



Tour: **Yosemite Science**

Destination: San Francisco & Yosemite National Park, California

Ecology, Climate Change, Geology, Watersheds, Scientific Process Specialization:

Development & History

Itinerary: 7-days / 6-nights







Yosemite Science - Sample Itinerary					
Day		Morning	Afternoon		Evening
1	Sunday	Travel to San Francisco - hotel check-in & free time			Dinner (Optional)
2	Monday	Free Time in San Francisco		Transfer to Yosemite	Orientation & Field Overview
3	Tuesday	Science Program: Climate/Ecology/Geology/Watersheds			Black Bear Presentation
4	Wednesday	Science Program: Climate/Ecology/Geology/Watersheds			Night Hike
5	Thursday	Science Program: Climate/Ecology/Geology/Watersheds			Hetch Hetchy Dam Debate
6	Friday	Science Program: Climate/Ecology/Geology/Watersheds			Art in Yosemite
7	Saturday	Science Programming Transfer to San		rancisco; depart for home	
Additional days in San Francisco or Yosemite are available upon request					

Welcome to Visions Science Discovery School specialists in Science, Technology & Geography

As with all sample itineraries, please be aware that this is an "example" of a schedule and that the activities included may be variable dependent upon dates, weather, special requests and other factors. Itineraries will be confirmed prior to travel.













California ... Located on the west coast of North America, California is the largest US state by

population, and the third largest by area. California offers something for everyone: Southern California is home to such popular attractions as Disneyland, Hollywood and the beaches in Malibu that inspired the television show Baywatch; while the northern part of California offers the iconic Golden Gate Bridge, the hills of San Francisco, the vineyards of Napa Valley, and the capital, Sacramento. Outside California's major cities one finds some of North America's most rugged national parks, incredible skiing opportunities, and quiet and ancient northern forests including the highest mountain peak in the contiguous USA, Mt. Whitney.

The first Spanish missionaries arrived in California in the 1700s, but California didn't become a U.S. territory until 1847, as part of the treaty ending the Mexican-American War. Shortly thereafter, the discovery of gold at Sutter's Mill in 1848 inspired a wave of settlers to head to the west coast in search of fortune. In 1850 California became the 31st state, and is now the third largest state behind Alaska and Texas. With millions of acres of farmland, California leads the U.S. in agricultural production. The state is also home to famous cultural institutions and national parks including Yosemite National Park, Alcatraz, Angel Island and the Golden Gate Bridge.

San Francisco - San Francisco is considered one of the greatest cities in the world for many things including five-star dining, a happening theatre scene, and more! And, beyond the fifty-square-mile city, in the surrounding Bay Area, there's so much more to explore, including Silicon Valley's innovations, Marin's Headlands, the vineyards of Napa Valley and Sonoma County, and Berkeley's free spirit. With so many pockets to choose from - Chinatown, Fisherman's Wharf, Union Square, and a half-dozen other major tourist draws – there's just so much to see and do!

The High Sierras - The hard part, when thinking about California's High Sierra, is deciding what to do during your visit. The options include Yosemite, King's Canyon and Sequoia National Parks where John Muir was inspired by breath-taking scenery, now famous mountains, and the majestic sequoias, the oldest trees on earth. Few things are more breathtaking than a starry summer night in the High Sierra; the sky filled with an impossible number of twinkling constellations. While hotels and rooftops certainly have their place, why not opt for a snug campsite in one of the world's most spectacular destinations in the Sierra - and the world – Yosemite National Park! http://www.visitcalifornia.com/Explore/High-Sierra

Did you know??

- ✓ The highest and lowest points in the continental United States are in California and within 100 miles of one another. Mount Whitney measures 14,495 feet and Bad Water in Death Valley is 282 feet below sea level.
- ✓ Fallbrook is known as the Avocado Capital of the World and Castroville is known as the Artichoke Capital of the World. In 1947 a young woman named Norma Jean was crowned Castroville's first Artichoke Queen. She went on to become actress Marilyn Monroe.
- Klamath Basin National Wildlife Refuge contains the largest winter population of bald eagles in the continental United States.
- ✓ Death Valley is recognized as the hottest, driest place in the United States. It isn't uncommon for the summer temperatures to reach more than 115 degrees.
- ✓ Inyo National Forest is home to the bristle cone pine, where some of the gnarled trees are thought to be over 4,600 years old. A Mojave Desert creosote bush is among the world's oldest living things at 43,000 years.
- ✓ San Francisco Bay is considered the world's largest landlocked harbor.

- ✓ Sequoia National Park contains the largest living tree. Its trunk is 102 feet in circumference. The redwood is the official state tree and some of the giant redwoods in Sequoia National Park are more than 2,000 years old.
- ✓ One out of every eight United States residents lives in California.
- ✓ If California's economic size were measured by itself to other countries, it would rank the 7th largest economy in the world. Los Angeles is ranked the fourth largest economy in the United States compared to other states.
- ✓ It is estimated there are approximately 500,000 detectable seismic tremors in California annually.
- ✓ There are more than 300,000 tons of grapes grown in California annually. California produces more than 17 million gallons of wine each year.
- California was the country's top state in cash farm receipts in 2008, growing nearly half of all fruits, nuts and vegetables. Almonds are the biggest export (in USD); followed by dairy products, wine, table grapes, cotton, walnuts, pistachios and rice.
- California is the birthplace of fortune cookies, Apple computers, theme parks (Disneyland), blue jeans, the Barbie doll, Frisbee, skateboards, and video arcade games.
- ✓ The best view in the United States is at Mount Diablo State Park. From the top of the 3,849 foot summit more of the earth's surface can be seen than any other peak in the world, except Mt. Kilimanjaro in Africa.

<u>Day 1</u>

Dinner (Optional and dependent upon quote)

Groups participating in Visions Yosemite Science will generally arrive in San Francisco in the afternoon. Upon arrival we'll transfer to our hotel, relax and get settled. Your Visions Ambassador will meet you at the hotel for a Visions Welcome & Safety meeting. The afternoon is then yours to explore Pier 39! Tonight, if elected, we'll have dinner at the Pier as well.

Sample Hotel – The Radisson Hotel Fisherman's Wharf

From the moment you step into the Radisson's revitalized lobby and guest rooms, you'll enjoy San Francisco's charm and clean, contemporary style. Ideally suited for student groups, the hotel offers 355 guestrooms with flat-screen TVs, premium linens and fresh, updated bathrooms plus an on-site Business Center and a modern, 24-hour Fitness Center. A heated outdoor pool is available year-round, plus complimentary Wi-Fi and gorgeous views of the bay! From the hotel's unrivalled location at Fisherman's Wharf, guests are incredibly



close to the area's best attractions - just steps from ferries to Alcatraz, Ghirardelli Square, San Francisco's historic cable cars and world-famous shopping, dining and entertainment options at Pier 39. Students sleep 4 pupils per room in two double beds; staff sleep 2 teachers to a room.

http://www.radisson.com/san-francisco-hotel-ca-94133/cafisher

Day 2

Breakfast * Lunch On Own * Dinner

Good morning California! Today, we'll check out of our hotel, store our luggage and then have free time this morning to explore San Francisco! Make sure to visit the Sea Lions at Pier 39 and perhaps try the Aquarium of the Bay, a cruise to Alcatraz on the Blue & Gold Fleet or even a sightseeing trip on one of San Francisco's famous cable cars! www.pier39.com





After our morning of exploration, we'll board our motorcoach and transfer to Yosemite National Park, approximately 4-hours. Once there, we'll settle into our camp and get ready for an awesome adventure!

The Yosemite Institute: Learning in nature's classroom

NatureBridge field science programs in Yosemite National Park offer students the opportunity to learn hands-on science in one of the world's most stunning geologic wonders. Residential outdoor science programs are led by experienced educators and customized to enhance your school's curriculum.



A classroom like no other

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.

Inquiry-based learning

Students explore the geologic history of the Sierra Nevada; engage in field research projects, such as macroinvertebrate biomonitoring; and discover how the environment supported humans from the early Miwok to the present.

Inspired to action

Students are empowered to see how their actions impact their community and the world around them through service learning projects, such as removing invasive species that threaten biodiversity in the Park.

Program Educators

NatureBridge's field science educators have years of teaching experience in outdoor and environmental education programs and a contagious enthusiasm for exploring the natural world. All of the educators have a Bachelor's degree or higher; a Wilderness First Responder certification; and a passion about teaching, youth, and the environment. In addition, a Visions Ambassador will accompany every group to make sure you are set up to experience the very best!

Curry Village Accommodations - Sometimes called Camp Curry, Curry Village is one of the most popular lodging options inside Yosemite Park. Visions groups will utilize canvas tent cabins. Because of its popularity, we strongly suggest reservations are made with as much advance notice as possible. Like most properties inside the park, Curry Village accommodations do not have televisions or air conditioning. Curry Village is conveniently located in the south central part of Yosemite Valley.











http://www.nationalparkreservations.com/yosemite curry village.php

<u>Canvas Tent Cabins</u> - These canvas-covered tents are wood-framed on a raised wooden platform and will accommodate up to five people. Each cabin must use maximum occupancy when available for boy/girl ratio. Cabins are equipped with beds, linens and electrical lights, but no electrical outlets, telephones, televisions or plumbing. Two central shower and restroom facilities are within a short distance.

<u>Meals</u> - Yosemite has a lot of experience preparing meals for participants with varying dietary restrictions. The restrictions that they are not able to accommodate are: strictly vegan (participants may bring/purchase food to supplement), nut allergies so severe that participants cannot eat anything processed in a factory with nuts, and strictly kosher (there is no access to a kosher kitchen).

Curry Village Amenities

- Gift shop & Mountain shop
- ATM machine
- Outdoor swimming pool
- Amphitheatre
- Tour & activities desk
- Bicycle & raft rentals
- Mountaineering school
- Ice skating rink
- Free shuttle bus
- Village Pavilion
- Taqueria Stand (Mexican restaurant)
- Pizza Deck
- Ice Cream stand
- Coffee Corner



Areas of Study

In the outdoor classroom, students have the unique opportunity to observe, experience, and personally connect with nature in Yosemite National Park. All Visions groups can elect from seven areas of comprehensive study; incorporating up to 4 specific areas. Teachers may feel free to mix and match programs.

Climate Change - Climate change is a critical issue in our world, especially in our national parks. In Yosemite, students study topics such as climate and weather patterns, the greenhouse effect, the carbon cycle, and possible consequences of global climate change. Students learn what climate change is, how it may affect Yosemite, and how actions at home can impact our natural world.

Ecology – Explore the connections between Yosemite's diverse environments and the plants and animals that live there. Delve into Yosemite's ecosystems by studying how plants and animals adapt to their surroundings through observation and identification. Learn how living things and their surroundings are interconnected.

Geology – Students will be inspired by Yosemite's rocks to learn about the ancient and on-going processes that shape and change the earth. Take a closer look at granite to see its minerals, learn about the rock cycle, discover the powers of plate tectonics, or grasp the mighty forces of erosion while learning about the formation of the magnificent Yosemite Valley.

Human History – Explore Yosemite's rich cultural history by learning about the American Indians of this region, pioneer history, and how Yosemite played a pivotal role in the establishment of the USA National Park System. Groups can opt to visit the Indian Museum and learn from an Indian Cultural Demonstrator or focus on how the actions of settlers, explorers, activists, and politicians together resulted in the creation of Yosemite National Park.

Watersheds – Yosemite's rivers, creeks and waterfalls create a dynamic place to study the science of water. Learn where water comes from and how we can have an effect on this vital resource. Students will become scientists as they take part in a water quality study in one of Yosemite's creeks.

Scientific Process – Bring what students have learned in the classroom to life as they're on a path of discovery. Students will become scientists by answering scientific questions through careful observation, inference, and direct experimentation. Inquiry opportunities range from informal exploratory investigations to utilizing the scientific method and research techniques to process student questions.

Educator Choice (Open) — NatureBridge field educators come from diverse education and professional backgrounds. Put the decision of academic content for your program in the hands of your field educator. An open academic emphasis allows educators to tailor instruction to the strengths and passions as well as what they feel is best suited for your students.

"The amazing field instructors brought learning to life and their love and passion were passed on to students."

—Teacher, Millikan Middle School, Sherman Oaks, California



Days 3 - 6

Breakfast * Lunch * Dinner

Rise and shine Yosemite! After breakfast, we'll engage in our daily sessions. Teachers will have selected their interests prior to travel with a maximum of 4 areas of study included. Sample daily scheduling is as follows for field science participants:

6:30-7:15 AM - Wake up

Students rise each morning and walk out of their cabins into one of the most stunning natural environments on the continent. They will use this time to shower, dress, and prepare for their day.

7:15-8 AM - Breakfast

Participants are served breakfast in the Yosemite Lodge or Wawona Hotel dining rooms. Meals are served buffet-style with numerous options to satisfy even the pickiest of eaters!

8:30 or 9 AM - Morning meeting

Teachers can opt to begin their day of hiking and learning at either 8:30 or 9 AM. At this time, students and staff will meet their field educator.

8:30/9 AM - 4 PM - Instructional day

During the instructional day, your school splits into trail groups that average 12 students per group plus one or two staff. The field educator assigned to your trail group will work with the same group every day. The educators provide the activities and curriculum, staff assist in group management. Lunch is typically eaten out on the trail. Each day's learning adventures are customized to meet the academic and social goals your school has set. Some examples of popular instructional days (seasonality dependent):

- Hiking in Yosemite Valley while learning about the geological processes that formed the Sierra Nevada mountain range and the Yosemite Valley.
- Snowshoeing or cross country skiing in High Sierra meadows while learning about the winter adaptations of the plants and animals that live there.
- Completing team-building challenges and exploring lessons on leadership while hiking to the top of one of Yosemite Valley's waterfalls.
- Hiking in a giant sequoia forest while learning about the unique ecological interconnections that support these ancient and rare trees.

4-6 PM - Recreation time & store visits

Students can use this time to shower and change, work on journals, or play outside. A school may also use this time for structured learning activities. Teachers will supervise during recreation time. The NatureBridge store in Yosemite Valley is open from 3:30 to 5 PM, Monday - Thursday in the Boystown lodging area. Students can purchase t-shirts, hoodies, baseball caps, beanies, or Klean Kanteen water bottles.

5-6 PM - Dinner

In Yosemite Valley, dinner is served in the Yosemite Lodge or Wawona Hotel dining room. At Crane Flat, dinner is served family style in the Crane Flat dining hall. The food we serve is nutritious, plentiful and kid-friendly. Meals such as pasta with marinara sauce, burrito bar, meat and vegetarian chili, and the ever-popular pizza frequently appear on the menu.



7:30-8:30 PM - Evening program

Evening programs complement the material being presented during your field day. These large-group programs are engaging, educational, and inspiring. Students may engage in a town-hall style debate about the Hetch Hetchy Dam, learn about the history of art in Yosemite, take a night hike, or see a presentation about black bears.

9-10 PM - Off to bed

This is the time for students to use bathrooms, change clothes, and brush their teeth. Staff will supervise students during this time. Lights out is at 10 PM.

Safety - The top priority at Yosemite Institute is the health and well-being of participants and staff, and we know safety is a concern for all parents and families. With any outdoor recreation, education program, or activity there is always a risk. Knowledge is the key to helping reduce these risks. Parents and families can help prepare for their child's visit by reading downloading this link: **safety tips**. Yosemite's field science educators are Wilderness First Responders and educate participants about ways they can protect themselves and the environment during their stay in Yosemite. Please visit the **National Park Service website** for updates and information about weather, safety, and other Yosemite news.

Day 7

Breakfast * Lunch

Good morning California! After breakfast we'll have the morning and early afternoon for our science programming and then begin to pack our bags and get ready for departure. Afterwards we'll start to say goodbye to this wonderful land! We will wave to our new friends as we leave for the airport and hopefully, take away memories that will last a lifetime!

ADDITIONAL LINKS:

Yosemite packing list:

http://www.naturebridge.org/sites/default/files/FIELD%20SCIENCE%20CLOTHING%20AND%20EQUIPMENT%20LIST%20YOSE.pdf

Weather: http://www.visitcalifornia.com/Travel-Tools/Weather

California Interactive Map: http://www.visitcalifornia.com/Interactive-Map

As always, our staff is available to you to answer any questions you may have regarding programming. If we may serve you in any way, please do not hesitate to contact us.

Kaleidoscope Adventures | 800-774-7337 <u>www.kaleidoscopeadventures.com</u> | info@kaleidoscopeadventures.com



YOSEMITE SCIENCE

Minimum Booking Numbers: 20 students

What's Included: Round-trip flights on a scheduled carrier

6-nights' accommodation (One in San Francisco & 5 in Yosemite)

Breakfasts, lunches & dinners in destination with the exception of lunch on Day 2. Lunch on Day 7 is dependent upon flight times and may not be

available for groups departing on afternoon or early evening flights

Airport transfers in California and transfers to/from Yosemite 5-days of Field Programming with NatureBridge Yosemite Specialists

Free Time in San Francisco Visions Ambassador 24-hour emergency cover

What's Not Included: Fully comprehensive insurance (mandatory)

Transfers to/from home airport if traveling via air

Dinner on Day 1 is Optional and dependent upon your quote / arrival time

Lunch on Day 2 & possibly Day 7 dependent upon flight times

Transportation for activities not shown in the itinerary

Cost of visas, full or collective passports

Cost of inoculations or medication required for travel Sightseeing / Entertainment Options not shown in Itinerary

Hotel incidental deposits & bills – meals, mini-bar items, recreation charges,

purchases billed to room, etc

Any gratuities – coach drivers, maid service, bellman service, area guides,

tour ambassador

As always, our staff is available to you to answer any questions you may have regarding programming. If we may serve you in any way, please do not hesitate to contact us.

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