Education Programs

Fourth Grade - Earth Science

Program Type: Assembly

Banana Slug String Band
Santa Cruz
http://www.bananaslugstringband.com

Living with the Earth
http://www.bananaslugstringband.com/pages/workshops.html
Grade Levels: K;1st;2nd;3rd;4th;5th;6th
The Slugs blend music, theater, puppetry and audience participation to create a fun-filled learning environment. A discovery of the magical relationship between animals, plants and the Earth. During this musical journey students will meet a six-foot tall Banana Slug, learn how dirt made their lunch and rap with Nature Man.

Earth Adventure
Circle Pines
http://www.earthadventure.org/Earth_Balloon.cfm

Earth Balloon School Assembly Program
http://www.earthadventure.org/Earth_Balloon.cfm
Grade Levels: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
The Earth Balloon program is most often used in elementary and middle schools as a school assembly program. Grade level appropriate content is taught that includes specific learning objectives and matches to many earth science and geography education standards. Programs include content presentation, interactive question and answers, inquiry based learning, demonstration and activity.
Grade K: Our Amazing Earth - animals and their environments
Grade 1: Hello Meet the Earth - an introduction to the planet
Grade 2: Earth Explorations - continents and oceans
Grade 3: Rain or Shine - precipitation, temperature, and patterns
Grade 4: Biomes and Ecosystems - rain forests, deserts, and more
Grade 5: The Fractured Earth - a look at plate tectonics
Grade 6: The Ever Changing Earth - processes that shape and form the planet

Program Type: Field Trip

Bay Model Visitor Center
Sausalito
http://www.spn.usace.army.mil/Missions/Recreation/BayModelVisitorCenter.aspx
Guided Ranger Tour
http://www.spn.usace.army.mil/Missions/Recreation/BayModelVisitorCenter/TeachersQuest/OurEducationalPrograms.aspx

**Grade Levels:** K, 1st, 2nd, 3rd, 4th, 5th, 6th, 7th, 8th, 9th, 10th, 11th, 12th

The Bay Model Visitor Center provides public information and educational programs focusing on the environmental, historical and cultural elements of the San Francisco Bay region. These educational programs focus on concepts such as geography, geology, tide cycle, water cycle, the food chain and map scale.

Pre-scheduled programs can be arranged for groups of 10 or more, and are approximately 1 ½ hours in length. This tour will provide valuable knowledge about the history of the hydraulic model of our estuary in San Francisco Bay and Delta and can be tailored to specific interests of your group.

Black Diamond Mines Regional Preserve
Antioch
http://www.ebparks.org

California Mining History
http://www.ebparks.org/activities/educators

**Grade Levels:** 2nd; 3rd; 4th; 5th; 6th

A hike through the town site of Somerville to discover the local coal and sand mining history of the area. This program no longer includes an underground visit to the Greathouse Visitor Center. This program is two hours long.

Rose Hill Cemetery
http://www.ebparks.org/activities/educators

**Grade Levels:** 3rd; 4th; 5th; 6th

A hike to Rose Hill Cemetery to learn about the early California coal mining history or the area. Gravestone rubbings can be made at the cemetery. NOTE: Teachers must provide the materials following established guidelines for gravestone rubbings.

Information available. Program is offered September through May, and is 2.5 hours long. See brochure for more information:

Black Diamond Geology
http://www.ebparks.org/activities/educators

**Grade Levels:** 2nd; 3rd; 4th; 5th; 6th

A hike along the trails at Black Diamond to learn how millions of years of geologic activity have influenced the cultural and natural history of this Preserve. This program no longer includes an underground visit to the Greathouse Visitor Center. The program is 2 hours long.

Hazel-Atlas Mine Tour
http://www.ebparks.org/activities/educators

**Grade Levels:** 3rd; 4th; 5th; 6th

Explore 400 feet of an underground silica sand mine on this guided tour and learn the mining history and techniques that were used here. Hard hats and flashlights are provided.

From the mid-1920s to the mid-1940s, the Hazel-Atlas Mine produced silica sand to make jars, bottles, and other glass items. Today, tour participants can take a 950-foot walk into the mine to see mine workings, ore chutes, the shifter's office (mine boss), and ancient geological features. Because of its size and the need for safety, visitors will be taken in only on guided tours, with a limit of 15 persons per tour (minimum age seven years, parental participation is required).

See this brochure for more program information: http://www.ebparks.org/files/Hazel_Atlas_Brochure.pdf

Clayton Valley Pumpkin Farm
Clayton
http://www.cvpumpkinfarm.com

Spring Science Program
http://www.cvpumpkinfarm.com/spring-science-program

**Grade Levels:** K, 1st; 2nd; 3rd; 4th
Science is especially prevalent at the Clayton Valley Pumpkin Farm and Christmas Trees during our Spring Science Program (April 8th - May 8th 2019) for school groups. The natural farm setting is ideal for children to explore and experience "Ag in the Classroom" to compliment your curriculum. Students see, touch, smell and hear science at our three learning stations where they discover new facts in the areas of Physical, Earth, and Life Sciences. Every student gets to take home a sunflower seed in a peat pot. And don't forget the most fun time of all, students and parents get to ride on the Pumpkin Farm Express. 90 minutes.

**Crab Cove Marine Reserve**
Alameda

http://www.ebparks.org/parks/vc/crab_cove

**Nature Walks in the Regional Parks**
https://www.ebparks.org/activities/educators/field_trips/trips/default.htm

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

Use the parklands as your classroom! Programs are available at the following East Bay Regional Parks: Redwood, Roberts, Lake Chabot, Anthony Chabot, Huckleberry Botanic Preserve, Sibley Volcanic Preserve, Temescal, Arrowhead Marsh at MLK Jr. Shoreline, and Oyster Bay. Lake Chabot boat tours aboard the “Chabot Queen” may be available; separate fee applies for boat rental.

**Redwood Forest Rendezvous (multi-class option)**
https://www.ebparks.org/activities/educators/field_trips/trips/default.htm

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

Experience the magic of the forest. Designed to accommodate multiple classes, this program will rotate students though a variety of forest themed activities including a nature walk, forest food web, tree and climate study. Note: This two hour program can accommodate up to 120 kids.

**CuriOdyssey**
San Mateo

http://www.curiodyssey.org/

**Plant Power**
https://curiodyssey.org/schools-groups/

**Grade Levels:** 1st;2nd;3rd;4th

Plants gather food, battle predators, and find a mate- all while rooted in place. Explore the fascinating world of plants, soil, sunlight, and seeds in the Museum’s beautiful gardens. FOSS Links: Trees, Wood and Paper, Plants and Animals, Insects and Plants. 50 minutes

**Diablo Nature Adventures**
Walnut Creek

http://www.diablornature.com

**The Sands of Time - Shell Ridge Open Space**

**Grade Levels:** K;1st;2nd;3rd;4th;5th

This program offers a hands-on introduction to the geological origins of the Shell Ridge Open Space. The Sands of Time takes place in the 2500 acre Shell Ridge Open Space Area. Students are introduced to the fossils of Shell Ridge and what they reveal about long ago landscapes there. Sedimentary, igneous and metamorphic rocks are defined and local samples are handled by the youngsters. Students perform a play that explains the formation of Mt. Diablo and the surrounding foothills. Map skills are a part of the program. A nature hike emphasizes the flora and fauna of the grassland and oak woodland communities of the area and reveals how water has shaped the land. Change through time is an important theme. One class of 20 students per day.

**East Bay Municipal Water District**
Orinda

http://www.ebmud.com/
Outdoor Education

**Grade Levels:** 2nd; 3rd; 4th; 5th; 6th

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.

Environmental Discovery Center of Sonoma County
Santa Rosa
http://www.sonoma-county.org/parks/edc.htm

Discovering Earth Science in the Parks
http://www.sonoma-county.org/parks/edc.htm

**Grade Levels:** 4th; 5th; 6th

A place-based field trip program, for 4th, 5th, and 6th grades focusing on Earth Science and conservation. Choose from six locations!
- Helen Putnam Regional Park in Petaluma
- Foothill Regional Park in Windsor
- Riverfront Regional Park in Windsor
- Crane Creek Regional Park in Rohnert Park
- Ragle Ranch Regional Park in Sebastopol
- Stillwater Cove Regional Park in Jenner

Program Choices:
* Rockin’ and Recycling - This fieldtrip will focus on the properties of the common rocks and minerals in the park and the processes that formed them. Students will also learn the importance of recycling products manufactured from minerals and rocks.
* Weather or Not - Students will learn the science behind weather and weather patterns. They will learn about some of Sonoma County's many microclimates within the parks, and forecast local weather based on observation and data collection.

Healthy Earth, Healthy Bodies
https://parks.sonoma-county.ca.gov/Learn/Field-Trips/

**Grade Levels:** K; 1st; 2nd; 3rd; 4th; 5th; 6th

Take a field trip to a farm! This program combines the best in science education while making the connection between protecting natural resources and growing healthy bodies. Students will learn the benefits of eating healthy foods, take a rigorous hike, tour the farm, and work in the garden. Reinforces grade-level state science standards in life science and health. Held at Tolay Lake Regional Park in Petaluma.

Exploratorium
San Francisco
http://www.exploratorium.edu

Outdoor Gallery: Open your senses to this place by the Bay.
https://www.exploratorium.edu/visit/galleries

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

Investigate forces shaping the City, Bay, and region. Watch shifting winds and tides, reveal hidden life, shake a bridge, observe human behavior, and find new ways to notice the places we inhabit.

Fort Point National Historic Site
San Francisco
http://www.nps.gov/fopo/index.htm

Point of Inquiry
http://www.nps.gov/fopo/forteachers/index.htm

**Grade Levels:** 4th
At the straits of the Golden Gate sits Fort Point, an enduring symbol of Gold Rush San Francisco. Your history sleuths will investigate all corners of this massive brick and granite fort to imagine life at the bluffs of the city. Then, they hike the nearby trails and join in group games. Co-sponsored by the Presidio Community YMCA.

Golden Gate National Parks Conservancy
San Francisco
http://www.parksconservancy.org/our-work/crissy/

Rock! Pattern! Systems!
https://www.nps.gov/goga/learn/education/elementary.htm
**Grade Levels:** 4th
Rock! Pattern! Systems! takes young geologists on a dramatic trek to the Point Bonita Lighthouse, the first place in California where scientists produced a detailed geologic map. Through both individual and small group work, students use copies of the first complete world map of the ocean floor to hone their powers of observation and find patterns in seafloor mountain ranges. A close read of a short biography of the mapmakers offers context for the 3 decade struggle to produce and publish a map that changed how we think about land and sea. At Point Bonita, students investigate seafloor rocks along the trail and pose information questions and questions for deeper meaning as they construct their own understanding of the importance of accurate data in creating new scientific knowledge.
Rock! Pattern! Systems! uses the Understanding by Design framework, and aligns with the Next Generation Science Standards and Common Core Standards.

Green Gulch Farm - SF Zen Center
Sausalito
http://www.sfzc.org/ggfindex.htm

Green Gulch Farm Environmental Education
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th
Since its establishment in 1972, Green Gulch Farm has been on the leading edge of organic farming and land stewardship. We are dedicated to cultivating future stewards of the earth. Our Environmental Education program brings over 900 children from 34 Bay Area schools and organizations to the farm each year. Kids who come might uncover the secrets of compost, make a lettuce burrito, visit a beehive, or see how an apple blossom turns into fruit. Some come from urban underserved schools, and for many it's their first experience of being out in a natural environment. As one Green Gulch tour leader put it, “The children have such a deep hunger to be here. It is a real event in their lives.” More and more schools also are requesting that the zendo be included in their visit and are recognizing the power of helping children find the still, quiet place within themselves.

Lawrence Hall of Science
Berkeley
lawrencehallofscience.org

Self-Guided Visit
https://www.lawrencehallofscience.org/visit/field_trips
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Take your students to the Lawrence Hall of Science to enjoy the exhibits.

Life Lab Science Program
Santa Cruz
http://www.lifelab.org

Feeling Fine with Fresh Food Nutrition & Cooking - Winter
http://www.lifelab.org/for-educators/fieldtrips/
**Grade Levels:** 3rd;4th;5th
For 1st grade through middle school students. This program helps students to make the important connection between farms and the food on their dinner table. All participating teachers will receive pre- and post-visit lessons related to our local food system.

Farm to Fork Field Trips include:

Hands-on Exploration of the 25-acre UCSC Farm
- explore a organic flower and vegetable farm
- harvest and sample the six plant parts—roots, stems, leaves, flowers, fruits & seeds
- participate in apple investigations and tastings in the orchard
- gain an appreciation for the different varieties & uses of corn

Activities in the Garden Classroom
- harvest celebration, where students make and taste corn tortillas & apple cider
- visiting chickens, honey bees, composting worms, and other garden learning sites

Field Trips are available Monday, Tuesday, Thursday, & Friday Early September through early November. Field trips begin at 10 a.m. and end at 1:15 p.m.

Fall - Farm to Fork

http://www.lifelab.org/for-educators/fieldtrips/

Grade Levels: 1st;2nd;3rd;4th;5th;6th;7th;8th

For 1st grade through middle school students. This program helps students to make the important connection between farms and the food on their dinner table. All participating teachers will receive pre- and post-visit lessons related to our local food system.

Farm to Fork Field Trips include:

Hands-on Exploration of the 25-acre UCSC Farm
- explore a organic flower and vegetable farm
- harvest and sample the six plant parts—roots, stems, leaves, flowers, fruits & seeds
- participate in apple investigations and tastings in the orchard
- gain an appreciation for the different varieties & uses of corn

Activities in the Garden Classroom
- harvest celebration, where students make and taste corn tortillas & apple cider
- visiting chickens, honey bees, composting worms, and other garden learning sites

Field Trips are available Monday, Tuesday, Thursday, & Friday Early September through early November. Field trips begin at 10 a.m. and end at 1:15 p.m.

Math Science Nucleus
Fremont

http://www.msnucleus.org

Tule Ponds - Changes through Time

http://www.msnucleus.org/classes/fieldtyson.htm

Grade Levels: 4th

1. Students will observe how organisms are adapted to a wetland environment.
2. Students are introduced to how movement along Hayward faults causes water to percolate upwards creating a sag pond.
3. Students will learn about the various food webs at Tule Ponds at Tyson Lagoon.
4. Students learn about a lake environment over time and how sediments will later become sedimentary rocks.
5. Students observe the microorganisms that can be found in the water and are beneficial to the environment.

Point Reyes National Seashore
Point Reyes Station

http://www.nps.gov/pore/forteachers/index.htm

Woodpecker Trail

http://www.nps.gov/pore/planyourvisit/outdoorselfguidingactivities.htm

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

A rustic trail through fields and trees with exhibits highlighting the flora and fauna of the area. Allow 45 minutes to walk this trail. Park at the south end of the Bear Valley Visitor Center parking lot. The Woodpecker Trail starts at the Bear Valley Trailhead. 1-mile loop. Trail is steep in places.
Earthquake Trail
http://www.nps.gov/pore/planyourvisit/outdoorselfguidingactivities.htm
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
A short, informative trail with exhibits about the 1906 earthquake and the San Andreas Fault zone. Allow 35 minutes to walk this trail. Park in the gravel parking lot east of the Bear Valley Visitor Center. The trailhead is next to the picnic area restrooms. 0.6-mile loop wheelchair accessible.

Randall Museum
San Francisco
http://www.randallmuseum.org/

Living with a Restless Earth
http://www.randallmuseum.org/LivingWithaRestlessEarth.aspx
**Grade Levels:** 2nd;3rd;4th;5th
We live in earthquake country. Other people live with tornadoes, lightning, avalanches, or hurricanes. In the Bay Area, earthquakes happen every day - but most are small and only a seismograph can detect them. At the Randall Museum's permanent earthquake exhibit, "Living with a Restless Earth," you can make your own quake by jumping on the floor. A seismometer in the Museum's lobby will let you know the intensity of your "floor quake." Another seismometer in the basement of the Randall is connected to a seismograph in the exhibit that registers actual earthquakes. Visitors to the Museum can view our real-time recordings of recent quakes all around the world and learn about plate tectonics while playing with our hands-on replica of the Hayward Fault.

San Francisco Maritime National Park
San Francisco
http://www.maritime.org

Life on the Barbary Coast
https://maritime.org/education/day-programs/life-on-barbary-coast/
**Grade Levels:** 4th;5th;6th
Students become sailors for an afternoon aboard an historic vessel when they are picked up as green hand sailors in 1906. As San Francisco is scrambling to rebuild itself following a devastating earthquake, the lads must scramble themselves in order to learn basic nautical skills under the scrutiny of the officers. This program emphasizes team work and group problem solving skills.

The Gold Rush
https://maritime.org/education/day-programs/gold-rush/
**Grade Levels:** 4th;5th;6th
A ship's captain, a merchant, and a miner from California's gold rush days will invite the students to work as crew men, cargo handlers, and miners and to learn about the tools of the trade.

Sibley Volcanic Regional Preserve
Oakland
http://www.ebparks.org

Volcanic Tour
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Folding and erosion have exposed a cross section of a great volcano, right down to its roots, providing an unsurpassed outdoor laboratory for the study of volcanism in the Central Coast Ranges. An unstaffed visitor center next to the staging area at the park entrance has displays illustrating the park's geology, and a supply of park brochures containing a map with a self-guided volcanic tour. Sibley Volcanic Preserve's main entrance is on Skyline Boulevard just east of the intersection with Grizzly Peak Boulevard in the Oakland hills.
Do the Rot Thing: Soils and Composting Field Trip
http://www.gardenshf.org/youth-programs.html#dotherotthing
**Grade Levels:** K;1st;2nd;3rd;4th;5th
Dig in and investigate the secrets of soil as we learn the "rotten truth" about decomposition, solve a compost critter mystery, cook up a compost experiment and discover our role in conserving this precious resource. (Also available as an in-class presentation)

Wonderful Worms Field Trip
http://www.gardenshf.org/youth-programs.html#wonderfulworms
**Grade Levels:** K;1st;2nd;3rd;4th;5th
Through experiments and observation we'll investigate the hidden life of this fascinating recycler and create a classroom worm bin. (Also available as an in-class presentation)

The Tech Museum of Innovation
San Jose
http://www.thetech.org

Exploration Gallery
http://www.thetech.org
**Grade Levels:** 3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Explore land, sea, sky and space using technologies that expand our ability to investigate our world and our universe. Study Bay Area plate tectonics and try to build earthquake proof structures on a 9 x 9 shake table. Analyze data gathered from a research station on the San Andreas Fault in "The Parkfield Experiment", and find out how to use seismometers and strain meters. Explore the basics of space technology in a high-tech environment created from space station components.

IMAX Film: Rocky Mountain Express
http://www.thetech.org
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Available to groups of 50 or more at 10 a.m. Rocky Mountain Express
Experience the adventure of a lifetime in Rocky Mountain Express, the new film that propels audiences on an exhilarating journey deep into the Rockies along steep cliff edges, spiraling tunnels and through the most beautiful and rugged landscapes on earth. Learn about the heroic human drama and epic engineering involved in shaping a nearly impossible transcontinental railway link.

IMAX Film: Journey to the South Pacific
http://www.thetech.org
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Available to groups of 50 or more at 10 a.m. Journey to the South Pacific
Take a breathtaking IMAX® adventure to the lush tropical islands of remote West Papua, where life flourishes above and below the sea. Home to more than 2,000 species of sea life, this exotic locale features the most diverse marine ecosystem on earth. An uplifting story of hope and celebration, Journey to the South Pacific highlights the importance of living in balance with the ocean planet we all call home. Narrated by Cate Blanchett.

IMAX film - Forces of Nature
http://www.thetech.org
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
There are nearly 500,000 earthquakes, over 1,000 tornadoes, and about 50 volcanoes erupting around the world each year. The science stories in Forces of Nature are augmented with computer graphics sequences designed to illustrate the inner workings of these forces. Forces of Nature lets you experience what it's like when the ground shakes, mountains explode and the sky turns black and violent. Follow scientists on their groundbreaking quests to understand how these natural disasters are triggered. Learn what is being done to predict and prepare for these events — and minimize their destructive forces.
IMAX film - Everest
http://www.thetech.org
Grade Levels: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
available to groups of 50 or more at 10 a.m. Everest is the dramatic true story of a team of climbers who found hope, strength and triumph in the wake of tragedy. Their successful ascent of Mount Everest just days after fellow mountaineers and friends died there is a compelling story about the human spirit and a mountain they love, respect and sometimes fear. In Everest travel across creaking icefalls and gaping chasms, up dangerous, towering cliffs, through a harrowing rescue, and into the danger zone of oxygen-thin altitude. The film also reveals how this tallest mountain was formed and continues to evolve, how high altitude challenges a climber’s physical and mental capabilities.

Tilden Nature Area-Tilden Regional Park
Berkeley
http://www.ebparks.org

Tailored Naturalist Program: Habitats
https://www.ebparks.org/activities/educators/field_trips/trips/default.htm
Grade Levels: K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
the Tilden Naturalists can adapt their programs to meet the specific needs of your science unit. Sign up for a fieldtrip via the lottery system and give them a call once you are selected.

Program Type: In-Class Program

American Red Cross
San Francisco
http://www.bayarea-redcross.org

Masters of Disaster
http://redcrossyouth.org/2007/12/10/masters-of-disaster/
Grade Levels: K;1st;2nd;3rd;4th;5th;6th;7th;8th
The award-winning Masters of Disaster disaster preparedness curriculum teaches children how to prevent, prepare for and respond to disasters and other emergencies. The Masters of Disaster Educator’s Kit contains lessons, activities and demonstrations on disaster-related topics that youth-serving organizations can incorporate into daily or thematic programming. The Masters of Disaster curriculum materials meet national educational standards and are specifically tailored for lower elementary (K–2), upper elementary (3–5) and middle school (6–8) classes. A Red Cross instructor can bring this training to your school, or you can download materials online for use in the classroom.

Mad Science - Mt. Diablo
Concord
http://www.madscience.org/locations/mtdiablo/

Earthworks
http://www.madscience.org/locations/mtdiablo/
Grade Levels: K;1st;2nd;3rd;4th;5th
Investigate different types of earth phenomena like volcanoes, mountains, and earthquakes. Learn about the forces of nature that shape our very earth. Go home with your very own volcano!

Rock-It Science
Santa Clara
https://rockitscience.com/
In-class Programs for Schools in Silicon Valley
https://rockitscience.com/inschoollessons/
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th
A variety of topics are offered. Each science lesson lasts 45-60 minutes. The classroom teacher observes the lesson and participates if they wish. Our instructors can teach up to 40 students at a time (up to 30 for kindergarten).

The Gardens at Heather Farms
Walnut Creek
http://www.gardenshf.org/

**Do the Rot Thing: Soils and Composting In-Class**
http://www.gardenshf.org/youth-programs.html#dotherotthing
**Grade Levels:** K;1st;2nd;3rd;4th;5th
Dig in and investigate the secrets of soil as we learn the "rotten truth" about decomposition, solve a compost critter mystery, cook up a compost experiment and discover our role in conserving this precious resource. (Also available as a field-trip)

**Wonderful Worms In-Class**
http://www.gardenshf.org/youth-programs.html#wonderfulworms
**Grade Levels:** K;1st;2nd;3rd;4th;5th
Through experiments and observation we'll investigate the hidden life of this fascinating recycler and create a classroom worm bin. (Also available as a field trip)

Web of Life Field (WOLF) School
Aptos
http://www.wolfschool.org/

**In-Class Presentation**
http://www.wolfschool.org/
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th
The WOLF School offers in-class presentations to supplement your regular classroom instruction. All presentations include standards-based hands-on activities, songs, active games and student-centered discussion. Topics include: Animals! Animals!, Amazing Plants, California’s Gold Rush, Native American History, Geology Rocks!, Salamanders, Water Cycle and Watersheds, Group Building and Challenge Activities, Design Your Own.

Program Type: Overnight Program

Camp Ocean Pines
Cambria
http://www.campoceanpines.org/

**Overnight Program at Camp Ocean Pines**
http://www.campoceanpines.org/outdoor-education
**Grade Levels:** K;1st;2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
Camp Ocean Pines Outdoor School offers hands-on, standards based environmental education year round providing a great outdoor educational experience for school groups. Our services include meals, afternoon snacks, lodging, lessons, and exciting outings led by experienced naturalists. Students sleep in new passive solar designed cabins built with strawbale construction. Highlights of the 5-day camp include hiking to our secret observation point at the elephant seal breeding grounds in San Simeon, sandy beach studies at San Simeon Cove, or estuary studies and kayaking with the otters in Morro Bay, with transportation included. Onsite, we provide standards-based lessons or a custom program to meet your specific needs. Call to check availability and we'll discuss a program that will best fit the needs of your school.
Coloma Outdoor Discovery School
Coloma
http://www.cods.org/

Gold Rush CA History
https://colomaresort.com/discover/cods-link.html
Grade Levels: 4th
The Coloma Outdoor Discovery School's Gold Rush program is designed for fourth graders, and is correlated with the California Content Standards. Our intention is to celebrate the culture, music, and folklore of the California Gold Rush while using lessons of the past to awaken students' interest and sense of responsibility for the environment. At CODS, students live the Gold Rush: stories, songs, skits, and characterizations all help to convey the social and economic community of early Coloma. Students will walk in the footsteps of the 49ers and experience some of the challenges of surviving away from home. All of the educational programs at the Outdoor School operate around the concept of respect: for nature, oneself, and others.

Eco-Science Exploration
http://www.cods.org/science.html
Grade Levels: 4th;5th;6th
Using the Earth as their classroom, students will actively investigate and explore the extraordinary ecosystems and geology of the Sierra Nevada foothills. Exploring the Earth's cycles through hands-on activities and authentic observation opportunities, students will attain first-hand knowledge of concepts such as sustainable farming with earthworms and gold fish, the life-cycles and significance of the amazing bee, as well as where our water comes from and the astonishing aquatic life within. We expect that students will head home with the understanding that they too are connected to the Earth’s systems. This program is correlated with the Common Core and Next Generation Science standards for 4th-6th grade. Get ready to view the Earth in a whole new way!

NatureBridge at Yosemite
Yosemite
http://www.naturebridge.org/school-group-field-science-yosemite

Residential Field Science Program
https://naturebridge.org/yosemite/school-group
Grade Levels: 2nd;3rd;4th;5th;6th;7th;8th;9th;10th;11th;12th
With NatureBridge at Yosemite, students hike through the dramatic landscapes of Yosemite, explore ancient groves of giant sequoias, ski across snowy meadows, and challenge themselves to reach the tops of waterfalls. Through active student engagement, our faculty teaches science, history, and the arts and gives these subjects context through personal experience. What is taught: California Content Standards: our interdisciplinary programs help teachers meet grade-specific content standards. Choose from our menu of academic emphases to help you meet your goals for the year. Learning Outcomes: students emerge from our programs having grown academically, personally, and socially and with increased responsible environmental behavior.

Web of Life Field (WOLF) School
Aptos
http://www.wolfschool.org/

Living History Program (Gold Rush)
https://www.wolfschool.org/california-living-history
Grade Levels: 3rd;4th;5th;6th
Designed for the gold rush studies. Take a journey back in time and join us for an exciting program for students and their teachers. History comes alive as participants re-enact the life and times of Native Americans, early settlers and gold miners. Students will learn how different cultures have utilized natural resources over the years and examine their impact on the environment. Understanding history helps students make informed decisions, which will shape the future. Campuses in Santa Cruz, Sierra Foothill, and Sonoma areas. 2-5 day programs available.
Giants of Land and Sea

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

Discover the giant forces that make Northern California a landscape like nowhere else in the world. Ascend through the towering redwoods, step inside an immersive fog room, follow a blue whale migration route, and hear from Californians working to sustain the precious and critical ecosystems in their own backyard.