





The Iowa Million Girls Moonshot Minute

May 2021

Welcome to the Iowa Million Girls Moonshot Minute! This new, monthly publication from the Iowa Afterschool Alliance provides dozens of STEM out-of-school time professional development opportunities and activities to strengthen the quality of programs across the state. We hope that you find these resources valuable! Learn more about the national Million Girls Moonshot movement here.

Iowa STEM Resources and Trainings

Survey Deadline Extended!

Let's Show the Nation how lowa does STEM in Afterschool!

The Iowa Afterschool Alliance is a part of the Million Girls Moonshot, helping out-of-school time programs as they increase the quality of STEM learning opportunities for all young people, especially for underserved and underrepresented youth. (Learn more **here**)

The Moonshot seeks to re-imagine who can engineer, who can build, who can make. It will inspire and prepare the next generation of innovators by engaging one million more girls in Science, Technology, Engineering, and Math (STEM) learning opportunities through afterschool and summer programs over the next 5 years.

Every state is asking afterschool and summer programs to share more about how they do STEM through a nationwide survey. Please join this important effort! Your answers will help us to better understand how we can best support afterschool and summer programs statewide. The survey should take 5-10 minutes to complete.

Everyone who completes the survey will have exclusive access to a webinar on engaging kids in hands-on engineering activities from home. Everyone who responds will be entered into a drawing for a \$100 gift certificate. **Surveys must be submitted by May 31.**

Million Girls Moonshot Resources

Featured Webinars

Recorded Webinars: Engineering Mindset

What is an Engineering Mindset? Christine Cunningham Recording

Deep Dive into each Engineering Mindset Practice Christine Cunningham Recording 1, Recording 2, Recording 3

Best Practice and Professional Development

For STEM Partners

Asian American Pacific Islander (AAPI) Heritage Month Role Model Videos

The below assets are free profile videos of AAPI IF/THEN Ambassadors:

- Long profile of Samantha Porter
- On-the-job video of Samantha Porter
- Long Profile Video of Shyla Ragav
- STEM Journey Video of Shyla Ragav
- Long Profile Video of Anamita Guha
- Short Profile Video of Anamita Guha

National Space Day (May 7)

The below assets feature IF/THEN Ambassador and astrophysicist, Kelly Korreck These can be used in marketing, presentations, social media, during conferences, and so much more.

- Long Profile Video of Kelly Korreck
- STEM Journey Video of Kelly Korreck
- Looking for more assets featuring Kelly Korreck? Click here.

The below assets feature IF/THEN Ambassador and aerospace engineer, Sydney Hamilton. These can be used in marketing, presentations, social media, during conferences, and so much more.

- Long Profile Video of Sydney Hamilton
- On-the-Job Video of Sydney Hamilton
- Looking for more assets featuring Sydney Hamilton? Click here.

For Programs and Providers

The below assets can all be used in your programs as you celebrate National Space Day (May 7).

- Curiosity Camp: Can a Satellite Drop From the Sky Into Your Backyard?!
- Curiosity Camp Activity Sheet: DIY Model Satellite
- Mission Unstoppable: Is Lava Rock the Key to Building the First Mars Base?
- Mission Unstoppable: Mission to Mars
- Curiosity Camp Activity Sheet: Solar Print Fabric

The below assets can be used in your programs as you celebrate Global Accessibility Awareness Day (May 20).

- Next Gen STEM Workbook: Meet Dana Bolles, a Space Agency Science Communicator
- Free **This is what a scientist looks like poster** of IF/THEN Ambassador and spaceflight engineer and disability awareness champion, Dana Bolles. This poster can be used in your physical paces to highlight an inspiring role model in engineering.
- Curiosity Camp: Are There Aliens Really Out There?! Space Professional, Dana Bolles Thinks So!

Curiosity Camp Activity Sheet: Galaxy Rocks

Together at Home – Activities for Youth and Families

- Student Activity: Building Bridges 4-H STEM Lab Activity | 4-H (4-h.org) In this
 activity, youth will apply STEM to community issues through the engineering design
 process and the basic mechanics behind building bridges while designing their own
 bridge. This is a spin on an activity frequently seen in afterschool programs but with a
 serious focus on the design process. Kids re-visit the hands-on experience with new
 meaning.
- Student Activity: Educator Guide: Robotic Arm Challenge | NASA/JPL Edu This
 activity is part of NASA's Engineering in the Classroom tool for educators! In this
 challenge, students will use a model robotic arm to move items from one location to
 another as they engage in the engineering design process to design, build and operate
 the arm.
- Student Activity: Race for the Planet: Spring '21 Edition | Project Green Schools Project Green Schools has selected a sampling of activities from their larger program
 to give your students a way to apply environmental education to community issues.
 Join the coastal cleanup challenge, the upcycle challenge, the scavenger hunt, or other
 activities as a group or individually.
- Student Activity: **Toxic Popcorn Design Challenge** This lesson introduces youth to the engineering design process (EDP)—the process engineers use to solve design challenges. Youth work in teams to solve the challenge by designing both a product and process to safely remove "toxic" popcorn and save the city.
- Student Activity: Engineering a Flotation Device Youth design a device that uses simple chemical reactions to create a floatable device for a cell phone. Youth experimenting with "chemical" (citric acid, cream of tartar, baking soda) to engineer the type and amount of chemical that will float a model cell phone.

Additional Virtual Professional Development

- Curious about Curiosity Camp? IF/THEN Collection Resources to Support Girls in STEM - Tuesday, June 22nd 1:00 - 2:00pm CT - GoldieBlox is educating and empowering girls by creating engaging content, fun toys and interesting resources. In this webinar you'll learn more about the IF/THEN Collection and Curiosity Camp resources, produced by GoldiBlox, and how to use them to support gender equity in STEM programs. Hear from the founder of GoldiBlox, Debbie Sterling, and the stars of Curiosity Camp, about why having role models and resources for girls in STEM is important.
- Representation Matters! Highlighting the IF/THEN Collection Tuesday, May 25th 1:00 2:00pm CT Join IF/THEN Ambassadors in a conversation about representation and why it is important for girls to see role models in STEM. In this webinar, learn why representation matters and how to use the IF/THEN Collection to increase representation of women in STEM. You'll hear from inspiring women STEM professionals who serve as IF/THEN Ambassadors. Resources from the IF/THEN Collection that support equity in STEM will be shared.

This work of the Iowa Afterschool Alliance is made possible by funding from STEM Next and the Million Girls Moonshot Innovator Grant. The mission of MGM is to expand STEM opportunities, specifically in the field of Engineering, for girls across the United States, which is made possible through state partnerships.

