STEM Ambassadors Newsletter

February 2025

February in Review

February was another exciting and impactful month for the STEM Ambassadors, filled with hands-on workshops, community outreach, and engaging STEM activities. Here's a look back at what we accomplished!





3D Printing with the Girl Scout Troop

STEM Ambassadors hosted a 3D Printing Workshop for a local Girl Scout troop, introducing them to the history and technology behind 3D printing.

What We Did:

- A coloring activity featuring a simplified 3D printer.
- A hands-on Onshape tutorial, led by STEM Ambassador Mateo Nikitin.
- Personalized design projects, where scouts created custom Girl Scout coins.
- A tour of the 3D printers, showing them how their designs are transformed into real objects.

The workshop was a success, sparking curiosity and excitement about engineering and technology—not only for the Girl Scouts but also for the parents who asked questions and expanded their own knowledge on 3D printing.

STEM Avenue Returns!

STEM Avenue is back on all campuses, bringing fun and interactive STEM-based trivia to students. Participants tested their knowledge in subjects like Biology, Chemistry, and Engineering for a chance to win prizes! It was a great way to engage with fellow students while reinforcing STEM concepts in a fun and competitive environment.







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Maryland Science Olympiad (MSO) Regionals

STEM Ambassadors participated in the Maryland Science Olympiad (MSO) Regionals. Our volunteers assisted with check-in and registration before supporting various competition events, including botany, astronomy, physics, and more. Later that day, we continued helping with different activities and later assisted in grading and scoring tests at the end of each session. It was a rewarding experience to contribute to such an exciting event and support young students in their STEM journey!





Sonya Kovalevskaya (SK) Day

STEM Ambassadors played an essential role in Sonya Kovalevskaya Day, an event designed to inspire middle school students in STEM through hands-on learning.

One of our Ambassadors reflected:

"It was incredible to see the students light up as they explored these subjects hands-on. The energy in the rooms was contagious, making it an unforgettable experience for both students and mentors."









Club Rush Spring 2025

STEM Ambassadors connected with MC students across all campuses during Club Rush, sharing the exciting opportunities of being an Ambassador. We highlighted the benefits of joining, upcoming STEM events, and ways to get involved. It was a great chance to welcome new students and inspire future leaders in STEM outreach!

Travilah Elementary School STEM EXPO







STEM Ambassadors brought hands-on science experiments to Travilah Elementary's STEM Expo, sparking excitement for chemistry! In an Acid-Base Reaction Demonstration we explained a chemical reaction using baking soda and vinegar. Students measured the baking soda and poured it into a bottle of vinegar. The reaction produced CO₂ gas, inflating a balloon placed above the bottle. The excitement was contagious—students kept coming back to try it again! By letting students interact with real scientific concepts, we helped foster early interest in STEM!

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Mathical Program - Inspiring Young Minds!

STEM Ambassadors continue to bring hands-on math and STEM activities to local elementary schools through the MCPS Mathical Program! This initiative sparks curiosity and excitement for STEM beyond the classroom.

This semester, we're partnering with:

- Strathmore Elementary School
- Wilson Wims Elementary School
- Montgomery Knolls Elementary School
- Highland View Elementary School

Want to volunteer? Help inspire the next generation of STEM leaders!

<u>Sign up here to be a Stem Ambassador!</u>

For any further information email: Nafeesa.Aziziemontgomerycollege.edu



MC-MCPS Programming Competition

STEM Ambassadors played a key role in organizing and managing the MC-MCPS Programming Competition, ensuring a smooth and successful event for all participants. Ambassadors assisted with registration, guided participants, and served as runners, ensuring teachers and students had everything they needed. After the competition, we collected documents and prepared pizza for the participants. Thanks to our dedicated volunteers who helped create a well-organized and engaging experience for all. The event was a great success!





Upcoming events - Get Involved!

- MCPS MESA Judging (March 3-10, Showcase on March 13): Judge STEM projects online, including Lunar Lander, Wearable Tech, and Community Clean-Up innovations.
- MC Foundation Board (March 6, 1-2 PM):
 Share your MC experience with board
 members.
- MC-MCPS Cyber Forensics Challenge (March 19, 7 AM-2:30 PM): Solve digital forensic challenges in this exciting cybersecurity competition.
- STEAM Showcase (March 20, 5-7 PM):
 Engage the community with hands-on STEM
 + Arts activities and an expo featuring
 various organizations.
 Volunteer now: Sign up here!



Scientist Spotlight: Dr. Shirley Ann Jackson

In honor of Black History Month, we celebrate Dr. Shirley Ann Jackson, a trailblazing physicist whose work revolutionized telecommunications. She was the first Black woman to earn a Ph.D. in Theoretical Physics from MIT and contributed to technologies like caller ID, fiber optics, and touch-tone phones. As the former President of Rensselaer Polytechnic Institute, she championed STEM education, leaving a lasting impact on future innovators.

