

2019 Northside School Family STEM Night

Stop by the Northside Library to see what our #NSHeroes are doing to explore STEM and Making.

Station Location Color Key: **Pink** = NS Cafeteria **Blue** = NS Gym **Orange** = Dudley Cafeteria **Purple** = Dudley Gym

Station #	Station Name	Station Description	Station Leader(s) and Affiliation
1 Room 690	Blast From the Past: Explorers Come to Life	Fourth graders from Mrs. McDermott's class worked with Mrs. Dubois and Hummingbird Robotics to create interactive explorers! Come say "hi," to 6 European explorers who made an impact on NY's history!	Erica McDermott, Jessica Dubois, and Students
2 Music Room	Optics Suitcase	This innovative, interactive presentation is designed to introduce students to the dynamic and exciting range of concepts within the study of light.	Jessica Nelson, OSA Rochester Section
3 Music Room	Optics! The Power of Light	MCC Optics bring demonstrations on the principals of harnessing and controlling light of a fundamental physical property that shapes our world through applied, hands-on demonstrations.	Alexis Vogt, Patrick Stefano, MCC
4	LEGO Great Ball Contraption	Watch amazing machines made entirely out of LEGO! Similar to a Rube Goldberg, each machine has a unique function to help the LEGO balls complete an endless loop!	Jeffrey Johnson, Rochester LEGO User Group
5	RMSC STEM Encounters	Get ready for some hands-on, minds-on STEM-tastic science encounters and fun with RMSC's Curiosity Camps!	Allison Schultes, Stephen Weisenreder, RMSC
6	Make Your Own Concrete	The roads we drive on, the buildings we work in, and houses we live in are all made of concrete! Join The American Society of Civil Engineers (ASCE) and make a sample of concrete and learn about the various job and careers in the Civil Engineering profession.	Ed Farrell, Drew Schwingel, Erdman Anthony
7	Drinking Straw Pressure Drop	Engineers design fans to push air through ducts. Try building your own pipe out of drinking straws, and see how difficult it is to blow air through as it gets longer.	Rachel Stuckey, Erdman Anthony, NS Parent
8	Sweet STEM	Which #NSHero can build the largest tower? Use gumdrops and toothpicks to create the tallest tower possible. The goal is to have a tower that can support its own weight as well as be the tallest. Give it a try!	Jill Robertson, NS Parent
9	May the Forces be with You	Join us in testing and floating rubber duckies as we explore amazing forces. No Jedi-mind tricks here, just the wonderment of physics. We'll introduce visitors to the language of physics through different types of forces, and let kids use popsicle sticks to label forces around them.	Annette Dunn, Jumbo Minds, LLC
10	You Mean Science Can be Fun?	Nine 'Magic' surprises that capitalize on STEM, in ways you don't expect!	Jon Kriegel, Rochester Engineering Society, Finger Lakes STEM Hub
11	Fossils of NY State	Students will have the opportunity to identify some common fossils from New York State and determine what the environment of New York was like in the Paleozoic Era.	Eric Becker, FCSD, NS Parent
12	DIY Science- Upcycling Plastic Into Something Fantastic!	Where do all those empty water bottles go? Garbage dumps and into our oceans, oh no! Learn how to recycle and upcycle used water bottles and have some science fun along the way. Race a balloon powered car, check out our tornados, greenhouse, and bird feeders along with other creative ideas and experiments reusing plastic bottles.	Robin Hernandez/Beth Espada, Fairport Girl Scout Troops 60029 & 60374
13	App Magic	Interact with virtual objects using augmented reality.	Graham Diehl, Apperdashery LLC, NS Parent

14	Much Ado About Nothing	What is air pressure? What happens when it is gone? If you scream in space, can anyone hear you? Why are marshmallows so fluffy? Curious?	Michael Maiorino, James McLean, Jeremy Grace, Mohawk Valley Chapter of the AVS
15	The Science of Sound Waves	Rochester, NY March for Science shares the science of sound! Learn how sounds you hear travel through air and see the patterns they make in sand.	Stephanie Gallant, Rochester NY March for Science
16	Spectacular Spectroscopy	Learn how astronomers use different types of light to discover the compositions of our universe via interactive and hands-on activities.	Chi Nguyen, Annie Dickson-Vandervelde, Marco Ristic, RIT Astrophysics
17	Killer Plants	Most people have heard of the Venus Flytrap, but did you know that there are over 600 species of carnivorous plants? Some are even native to the Rochester area! Visit the Killer Plants table to learn more.	Michael DiCaprio, NS Parent
18	STEM Board Games		Matthew Vercant, Just Games Rochester
19	Interactive Media and Games	This station gives an inside look at the current projects of the Workinman Interactive Game Design company.	Justin Dambra, Workinman Interactive
20	Spare Tools Pouch	We are designing a tool box for use on board the International Space Station. NASA asked us to be able to organize and store their tools on board.	Donna Himmelberg, Vince Stornello, FHS NASA Hunch Team
21	Video Game Design with the Fairport Library	Using Bloxels and an iPad you can design your own video game! Each colored block in the Bloxels kit represents a different video game element. Combine them in any combination to create a multi level video game. Then use the iPad to play the game you created!	Anne Hicks & Lauren Hinett, Fairport Public Library
22	Red Raiders Robotics Team 578	Come learn about Fairport's Red Raider Robotics Team and play with one of our robots!	Fairport Red Raider Robotics, Team 578
23	FIRST Lego Robotics	First Lego Robotics is the first step of the Fairport Robotics Team. Come learn about FLL at the Elementary and Middle School level of robotics and watch a robot in action!	Anette Messer, FIRST Lego Robotics
24	Cybersecurity?		Laura King, RIT Cybercorp Program

TEDxNS: Don't miss this opportunity to hear inspiring conversations about amazing science and cool jobs!

Location	Time	Presenter, Affiliation	Talk Description
686	6:40	Josh Faber, RIT	The Sounds of Black Holes- Black holes might not give off any light, but they still make waves that travel across the cosmos. Come learn about how scientists detect black holes colliding, what it "sounds" like, and what it tells us about everything from stars to galaxies to the entire universe.
684	7:05	Nathan Cahill, RIT	Mathematics to Determine if a Goal is Scored- During this conversation Mr. Cahill will explain the mathematics behind Goal Line Technology in determining if a goal was scored in a soccer game. You will also review controversial goals from past World Cups to determine if goals were scored.
686	7:30		