

Science

Ecosystems

Students build a self-sustaining terrarium/ aquarium using seeds, aquatic plants and snails. This activity models the interrelationship between biotic and abiotic factors in an ecosystem. Students will record observations in a Google doc over a period or several weeks.

This and other design challenges, connected to the NJSL and NGSS, are available for your classes. Please contact your school's STEM Specialist.



Step Into

STEM



Science • Technology • Engineering • Math



Invent a Self-Driving Vehicle

Mathematics

Gears

Students investigate the proportional ratio among different size gears after constructing a gear train. Students collect data from their gear train and create a linear graph. The graph helps students understand how gear relationships are proportional and constant.

Middle School STEM Specialists

Bayshore
JoAnn Layton
X 2610

Thompson
Jeanette VanFechtman
X 8776

Thorne
Kristen Parry
X 7785

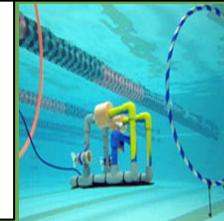
Little Bits Student Sets

Little Bits Student Sets have been ordered for the middle schools. These sets can be used for easy circuit building or in depth invention purposes. Additional uses include constructing a security device and creating a chain reaction contraption.

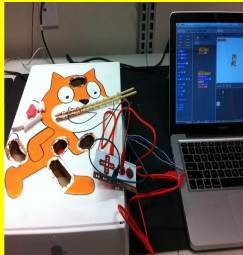


STEM Club

The Sea Perch teams competed in the underwater robotics challenge on Saturday, March 25th. The students maneuvered through an obstacle course and manipulated polypropylene rings and PVC cubes to hang on a ledge. Great job by all!



MaKey, MaKey Operation Game



Students work in groups to design an operation game using a shoebox, aluminum foil, a MaKey, MaKey kit and Scratch Project Editor. Creativity, cooperation and programming skills are utilized to add a new twist to the classic game of operation.

Engineering Resources Spotlight

Bloomsburg University - STEM
Resources for Teachers
<http://www.bloomu.edu/stem-resources?scrybrkr>
Environmental Restoration - Grasses in
Classes
<http://www.littoralsociety.org/grasses-in-classes.html>
Tinker Crate- Hands on Experiments
<http://www.tinker.kiwicrate.com>

