While we don't guarantee the effectiveness of these activities, we have heard nothing but good things about them. Branches might provide this list to parents and students who are ineligible or aren't selected for Tech Trek camps.

## SCIENCE CAMPS and ACTIVITIES in NORTHERN CALIFORNIA

We welcome notice of other STEM activities suitable for children. The AAUW Tech Trek State Coordinator can be reached at <a href="techtrek@aauw-ca.org/">techtrek@aauw-ca.org/</a> Our website is www.aauw-techtrek.org

COSMOS – California State summer school for mathematics and science. Sites are the various UC campuses. Application is similar to college entrance applications and the deadline is usually in early March. References, essay, and transcripts are needed. Excellent program and financial scholarships are available, grades 8-11. http://www.ucop.edu/cosmos/

Also check out <a href="http://cosmos.ucdavis.edu/">http://cosmos.ucdavis.edu/</a> for information on COSMOS, a four-week summer residential program at UC Davis for high achieving math/science students in grades 9-12.

iD Tech offers computer tech and gaming camps during the summer (<u>www.internaldrive.com</u>) UC Berkeley, Stanford University, CSU Sacramento, Santa Clara University, St. Mary's College, Moraga

The EPIC Program – Cal Poly San Luis Obispo (central California)

Santa Clara University's summer program

<u>The Tech Museum in San Jose</u>, summer programs for children entering 4<sup>th</sup> thru 8<sup>th</sup> grade (www.thetech.org/summercamps/)

Marine Science Institute – Redwood City – Classes, summer camps for all ages/ www.sfbaymsi.org

Seymour Center Summer Program – Ocean Explorers ages 7-14 at the Long Marine Laboratory in Santa Cruz; different from the Monterey Bay Aquarium's program. Smaller and more research focused. This is a great summer program that gets your kids up close and personal with marine life, including the marine mammals that are at their research station. The website below is from 2010 summer, you need to get on their mailing list to get the application for the next season, it is highly competitive and I think they hold a lottery. <a href="http://www2.ucsc.edu/seymourcenter/lp-youth-OE.html">http://www2.ucsc.edu/seymourcenter/lp-youth-OE.html</a> http://seymourcenter.ucsc.edu/

The Sally Ride Science Camps provide innovative hands-on science camps for girls entering 4<sup>th</sup> - 9<sup>th</sup> grades. They provide girls an opportunity to explore STEM fields while having fun on a college campus, such as UC Berkeley, U of San Diego, MIT, and Cal Tech. See www.sallyridecamps.com.

SCIENCE RESOURCES IN THE SOUTH BAY AND BAY AREA. you may not have thought about

A Schmahl Science Workshop

SSW is unique in its breadth of curriculum (physical, earth and life science), and for its tiered program meeting the needs of all age groups (pre-K through 12). We offer an after school career mentorship program that enables students to participate in on-going science and engineering research programs. http://www.schmahlscience.org/

The Education Unlimited (www.educationunlimited.com).

Natural Bridges State Beach in Santa Cruz. Has tide pools and monarch migration habitat. Programs offered for both. And excellent day trip experience. Near the Seymour Center, but that's too much for one day.

Monterey Bay Aquarium, (www.mbayaq.org/)

http://www.parks.ca.gov/?page id=541

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<u>Lawrence Hall of Science at UC Berkeley</u>. Museums and special exhibitions, children's programs and summer programs. There is a wonderful Botanical garden nearby too and an excellent view of the SF bay.

http://www.lawrencehallofscience.org/

Exploratorium in San Francisco. One of the best engaging, hands on and sense gathering experiences I have ever encountered in a museum atmosphere. For ALL ages; just let your kids wander and explore. (They are moving to Pier 15, opening April 12, 2013) <a href="http://www.exploratorium.edu/">http://www.exploratorium.edu/</a>

Explorit Science Center, Davis, (www.explorit.org)

Gateway Science Museum, Chico www.csuchico.edu/gateway/

<u>Fremont Peak State Park</u> – A beautiful clear peak that often has telescope viewing and sharing. Good campground too. http://www.parks.ca.gov/?page\_id=564

Fremont Peak Observatory Association: http://www.fpoa.net/

Chabot Space Center in the Oakland Hills (www.chabotspace.org/)

Discovery Museum-Challenger Learning Center, Sacramento (www.thediscovery.org/)

Also, check your local college, university or community college for science/math/technology-related activities for kids. Some have College for Kids. Many museums/aquariums also have summer programs. Also, do an Internet search for science camps in your area; new ones open up all the time. And, as always, your children's teachers and school counselors will have ideas.

## Other STEM Opportunities for Students

There are many opportunities to pursue an interest in science, technology, engineering, and math (STEM) in addition to the AAUW Tech Trek Math/Science Camps. Many schools have a robotics program and access to math/science camps, so check the possibilities at your school and at www.educationunlimited.com.

An eight-week program called the NASA SHARP (Summer High School Apprenticeship Research Program). See <a href="https://www.dfrc.nasa.gov/Education/Students/Research/sharp.html">www.dfrc.nasa.gov/Education/Students/Research/sharp.html</a> for more information.

INSPIRE, the Interdisciplinary National Science Program Incorporating Research Education, is designed by NASA to encourage future explorers from the 9<sup>th</sup> through the 12<sup>th</sup> grades to pursue an education and careers in STEM fields. See www.nasa.gov/education/INSPIRE.

AAUW recently joined an exciting group of STEM collaborators who are developing interactive online science and math activities. Funded by the National Science Foundation, it features downloadable lesson plans, field trip projects,how-to videos, games, and thousands of other hands-on activities. Go to <a href="https://www.howtosmile.org">www.howtosmile.org</a>.

## **Book Suggestions**

Math books by Danica McKellar are excellent resource for girls, teachers, and parents. They are geared for girls in elementary school and pre-algebra, and algebra. She may have one in geometry soon. I browsed them and thought the lesson and the delivery of the lesson was excellent. Again, it is an approach that actively engages a girls mind. Abstract ideas become everyday problems that can be analyzed and solved. They also have websites for each book.

Math Doesn't Suck – how to survive middle school math http://mathdoesntsuck.com/

Kiss my Math – showing algebra who's boss http://www.kissmymath.com/

Hot X – Algebra Exposed! http://danicamckellar.com/hotx/

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