March 6, 2020 - Project display set up (3:30 pm - 9:00 pm) *See full Day 1 schedule below
Saturday March 7, 2020 - Judging Interviews of all projects (Round One 9 am-12:15 & Round Two 1:45 - 3:00 pm) *see full Day 2 schedule below
Sunday March 8, 2020 - Public Day Activities & Award Ceremony (10:00 am - 5:30 pm)

11/26/2019  Deadline to apply for free fieldtrips 4/5 grade  Audubon Canyon Ranch
Grades: 4th;5th
http://www.egret.org/field_trips_martin_griffin
November is the month to apply for free field trips for 4/5th graders to the Bolinas Lagoon. Bus scholarships are available to alleviate the cost of transportation to the preserve.

December 2019

12/1/2019  Spring Field trip Lottery ENDS  SF Botanical Garden & Strybing Arboretum
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.sfbotanicalgarden.org/education/schoolprograms.html
Sign up for spring field trips

12/2/2019  Lottery Deadline for Winter & Spring Fieldtrips  East Bay Regional Park District
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.ebparks.org/activities/educators/trips
Sign up for Winter and Spring Field Trips
October 2019

10/31/2019  Richmond - Fuel Your Schools Grant - Last Day to submit  Chevron
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
up to $1000  http://www.fuelyschools.com/
Chevron is working with DonorsChoose.org again this year to help K-12 teachers in public schools get the supplies they need for eligible public school classroom projects. What do your students need? Microscopes, art supplies, books. The Project Submission Period will begin at 9:00:00 p.m. EDT on September 30, 2018 and is scheduled to end at 11:59:59 p.m. EST on October 31, 2018. Eligible project requests will be funded on a rotating basis by the order in which they are received and posted on DonorsChoose.org per Eligible School within each city, so post your project as soon as possible during that time. Chevron reserves the right to end the Project Submission Period earlier if funds have been exhausted by eligible projects. The earlier you post your project during the submission period, the better your chance will be to receive funding.

10/31/2019  Good Neighbor Citizenship Company Grants  State Farm
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$ up to 25,000  https://www.statefarm.com/about-us/community-involvement/community-grants/good-neighbor-citizenship-grants
Teacher Development
Service-Learning
Education Reform/Systemic Improvement

10/31/2019  Environmental Education Grants  The Lawrence Foundation
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$5,000  https://thelawrencefoundation.org/application-process
Grants to support environmental, education, human services and other causes. Interests are diverse and may lead into other areas on an occasional basis.

November 2019

11/1/2019  Annie's Grants for Gardens  Annie's Homegrown
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$2500-5000  https://www.annies.com/giving-back/grants-for-gardens/grant-eligibility
Grants for school gardens that connect children directly to real food. These funds can be used to buy gardening tools, seeds or other needed supplies. 30 schools will receive $2,500 and three schools (must be returning Grants for Gardens applicants who have received a grant from us in the past five years) will receive $5,000.

11/1/2019  Grants For Grades 6 - 12  Toshiba America Foundation
Grades:  6th;7th;8th;9th;10th;11th;12th
$5000 +  http://www.toshiba.com/taf/612.jsp
Toshiba America Foundation is currently accepting applications from teachers who are passionate about making science and mathematics more engaging for their students. Do you teach 6-12 science or math? Do you have a wish list of instructional equipment that will make learning more exciting for your students?

11/2/2019  various grants for all levels available  National Council of Teachers Mathematics
Grades:  PK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
up to $6,000  http://www.nctm.org/Grants/
Various grants available as recognition and to fund PD in math.
This program supports marine science education and projects encouraging people to value and take action to improve the health of California’s marine and coastal environments.

* This year there is a special subcategory for projects addressing climate change and/or ocean acidification.

* Emphasis is on reaching underserved students or members of the public.

Whale Tail Grants Program
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$500-$50,000
http://www.coastal.ca.gov/publiced/plate/plgrant.html

The Max and Victoria Dreyfus Foundation Grant
Grades: PK, TK, K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$1,000 to $20,000
http://www.mvdreyfusfoundation.org/#/application-guidelines

Green Ribbon Schools Award Program
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

Honors schools that are exemplary in reducing environmental impact and costs; improving the health and wellness of students and staff; and providing effective environmental and sustainability education, which incorporates science, technology, engineering, and mathematics (STEM), civic skills and green career pathways. In California, nominations for the award are made by the California Department of Education (CDE), with technical assistance from other state and federal agencies. CDE may nominate up to four schools and one school district for ED-GRS.

Albert Einstein Distinguished Educator Fellowship - Deadline
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$7,000/month in stipend and housing expenses
https://science.osti.gov/wdts/einstein

LIGHT Awards
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$30,000
http://lightawards.org/

Career Development Grants
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$2,000-12,000

FREE lab supplies
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

FREE equipment
http://biolinkdepot.org/index.php/get-supplies/

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

December 2019

The Bauder Endowment for the Support of Physics Teaching
Grades: K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

$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.
1/2/2019 Community Action Grants American Association of University Women
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$2,000-10,000 http://www.aauw.org/what-we-do/educational-funding-and-awards/community-action-grants/
Provides funds for innovative programs or non-degree research projects that promote education and equity for women and girls. Should include a clearly defined activity that promotes education and equity for women and girls. Applicants must be women who are U.S. citizens or permanent residents. Special consideration is given to projects focused on K-12 and community college girls’ and women’s achievements in science, technology, engineering or math.

12/11/2019 Bay Watershed Education and Training Program (B-WET) National Marine Sanctuaries
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$30,000-60,000 http://sanctuaries.noaa.gov/news/bwet/welcome.html
Competitively based program that supports existing environmental education programs, fosters the growth of new programs, and encourages the development of partnerships among environmental education programs throughout the San Francisco Bay, Monterey Bay, and Santa Barbara Channel watersheds.

12/15/2019 Educator Grants Air Force Association
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$250 https://www.afa.org/education/k-12-educator-grants
Educator Grant promotes aerospace education activities in classrooms from kindergarten through twelfth grades. The program encourages development of innovative aerospace activities within the prescribed curriculum.

12/16/2019 2020 Youth Garden Grants KidsGardening.org
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$500-2100 https://kidsgardening.org/2020-youth-garden-grant/
25 Schools receive award. Grants to schools and community organizations with child-centered garden programs. Priority will be given to programs that emphasize one or more of these elements: * educational focus or curricular/program integration. * nutrition or plant-to-food connections, * environmental awareness/education, * entrepreneurship * social aspects of gardening such as leadership development, team building, community support, or service-learning.

12/18/2019 Shell Science Teaching Award National Science Teaching Association
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$10,000 and Expenses to attend NSTA conference http://www.nsta.org/about/awards.aspx
Award recognizes one outstanding classroom science teacher (K–12) who has had a positive impact on his or her students, school, and community through exemplary classroom science teaching. Award: $10,000 and a paid trip to attend NSTA’s National Conference; two finalists will also receive paid trips to the conference.

12/18/2019 Numerous Teaching Awards National Science Teaching Association
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.nsta.org/about/awards.aspx
About 20 awards for teachers of science from Kindergarten through college. Please check out their website for more details on the awards. Various Prizes. Most have a cash prize and expenses to the NSTA conference.

12/31/2019 Katie's Krops Grant Applications Open Katie's Krops
Grades: 4th;5th;6th;7th;8th;9th;10th http://katieskrops.com/start-a-garden.html
Once a year, Katie’s Krops hosts a grant cycle for youth, ages 9 to 16, to win a grant to start a Katie’s Krops vegetable garden in their community, where the whole harvest is donated to people in need. A child, or a group of children, can apply as long as they fall within the age range of 9 to 16 and live in the United States. We are a youth based initiative. All Katie’s Krops are grown by kids. Grantees are awarded a gift card to a garden center of their choice in their area, have support from Katie’s Krops, and are given a digital camera to document the garden and the harvest.

12/31/2019 Community Grant Program Walmart Foundation
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
$250 - $5,000 https://walmart.org/how-we-give/local-community-grants
Supports local, state and national organizations that provide opportunities for individuals and families to live better. Four core areas of giving: Hunger Relief & Healthy Eating, Sustainability, Women's Economic Empowerment and Career Opportunity. To ensure that your application has the best chance of being funded, the proposed use of the grant should fit within one of these areas of giving.

January 2020

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed 10/10/2019 Grants
<table>
<thead>
<tr>
<th>Date</th>
<th>Grant Name</th>
<th>Details</th>
<th>Eligibility</th>
<th>Website Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/15/2020</td>
<td>ecoSTEM Kit Grant</td>
<td>ecoSTEM Kits were curated to engage students in project-based learning, including observing phenomena, conducting inquiry investigations, making models, collecting data for citizen science projects, creating solutions to engineering challenges, and conducting environmental stewardship projects to solve real-world problems. Each kit contains supplies for 32 students. In addition to being available through DonorsChoose.org and for direct sale, a limited supply of kits are available as Material Support Grants.</td>
<td>Captain Planet Foundation</td>
<td><a href="http://www.captainplanetfoundation.org/grants/">http://www.captainplanetfoundation.org/grants/</a></td>
</tr>
<tr>
<td>1/15/2020</td>
<td>ecoTech Grants</td>
<td>We believe that technology can present innovative ways to address environmental challenges – and that when dealing with digital natives, we do ourselves a disservice by asking them to unplug. Examples of previous ecoTech Grant funded projects have involved: the integration of robotics and sensors to explore water bodies, collect data, and organize clean-ups; the development of aquaponic and hydroponic systems using arduinos and remote sensing; renewable energy design challenges; biotechnology research; nature-based design applications.</td>
<td>Captain Planet Foundation</td>
<td><a href="http://www.captainplanetfoundation.org/grants/">http://www.captainplanetfoundation.org/grants/</a></td>
</tr>
<tr>
<td>1/15/2020</td>
<td>ecoSolution Grants</td>
<td>Grants are intended to support solution-oriented, youth-led projects that result in real environmental outcomes. Available to educators working with youth in the United States. Please note that ecoSolution Grants will only support direct project costs. Support for t-shirts, staff salaries, field trips, scholarships, beautification/landscaping, etc. will NOT be considered.</td>
<td>Captain Planet Foundation</td>
<td><a href="http://www.captainplanetfoundation.org/grants/">http://www.captainplanetfoundation.org/grants/</a></td>
</tr>
<tr>
<td>1/15/2020</td>
<td>K-12 Geoscience Teaching Award</td>
<td>Applications may be submitted by any teacher regardless of experience. Entries will be judged in two categories: Grades K-8 and Grades 9-12. Applications should address teaching of units covering any of the earth or environmental sciences, including but not limited to mineralogy, petrology, economic geology, geomorphology, paleontology, hydrology, and planetary geology are invited from physical science, earth science, and geology teachers.</td>
<td>Northern California Geological Society</td>
<td><a href="http://www.ncgeolsoc.org/k-12-teacher-of-the-year/">http://www.ncgeolsoc.org/k-12-teacher-of-the-year/</a></td>
</tr>
<tr>
<td>1/17/2020</td>
<td>AIAA Classroom Grants</td>
<td>The AIAA Foundation believes that one of the most significant means to inspire and advance the future of Aerospace is to fund grants to meet the unmet and unfunded educational need of students. Each school year, AIAA awards grants of up to $250 to worthy projects that significantly influence student learning.</td>
<td>AIAA Foundation</td>
<td><a href="https://www.aiaa.org/home/get-involved/students-educators/aiaa-foundation-classroom-grant-program">https://www.aiaa.org/home/get-involved/students-educators/aiaa-foundation-classroom-grant-program</a></td>
</tr>
<tr>
<td>1/22/2020</td>
<td>Award For Excellence in K-8 Earth Science Teaching</td>
<td>The award is designed to recognize one teacher of grades K-8 each year for his or her leadership and innovation in Earth science education.</td>
<td>American Geosciences Institute</td>
<td><a href="http://www.americangeosciences.org/education.awards.roy">http://www.americangeosciences.org/education.awards.roy</a></td>
</tr>
<tr>
<td>1/30/2020</td>
<td>Fund for Teachers Grants</td>
<td>Individuals may apply for up to $5,000 and teams may apply for up to $10,000 (all team members must meet the eligibility criteria). Upon award, Fellows will receive 90 percent of their grant award, the remaining 10 percent to be reimbursed upon completion of post-fellowship requirements.</td>
<td>Fund for Teachers</td>
<td><a href="http://fft.fundforteachers.org/applications/choose_program?state=ca">http://fft.fundforteachers.org/applications/choose_program?state=ca</a></td>
</tr>
<tr>
<td>1/31/2020</td>
<td>California Coastal Art &amp; Poetry Contest</td>
<td>The California Coastal Commission invites California students in kindergarten through 12th grade to submit artwork or poetry with a California coastal or marine theme to the annual Coastal Art &amp; Poetry Contest.</td>
<td>California Coastal Commission</td>
<td><a href="http://www.coastal.ca.gov/publiced/poster/poster.html">http://www.coastal.ca.gov/publiced/poster/poster.html</a></td>
</tr>
</tbody>
</table>

**February 2020**

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

Printed 10/10/2019
The Toshiba/NSTA ExploraVision science competition encourages K – 12 students to imagine what technology might be like in the future. ExploraVision helps teacher sponsors meet many of the National Science Education Standards while letting students experience scientific process and discovery in an engaging, hands-on way. Let’s empower the next generation of inventors, scientists and leaders.

**Toshiba America Foundation**

**ExploraVision K-12 student competition**

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

http://www.exploravision.org/

$10,000 grand prize, many more smaller prizes

March 2020

**3/1/2020 AAE Classroom Grant**

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

http://www.aateachers.org/index.php/classroom-grant-application

Classroom grants can be used for a variety of projects and materials. Funds must be used within one year of the application deadline. Awards are competitive. AAE members receive additional weight in the scoring rubric.

**California Coastal Commission**

**How do we come together for the climate?**

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

https://www.coastal.ca.gov/climatechallenge/

$300 for 1st place, $200 for 2nd place, $100 for 3rd place

Climate change is a global problem that has many local implications. It impacts all of us, and it will take all of us working together to face it. With this understanding in mind, the California Coastal Commission invites California middle and high school students to present a video response to the question: How do we come together for the climate? You may enter as an individual or a group, but one prize will be offered per winning entry.
## Teacher Grants: Rolling or Continuous Deadlines

**Teacher wishlist**

### Adopt-A-Classroom Grants
- **Grades:** K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th
- **Website:** [http://www.adoptaclassroom.org](http://www.adoptaclassroom.org)

Register your classroom online. This site pairs you with people who want to give money to your classroom to purchase supplies. It is not project based.

### Amgen Foundation Grant
- **Grades:** K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th
- **Website:** [http://wwwext.amgen.com/citizenship/apply_for_grant.html](http://wwwext.amgen.com/citizenship/apply_for_grant.html)

The areas given priority consideration within science education are: Teacher quality and professional development in math and science, and Pivotal hands-on science experience for students.

### Program Scholarships
- **Grades:** PK, TK, K, 1st, 2nd, 3rd
- **Website:** [https://bayareadiscoverymuseum.org/school-community-programs](https://bayareadiscoverymuseum.org/school-community-programs)

Partial scholarships are available for all BADM school programs. Teachers at Title I schools are encouraged to apply.

### Course Scholarships
- **Grades:** K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th
- **Website:** [https://www.bawt.org/scholarships/](https://www.bawt.org/scholarships/)

With this scholarship program, we hope to increase access to our programs for teachers and youth workers from under-represented and marginalized communities. The Summit Scholarship program provides 50% scholarships to qualified applicants on a first-come-first-served basis for up to a third of all available spaces on WLT, FLT, HLT, and Snowshoeing courses. All applicants must be a teachers or youth workers serving youth from one or more of the following Bay Area counties (San Francisco, San Mateo, Santa Clara, Alameda, Contra Costa, Solano, Napa, Marin, Sonoma).

**RECIPIENTS OF THE SCHOLARSHIP WILL MEET AT LEAST TWO OF THE FOLLOWING CRITERIA**

* Serve a population of youth in which 60% or more qualify for free or reduced lunch Or the youth worker or teacher earns $40,000 or less per year
* The youth worker or teacher speaks English as a second language
* The youth teacher or teacher is a person of color
* The youth worker or teacher is a member of a marginalized group other than being a person of color. This could be but is not limited to LGBTQ, person with limited mobility, Native American or indigenous, recent immigrant, refugee, homeless, foster youth, or formerly incarcerated

### Native Garden Design Grants
- **Grades:** K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th
- **Website:** [http://middlebrookcenter.com/elsee/cngf/design-grants/](http://middlebrookcenter.com/elsee/cngf/design-grants/)

Support include garden design services, in-kind donations of plants and landscape materials, volunteer assistance, and direct financial assistance. A typical grant cycle is about 5 months. Grant amounts are limited to $1,000 for in-kind assistance, $500 in direct cash assistance, and $5,000 for design services.

**Free Field Trips for Oakland Unified**
- **Grades:** TK, K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th
- **Website:** [https://chabotspace.org/education/field-trips/](https://chabotspace.org/education/field-trips/)


---

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

Printed 10/10/2019  
Grants
| Reduced-rated and fee-waived programs for CA Title 1 and qualifying schools are now available. |

<table>
<thead>
<tr>
<th><strong>Free Field Trips</strong></th>
<th>Children’s Creativity Museum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="https://creativity.org/visit/fieldtrips/">https://creativity.org/visit/fieldtrips/</a></td>
<td></td>
</tr>
<tr>
<td>Reduced-rate and fee-waived programs for CA Title 1 and qualifying schools are now available.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Classroom Computers</strong></th>
<th>Computers for Learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="http://computersforlearning.gov/">http://computersforlearning.gov/</a></td>
<td></td>
</tr>
<tr>
<td>Schools register and request equipment on the Computers for Learning web site. Federal agencies match their surplus equipment to schools with those needs. Computers and equipment are not refurbished by the government before being shipped to schools, nor are they covered by warranty.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Digital Wish List</strong></th>
<th>Digital Wish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.digitalwish.com/dw/digitalwish/home">http://www.digitalwish.com/dw/digitalwish/home</a></td>
<td></td>
</tr>
<tr>
<td>Teachers to create a technology wish list. Online crowd sourcing provides funding</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Classroom Wishlist</strong></th>
<th>DonorsChoose.org</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.donorschoose.org/teachers">http://www.donorschoose.org/teachers</a></td>
<td></td>
</tr>
<tr>
<td>Teachers describe classroom needs. Contributors decide where they want to put their money. Many corporations including Disney, Chevron, and Horace Mann are now using DonorsChoose.org as the way they give away money to education. Once funded, resources sent directly to your classroom.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Book Give</strong></th>
<th>East Bay Children’s Book Project</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: PK;TK;K;1st;2nd;3rd;4th;5th</td>
<td></td>
</tr>
<tr>
<td><a href="http://www.eastbaychildrensbookproject.org/">http://www.eastbaychildrensbookproject.org/</a></td>
<td></td>
</tr>
<tr>
<td>3:30PM – 6:00PM Every Tuesday and Thursday. Limits of the number of books you can have change from day to day. In the range of 20-30. The East Bay Children’s Book Project helps build literacy by putting books into the hands of children who have little or no access to them. Working through individuals and organizations who help children in need,</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>WaterSmart garden grants</strong></th>
<th>East Bay Municipal Utility District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td>Gardens must be located within the EBMUD service area and have an active water account or other water source. Grants are for EBMUD pre-approved projects or events only. Awards are not retroactive. The garden must have safe public access and high visibility. Conservation of water and other natural resources must be the clear message through the design and interpretive signage. EBMUD support of the project will be acknowledged in signage. Applicants must commit to ongoing operation and maintenance of their demonstration project for a minimum of five years. Grant awards are subject to reimbursement to EBMUD in the event that gardens are not maintained per the agreement or are removed prematurely. Whenever possible, a demonstration site must utilize current sustainable landscaping principles, including:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Parks Express Transportation Services</strong></th>
<th>East Bay Regional Park District</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="https://www.ebparks.org/parks/publictransit/parks_express.htm">https://www.ebparks.org/parks/publictransit/parks_express.htm</a></td>
<td></td>
</tr>
<tr>
<td>Discount buses ($120) 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.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Transportation Fund</strong></th>
<th>Environmental Volunteers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th</td>
<td></td>
</tr>
<tr>
<td><a href="https://www.evol.org/transportation-fund/">https://www.evol.org/transportation-fund/</a></td>
<td></td>
</tr>
<tr>
<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.</td>
<td></td>
</tr>
<tr>
<td>* For schools with 70% FRPM or greater, the maximum subsidy is $500 per bus.</td>
<td></td>
</tr>
<tr>
<td>* For youth-serving organizations (e.g. an after-school program serving a community with 70% FRPM or greater), the maximum subsidy is $500 per bus.</td>
<td></td>
</tr>
</tbody>
</table>
Free Admission to CA Title 1 Schools

Grades: K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://www.exploratorium.edu/visit/field-trips

Free admission to provided to all CA Title 1 schools.

Free Monday Field Trips and Transportation Grants

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

No charge field trips during Mondays at the Museum, with transportation reimbursement also available for qualified low-income schools (at least 40% of students qualified to receive free or reduced price meals).

Youth Microgrant Program

Grades: TK; K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://karmaforcara.org/get-involved/apply-for-a-microgrant/

Kids 18 and under to apply for funds between $250 and $1,000 to complete service projects in their communities. Whether it is turning a vacant lot into a community garden, rebuilding a school playground or helping senior citizens get their homes ready for winter, we want to hear what project you’re passionate about.

Education Grants

Grades: K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://www.kindermorgan.com/community/km_foundation_guidelines.cfm

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

Program Scholarships

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

* Any school located within the Oakland Unified School District receives a 30% discount on tours, programs, performances, and self-guided visits.
* Any school with 75% or more of students qualifying for free or reduced meal plans qualify for scholarships.

Bus Transportation Scholarship - Oakland & Richmond

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

A limited number of scholarships are available and are awarded based on these criteria: • School must be in Oakland Unified School District (includes charter schools) or a Richmond public school. • At least 70% of students at the school must qualify for the free or reduced lunch program. • One scholarship per teacher each school year. • Awarded on a first-come, first-served basis. • Teachers will contact the bus company directly to book the transportation, using the code as authorization provided by the museum. The Museum will be billed for the bus.

First Robotics Grants

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

The PG&E FIRST® Robotics program provides school and community-based student teams with funding to design and build fully functioning robots and take part in robotics competitions. Schools in the PG&E service area are invited to apply now (grants are provided on a first-come, first-serve basis)

Classroom Grant

Grades: PK; K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th
http://www.petsintheclassroom.org/teachers/

Offered to Pre-K through 8th grade classes. Supports pets or aquariums in the purposes for the classrooms 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. Grant can be used to purchase of animals or to cover food and material costs

Environmental Sciences Resource Grants

Grades: K; 1st; 2nd; 3rd; 4th; 5th; 6th; 7th; 8th; 9th; 10th; 11th; 12th
http://www.venturesfoundation.org/programs/teacher-grants/

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

Printed 10/10/2019

Grants
Grants of up to $500 will be awarded to teachers (K-12 teachers working at a low-income public school in Alameda County) to enhance classroom environmental science curriculum through projects, resources, field trips, and professional development. Examples include:
* Field trip related to the study of wetland and creek restoration and water conservation
* In-classroom presentations about endangered species by local wildlife experts
* Gardening supplies to build a wildlife habitat
* Adopt-a-Beehive program for a project-based learning activity about bees

Materials for a school-wide climate stewardship project to mitigate the effects of climate change

Limit 2 grants per school

$1000 for fieldtrips

**Excursion Grant - Alameda, San Mateo & SF Counties**
Grades: K;1st;2nd;3rd;4th;5th
http://venturesfoundation.org/programs/teacher-grants/excursion-grants-program
Apply early. Fund run out. Easy application. Funds can cover the cost of transportation, admission fees and food. For public school teachers for grades K-5, Alameda, San Mateo, and San Francisco counties.

Bus funding

**Bus Funding for Oakland Unified Schools**
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.steppingoutsteppingin.org/school-programs.html
All OUSD schools are now eligible for bus funding. Bus funding is limited to one bus per school teacher a year. Apply early! Title 1 Schools or schools that have over 75% Free and Reduced lunch program are eligible for full sponsorship by the Port of Oakland.

$1000 to $5,000

**Mini Grants - Waste Reduction**
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.stopwaste.org/recycling/business/general-mini-grant-program
StopWaste.org looks for innovative projects which will increase individual and community involvement in source reduction efforts, decrease the amount of waste generated and sent to the County's landfills, and encourage the development, marketing and use of recycled products.

**Grants for Teachers**
Grades: PK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://grants4teachers.com/
Database of education grants of all types and amounts.

50% of classes.

**Program discounts for teachers (personal)**
Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
TheCrucible.org/policies-resources/registration-pricing-discounts/#discounts
Learn more about hands-on making and pass down that passion to your students! Current K-12, undergraduate and graduate teachers and instructors can take advantage of 50% off class tuition!

12-20 trees plus more

**Fruit Tree Orchard for Your School**
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.ftpf.org/apply
Program brings fruit tree orchards to schoolyards, so students can make a positive environmental impact at their school, while creating a source of tasty snacks for decades to come. Orchard donations involve a 12-20 tree minimum to public or nonprofit schools. The trees, materials, orchard installation design work, and onsite environmental curriculum with students are all donated.

$2,500 - $10,000

**Foundation Grants for Youth and Education**
Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://safewayfoundation.org/get-funded/
Requires an employee sponsor. Find out if any parents at your school work for Safeway and partner with them for the grant application. First-time funded organization will typically receive a grant of $1,000 to $2,500. Once foundation has some history with an organization, they will entertain a request at a higher value. Applications reviewed on a quarterly basis. At the close of the application process, it typically takes at least 6 WEEKS to review and get back to you.

Field Trips are FREE for Title I schools

**Field Trips are FREE for Title I schools**
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.thetech.org/education/for-teachers/field-trips
Receive free museum admission for students, teachers and chaperones for all Bay Area Title I schools. The Tech's 90-minute science labs (subjects include electricity, physics, chemistry, water, DNA/genetics, and earthquakes) are also free to Title I schools.

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

Printed 10/10/2019
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?

Mini-Grants For Grades 6 - 12
Toshiba America Foundation
 Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.toshiba.com/taf/612.jsp

School Yard Habitats Grants
US Fish & Wildlife Services
 Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.fws.gov/cno/conservation/Schoolyard.html

Free Overnight Field Trips
Vida Verde
 Grades: 4th;5th;6th
https://www.vveducation.org/teachers/#schedule-a-trip

Education Grants
Wells Fargo Foundation
 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.wellsfargo.com/about/charitable/ca_guidelines

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

Printed 10/10/2019
Grants
Professional Development

October 2019

10/24/2019  Webinar: Analyzing global sea-level and temperature data
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: free
Stipend: (9:00 AM PST) Activity: Impact of increased amounts of carbon dioxide on global temperature- what can students do to help.
Each webinar is a short 30 minutes and will explore the different sections of the 5E sea level rise curriculum. The webinars will be recorded and archived in this web page.

10/24/2019 - 10/25/2019  CA NGSS and Environmental Literacy Rollout Workshop
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: $250 per attendee.
Stipend:
https://web.cvent.com/event/46dc5200-97b9-4b08-9e51-e4d5032fda6/summary

10/25/2019  Field Trip for Teachers @ UC Berkeley
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: FREE
Stipend: (5:30-8:00) Join us for a Field Trip for Teachers co-hosted by CRS and Science at Cal. It's a celebration of the Nature of California. Discover how the University of California Natural Reserves System is cultivating tomorrow's field scientists, providing environmental forecasting, and serving the people of California. This event is open to teachers and family and friends. Children 5th grade and above are welcome as well.
* Tour UC Berkeley's natural history museums
* Meet scientists working at UC Natural Reserves
* Learn about the technology used to listen to the "heartbeat" of California
* Explore ways to participate in citizen science
* Plan a field trip to the UC Berkeley campus with your students
* And learn about the future of land conservation in California.
https://forms.gle/VEJQuGBNS7YEyxxB9

10/26/2019  Hiking Leadership Training
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: $30-90
Stipend: includes lunch and snacks
http://www.bawt.org/programs/training/leadership-training/hiking-leadership-training/
The Hiking Leadership Training (HLT) is designed to train teachers and youth workers how to plan, organize, and lead fun and safe hikes with youth. Novice and experienced hikers will gain new leadership and facilitation skills. Some of the topics covered during the training include: fun games for the trail, leave no trace, the natural history of open spaces, risk management, meal planning, navigation, and more. Registration for this course includes snacks and lunch.

Participants are expected to wear footwear appropriate for hiking. Bay Area Wilderness Training can provide boots upon request. Participants are not expected to buy new clothing for this training. The HLT is a partnership program between Bay Area Wilderness Training and the Santa Clara Valley Open Space Authority. Time: 9:30am to 3:30pm Location: South Bay open space preserves

10/24/2019 - NSTA Area Conference -Salt Lake City, UT: National Science Teaching Association
10/26/2019 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.nsta.org/conferences/
Cost: $175 early bird registration
Navigating Phenomenal Landscapes: Using Phenomena as a Way to Guide Science Instruction
Forming Natural Bridges: Integrating Science Across Content Areas
Hook 'Em for Life: Sustaining Science Teaching and Learning

10/26/2019 Outdoor Education Open House Point Bonita YMCA
Grades: PK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: FREE
Registration will open the first week of September.
10:30AM-1:30PM. Come explore the magic of the Marin Headlands, enjoy a delicious complimentary meal, take a naturalist-led hike, receive interactive lesson plans to take back to your classroom, and learn more about our program! Our Outdoor Education program is holistic and multi-disciplinary, incorporating hands-on learning, team-building challenges, community service and adventurous fun. We incorporate Next Generation Science Standards and weave social, emotional, physical, intellectual, environmental and spiritual wellness components throughout our program.

10/26/2019 IMAX Educator Preview Day - “Back from the Brink” The Tech Interactive
Grades: 4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.thetech.org/
Cost: free
This immersive film explores the extraordinary true stories of animals rescued from the brink of extinction. Ideal for lessons on natural resources, ecosystems or human impact on Earth systems, “Back from the Brink” is also 45 minutes of cute animals that your students will love. This world premiere event will also include a discussion with the film's director and is exclusive to educators and members of The Tech Interactive.

10/26/2019 Understanding Climate Change in California Water Education Foundation
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://watereducation.org/project-wet-workshops
Cost: $25
Location: Fairfield CA
Join the California Department of Water Resources Climate Change team for a day learning about the science of climate change, how local to Federal water managers are applying the science to safeguard California’s water supply and help develop more climate resilient communities – and how the interdisciplinary activities of Project WET can help you integrate climate change science knowledge, concepts and skills in your classroom or education program!

10/26/2019 - Wilderness First Aid Bay Area Wilderness Training
10/27/2019 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.bawt.org/programs/training/wilderness-medicine/wilderness-first-aid/
Cost: $195
This highly experiential 16-hour class is for anyone who wants to learn how to handle emergency medical situations in the backcountry. It covers basic wilderness first aid topics such as: patient assessment, shock and bleeding, head and spinal injuries, wounds, heat and cold illnesses and much more. Wilderness First Aid certification from Foster Calm available after successful completion of the course and wilderness exam.

10/21/2019 - Webinar: Finding & Evaluating Information KQED
10/27/2019 Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://teach.kqed.org/course/finding-evaluating-information
Cost: Free
We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed 10/10/2019
In this free, online, one-week bootcamp, participants will take the KQED Teach course “Finding & Evaluating Information” along with a supportive community of fellow educators, and participate in additional activities not available in the self-paced version of the course. The bootcamp will cover:

* Guidelines for evaluating the reliability of a resource
* How search engine algorithms shape the information you access
* Methods fact-checkers use to evaluate websites (and other forms of media)
* Identifying altered images

Bootcamp participants will create a lesson plan for evaluating information that they can implement in their classroom, and will walk away with a collection of source-checking resources they can share with students. Participants will earn a certificate of course completion when they finish all components of the course.

### November 2019

**10/28/2019**  **Webinar: Fall 2019 (Oct 28 - Dec 8, 2019)**  **American Museum of Natural History**

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

**http://learn.amnh.org/**

**Cost:** $549

**Stipend:**

6-week online courses provide access to cutting-edge research, world-class scientists, and powerful classroom resources and are designed around your busy schedule with 6 sessions offered per year. The fee for each Seminars on Science course is $549. All courses are available for graduate credit at an additional cost.

**10/31/2019**  **Documenting for Assessment**  **Maker Ed**

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

**https://makered.org/professional-development/workshops/**

**Cost:** $400  **Stipend:** Food: Breakfast and lunch provided daily

How can documentation support assessment? In the first part of this two-day workshop, we will explore different ways to make learning visible. While engaging in hands-on activities, we will practice capturing our work, our process, and our thinking. We will then use the documentation of our practice to broaden our notion of what is assessable. Using this experience, we will design an assessment or strategy tailored to your environment.

**Location:** Maker Ed’s Community Studio, 1808 5th St., Berkeley, CA 94710

**11/1/2019**  **Applications for Teacher at Sea program BEGINS**  **National Oceanic and Atmosphere Administration**

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

**http://teacheratsea.noaa.gov/#/how_to_apply/Call_for_Applications**

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

The mission of the National Oceanic and Atmospheric Administration’s (NOAA) Teacher at Sea (TAS) program is to give teachers a clearer insight into our ocean planet, a greater understanding of maritime work and studies, and to increase their level of environmental literacy by fostering an interdisciplinary research experience. The program provides a unique environment for learning and teaching by sending kindergarten through college-level teachers to sea aboard NOAA research and survey ships to work under the tutelage of scientists and crew. Then, armed with new understanding and experience, teachers bring this knowledge back to their classrooms. Indeed, the greatest payoff of NOAA’s Teacher at Sea program is the enthusiasm for learning more about our ocean planet generated between teachers and students. Since its inception in 1990, the program has enabled more than 430 teachers to gain first-hand experience of science and life at sea. By participating in this program, it becomes possible for teachers to enrich their classroom curricula with a depth of understanding made possible by living and working side-by-side, day and night, with those who contribute to the world’s body of oceanic and atmospheric scientific knowledge.

**11/2/2019**  **(Beginner) Raspberry Pi Robotic Cars**  **Synopsys Outreach Foundation**

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

**https://outreach-foundation.org/programs/superschool-teacher-training-seminars/#raspberry-pi**

**Cost:** refundable $25 deposit  **Stipend:**

Location: Anaerobe Systems, 15906 Concord Circle, Morgan Hill, 95037

Come build a robot car and program it in Python to drive. Educators will learn how to use the Raspberry Pi, a small computer, and its built-in tools for coding. Teachers will apply coding fundamentals by building prototype circuits on a breadboard and use the Raspberry Pi to program them. Learning Objectives: Educators learn the fundamentals of coding through Python, one of the most popular programming languages in industry, and how to integrate computational thinking into STEAM subjects through physical computing and robotics. Physical computing is an effective instructional strategy for engaging beginners in computer science, where students learn how to solve problems, collaborate and think critically through hands-on projects. No technical background is required for participants, and we recommend this workshop for educators teaching 6-12th grade. We will provide hardware kits for each participant during the workshop. Teachers get to take home the hardware kit (includes Raspberry Pi 3, circuit prototyping materials, and robotic car parts), NGSS-aligned lesson plan, and ongoing virtual support. A loaner classroom kit of cars will be available to teachers completing the workshop. Personal laptops are required.

---

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

*Printed 10/10/2019*
November 5 – December 10, 2019 Urban environmental education includes any learning practices that foster individual and community well-being and environmental quality in cities. Similar to how cities are innovation hubs, urban environmental education generates novel educational approaches that advance the field of environmental education more broadly. Urban environmental educators and their programs can benefit by adapting ideas from inspirational examples of other urban environmental education programs, and from recent research in this field. In this course, you will learn about UEE, including: (1) urban contexts; (2) theoretical background, (3) educational settings, (4) participants, and (5) educational approaches in urban environmental education. The course is offered by the Cornell University’s Civic Ecology Lab (https://civicecology.org), and based on cutting-edge ideas from the “Urban Environmental Education Review” book (https://www.cornellpress.cornell.edu/book/9781501707759/urban-environmental-education-review).

11/5/2019 Webinar: "Urban Environmental Education" online course
Cornell University
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.civicecology.org/course-uee
Cost: $60
Stipend: (November 5 – December 10, 2019) Urban environmental education includes any learning practices that foster individual and community well-being and environmental quality in cities. Similar to how cities are innovation hubs, urban environmental education generates novel educational approaches that advance the field of environmental education more broadly. Urban environmental educators and their programs can benefit by adapting ideas from inspirational examples of other urban environmental education programs, and from recent research in this field. In this course, you will learn about UEE, including: (1) urban contexts; (2) theoretical background, (3) educational settings, (4) participants, and (5) educational approaches in urban environmental education. The course is offered by the Cornell University’s Civic Ecology Lab (https://civicecology.org), and based on cutting-edge ideas from the “Urban Environmental Education Review” book (https://www.cornellpress.cornell.edu/book/9781501707759/urban-environmental-education-review).

11/5/2019 Here Today, Gone Tomorrow? Impacts of Climate Change on Bay Area WI
David Brower Center
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://tinyurl.com/bayareawildlife
Cost: $6-10
Stipend: In conjunction with the current stunning and inspiring Photo Ark exhibit, by National Geographic photographer Joel Sartore, Citizens Climate Lobby, Bay Nature and The David Brower Center are hosting a panel of experts to discuss the latest research on the effects of climate change on Bay Area wildlife. Sharon Negri from WildFutures will moderate a panel featuring Eric Simons from Bay Nature, Dr. Jeffrey Dorman, the Executive Director of the Farallon Institute, Dr. Morgan Gray, Conservation Analyst at Pepperwood Preserve, and Dr. Sam Veloz, Climate Adaptation Director from Point Blue. Q&A will follow.
This promises to be an evening filled with the latest information on the challenges and opportunities facing wildlife in the Bay Area, what research and efforts are already underway to help these species adapt, and the many ways people can get involved locally. Evening Agenda:
6:00 to 7 PM Photo Ark Exhibition and Wildlife Fair
6:30 - 7:00 "Edge Of Extinction"* film by Max Brimelow for Berkeleyside
7:00 - 8:30 Panel discussion, Q&A

11/6/2019 Constructing Math for the Early Learner (ages 3-8)
Alameda County Office of Education
Grades: PK;TK;K;1st;2nd
https://www.eventbrite.com/e/constructing-math-for-the-early-learner-ages-3-8-tickets-68197916805
Cost: FREE
Stipend: Join a Community of Practice focused on supporting Math Learning and Development of a Math Identity in the Early Years. The Alameda County Office of Education is offering a grant-funded professional learning opportunity for all Early Childhood coaches and teacher leaders. This project targets educators that support the PK - 2nd Grade to deepen teaching practices to support the early math learning processes through playful, intentional and developmentally appropriate ways. Research-based instructional practices will be the basis for powerful lesson design and assessment that is connected to standards. The professional learning model includes 3 sessions with follow up coaching between each session to support the transference of research to practice.
Please note that a commitment to the Professional Learning series is a commitment to ALL 3 meeting dates. Please note these dates on your calendar. Reminders will also be sent a week prior to each meeting date. Meeting dates will be:
November 6, 2019
February 5, 2020
May 6, 2020
All meetings will be from 4:30 pm - 7:30 pm (Dinner provided).

11/5/2019 - 11/6/2019 CA NGSS and Environmental Literacy Rollout Workshop
California Department of Education
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://web.cvent.com/event/46dc5200-97b9-4b08-9e51-e4d5032fda6/summary
Cost: $250 per attendee.
Stipend:
The California Next Generation Science Standards (NGSS) Statewide Rollout: Environmental Literacy is a two-day professional learning geared toward grade K-12 academic coaches, administrators, curriculum leads, and teacher leaders. Participants will experience grade appropriate learning sequences with an environmental literacy focus and examples of local environmental phenomena. A variety of community-based partners will feature resources that use the environment as a context for supporting student learning and CA NGSS implementation. It is recommended that districts send teams of four to six, which include at least one administrator.

11/9/2019 Ocean Literacy, NGSS, and Your Classroom  Monterey Bay Aquarium
Grades: TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://forms.gle/Rf4hgtiiVkv9oLbQ9
Cost: Free for SWMEA members; $10 for non-members  Stipend:
9:00 AM – 3:00 PM This workshop will provide multiple opportunities to learn about the Ocean Literacy Framework, including how to bring ocean concepts into your classroom to address your NGSS needs. There will be opportunities to:
• engage in grade-level appropriate lessons from the Monterey Bay Aquarium and the Lawrence Hall of Science that illustrate connections to Ocean Literacy and NGSS;
• enter into discussions with colleagues about how to bring ocean literacy into your curriculum;
• and learn about and engage in model lessons illustrating effective teaching and learning pedagogy as called for in the Framework for K-12 Science Education.

11/11/2019 Open House for Teachers  Exploratorium
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.exploratorium.edu/visit/calendar/event-school-field-trips-open-house-teachers-2019
Cost: free  Stipend:
Teachers: Are you interested in bringing your class to the Exploratorium on a field trip? Enjoy free admission (for you and two guests), and start planning a great experience at the museum. Explainers will be on hand to share and discuss field trip resources with you, and you’ll have all-day access to our exhibits. Show your teacher ID at the Ticketing Desk for free admission (applies to general admission only).

11/16/2019 Mindset Matters: Learning and the Brain  California Academy of Sciences
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/events/teacher-workshops
Cost: $35  Stipend:
9:00 am - 3:00 pm Tue Jul 30 at 9:00 am - Classroom
image of brain
This is a brand new workshop! Space is limited, so register soon.

Register now
In the last few years, the fields of neuroscience, psychology, and education have led a surge of research on how people learn. What does it all mean for STEM learning? How can we leverage this research to create deep and equitable learning experiences? How well are the Next Generation Science Standards (NGSS) aligned with what we’ve learned from this research? New technologies and research methods have led to exciting work on learning and development. Some of this recent work breaks new ground, some of it offers evidence to support the value of beliefs and practices that have been around for ages. This research provides evidence that all students have the capacity to learn and achieve at high levels, as long as we align our instruction to the way the brain learns. In this workshop we will explore and practice ways this research can be applied to our work as educators. We will go beyond, “that’s just good teaching,” to discover how understanding neural pathways can help us create STEM pathways for all of our students.

11/19/2019 Webinar: 6-12 eBird  Cornell Lab of Ornithology
Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost: FREE  Stipend:
3:00 PM PST Build literacy—and scientific literacy—through schoolyard exploration and citizen science. We’ll share our newest eBird Explorers curricula for K-2 and 3-5 teachers. Receive access to free lessons that will support you in teaching bird ID, participating in eBird, and meeting science standards.

11/21/2019 Webinar: 6-12 eBird  Cornell Lab of Ornithology
Grades: 6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost: FREE  Stipend:
We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org

Printed 10/10/2019  Professional Development
12/7/2019  Snowshoe Training  Bay Area Wilderness Training
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.bawt.org/programs/training/winter-courses/snowshoeing/
Cost:  $60  Stipend:
This experience-based class teaches you the skills you’ll need to take kids out in the snow through the easy and inexpensive activity of snowshoeing. The course starts in a classroom with information about clothing and equipment and then goes into the now SNOW FILLED mountains of Tahoe National Forest! Upon your return, you’ll be qualified to rent or borrow (if you’re taking kids out) Atlas Snowshoes- the best in the biz!

12/7/2019  Rainforest Kit Training  California Academy of Sciences
Grades:  K;1st;2nd;3rd
http://www.calacademy.org/events/teacher-workshops
Cost:  $25  Stipend:
In this workshop, you will explore the tropical rainforest ecosystem and get prepared to use the Rainforest Kit with your students. This kit explores where rainforests are found, what the layers are all about, and some of the plants and animals found there, all at a level appropriate for K - 3 students. You will also visit the California Academy of Sciences' Osher Rainforest dome and discover ways to connect this unique exhibit with your curriculum. Please note: Kit trainings are required to be eligible to rent the specific kit.

Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.stemcalifornia.org/
Cost:  $340  Stipend:
The California STEAM Symposium brings together thousands of teachers, administrators, students, higher education representatives, program providers, philanthropic and industry representatives to engage them in STEAM education by providing strategies and resources for program implementation. The Symposium has a special focus on increasing and supporting the participation of women and girls—as well as other underrepresented groups—in STEAM fields. It also highlights leaders in classroom innovation from across the state and attract student teams to showcase critical thinking, creativity, problem solving, and teamwork.

12/14/2019  Rainforest Kit Training (Grades 4-8)  California Academy of Sciences
Grades:  4th;5th;6th;7th;8th
http://www.calacademy.org/events/teacher-workshops
Cost:  $25  Stipend:
In this workshop, you will explore the tropical rainforest ecosystem and get prepared to use the Rainforest Kit with your students. This kit explores where rainforests are found, what the layers are all about, and some of the plants and animals found there, all at a level appropriate for 4th-8th grade students. You will also visit the California Academy of Sciences' Osher Rainforest dome and discover ways to connect this unique exhibit with your curriculum. Please note: Kit trainings are required to be eligible to rent the specific kit.

12/17/2019  Webinar: Girls in STEM  Cornell Lab of Ornithology
Grades:  3rd;4th;5th;6th;7th;8th
http://www.birds.cornell.edu/k12/webinars-2/
Cost:  FREE  Stipend:
3:00 PM PST Empower young girls in STEM through deeply engaging citizen-science projects and authentic investigations! We’ll explore strategies that make STEM more accessible to girls and young women. In this webinar, you will:
* Learn about the SciGirls Six: simple strategies to engage girls in STEM.
* Gain access to valuable resources you can use right away to nurture a generation of girls in STEM

12/19/2019  Webinar: Girls in STEM  Cornell Lab of Ornithology
Grades:  4th;5th;6th;7th;8th
http://www.birds.cornell.edu/k12/webinars-2/
Cost:  FREE  Stipend:
5:00 PM PST Empower young girls in STEM through deeply engaging citizen-science projects and authentic investigations! We’ll explore strategies that make STEM more accessible to girls and young women. In this webinar, you will:
* Learn about the SciGirls Six: simple strategies to engage girls in STEM.
* Gain access to valuable resources you can use right away to nurture a generation of girls in STEM

January 2020

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Printed  10/10/2019  Professional Development
1/8/2020 - 2020 International Meeting - San Antonio, TX
Grades: 6th;7th;8th;9th;10th;11th;12th
https://theaste.org/meetings/2020-international-conference/
Cost: $355 (non-member rate)  Stipend:
ASTE is dedicated to continuing the professional growth and development of individuals who work in, or have a strong interest in, issues related to science teacher education.

1/11/2020 - Exploring Phenomena: Using Science to Figure Things Out
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/events/teacher-workshops
Cost: $35  Stipend:
What is meant by “real-world phenomena” and how can they anchor learning in science and engineering? Build your understanding of what phenomenon-based science can be, and how to start making it happen in your classroom. “How did the Grand Canyon form?” “Where did the mass of the apple go when I threw it in the compost?” These questions about real-world phenomena are great examples of how science can be used for figuring things out. Participate as a learner in a phenomenon-based lesson, then unpack your experience with fellow educators. Build understanding and gain tools and strategies to help choose phenomena and craft essential questions that can guide students to “figure things out” about the real world.

1/13/2020 - Webinar: Safety and Privacy in a Participatory Culture
KQED
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Cost: Free  Stipend:
A week-long online facilitated course. Understand what online safety and privacy looks like as both a media consumer and media producer. Learn how to support your students’ safety and privacy online so they can get started making media.

1/17/2020 - Webinar: Student-driven Investigations
Cornell Lab of Ornithology
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost: FREE  Stipend:
3:00 PM PST Put your students in the driver’s seat. We'll guide you through the basics of using Investigating Evidence: how to develop observations, formulate questions, and design experiments.

1/23/2020 - Webinar: Student-driven Investigations
Cornell Lab of Ornithology
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost: FREE  Stipend:
5:00 PM PST Put your students in the driver’s seat. We'll guide you through the basics of using Investigating Evidence: how to develop observations, formulate questions, and design experiments.

February 2020

2/1/2020 - Saturday Seminar
Bay Area Science Project
Grades: PK;TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.eisewhere.com/satseminaroct2019
Cost: $35  Stipend:
Details to come. Save the Date

2/1/2020 - Engineering: Beyond Building Bridges
California Academy of Sciences
Grades: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th
http://www.calacademy.org/events/teacher-workshops
Cost: $55  Stipend:
This is a two part workshop taking place on Saturday, February 1 and Saturday February 1, 2020. In order to participate, you must attend both sessions. Many of us grew up thinking that engineering was just about building bridges or designing gadgets. While some engineers really do those things, it turns out there is a lot more to it! Engineering is an iterative, collaborative process involving critical thinking, problem solving, and communication. In this workshop, you will discover what engineering really looks like and how it can be applied to many content areas. Go beyond the stereotypical engineering activities and find ways to integrate this way of thinking across your science curriculum.
1/30/2020 - 2/1/2020  Approaches to Maker Education  Maker Ed
Grades:  TK;K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://makered.org/professional-development/workshops/
Cost:  $600  Stipend:
Join us for three days of intensive, hands-on, minds-on learning that culminates in the creation of a maker-centered project tailored to your learning environment. Step into your learners’ shoes and explore four foundational approaches to weaving making into your practice: tinkering to discover, making to learn, the application project, and making to build and impact community. This workshop is perfect for those who are just getting started or are looking to further develop their practice in schools, libraries, museums, makerspace, and other educational settings.

2/6/2020 - 2/8/2020  Annual Space Exploration Educators Conference  NASA Education
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://spacecenter.org/educator-resources/teachers-seec/
Cost:  $300 Early Bird through 12/31/19  Stipend:
At Space Center Houston - This conference is for Grades K-12 – and not just for science teachers! Space Center Houston strives to use space to teach across the curriculum. The activities presented can be used for science, language arts, mathematics, history, and more! Space Center Houston is proud to continue offering the educational opportunity of a lifetime! Experience three days of complete submersion into the out-of-this world adventure of space exploration! Attend sessions hosted by the actual scientists and engineers working on these exciting endeavors including the International Space Station, Mars exploration, and the planets beyond. Hear from the astronauts leading the charge in exploration! Come learn about the bold vision to send humans back to the Moon and off to Mars! Attend sessions presented by educators and receive ready to implement classroom ideas and experience minds-on, hands-on fun! Network with fellow educators, take back a multitude of cross curriculum ideas and activities and earn 24 hours of Continuing Professional Education credit.

2/18/2020  Webinar: Inquiry Across the Ages: A Panel Discussion  Cornell Lab of Ornithology
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost:  FREE  Stipend:
3:00 PM PST Hear from K-12 teachers who have successfully inspired student-driven investigations with citizen science through Investigating Evidence. They'll share the benefits of inquiry-based teaching and strategies they've used to overcome challenges.

2/20/2020  Webinar: Inquiry Across the Ages: A Panel Discussion  Cornell Lab of Ornithology
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.birds.cornell.edu/k12/webinars-2/
Cost:  FREE  Stipend:
5:00 PM PST Hear from K-12 teachers who have successfully inspired student-driven investigations with citizen science through Investigating Evidence. They'll share the benefits of inquiry-based teaching and strategies they've used to overcome challenges.

March 2020

3/7/2020  Low Floor, High Ceiling: Engaging Every Student  California Academy of Sciences
Grades:  K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
http://www.calacademy.org/events/teacher-workshops
Cost:  $35  Stipend:
“Low floor, high ceiling” learning experiences enable all students to engage with the learning at their own level. At the same time, they provide ample space for students to challenge themselves and grow their understanding. Join us to explore this kind of experience, which has transformed math education, and discover what it can bring to science learning. Participate in example activities, discuss the benefits and characteristics of this approach with your peers, and consider how to bring these ideas into your own classroom.

3/7/2020  NGSS STEM Conference  Exploratorium
Grades:  3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
https://www.exploratorium.edu/education/ngss-stem
Cost:  $50.00  Stipend:
Science is all around us, and CA NGSS can help your students understand it. Join us as we engage in activities for your science classroom incorporating the three dimensions of NGSS. This day-long conference features a keynote, hands-on workshops, and activities teachers can use in their classrooms to engage students in CA NGSS learning experiences. Registration is $50. A 50% discount is available for teachers at Title 1 Schools.
Frontcountry Leadership Training (FLT) is an entry level course covers all the basic skills you will need to successfully take youth on car-camping based overnight trips. Skills covered include: camping safety, day-hiking, tent and stove-set up, clothing requirements, nutrition and team building activities. All learning is experiential. Prior to the weekend training, to get access to our gear libraries, participants also need to complete the Gear Orientation (GO!) training. This can be completed during the pre-trip meeting. Please note that Gear Orientations are offered in both our Oakland and Milpitas offices. Cost: The cost of the course covers all course materials, meals and camping. Participants will have to provide their own transportation to get to the location. The price is $65 for the first participants, and $50 for each additional participant from the same organization (Limit: 2 Discounts per organization). All registrations include a Gear Orientation and pre-trip meeting.

3/17/2020  Webinar: Life Cycles with Birds  Cornell Lab of Ornithology
Cost: FREE  Stipend:
3:00 PM PST Explore the world of nesting birds through observing wild nests, building nest boxes, and participating in citizen science. Then talk to an expert about the do's and don'ts of observing nesting birds.

3/19/2020  Webinar: Life Cycles with Birds  Cornell Lab of Ornithology
Cost: FREE  Stipend:
5:00 PM PST Explore the world of nesting birds through observing wild nests, building nest boxes, and participating in citizen science. Then talk to an expert about the do's and don'ts of observing nesting birds.

3/21/2020  Urban Science: The City as Classroom  California Academy of Sciences
Cost: $35  Stipend:
"At first glance, the city may not seem like the perfect place for outdoor science. But the urban ecosystem is a fascinating phenomenon to explore and provides many rich opportunities for making observations, collecting and analyzing data, constructing explanations, and more. Join us to discover ways to make the city your science classroom. Get outside with us and participate in some urban science, then consider ways to apply these ideas to your own school setting."

We're here to help you find the science resources you're looking for. Email us at CRS@crscience.org
Temporary & New Science Exhibits Around the Bay Area

Bay Area Discovery Museum

Try It Studio - new permanent exhibit
http://bayareadiscoverymuseum.org/exhibits
(Opens Fall 2019) Stay tuned for specific dates and details.

Science + You
http://bayareadiscoverymuseum.org/exhibits
(September 24, 2019 to January 5, 2020) All children are scientists, and in BADM’s new traveling exhibit, Science + You, they’ll be able to look and act the part! In Science + You, children and their families will explore a replica laboratory, where different stations and experiments empower them to make important connections between science and wellness.

Bay Area Science

Bay Area Science Festival 2019
www.bayareasciencefestival.org
(October 25 to November 2, 2019) - 9th annual Bay Area Science Festival. The Bay Area Science Festival returns this fall to inspire and engage the public with the science and technology that surrounds us. Organized and led by UCSF, in collaboration with hundreds of the Bay Area’s premier science, cultural, and educational establishments, the 2019 Bay Area Science Festival offers a series of events over nine days all across the Bay Area.

Bay Model Visitor Center

A Seaweed Sanctuary – Art Exhibition
http://www.spn.usace.army.mil/Missions/Recreation/BayModelVisitorCenter/CalendarofEvents.aspx
(October 8 – November 16, 2019) Josie Iselin and Ellen Litwiller come together with delightful visions of seaweed and the wonders that live within. Although they work in different mediums, both have extensive experience bringing art and science together, Their work engages and challenges the way we can observe, appreciate and learn about the underwater world of seaweed.

California Academy of Sciences

Skin: Living Armor, Evolving Identity
https://www.calacademy.org/exhibits-events
(Opening June 14, 2019) Skin is the way we face our world. Uniquely personal yet universal, this complex organ forms a living interface between organisms and their environment. In this immersive new exhibit, discover the shape-shifting, color-changing, and ever-evolving nature of skin. From thick-skinned armadillos, rhinoceros, and turtles to colorful insects and birds, dynamic displays of Academy scientific specimen reveal the extreme protection that skin can offer while multimedia experiences show visitors how animals heal in extraordinary ways. Interactive elements throughout the exhibit invite visitors to stimulate their own skin’s array of sense to uncover how we perceive temperature, vibration, and pressure. Plus, explore the layers of meaning humans have associated with skin color throughout history and how this shapes the way we view, interact with, and identify ourselves and each other in a modern world.

California Coastal Commission

Coastal Art & Poetry Contest Exhibition
https://www.coastal.ca.gov/publiced/poster/poster.html
Winners will be exhibited at the Channel Islands National Park in Ventura from September to mid-November, and the Seymour Marine Discovery Center in Santa Cruz in December and January. See all the winners at https://www.coastal.ca.gov/publiced/poster/mm19/winners2019.html
Code.org

Computer Science Education Week - December 9-15, 2019
https://csedweek.org/
December 9-15, 2019. Try an Hour of Code. Website is full of resources you can use to spend some time learning about computer science and having an experience with coding.

David Brower Center

ART/ACT: AWARD – PHOTO ARK, JOEL SARTORE
https://browercenter.org/exhibitions-programs/
(September 20, 2019 - February 14, 2020) The interaction between animals and their environments is the engine that keeps the planet healthy for all of us. But for many species, time is running out. When you remove one, it affects us all. The National Geographic Photo Ark is a multiyear effort to raise awareness of and find solutions to some of the most pressing issues affecting wildlife and their habitats. Led by National Geographic photographer Joel Sartore, the project aims to document every species living in the world’s zoos and wildlife sanctuaries, inspire action through education, and help save wildlife by supporting on-the-ground conservation efforts. This fall the Brower Center honors Sartore with its annual Art/Act: Award, given to an artist who has dedicated their career to using art for activism.

DiscoverE

National Engineers Week - February 16-22, 2020
http://www.discovere.org/our-programs/engineers-week
Engineers Week—the only event of its kind—is a time to: Celebrate how engineers make a difference in our world, Increase public dialogue about the need for engineers, Bring engineering to life for kids, educators, and parents. More than a week-long event, Engineers Week is a year-round commitment to making a difference.

Oakland Museum of California

Take Root: Oakland Grows Food
http://museumca.org/exhibit/take-root-oakland-grows-food
(Through November 2019) Enjoy this hands-on exhibition with the entire family to understand what factors determine where, how, why, and what is grown throughout the city. Hear personal stories from farmers and growers within the community, see compelling illustrations and maps, and meet the diverse flavors of Oakland. Learn what motivations Oaklanders have for growing food—including access to healthy and delicious ingredients, environmental and social justice values, or simply the joy of tending a garden.

SF Botanical Garden & Strybing Arboretum

Art Exhibit: A Classical Eye: Chinese Brush Paintings of the Botanical Garden
http://www.sfbotanicalgarden.org/library/art-exhibit.html
(September 4 - December 30, 2019) Works by noted artists Janny Huang and Joseph Yan of The Pine Studio together with several of their students reveal San Francisco Botanical Garden through the lens of traditional Chinese painting. "The Garden is an endless source of beauty and amazement, and an inviting challenge to a painter," say Huang and Yan, "so it was natural that we would one day want to organize an exhibition of works about the Garden and its inspirations through the lens of Chinese Brush Painting." The exhibit showcases the Garden in a range of classical styles from a grand landscape of the Great Meadow to a set of detailed images of magnolias, all reflecting the prevailing styles of various Chinese eras.

University of California Berkeley

Cal Day Open House - April 18, 2020
http://calday.berkeley.edu/
From Astronomy to Zoology, explore the wonders of science! There are a huge range of activities for adults and families. Tour the Berkeley Natural History Museums (Valley Life Sciences Building) and Berkeley’s renowned research labs. Arrive early to register for a place on a Museum of Paleontology tour! Tour the Space Sciences Laboratory, Lawrence Hall of Science and the Botanical Garden (take Hill Shuttle from Evans Hall east entrance). Meet Cal scientists at numerous talks and hands-on presentations.

Printed: 10/10/2019
In This Issue:

- Field Trip for Teachers at UC Berkeley, October 25
- Tracking Progress
- Science Super Star Challenge
- Exploring MakerEd
- Online Resources at Your Fingertips
- Bay Area Scientists in Schools (BASIS)
- Need Help? Ask CRS!

- **Time Sensitive Science Resource Lists** (Professional Development, Registration Deadlines, Temporary/New Science Exhibits, Grant Deadlines)

Dive in and don't be afraid of the mess, or that it won't work! Students learn so much from hands-on science experiences, especially those that don't go perfectly! Also use writing as a time to explore science concepts, it's a good way to synthesize learning, as well as practice the art of written composure. —Teacher, Oakland

“I always look forward to the CRS newsletters. There is so much available to help us teach science more effectively and the newsletter puts it all in one place for easy access. I also enjoy their obvious love for the subject—it's inspiring!”

- Teacher, Oakland Unified School District