

The Million Girls Moonshot: February Quality Trainings and Transformative Practices



Million Girls Moonshot

Engaging one million more girls in STEM learning opportunities







The Moonshot will be active in out-of-school programs in all 50 states, leveraging the Mott-funded 50 State Afterschool Network, which has access to more than 10 million youth and 100,000 afterschool programs across the country. Over the course of the new year NJSACC's STEM Specialist Chris Jorn will bring you The Million Girl Moonshot monthly newsletter. Each month Chris will be rounding up accessible training opportunities, role models, and most importantly STEM activities for New Jersey's after school community.

This month we celebrate <u>Engineer Week - Reimagining the Possible</u> and <u>Introduce a</u> Girl to Engineering Day — and we recommit to a year-round effort of cultivating an engineering mindset in girls and youth traditionally underrepresented in STEM fields.



The Million Girls Moonshot is excited to launch recruitment for the inaugural <u>2022</u> <u>Moonshot Flight Crew</u>. We are looking for youth advocates — young scientists, engineers, inventors, builders, and leaders who have been inspired by their experience outside of the school classroom. The application window is open through February 25, 2022.

Moonshot Flight Crew

The Million Girls Moonshot is launching its inaugural Flight Crew!

The Flight Crew is a cohort of youth advocates, ages 13-18, who are committed to creating equity for girls in STEM through elevating youth voices and inspiring future STEM leaders. We are looking for young scientists, engineers, inventors, builders, and leaders who have been inspired by their experience outside of the school classroom. Flight Crew members will participate in six months of virtual programming where they will hone their leadership and advocacy skills using their own experiences from afterschool STEM learning.





Those selected will be eligible for a \$1000 stipend, an all-expense paid trip to the annual Million Girls Moonshot summer 2022 event, and thanks to our partners, an all-expense paid opportunity to go to Space Camp for summer 2023.

The Flight Crew application is open to youth ages 13 to 18 who identify as female, gender-expansive, or outside of the identity of cis-gender male. Applicants will share their views in a written, video, or art piece. Applications are **due February 25, 2022**. Apply here! https://milliongirlsmoonshot.org/moonshot-flight-crew!

QUALITY TRAININGS

ACRES is a nationally acclaimed coaching program that builds knowledge and skills so after school educators, librarians and anyone who works with youth in out-of-school settings can confidently facilitate Science, Technology, Engineering, and Math (STEM) experiences for youth. More information found here.





ACRES February Cohort: Asking Purposeful Questions

Questions are the beginning of a path towards discovery, imagination, and STEM exploration. How can we help youth expand and clarify their thinking and develop their reasoning through the questions we ask them? This module is designed for educators who have some experience facilitating STEM learning and would like to grow in their practice within a supportive group of other educators. *The expectation is that you will be live at all three sessions and an active member of this coaching cohort. Stipends are offered to participants who complete feedback surveys before and after a module.

Cohort dates and times are: Thursdays February 20th, March 13th and 17th: 9:00 - 11:00am EST **REGISTER HERE**

Introduce a Girl to Engineering

Celebrate <u>Introduce a Girl to Engineering Day</u> on February 24, 2022!

DiscoverE's Girl Day is a time when volunteers, educators, and others act as role models, facilitate engineering activities, and show girls how engineers change our world.



Earn an A+ from all of the girls who attend your Girl Day celebrations with these planning guides:

- Educators Planning Guide Spark girls' interest in engineering in classrooms, afterschool programs, and other group settings.
- Engineers / Volunteers Planning Guide Inspire a girl's future by sharing with her what engineering is all about.
- <u>Parents Planning Guide</u> Learn how you can introduce your child to engineering.

FEATURED WEBINARS

Role Models And Mentors as an Equity Strategy

 Role Models Matters Training for STEM Volunteers







Ready to train volunteers and role models in your Network, school, or afterschool program? **COMPLETE THIS REGISTRATION FORM** to gain access to the Role Models Matter training developed by Techbridge Girls.

IF/THEN's Webinars

Webinar Recording and Materials: <u>Celebrate Computer Science with the IF/THEN</u>
 <u>Collection</u> - Looking for new computer science and engineering activities? The IF/THEN
 Collection is a free digital library designed to inspire the next generation of girls to pursue
 STEM careers and features activities and videos of real women STEM professionals.

February's STEM Spotlight

President's Day STEM

Supplies:

- Pennies, Nickels, Dimes & Quarters
- Eyedroppers
- Cups of Water





Printable Chart

Directions:

- 1. Wash and dry all coins.
- 2. Place coins on a flat surface.
- 3. Ask the group to guess/record how many drops will fit on each coin?
- 4. Draw water with an eyedropper and drop single drops of water on each coin.
- 5. Count how many drops can fit on each coin and record on the attached chart.

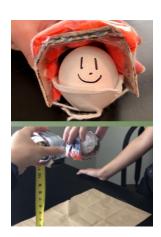
Super Bowl STEM





Brain Safety Football STEM Challenge

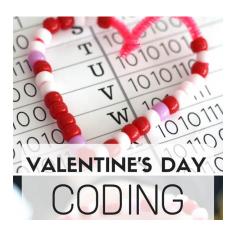
Challenge your students to create a safer football helmet for their "egg" players. Using the engineering design process, teams of students design, create, and test pint-sized football helmets.



Valentine Binary Bracelet STEM

If you want to help your kids learn to code, this simple <u>Valentine's Day coding bracelets challenge</u> is a fun way to make coding for come alive!

A binary code represents text, computer processor instructions, or any other data using a **two-symbol system**. The two-symbol system used is often "0" and "1" from the binary number system. Binary Code Chart





Create a Game Show with Kahoot!

<u>Kahoot!</u> is a game-based learning platform, used as educational technology in schools and other educational institutions. Its learning games, "kahoots", are user-generated multiple-choice quizzes that can be accessed online using computers, tablets and smartphones.



Phenomenal Black Women Who Made History.

Play this Kahoot game to learn more about extraordinary Black women and their remarkable achievements!



Black History Month

Introduction to Black History. See how much your students know about key African American figures and moments in history! #BlackHistory #BlackHistoryMonth



Super Bowl Quiz

Try Kahoot's Super Bowl quizzes to learn more about the big game on Super Sunday! Try making your own!





Activities for Programs

Incorporating Role Models (For Black History Month & Engineer's Week

- Math + Science = Engineering. Hear more about how problem solver & @lfThenSheCan ambassador @AishaKenya77 found a path to engineering → https://bit.ly/3rY0REu
 #womeninSTEM
- Engineers can be in any field. Hear how @AishaKenya77 defines success: https://bit.ly/3s15v4p @IfThenSheCan #womeninSTEM
- What is a sound wave? How can you see it? Check this out: https://bit.ly/3u9gZWg
 @AishaKenya77 #womeninSTEM

For Black History Month and National Heart Month

- From a high school summer research program at NASA to a PhD in neuroscience,
 @JoyonnaGamble is an inspiring science expert! https://bit.ly/3s16C45 @IfThenSheCan #womeninSTEM
- Scientists can be from any background! We are inspired by this neuroscientist's journey! @JoyonnaGamble @IfThenSheCan #womeninSTEM https://bit.ly/3ugRv9o
- Check out this power pose! @JoyonnaGamble @IfThenSheCan #womeninSTEM https://bit.lv/3g80gBO

Families

- FREE: Play with math in Math Communities! https://mathcommunities.org/
 @AlMathCommunity
- Don't miss these 4 best practices to engage families in mathematics education → https://bit.ly/3lgZlSu

STEM Activities

 Check out these free #STEM resources from @NASA – for grades 3-8! https://bit.ly/3rXYIJ0



- [ACTIVITY TOOLKIT] design challenges, skill builder videos, and more → https://bit.ly/3p80fJp @expand_school
- Have students that love to move? Show that math isn't boring with these 30 active math games! https://bit.ly/3r8BikG
- Get inspired with these 21 cool math activities and games for kids in grades 1-6: https://bit.ly/3KSsRly
- Students, parents, and educators can play with math in (free) Math Communities! https://mathcommunities.org/ @AlMathCommunity

MIZZEN BY MOTT MOONSHOT CONNECTION

The Mizzen By Mott app delivers inspiring and engaging activities that spark learning in young people. Supported by the Mott Foundation, Mizzen is available at no cost to afterschool professionals! Encourage partners to download the Mizzen By Mott app to access STEM activities at your finger-touch! You'll find it in Mizzen here.

