# Ambassadors Newsletter

November & December 2024

## November & December in Review

As 2024 drew to a close, the STEM Ambassadors wrapped up the year by inspiring young minds through two impactful events in November and December! At SK Day, we welcomed 9th-grade students to explore chemistry, mathematics, and data science through hands-on activities like making colorful putty, analyzing penguin data, and uncovering the beauty of vertex graphs. Meanwhile, at Cannon Road Elementary School, they launched the MCPS Mathical program, sparking curiosity with interactive lessons on space, math games, and paper-straw rocket building. These activities encouraged critical thinking and creativity, leaving a lasting impression on future STEM leaders. We were proud of our ambassadors for bringing STEM to life!





### STEM Ambassadors Brought STEM to Life at SK Day

Last November, our STEM Ambassadors played a vital role in the successful SK Day event, welcoming enthusiastic 9th-grade students to explore the exciting world of STEM. Our ambassadors contributed in various capacities, showcasing their leadership and organizational skills. They stepped into the spotlight as group leaders, guided students, and collaborated with Montgomery College professors to deliver engaging STEM activities.

The day was filled with discovery as students explored captivating STEM topics, including chemistry, mathematics, and data science. In the chemistry session, students delved into the fascinating world of chemical bonds by creating their own colorful putty—a hands-on way to see science in action. The math activity brought geometry to life as students explored vertex graphs and shapes, uncovering the beauty of mathematical structures. In the data science session, students became analysts for the day, sorting penguins based on demographics and statistics, gaining insights into real-world data analysis.

Beyond the activities, students enjoyed a memorable day walking around campus, meeting peers who shared their enthusiasm for STEM, and discovering the exciting opportunities STEM offers. It was a fantastic experience for everyone involved, and we look forward to continuing to inspire young minds in STEM!

## Reflections from SK Day: An Ambassador's Experience

"I had the privilege of serving as a team mentor, working alongside a math professor, Professor Peters, to guide students through a series of engaging STEM activities. Together, we ensured smooth transitions between the Geometry, Statistics, and Chemistry sessions. It was incredible to see the students light up as they explored these subjects in hands-on, interactive ways. The energy in the room was contagious, and both the students and we, as mentors, had so much fun. Witnessing their enthusiasm and curiosity made the day truly uplifting and memorable!"

~Latifa

## M Ambassadors Newsletter

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### MCPS Mathical at Cannon Road Elementary School!

Last November, our STEM Ambassadors proudly kicked off the MCPS Mathical program at Cannon Road Elementary School in Silver Spring, MD. Designed to spark curiosity and excitement for STEM, the program gave students the chance to dive into hands-on activities and discover the wonders of science and technology beyond their usual curriculum.

Our ambassadors proposed and led creative STEM activities, keeping students engaged and eager to learn. This month's program featured a fun math game, an interactive lesson on space and rocket science, and a hands-on project where students built their very own paper-straw rockets. By experimenting with rocket designs—such as adjusting fin numbers or increasing rocket length—students explored how these changes impacted trajectory and speed. The activity encouraged critical thinking, problem-solving, and collaboration, all while ensuring a fun and memorable experience.

The Mathical program doesn't stop here! We are thrilled to continue bringing exciting STEM lessons to schools across Montgomery County throughout the school year. By inspiring younger generations to explore science and technology in new ways, our program aims to plant the seeds of innovation and curiosity in the minds of future STEM leaders.





#### A Word from Professor Azizi!

"Dear STEM Ambassadors, As we wrapped up the fall semester, I wanted to express my sincere appreciation for your outstanding work and dedication. Your commitment to promoting STEM education was truly inspiring. Last year, you went above and beyond:

Engaged students through creative outreach programs
Served as exceptional role models in our community
Demonstrated leadership and passion for STEM fields Your efforts made a real difference, sparking curiosity and potential in young minds while representing MC STEM
Ambassadors with exceptional professionalism. Thank you for your hard work, enthusiasm, and commitment to making STEM education accessible and exciting." Warmest regards, ~Nafeesa Azizi



### Native American Heritage Month Spotlight: Mary G. Ross

We were honored to celebrate Native American Heritage Month last November, a time to recognize the rich contributions of Native Americans to STEM. Mary G. Ross, the first Native American female engineer and a trailblazer in aerospace engineering, exemplifies this legacy. As a member of the Cherokee Nation, Ross played a key role in advancing satellite technology and space exploration. Her achievements continue to inspire future generations to pursue innovation and excellence in STEM.

