

Ocean Acidification - Corals on Acid

As the ocean becomes more acidic, corals are suffering. Learn about ocean acidification and how it impacts ocean life. See how the pH of water changes when CO₂ bubbles are introduced. Find out how the weight of a coral changes due to dissolution with an acid.

Strawberry DNA Extraction

All living things have DNA inside their cells. How do scientists extract the DNA from cells in order to study it? In this workshop, you will get to perform an experiment to extract DNA from strawberries. In just a few simple steps, you will actually see the strands of strawberry DNA appear in the test tube before your very eyes!

Made With Code

This workshop will introduce students to the art and science of computer programming. Students will be introduced to HTML and CSS basics and guided through creating a custom greeting card made from code! No coding experience is required.

Now It Makes Sense!

We will explore and measure various aspects of sensory physiology: vision, hearing, taste, reaction time and touch sensitivity. We will also study how sensory organs are designed to help us perceive our environment.

Cool Ways to Explore Geology: From VR Google Glasses to the Acid Test

This workshop will be divided in two very different ways of exploring Nature. First, using virtual reality google glasses and the student's smartphones, we will learn to explore more vividly landscapes via educational apps, from mountains to underneath the water, everything is possible! Afterwards, we'll learn how to distinguish geologic samples using their chemical properties with a simple 'acid' test. **Students will need to bring their own smartphone for this workshop.**

Market squid - inside & out!

Smells like science! Dive into the world of invertebrate zoology by getting an up close look at one of the coolest ocean creatures - squid! Each pair of students will dissect a market squid and investigate how squid anatomy is well-adapted to an ocean environment.

Carbon and Climate Change

How can gases that come out of a car change sea level in the ocean? This hands-on workshop will give you a chance to learn how small changes in the amounts of greenhouse gases in our atmosphere can impact our climate and the oceans.

Managing Endangered Species

We will discuss what makes species endangered, threats to the CA Condor population and what we can do about it. We will practice tracking condors with the equipment the pros use to see how well you can track in the most difficult of situations.

Ocean Currents - Density and Circulation

Why are some parts of the ocean warm while others are cold? Learn how changes in water temperature and salinity create density currents and how those density currents create circulation patterns in the ocean.

Creating a Sierpinski Pyramid

Students will create a Sierpinski pyramid developed by the Polish mathematician Waclaw Sierpinski. This activity is a great way to combine art and play in order to learn about mathematical principals such as fractals, tetrahedrons, iterations and nets.

Wildlife Rehabilitation 101

Look at radiographs of real patients at the SPCA Wildlife Center and how Rehabilitation Technicians use medical techniques to get their wild patients back into the wild. This Workshop will include one patient case from admit to release to outline all off the science and problem solving that goes into Wildlife Rehabilitation. Look at real radiographs to identify broken bones or pellets from gunshot wounds. Apply wing splint to broken wing (radius/ulna) of a bird. **IMPORTANT NOTE: STUDENTS WILL BE WORKING WITH BIRD CARCASSES IS THIS WORKSHOP. PLEASE MAKE SURE YOUR CHILD/STUDENT IS COMFORTABLE WITH THIS.**

All About the Planets

In this workshop, you will learn all about the planets. You will participate in activities that will allow you to envision the distance and size scales of the planets in our Solar System. We will also discuss some of their important characteristics. Lastly, we will go to the Planetarium to view a show about the pla

Amazing Lives of Sea Turtles

A multimedia presentation that explores sea turtle evolution, anatomy, and conservation, and look at one of the most remarkable and specialized marine creatures that travel throughout the world's oceans. They have been on earth over 100 million years and now face the threat of extinction. Learn about their ecology and human impacts that affect their survival like fishing practices, illegal shell trading/egg poaching, oil pollution and marine debris that has accumulated into massive garbage patches. Find out how you can help Save The Sea Turtles!

Grow Your Own Pet Microbe

Grow Your Own Pet Microbe, Fluoresce Under a Black Light, and See Something Disappear, but Don't Drink the Kool-Aid! Come explore and apply some techniques used in agriculture and food safety industry laboratories.

Weather and Climate. Why is our drought so awful?

Weather is a very important factor in the growing of our food in California. We often hear weather and climate used as synonyms but they actually are quite different. We will discover what Meteorology is and discuss differences in weather, climate, and our current drought situation. We will also touch on some real life examples of women in Meteorology before starting our lab.

Beneficial Bats

Bats: you'll find bat images all over the place around Halloween. But bats are so much more than a symbol of all things scary. Join us to learn how bats use echolocation to locate their food and how bats help farmers by eating insects. You will gain a new appreciation for this diverse and misunderstood group of mammals.

PARENT/TEACHER WORKSHOPS:

Using Film & Storytelling in Science Education

Presented by Leah Tremblay, SJSC, Green Ninja <http://greenninja.org/>
(Teacher workshop, Parents welcome to attend)

Our Daughters in Math: High School, College, and Beyond

Presented by Senorina Vazquez
(Parent Workshop, Teachers welcome to attend)