



In 2011, Girl Scouts of Greater Los Angeles was selected to partner with Techbridge, a program of Chabot Space and Science Center based in Oakland, CA, that inspires girls in science, technology and engineering. The partnership, called "Girls Go Techbridge," will enable the Girl Scouts of Greater Los Angeles to adopt Techbridge's hands-on projects and career exploration activities to help excite girls about science and engineering, and discover her own potential. In addition, resources for parents and role models are offered with practical advice for supporting girls' participation in these fields with historically low female representation.

Over 3,000 Girl Scouts have participated in Girls Go Techbridge's after-school and summer programs since the program's launch in 2008. Made possible by the Noyce Foundation and the Gordon and Betty Moore Foundation, the program offers hands-on engineering and science projects as well as career exploration activities that include visits by role models. Techbridge also provides trainings to troop leaders, role models, and program partners to enhance the network of support for girls. Techbridge's success has been evidenced by consistent evaluation results that demonstrate girls' increase in technical skills, confidence and interest in a career in science or engineering.

The local contacts for Girls Go Techbridge are STEM Manager Kristen Simon and program staff Brianna Colomb. Your troop or group can check out these programs-in-a-box for a very small fee. To learn more about these programs or to find out more about how you can check out the boxes, please contact them at <a href="mailto:ksimon@girlscoutsla.org">ksimon@girlscoutsla.org</a> or <a href="mailto:bcolomb@girlscoutsla.org">bcolomb@girlscoutsla.org</a>. You can find very simple instructional videos for each hands-on activity on YouTube:

## http://www.youtube.com/user/Techbridge

#### Make it Green

Learn about green design and in the process develop science and engineering skills. Girls will construct a green studio from start to finish – from brainstorming an idea, to creating a floor plan, to building "green." Through smaller activities, you will explore and reflect on their energy usage in your home and consider ways in which you can change your habits to lessen your environmental impact.

## Power it Up

Learn about electronics and circuitry through a series of hands-on investigations. You will begin with exploration of Snap Circuits<sup>TM</sup>, learn about basic electronic components and build different kinds of circuits. Rounding out this unit, you will learn how to solder and put your skills to action, making an Electric Game Board and Tilt Lantern that you can take home.

#### **Design Time**

Do you love to play and be creative? You will learn about the engineering design process and get your creative juices flowing by building and designing a pencil pouch for your buddy and a unique bubble wand and solution. You'll also build protective packaging for your favorite cookie and prototype a toy of your own invention.

# **Engineers to the Rescue!**

Survival skills meet science as you design water filters, wind-powered cranks, a message-carrying car, and safe shelter for your troop's (make-believe) camping trip in Yellowstone National Park. After an earthquake strikes your fictional campground your electrical power, your food, and your water source are unavailable. How will you get out of this predicament? By applying your engineering, problem-solving and design savvy! Go girl power!

## **ThrillBuilders**

Welcome to the crazy carnival of your own creation. Explore simple machines all around us as you build a merry-go-round, a bean-bag toss, and a race car. Levers, pulleys, screws and gears abound as you engineer the ultimate playground. Wheee!









