

## SCHOOL FIELD TRIP GUIDE

The Santa Barbara Museum of Natural History and Sea Center offers experiential, Next Generation Science Standards aligned school programs for elementary and middle school classes.





## SANTA BARBARA MUSEUM OF NATURAL HISTORY

2559 Puesta del Sol Santa Barbara, CA 93105 805-682-4711 ext. 108 or bookings@sbnature2.org



#### **SEA CENTER**

Santa Barbara, CA 93101 805-962-2526 ext. 108 or

# 211 Stearns Wharf seacenterbookings@sbnature2.org

# MUSEUM SCHOOL PROGRAMS

## **GRADE LEVEL K**

## Connect to Outdoor: Nature Exploration

Students get comfortable and connected with nature in the Museum's beautiful oak woodland by playing, exploring, and making new discoveries!

## **Habitat Museum Tour**

Students investigate Santa Barbara ecosystems, animals, plants and their environment on this 'touch and explore' tour.

## **GRADE LEVEL 1**

NATŬRAL

## Meet the Teeth Class

What do teeth tell us about what an animal can eat? In this lab, students get hands-on with animal skulls and develop the skills to distinguish herbivores, omnivores and carnivores.

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#### **Natural Wonders: Outdoor Nature Exploration**

Students explore the wonder of nature by becoming junior naturalists and participating in hands-on learning that includes an invertebrate search and animal interactions.

## Be an Astronomer

Students study how the Earth and Moon move and why we have day and night. Program may begin in the Observatory.

## Inheritance and Variation of Traits Tour

Students examine what animal features are inherited and what causes variation in different species.

## **GRADE LEVEL 2**

## **Geology Rocks! Class**

Students explore magnificent Earth processes, discover different properties of rocks and minerals, and learn about fossils, all while having fun indoors and outdoors.

## Nature Up-Close: Outdoor Nature Exploration

Students get up close with nature by exploring the oak woodland and searching for natural objects while categorizing their discoveries just like a scientist.

#### **Space Rocks!**

Students visit the Observatory where meteorites and asteroids are discussed and identified. The program is complemented with a live, Planetarium presentation where students can view and discuss asteroids, meteors and comets.

#### **Interdependent Relationships Tour**

Students learn how some animals can work together in nature to help their survival. Students evaluate which species are interdependent, and why creatures adapt and evolve.

## **GRADE LEVEL 3**

#### **Chumash Class**

Students will get to explore the Museum's Chumash Sukinanik'oy Garden, handle artifacts and become immersed in Chumash life.

#### Jr. Naturalist: Outdoor Nature Exploration

Students learn to look for and identify local plants and animals in the oak woodland ecosystem. Students uncover decomposers, identify producers and handle consumers all found on Museum grounds.

## What's Up?

'What's Up' with the Moon and Sun? Which way is North? What is a constellation? In this program students become an astronaut for the day and explore the mysteries of space.

#### Life Cycle Tour

Students see the variation of traits found in mammals, birds and marine life. Why is biological diversity important? From monarch butterflies to our national bird, students discover the life cycle of our local creatures.

#### **GRADE LEVEL 4**

#### **Fossil Finders Class**

Students become a Paleontologist for the day! What do local fossils tell us about the past? Junior Paleontologists learn how fossils are formed and about the biological evolution of the Pygmy Mammoth. Includes in-class excavation activity.

## **Ecosystems: Outdoor Nature Exploration**Students explore the oak woodland and/or riparian ecosystems

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## **Human Activity on Earth Tour**

Students learn about human impact on the ecosystem by thinking like scientists and analyzing specimens found throughout the Museum halls.

## **Out in Space**

Students begin program at the Observatory where they may observe the Sun and discuss the challenges of space travel. Back in the Planetarium, students will watch the full-dome movie "Astronaut."

#### **GRADE LEVEL 5**

#### Whale of a Tale Class

How is a human skeleton similar to a Blue Whale skeleton? Students observe human and whale similarities in both skeletal structure and function, learn about whales living in the Santa Barbara Channel through exploration stations, and propose solutions on how to protect the ocean's ecosystems.

## Watershed Ecology: Outdoor Nature Exploration

Students explore the Mission Creek watershed by becoming a field naturalist that catches and identifies aquatic invertebrates. Includes testing the water quality of Mission Creek and determining indicators and impacts of drought.

## Our Place in Space

Students will take a virtual trip around the Solar System and get a front seat view of all the planets. Students will also observe the variety of the moons and explore what makes each planet so unique.

## Matter and Energy in Organisms Tour

Where do all living organisms get their energy from? Students handle and examine everything from insects to mammals in this interactive Museum tour.

## **GRADE LEVEL 6**

## Far Out Astronomy

Students act as scientists & astrophysicists, seeing, observing and analyzing data to decipher what we find in the vastness of space exploration and what that means for us here on Earth.

## Natural Selection and Adaptations (2 HR) Tour

As scientist for the day, students will immerse themselves in the discovery of the growth and development of organisms on this advanced, interactive tour.

#### **GRADES 5/6**

## **Astrono-Mondays**

Students will build a scaled model of the Solar System and then take a virtual trip through our solar system in the Gladwin Planetarium (9:30 AM-Noon).

# SEA CENTER SCHOOL PROGRAMS

## **GRADE LEVEL K-1**

## **Outdoor Beach Explorations**

Students become scientists exploring Santa Barbara West Beach, using their senses while collecting, sorting and making up-close investigations.

## **GRADE LEVEL 2**

## **Investigating the Sandy Beach**

Students investigate the beach by collecting, sorting and analyzing their findings while discovering the origin of the sand.

## **GRADE LEVEL 3**

## **Coastal Bird Adaptations**

Students get up close and personal with our coastal birds by observing live birds and their special adaptations.

## **GRADE LEVEL 4**

## **Shifting Sands**

Students explore erosion and deposition by building a model of the beach, testing the effects of waves on the sand, and collecting natural materials that are subject to erosion.

## **GRADE LEVEL 5**

## Walking the Watershed

Students discover what a watershed is and the impacts that drought conditions and humans have on it. Students will investigate the quality of the local water from Mission Creek using field tools.

## **GRADE LEVEL 6**

## **Beach Profiling**

Students walk in the shoes of a coastal geologist by creating a model of their beach, testing the effects of waves on the sand, and completing a scientific experiment.

## MIDDLE SCHOOL AND HIGH SCHOOL PROGRAM

#### **Marine Debris**

Students learn about the impact of marine debris on ecosystems and marine life while participating in an onsite beach cleanup. Students will compare their marine debris collection to international coastal cleanup data.