

# SCIENCE & ENVIRONMENTAL LITERACY

APRIL 2021-SANTA CLARA COUNTY OFFICE OF EDUCATION

## HI EVERYONE,

Happy April!

Welcome to our second Science and Environmental Literacy email update. We know that many of your districts are in the midst of bringing students back to your school campuses and know that there is a lot to be planning for. We wanted to provide some resources for Environmental Education Week/ Earth Week/Earth Day/National Parks Week as well as some upcoming workshops with some of our partners that are coming up.

If you know of any other resources or workshops or would like to highlight something that is going on in your School District or Organization, please let us know and we will highlight it here.

## UPCOMING EVENTS



## **EARTH DAY 2021 (EARTH WEEK/ MONTH/ YEAR)**

Please check out these resources for Earth Day Ideas and ways to incorporate Earth Day everyday at your District/School/Classroom:

<https://www.earthday.org/>

EPA:

[Earth Day | US EPA](#)

CalRecycle:

[Earth Day 2021 \(ca.gov\)](#)

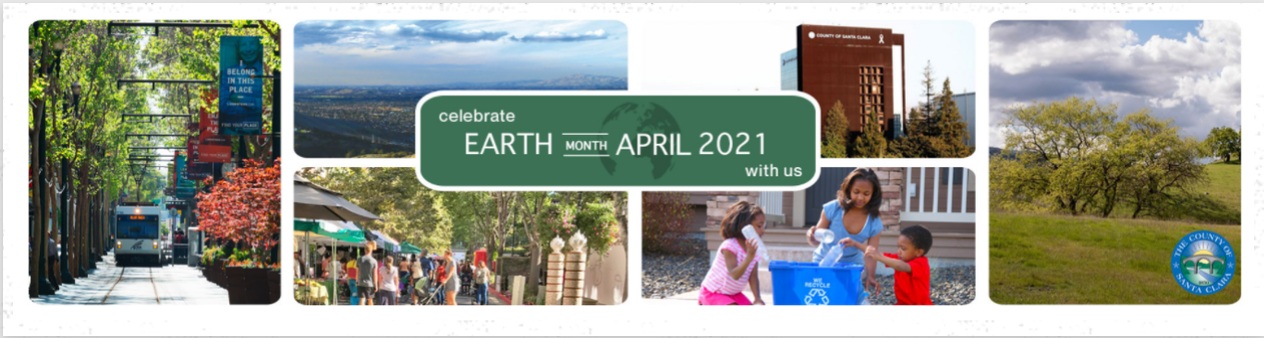
Santa Clara County:

[Earth Month 2021 - Clean Water Program - County of Santa Clara \(sccgov.org\)](#)

List of Local Events:

[How to celebrate Earth Day on the Midpeninsula: Films, art projects and more | News |](#)

[Mountain View Online | \(mv-voice.com\)](#)



The Grey Water Project's   
**EARTH DAY**

 **APRIL 24**

**REGISTER TODAY:**  
[BIT.LY/TGWPEARTHDAY2021](https://bit.ly/TGWPEARTHDAY2021)

Participate in our Art Competition: Submissions due **April 20th** 

 Hear from speakers from **National Geographic, water.org, and WWF!**

Attend a **Design Thinking** workshop 

 Meet **Internationally recognized** young scientists and innovators and learn how to do your own research project

Learn more about **Grey Water** systems 

 Join our **open mic** as a speaker!

## NATIONAL PARKS WEEK- APRIL 17TH-25TH

[National Park Week - NPS Celebrates! \(U.S. National Park Service\)](#)

Check out the National Parks website for different virtual events and themed days throughout the week. National Junior Ranger Day is Saturday, April 24th.



## NGSS NOW NEWSLETTER FOR APRIL 2021

# NGSS NOW

7 things to know about quality K–12 science education in April 2021



## ENVIRONMENTAL LITERACY LEADERSHIP COLLABORATIVE UPDATE

We have been moving forward with the development of the Microsite in partnership with Ten Strands and Green Guardians. Please look for information about the new website coming soon!.

We have also created a folder to house all of our resources shared during our Environmental Literacy Leadership Collaborative Meeting. You can view this folder by following the link: <http://bit.ly/2MCcC2L>

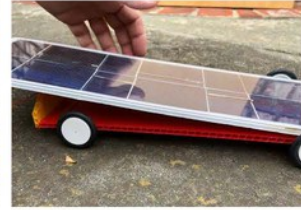
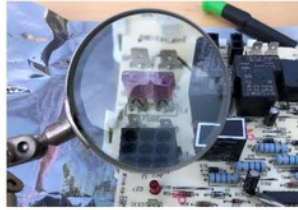
We are excited to see environmental literacy grow in the Bay Area and if you would like to join us feel free to register for our next meeting on April 22, 2021.

Register Here:

<http://bit.ly/EnviroCollab>

## **PARTNER WORKSHOPS AND EVENTS**

**SILICON VALLEY TECH ACADEMY- MORE  
INFORMATION**



## Tech Academy Re-Launching Middle School STEM Program

When I was only seven years old, my father taught me how to sew leather and repair shoes... before long I was putting new soles and heels on (my siblings') shoes. As I worked with my hands, I automatically coordinated the work with my head. And hands and head are a winning combination in any endeavor."

-- Eddie Rickenbacker - Eastern Air Lines CEO, aviation innovator, race champion

There are as many paths to inspiring a young person to become a scientist or engineer as there are professionals in these careers. The Silicon Valley Tech Academy was founded to provide inspiration to young students through hands-on projects modeling real-world challenges.

The late Dean of SJSU College of Engineering, Dr. Jay Pinson, developed the original program in 2006, partnering with the Silicon Valley Engineering Council, Santa Clara County Office of Education, San Jose State and Santa Clara Universities. Dr. Pinson wanted to introduce younger students to problem-solving and hands-on projects. He believed middle school students, having had algebra and some science, would be inspired to STEM subjects and would be drawn to engineering undergraduate work. In its nine years the Tech Academy experience benefited nearly 2000 students, and won a Silicon Valley Education Foundation STEM award in 2013. The two-week course features:

### High Technology & Space

- Build a Mars (egg) Lander
- Deconstruct a Cell Phone
- Build a Simple E-Device (soldering)

### Water

- Design & Build an Aqueduct
- Design & Building Bridges
- Build a Simple Robot

### Energy

- Design & Build a Solar Cooker
- Build a Basic Electric Motor
- Build & Race a Solar Model Car

The Tech Academy will re-launch with five Tech I classes of 20 students each, June 14-25 & July 5-16, 2021. Classes will be held at **Trinity Church on Leigh Avenue**, and at **Downtown College Prep Alum Rock High School**, both in San Jose.

Registration for the two-week Tech I course is \$500/student. Some scholarships are available for financially disadvantaged families. As SVTA grows, future advanced courses will use hands-on techniques to teach such topics as three-dimensional design and printing, digital electronics, robotics and bioengineering.

For more information on the Silicon Valley Tech Academy: <http://techacademysv.com/>

**ENVIRONMENTAL JUSTICE IN CALIFORNIA-  
REGISTER HERE**

The Bay Area Environmental STEM Institute (BAESI) presents a workshop on:



## Environmental Justice in California



Thursday, April 29  
3-5 pm (online)

### WHAT

According to the Environmental Protection Agency, environmental justice is "the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies." This is an important and timely topic that provides an opportunity to engage your students in NGSS-based, inquiry-based learning that connects to their lives and communities.

In this free workshop keyed to the Next Generation Science Standard, you will:

- Discover how environmental justice can be used as a theme for three-dimensional learning that integrates:
  - Disciplinary Core Ideas from across the sciences;
  - Science and Engineering Practices (Analyzing & Interpreting Data; Engaging in Arguments from Evidence);
  - Cross Cutting Concepts (Patterns; Cause and Effect); and
  - California's Environmental Principles and Concepts.
- Engage in collaborative, ready-to-use learning activities and participate in breakout sessions by grade level and discipline.
- Investigate [CalEnviroScreen](#), a powerful mapping tool that helps to identify which California communities are most affected by pollution.

### WHO

Teachers of grades 6-12

### INSTRUCTOR

Ellen Metzger, Professor of Geology and Science Education and Co-Director, BAESI

**TO REGISTER:** go to <https://forms.gle/z8YC1z5CbZSkrdeE9>

### QUESTIONS?

Contact Dr. Ellen Metzger at [ellen.metzger@sjsu.edu](mailto:ellen.metzger@sjsu.edu).

**RAFT- PROFESSIONAL DEVELOPMENT  
WORKSHOPS**



## HOME-BASED SCIENCE LEARNING

Saturday, May 15, 2021 | 10:00 AM - 12:00 PM PST

Price: \$45 (materials and shipping included)

Many of us learned some science at school, either as young learners or as adults. Science learning is definitely not restricted to the classroom, and some of the most interesting science phenomena can be explored in our own backyard, kitchen and living room! This virtual workshop leads participants through some science explorations and investigations that are practical, requiring only a few simple materials often found at home and at RAFT, and can prepare you for engaging students through the activities with confidence. Workshop materials are sent to registered participants prior to the workshop. (2 hours)

## RAFT STEAM PROJECT KIT EXTENSIONS

Saturday, May 22, 2021 | 10:00 AM - 12:00 PM PST

Price: \$45 (materials and shipping included)

RAFT develops many project kits covering different STEAM topics that provide students with joy as they learn new hands-on skills. This virtual workshop provides training on ways to extend the kits beyond the written instructions and enhance student learning, providing teachers with practical methods for differentiating their instruction. For example, the RAFT Car on a Roll kit can be a simple exploration of forces and motion but can become a mini research project on energy and collisions. Workshop participants engage in some project kits focused on specific phenomena and leave with ideas and skills for extending the kits that can be immediately applied. (2 hours)

## RAFT STEAM PROJECT KIT LEARNING PROGRESSIONS

Saturday, June 26, 2021 | 10:00 AM - 1:00 PM PST

Price: \$45 (materials and shipping included)

RAFT has a variety of STEAM Project Kits that are designed for easy exploration topics in math, science and other subjects. They are excellent resources that come with materials and easy-to-follow teacher instructions. Our project kits can be sequenced to provide a scaffolded learning progression and build towards understanding topics and phenomena in more depth.



Participants in this workshop practice using our kits and gain experience around interesting STEAM topics. This virtual workshop is ideal for those looking to develop progressions that cover a few days or several weeks. Workshop materials are sent to registered participants prior to the workshop. (3 hours)

## THE TECH INTERACTIVE

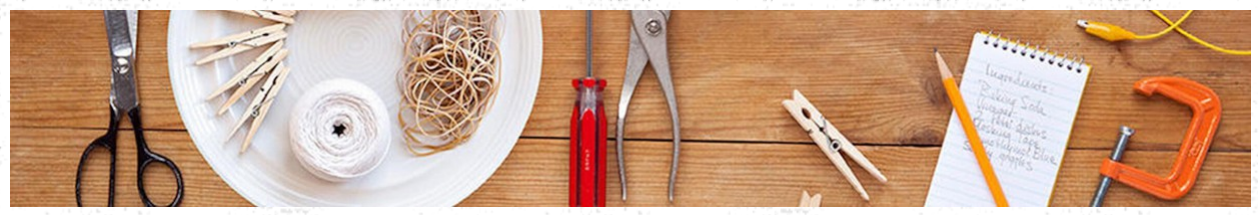


## VIRTUAL LEARNING AT THE TECH

[Virtual Learning at The Tech | The Tech Interactive](#)

The Tech At Home: [Fun STEAM Activities | The Tech at Home](#)

## EXPLORATORIUM- LEARNING TOOLBOX




## MONTEREY BAY AQUARIUM LEARNING AT HOME RESOURCES

Monterey Bay Aquarium

LOGIN FOR MEMBERS SHOP

VISIT ANIMALS JOIN & GIVE ACT FOR THE OCEAN FOR EDUCATORS

# Learning at home



**Support children's learning at home for grades PreK through 12.**

These online courses and family-friendly science activities encourage a sense of wonder and connection to the natural world while teaching important science concepts.

Love our educational resources? Support us with a donation.

**KQED TEACH- MEDIA ACADEMY FOR TEACHERS**



**REGISTER HERE- FREE EDUCATOR WORKSHOPS**

# JOHN MUIR LAWS

NATURE STEWARDSHIP THROUGH  
SCIENCE, EDUCATION, AND ART



ATTENTION·CURIOSITY·WONDER



## JOIN JOHN MUIR LAWS ON WEDNESDAY'S AT NOON FOR FREE EDUCATOR WORKSHOPS

Learn how to teach Nature Journaling! Join our weekly discussion and idea-sharing for teachers, home school parents, and other educators interested in teaching nature journaling skills. Each meeting will have a theme. Most of the conversation that day will revolve around this core idea but expect interesting side routes and trails.

[Click Here to Join the Meeting](#)

All ages and experience levels are welcome. No registration is necessary, This live workshop can hold 500 people and is open to everyone on a first-come basis. If you are new to Zoom or are having trouble with the meeting controls, please see these notes and suggestions on [Zoom Tips for Online Classes with John Muir Laws](#) to help you get more out of the online workshop. When possible I will also make a recording of the workshop and post it on my blog. I look forward to seeing you there!

**NOTE: Start time is 12 PM Pacific, 1 PM Mountain, 2 PM Central, 3 PM Eastern Time**

**CLICK HERE TO EXPLORE THRIVELY LEARNING  
EXPERIENCES**



## **THRIVELY**

**Ignite creativity with ready to integrate learning experiences.  
Engage your students with**

- STEM/STEAM
- Social-Emotional Learning
- Project-Based Learning, Work-Based Learning

[CLICK HERE TO EXPLORE THRIVELY LEARNING EXPERIENCES](#)

## **SCCOE & VALLEY WATER ENVIRONMENTAL LITERACY LEADERSHIP COHORT-INTEREST LIST**

SCCOE and Valley Water Education Outreach is partnering to provide a series of workshops for a cohort of 5th and 6th Grade teachers, TOSAs, and Instructional Coaches, where you will learn about infusing water-focused, NGSS based lessons and projects into your teaching and you will be able to earn a small stipend when the project is completed. Projected start time: September 2021 and applications will be available in Summer 2021

Please complete this form if you are interested in applying for this program:

<https://forms.gle/am5kb9qA3JUQcOKr9>

## **ENVIRONMENTAL LITERACY PARTNER WEBSITES**



## SCCOE

<https://www.scc-enviro-ed.org/>



## WALDEN WEST

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



## CAELI

<https://ca-eli.org/>



## SMCOE

<https://eeproviders.smcoe.org>



## SANTA CRUZ COE

<https://sites.google.com/view/environmental-literacy-for-all/professional-learning>



## SJCOE

<https://www.sjcoescience.org/environmental-literacy.html>



## VALLEY WATER

<https://www.valleywater.org/>  
Distance Learning Resources:  
[Distance Learning NEW FOR 2020 | Santa Clara Valley Water](#)



## EVOLS

<https://www.evols.org/>  
Distance Learning and COVID Modified Resources:  
[2020/21 Programs \(COVID Modified\) | Environmental Volunteers - Environmental Volunteers \(evols.org\)](#)



## LIVING CLASSROOM

<https://www.living-classroom.org/>

**MORE ENVIRONMENTAL LITERACY RESOURCES AND PARTNERS FEATURED ON THE SCCOE AND SMCOE**

# ENVIRONMENTAL LITERACY WEBSITES ABOVE.



## ISTEAM- SCIENCE & ENVIRONMENTAL LITERACY

 @sccoe

The mission of the Science Department is to provide service and support for all educational stakeholders. We offer workshops, conferences, and student events that promote the Next Generation Science Standards (NGSS).

Science explores and explains phenomena around us. It is a way of gaining, organizing, applying, and conveying knowledge of that phenomena. Having science as one of the core contents in K-12 education is vital as it influences our culture and has allowed society to flourish.

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 [sccoe.org/isteam/science/Pa...](https://sccoe.org/isteam/science/Pa...)

## SCCOE SCIENCE GOOGLE WEBPAGE

For even more resources, workshops and upcoming conferences, please visit our webpage. We are updating this weekly. Please also let us know if you have any events or workshops that you would like to share.