SCIENCE BUDDIES Project Ideas Roundup

SUMMER EDITION

July 2011

Science in the Summer

Summer Offers Time for Fun, Hands-on Science Exploration

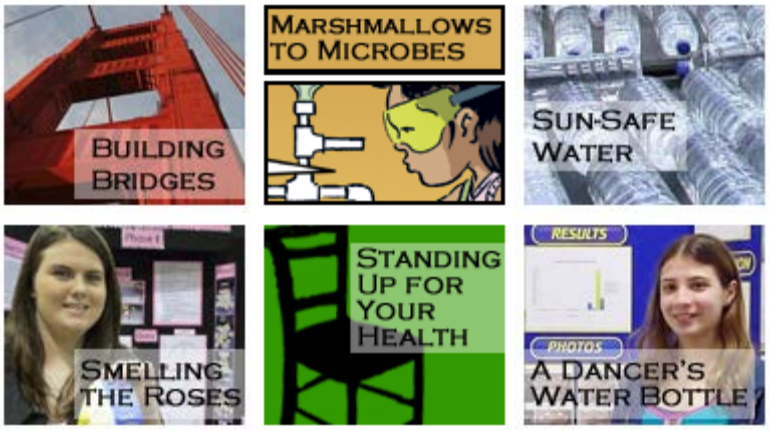
Lazy summer days and lemonade? What could you build, test, design, explore?

School may be out for the summer, but that doesn't mean scientific inquiry has to get tucked away with a student's backpack, lunchbox, and No. #2 pencil! **Summer is ripe with opportunities to ask questions and seek answers,** whether it's on a family camping trip, in the kitchen, by the beach, while tie-dyeing, with a guitar in hand, using a bucket of LEGO®, in the garden, or even with a bit of fire.

No matter what a student's hobby--or where a summer getaway leads--***there are science angles to investigate!***

And that No. #2 pencil? A lot can be learned from a trusty stick of graphite. Students can experiment with resistors and circuits, re-wire a light to use a dimmer, or investigate thigmotropism in touch-sensitive plants. *(Think a pencil's just a pencil? Check out last-year's Nobel-winning research on graphene.)*

Making Connections



Beat the Heat

Summer Days and Summer Rays

Bright, warm, and long summer days can give added zing to solar-powered projects. From being UV-savvy to thinking about the ways in which solar energy offers smart and exciting solutions for a "greener" tomorrow, the following Project Ideas are all sun-warmed:

- **Solar Speedway**

Kudos!

Congratulations to recently-announced winners in the **2010 Science Buddies - Lick Observatory Astronomy Contest.** Winners received cash awards and equipment, courtesy of Celestron, for ***thinking big and beyond!***

Summer 'Fellows'

Science Buddies is excited to welcome its first group of Summer Science Fellows! This summer, six recent graduates, all of whom participated in the Intel ISEF as seniors, are applying their science expertise and enthusiasm to various projects for

- **The Frightened Grasshopper: Explore Electronics & Solar Energy with a Solar-Powered Robot Bug**
- **From Brine to Beverage: Solar-Powered Salt Removal**
- **Get Something for Nothing: Free Power from the Sun!**
- **How Does Solar Cell Output Vary with Incident Light Intensity?**
- **The Speed of Light: Explore Solar Energy with a Supercapacitor Car Motor!**
- **Colorful Chemistry Creations: Make Your Own Sun Print with Color and Sunlight!**
- **Don't Get Burned! Measure the UV Index at Different Times of the Day**
- **Build Your Own Helio Tracker-a Self-powered Mechanical Sunflower that Turns with the Sun***

Science Buddies. In addition, the Fellows will attend special presentations designed to help them as they transition to college and into the larger scientific community.

Follow Us

Stay in touch day to day and all summer long by joining our Facebook community. Click "Like" to add us to your favorites!

Mark Your Calendar!

Professional Development Webinar for Teachers

Join us in September for our next free online webinar, sponsored by the AMD Foundation

Our upcoming **webinar on Sept. 14** will give you a hands-on virtual tour of the Science Buddies website and will highlight ways in which you can use Science Buddies resources and Project Ideas with your students. This year's webinar will also introduce a new set of video and computer game design resources **for classroom instruction and student exploration at home.** Stay tuned for registration information!

(Science Buddies' Video and Computer Games section is sponsored by the AMD Foundation.)

Your Science Stories

- Are you or your students at science camp this summer? If you are spending time in a summer science program and **having fun exploring or teaching science** in exciting hands-on ways, we'd love to **hear your story**!

Quick Links

- **Project Ideas**
- **Topic Selection Wizard**
- **Project Guide**
- **Scientific Method**
- **Careers in Science**
- **Ask an Expert Forums**