

Newton's Road Northwest - April, 2020 Newsletter



Our mission is to ensure *ALL* of our youth have opportunities to develop creative problem-solving skills and

investigate STEM-related careers so they may thrive in the 21st Century local and global economy.

NewtonsRoad.org

Facebook.com/NewtonsRoad

A Note from our Executive Director, Barb Termaat



I hope you and your family are staying well in body and mind while navigating our daily roller-coaster existence these days. Our team was certainly uplifted by the four Rube Goldberg Machines entered in our first Learn at Home Contest! Two of the winners have already chosen their STEM Kit prize from 120 options in the Traverse Area District Library (TADL) website [catalog](#). [Check out the winning Rube Goldberg Machine videos on our website!](#)

Our new Learn at Home - Invention Contest starts now! Time to start brainstorming an invention to solve a problem of your choosing for our second contest! Details are accessible below. The photo above shows a simple invention I added to my prototype face mask, it solved my problem of the strap repeatedly sliding down the back of my head--I can't wait to see the inventions your kids come up with!

In talking with parents new to home-based school, one of the greatest challenges is putting together a plan for each day. Our [April-May Families First](#) column shares best practices from an experienced local home-school mom and my years of teaching. In the [Aug.-Sept. issue](#), discover the latest research about how we learn and how to put this information into practice with examples related to learning math (the book ["Make it Stick"](#) is a great read on this topic).

Math skills development during this 'school at home' period is one of my greater concerns because many people in our country of all ages have math anxiety, and that anxiety can increase when trying to teach their kids. As a former math teacher, I was thrilled to find out that the nationally-recognized and State of Michigan approved math learning system [ST Math](#) is now available free to families through the end of June. Developed by neuroscience and math teaching experts, it determines your child's current mastery level and builds from there. This is called personalized or adaptive learning--and it's the future of learning. Why? Because it is incredibly more effective than everyone doing the same thing at the same time, regardless of whether or not they mastered the last lesson. Bonus: it is a game-like experience that kids love!

Having your K-8 child do [ST Math](#) daily through the end of June, is one of the best things you can do for their math learning--and one less thing you have to figure out, just support. Reading [Bedtime Math](#), which provides practice in both reading and math, is another great add to your daily Dad School and/or Mom School routine. Details on these two programs are below, and they and many more resources are in our searchable database of quality locally-relevant all things STEM--be sure to use the [Corona-compatible search](#) at the top of the page.

[Send me](#) your questions or topics you'd like to learn more about, especially now that Mom and Dad School will be in session until June. Thank goodness spring is coming--find some spring outdoor science fun ideas [here](#).

Rock on!




Barb

Newton's Road Adds Enhanced Functionality To Our STEM Activities and Resources Database!

Select Search Criteria

Keyword(s)

Please select tags to refine your search.

Corona-Compatibility   (All) 

Corona-Compatible Activities

What fun can you have during the 'Stay at home, Stay Safe' COVID-19 mandate? Check the box under our new Corona-Compatibility filter and click the Update Search button to see!

[CLICK HERE for the Newton's Road Searchable Database of Regional Activities](#)

Announcing Newton's Road 2nd "Learn At Home" Contest!

Enter to win your own STEM Kit!!

[Click here for contest details](#)



LEARN AT HOME INVENTION CONTEST!!



Use the steps given in contest instructions on NewtonsRoad.org to invent something that solves any problem...



Follow the instructions to post a video and photo of your invention to our Facebook event page...



The post with the most likes by Friday, May 8 wins a STEM Kit of your choice!



There will be FOUR PRIZES awarded (K-2, 3-5, 6-8, 9-12)



Celebrating our Rube Goldberg Machine Contest Winners....



1st Place: Elijah Richardson
(pictured left)

Prize: [Little Bits Electronics kit](#)

Runners Up:

Vaybreein & Thayvin Lardie

Prize: [Marble Race Deluxe](#)

CJ & Olivia Forsyth

Prize: T.B.D.

A Rube Goldberg Machine (RGM) is a crazy complicated machine to do a very simple task. [Here](#) is an amazing example of an RGM from OK Go!

[Here is a link to the winning videos](#)

No-Cost Access to Nationally Award-Winning ST Math!



MIND Research Institute is offering no-cost access to the award-winning, patented ST Math approach for your use at home - FREE through June 30, 2020. The offer is available for grades K-8.

ST (Spatial Temporal) Math is a web-based visual instructional program that leads to deep conceptual understanding of math. ST Math's visual approach makes the program accessible to all learners. When students of all levels, can problem solve without distractions, educators see dramatic increases in achievement.

[Click Here to Learn More and Sign Up for ST Math](#)



[Science Projects](#) | [Project Guides](#) | [Ask An Expert](#) | [Science Careers](#)

Science is all around us... so you can easily show that to your kids. Bring them in the kitchen with you and have them bake. Following a recipe step-by-step is a lot like doing a science experiment. Sciencebuddies.org is a good, free resource where you can find all sorts of suggestions sorted by grade level- elementary, middle, and high school.



COVID – 19 Resource Library – Activities for children.

The national STEMecosystems community of practice is organizing a series of webinars for parents, educators, school administrators and anyone who has students in their care. The webinars located in the [COVID-19 Resources Library](#) are intended to help with practical tips you can employ for how to keep children engaged and learning with STEM at Home. To see the webinar that Newton's Road presented in the STEM Workshops area just click [here!](#)



Daily Design Challenges for Youth at Home

Screen-time overload is real and it never hurts to unplug. To encourage kids and families to take a digital break, The TGW Foundation has launched weekly design challenges.

This series of five DIY, family-friendly projects each week in English and Spanish uses ordinary household items to keep kids engaged and still learning. The projects are designed to spark creativity, foster friendly competition and create fun family moments during this challenging time.

[Click Here](#) for multiple weeks of challenges!



Take a virtual career exploration field trip with the TGR Learning Lab and Discovery Education to the Facebook headquarters in Menlo Park, California!

This video showcases some of the innovative careers that fuel this Silicon Valley powerhouse. Facebook builds products to make the world more open and connected, and this means drawing from a team that understands and reflects a broad range of experience, thought, geography, age and background. Hear from experts in software and infrastructure engineering, product design and data security to learn how hands-on work in the classroom can lead to engaging careers that create positive change.

[Click Here To Go on the Virtual Career Exploration Field Trip at Facebook](#)

STEM Kits for Regional Libraries Update



****Due to the COVID-19 Stay At Home - Stay Safe State Guidelines, the STEM Kit lending program at all local libraries are currently suspended.**

[Click Here](#) to browse the TADL STEM Kits catalog and to request a future inter-library loan.

Locations where STEM Kits are available:

- TADL Main Library, 610 Woodmere Ave. Traverse City, MI 49686
- TADL East Bay Branch, 1989 Three Mile Rd. Traverse City, MI 49696
- TADL Kingsley Branch, 213 S. Brownson Ave. Kingsley, MI 49649
- Elk Rapids District Library, 300 Isle of Pines, Elk Rapids, MI 49629
- Fife Lake, Interlochen and Peninsula libraries through the inter-library loan system



Northwestern Lower Michigan Region

Attention Teachers:

Experience a unique, one-week (August 2-7, 2020) professional learning opportunity at [CMU's Biological Station on Beaver Island](#) in Lake Michigan. Sixteen K-12 teachers will participate in collaborative, inquiry-based workshops and field experiences to identify and integrate key standards from STEAM-related fields (science, technology, engineering, art, and mathematics). While we encourage educators to participate in the institute with a colleague from his/her own school, individual educators are also welcome to apply.

[Click here for more information.](#)

The [MiSTEM Network](#) is excited to announce that applications are now open for the 2020-21 Code.org computer science middle school and high school workshops for educators. The [Northwestern Lower MiSTEM Network](#) is sponsoring a limited number of teachers who wish to attend at little or no cost. Please share with any interested middle or high school educators. If you have any questions, visit [Mi-Coding.com](#), email the program manager [Larry Wyn](#), or email our regional MiSTEM Network Director [Drea Weiner](#).

Newton's Road Continues to Increase Our Community Outreach in 2020

We need your help! Newton's Road is a small nonprofit with a big goal to keep every town and school in Antrim, Benzie, Kalkaska, Grand Traverse and Leelanau counties informed about regional STEM education news, events and programs.

Over the last year we have developed a toolkit of easy-to-implement programs that can be replicated in every community. We are seeking 1-2 representatives in each town or school district to introduce our toolkit and help the community implement the programs they chose. The role takes just 3-5 hours per month based on our pilot. **Anyone eager to support STEM can become a local community representative for Newton's Road!**

Please email: contactus@newtonroad.org and let us know about your interest, or recommend a representative for your community and / or school.

~*~

In closing, we could not do the vital work of strengthening our regional STEM Ecosystem without the support of each and every one of YOU!

As always we would like to extend a HUGE thank you to our growing base of donors as well as our sustaining [Sponsors and Partners!](#)

Our Sustaining Sponsors:

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Please consider a gift to Newton's Road to help us continue our vital work!



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