

Elementary STEAM in Schoharie

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STEAM Night Successes

Congratulations to our brave engineers: Teyah, Tyler, and Ethan, who delivered the key-note speech to kick-off STEAM Night! The trio spoke about the benefits of joining our LEGO Robotics Club. One of my favorite quotes was from Ethan as he reminded students of the importance of teamwork; he declared, "Don't forget that there's TEAM in STEAM!" The highlight of the keynote was the trio's demonstration of the skills they learned as they showed off their dancing robot!



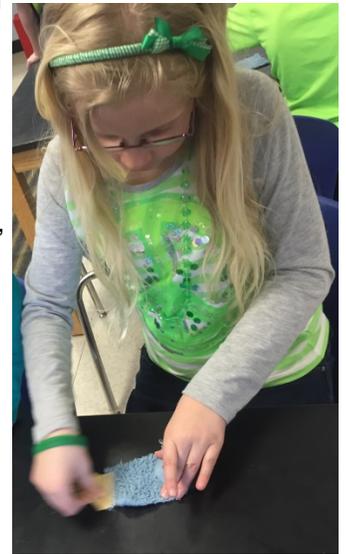
Students below participate in Mrs. Cheska Robinson's Roller Coaster Challenge during STEAM Night! The kids were trying to complete three levels of challenges: 1) designing a coaster with a ramp, 2) designing a coaster with a loop, and 3) designing a coaster with a hill, a loop, and a turn.



Materials Engineering

3rd graders study the properties, structure, and process of different materials.

Throughout this unit, 3rd graders will combine their science content learning about rocks with materials engineering knowledge in order to create a petroglyph. Our hands-on learning started with examining the differences between terry and twill. 3rd graders made claims about which material would be better to produce a towel; the kids supported their claims with evidence from their observations as well as absorbency and durability testing. Currently, 3rd graders are studying the properties of various types of rocks to determine the best material to use for a petroglyph. 3rd graders will conclude this unit by utilizing the Engineering Design Process to create their own petroglyph replica.



The Hip Bone's Connected to the Thigh Bone!

5th graders research the Skeletal System as part of their Biomedical Engineering Unit.

5th graders researched to learn about our skeletal system as a kick-off to their Biomedical Engineering Unit. Now the kids are researching various materials to determine which materials would be the most durable and most flexible. The kids will use this knowledge to help them on their journey to designing prosthetic limbs. At the conclusion of this unit, 5th graders will present a model of their design to the class and inform the audience about how the design suits the needs of their client. Be on the look-out for material requests for your children as they begin to plan their designs with their partner(s).

UPCOMING DATES OF INTEREST

3/27	Science Fair Forms DUE
** 5/11 **	Grades 5 & 6 Spring Arts Festival
4/12	Last session of Robotics Club (Session 2)
4/14-4/21	April Break STEM Workshops (www.misci.org) \$
4/26	First session of Robotics Club (Session 3)
4/27	Duanesburg/Schoharie K-6 Science Fair (6-8 pm)

A Work in Process!

Kindergarteners act as chemical engineers as they create the BEST process for making high-quality play dough.



To kick off this unit, Kindergarteners discovered and defined technology. Next we read, *Michelle's MVP Award*, and questioned whether a process could be a form of technology. Now we're improving an existing recipe to improve a product. Kindergarteners will explore and compare ways to change this recipe so we can change our play dough from a low-quality product to a high-quality product.

Erosion Experts

2nd graders learn about erosion, weathering, and deposition in order to engineer solutions.

In both STEAM and science in their classrooms, 2nd graders are engaged in hands-on learning to increase their understanding of erosion. During STEAM, 2nd graders will engineer solutions to erosion caused by wind. The kids will compare solutions created within their classes and determine which solution would be the best solution to prevent wind erosion.



2nd graders engaged in a weathering lab to determine what happens when rocks tumbled together. Ask your child what substance we used to represent our "rocks".

Lighting Up Others!

4th graders are electrical engineers!

4th graders learned about electric circuits as they planned, designed, and created electrocards: greeting cards with a flare! Using an LED bulb, copper tape, and a coin cell battery, 4th graders designed greeting cards that lit up! Our 4th graders amazed me with their generosity throughout this unit, as some students decided to create cards for children in the hospital. What thoughtful students we have in our Schoharie Community!



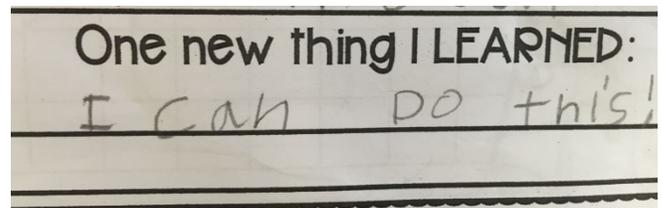
Jacob's card reads, "I was engineered to love you." ♥



Communicating with Light & Sound

1st graders engineer communication devices.

1st graders studied various means of communication; then they used the Engineering Design Process to create devices to communicate using sound or light. The kids thought of a sentence they would like to communicate, and then used their device, along with a self-created code, to relay their message.



One of the greatest benefits of STEAM is its ability to empower children to believe in themselves and see themselves as engineers!

Thank You for Your Donations!

I would like to thank all of the families who continue to generously donate supplies to the STEAM lab! It is much appreciated, and some of our projects would not be possible without your donations. From myself, and the children, THANK YOU!!

