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Tips and tools from your school library

LOW HANGING FRUIT

Make Your Way to STEM

By Erica Compton, Program Manager, STEM Action Center

It's no secret—I am a huge advocate for making and makerspaces! Helping develop the *Make It at the Library* project for the Idaho Commission for Libraries (ICfL) is one of the highlights of my career (so far)! Now in my new position at the Idaho STEM Action Center, I am excited to share my passion for making with schools, as well as with public libraries.

At the STEM Action Center, we have created an opportunity for schools to host events for informal learning, family-style. STEM Family Night event grants are our answer to the hundreds of schools across the state that have asked for funding help to host family STEM events. School faculty saw the need to educate families and community members on the importance of STEM, and fun, hands-on events are perfect venues for that!

Here are some of the great ideas that were submitted through the 45 grant requests we received. Perhaps they will inspire you to host a Family STEM event at your school.

“A portion of our event will be full-body engagement in an exploration of the laws of motion. We will rent equipment to hold interactive bubble soccer games, present a lesson on forces of motion, and then have hands-on demonstrations.”

“Each class in grades K-5 will complete an in-class science experiment to be displayed at Science Night, along with the data and results. Students and parents will also participate together in any of the interactive science exhibit stations as a family. For one night we will turn our school into a hands-on science museum.”

“During this event, we hope to provide parents with all the materials and resources they need to duplicate the games at home with their students. By actually hosting a family game night, we believe we can engage parents in the curriculum and make it easier for them to help students with activities at home.”

“One section of the event will highlight crime solving/forensics. Participants will use various technologies to solve a mystery through a variety of booths (polygraph, fingerprinting, microscopy, etc.). Another booth will invite participants to engineer bridges and other structures, with a guest engineer to answer questions.”

“The Bike Rodeo will illustrate to kids and parents the science behind the need for wearing helmets when cycling. The STEM lesson will show how force, speed and gravity can lead to serious or fatal head injuries.

Inspired by these examples to host a Family STEM event of your own or to spread the word about how important and fun STEM can be? For updates on how all these great plans turned out, visit www.stem.idaho.gov and follow the STEM Action Center on Facebook at <https://www.facebook.com/IdahoSTEMAC/>. + Also visit <http://libraries.idaho.gov/page/make-it-library-where-idaho-makers-meet> for great information and resources about making.

LINKS TO MORE LEARNING



Teen Tech Week: Any time during March teens join the maker movement. Find out how at <http://libraries.idaho.gov/page/teen-tech-week>.

Fun with Math & Science: For the younger set, try the Have Fun with Math & Science online game board at <http://stemgame.lili.org/public/>.

Makerspace Playbook: Intrigued? Learn about all things making with this free downloadable guide: <http://makered.org/wp-content/uploads/2014/09/Makerspace-Playbook-Feb-2013.pdf>

PRACTICAL APPLICATIONS



Cardboard Challenge

What is more fun than an empty cardboard box? Lots of empty cardboard boxes! And they also make excellent building materials.

If you haven't heard about the Imagination Foundation's Cardboard Challenge, visit <http://cardboardchallenge.com/>. While you are there, be sure to watch the Caine's Arcade video under About Us. Then the only course of action is to: set a date; launch a cardboard drive; and start building!

DIGITAL TOOLS



STEAM Resources for Kids

<http://libraries.idaho.gov/STEM-Resources>
Booklists, activities, and apps for building STEAM skills.

Hour of Code

<http://code.org/learn>
Designed to demystify code and show anybody can learn the basics. How-To Guide, lesson plans, and more.

LiLI STEM Resources

<http://lili.org/dbs/category/51>
Online books and articles to support STEM classroom education.

