



## Field Trip Program



**Sailing Into Science** is an outdoor science field trip program providing elementary students with hands-on education utilizing Lake Merritt's unique environment for science and boating safety education. Teachers can schedule one to four full-days (9am to 2pm) at Lake Merritt on the water and in our classrooms. We have safely served over 10,000 students.



## More Information

- Dates available September to mid-November and mid-February to June
- Cost: \$350 per day per class Oakland schools (\$420 non-Oakland)/ \$50 per day for OUSD Title 1 Schools if funds are available
- Our curriculum was designed in partnership with Oakland Unified School District for fifth grade standards (though we teach other grade levels)
- Lifejackets are provided and required when near or on the water
- Teachers can choose how many days to attend, curriculum, and boat types
- After completion of the program, students receive free boat rental passes
- No boating or swimming experience necessary
- Instructors are CPR & First Aid certified
- Multiple day trips do not have to be on consecutive dates

### Mornings

*From 9:00am to 11:30am*

The first half of the day is dedicated to investigating one of our four science topics (listed on the backside of this page).

### Afternoons

*From 12:00pm to 2:00pm*

The second half of the day is spent on the lake applying what students learned in the morning using one of our four boats (shown on the backside of this page).

Activities on the water include depth and salinity measurement, map navigation, and teamwork building.



"Sailing Into Science is without a doubt, the most wonderful program I have ever witnessed, let alone participated in. It provides a perfect balance between instructional and hands-on learning... I have never seen kids more excited about coming to school, more focused on their daily activities and more enthusiastic at the end of the day."

Evan Nichols, Teacher  
La Esuelita Elementary  
Oakland, CA



To register your class or for more information, contact:  
Lake Merritt Boating Center  
568 Bellevue Avenue  
Oakland, CA 94610  
sailingintoscience@oaklandnet.com  
Ph 510.238.2196  
Fx 510.238.7199

## Four types of boats



## Four Days Of Curriculum

Topics covered everyday:

- Scientific Method – Question, hypothesis, experiment, data, and conclusion
- Mean, median, and mode
- Data analysis and graphing

### **-Nautical Science** - How do boats float?

- What is buoyancy and what affects it?
- Scientific Method introduction
- Students create a small boat made of clay
- Chart the lake depth
- Mean. median. and mode

### **-Earth Science** – Water's Vital Role

- Earth's water – Types, amount, locations
- Water Cycle
- Lake Merritt's Watershed
- Water salinity measurements
- Tides and currents

### **-Life Science** – Is Lake Merritt a healthy habitat?

- Photosynthesis
- Photosynthesis Tag
- Measure the lake – Water and air temperature, dissolved oxygen, invertebrate observation
- Bird Sanctuary walk and observation

### **-Physics** – Simple Machines

- Simple machines introduction
  - Lever experiments
  - Pulley experiments
- Data analysis and graphing

Other topics and terms covered:

- Boating safety and proper lifevest fitting
- Local plants and wildlife
- Relative magnitude of small and large numbers



"Thank you for making my last year at Redwood Heights School the best year. You made me open up my eyes and stand up for a better habitat...thank you for showing me the light to a better future."

Andrew, 5<sup>th</sup> Grade Student  
Redwood Heights Elementary  
Oakland, CA



"I saw true experiential learning going on. I saw students who are often distracted and off task in the classroom completely engaged and excited during this program. I saw students increase their awareness of their own city and become engaged and excited about Lake Merritt and its inhabitants. I saw students trying new things and going outside of their comfort zone. I also saw students having lots of fun!"

David Braden, Teacher  
Bella Vista Elementary  
Oakland, CA