



Spring 2026

STEM Nights, Regular
Events, and Mathicals



Record





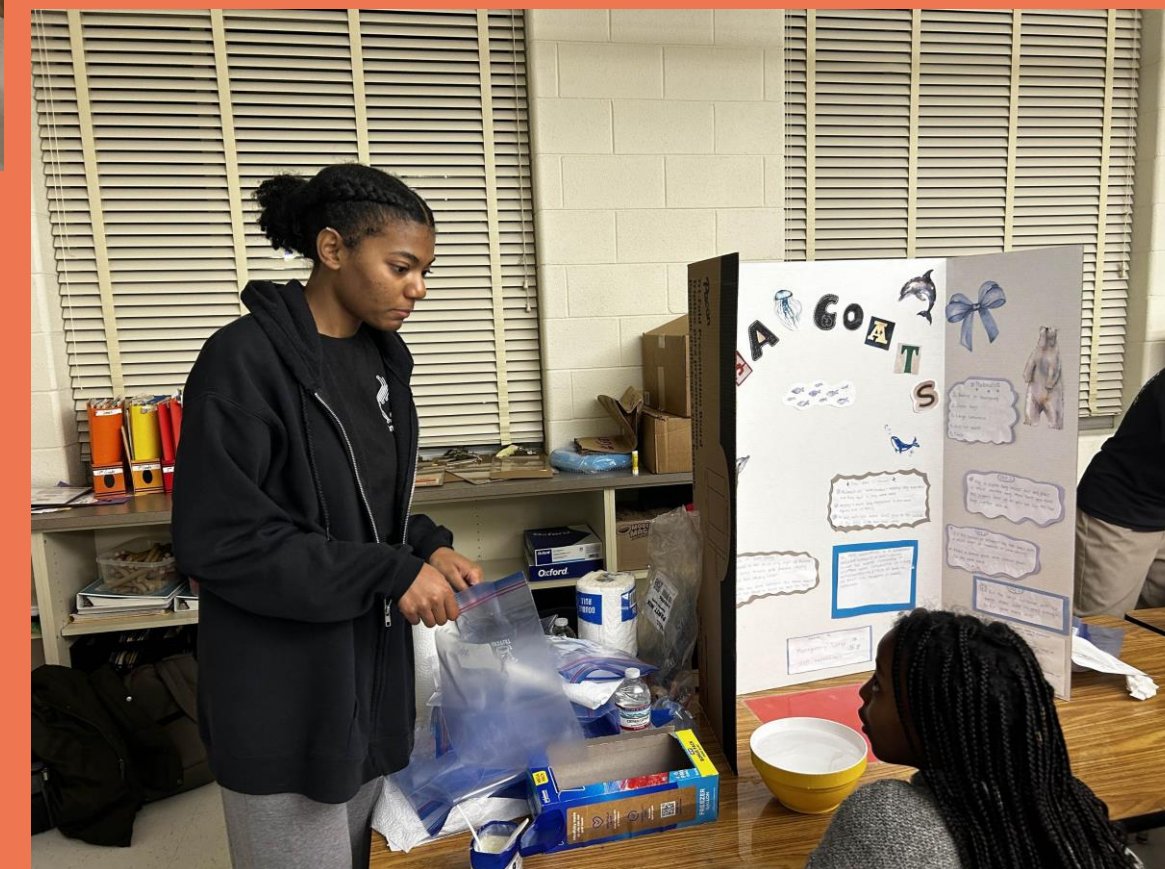
STEM Nights



Wheaton Woods Elementary STEAM Night

Volunteer: Camila, Samantha, and Maleekah

On **Wednesday, January 21st, 2026**, STEM Ambassadors (Camila, Samantha, and Maleekah) taught students about how blubber. To model this concept, they led a hands-on activity using Vaseline to represent blubber. First, students placed their hands in cold water with only a plastic bag covering their skin. Then, the ambassadors added a second bag with a layer of Vaseline between the two bags to simulate blubber. Students placed their hands back into the cold water, and we compared how long they could keep their hands submerged before feeling cold.



Travilah Elementary School STEM EXPO



Volunteers: Medwin, Camila, Moon



On Thursday February 19th 2026 STEM Ambassadors (Medwin, Camila, and Moon) taught students about how blubber. To model this concept, they led a hands-on activity using Vaseline to represent blubber. First, students placed their hands in cold water with only a plastic bag covering their skin. Then, the ambassadors added a second bag with a layer of Vaseline between the two bags to simulate blubber. Students placed their hands back into the cold water, and we compared how long they could keep their hands submerged before feeling cold.



Viers Mill Elementary School

Volunteers: Anaya, Adishree, Maleekah, Christelle, and Yuchen

On Thursday **February 26th, 2026**, our STEM Ambassador team had the opportunity of participating in Viers Mill Elementary School's STEM Night by hosting a Stomp Rockets Experiment. The activity demonstrated how air pressure and force can launch a handmade paper rocket into the air, turning simple physics into an unforgettable hands-on experience. Throughout the evening, we rotated small groups of elementary students through our station, helping them build their own paper rockets and attach them to the launch pad. Each child took a turn stomping on the plastic air bladder, sending their rocket soaring across the air. The reaction was immediate. Some students cheered as their rockets flew higher than expected, while others watched with wide smiles and ran to retrieve their creations for another launch. As volunteers, we found the evening deeply satisfying. Explaining the role of compressed air and launch angle in simple, relatable terms helped the students grasp real engineering concepts without feeling overwhelmed. Seeing their excitement build from assembly to liftoff reminded us why community outreach matters. Events like this do more than entertain. They plant seeds of curiosity and confidence, encouraging young learners to see science as something they can play with, question, and eventually master.

Visual aids: [Stomp Rockets Experiment](#) by NASA JPL Education





Hoover Middle School STEM Night

Volunteers: Christelle, Moon, Option, Medwin, Stephanie

On **Thursday March 12th 2026** STEM Ambassadors volunteered at Hoover Middle School's STEM Night where they built mini wind turbines made from simple materials. The students were mostly from grades 6 to 8, and younger siblings who attended with their families. The kids were able to use handheld fans to power the blades and see how many marbles each turbine can lift. STEM Ambassadors took turns help students angle the fans correctly so the wind can blow directly on to the blades and get it to spin rapidly.





Cedar Grove STEM Night

Volunteers: Pooja, Poojitha, Kedus, Vyomesh, Jayden

On **April 10th, 2026**, Pooja and Poojitha ran a station where they taught students how to build paper helicopters. Poojitha showed them how to construct it using the materials. Pooja helped them understand how to make it fly using basic engineering concepts. They had a large number of students, and they really enjoyed the hands-on activity. Additionally, Kedus, Vyo, and Jayden managed the 3D printing station, where they printed the school mascot (the bear) and explained how the process works, which students found really interesting!.

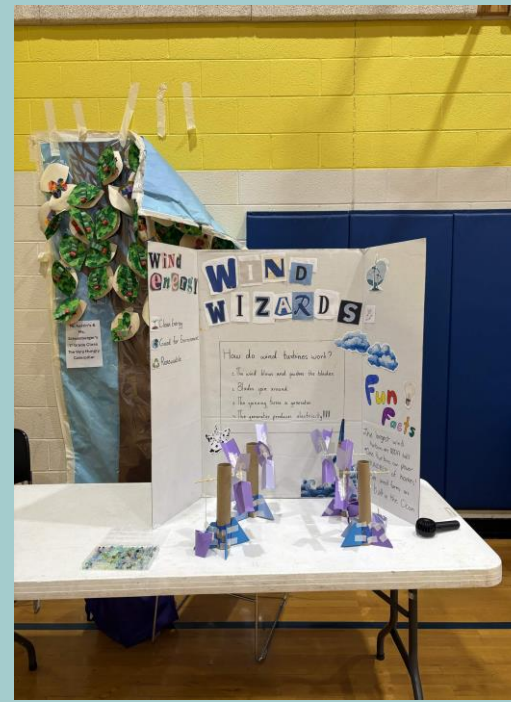





Fairland ES STEM Night

Volunteers: Christelle and Moon






On April 30th 2026, Christelle and Moon constructed mini wind turbines using simple, classroom-friendly materials. They used these models for a hands-on activity where students could make the mini-wind turbine lift colored beads by directing hand-held fans toward the blades. Students also learned about renewable wind energy and its importance in everyday life.





Other Events





Maryland Science Bowl

Volunteer: Afnan, Vyomesh, Kedus, and Camila

On Saturday, January 24, 2026, the STEM Ambassadors traveled to the Rockville campus to assist with preparations for the day's competition. Upon arrival, volunteers were assigned to four different competition rooms, where they were responsible for setting up essential equipment, including microphone systems, buzzer systems, and participant nametags. They also ensured that each room was fully prepared and met all requirements for the competition to run smoothly.

Following the setup of the individual competition rooms, the team proceeded to organize the main event space, applying the same level of attention to detail to ensure consistency and readiness.

Throughout the event, STEM Ambassadors served as messengers, facilitating clear communication between event organizers and helping address any logistical needs that arose.

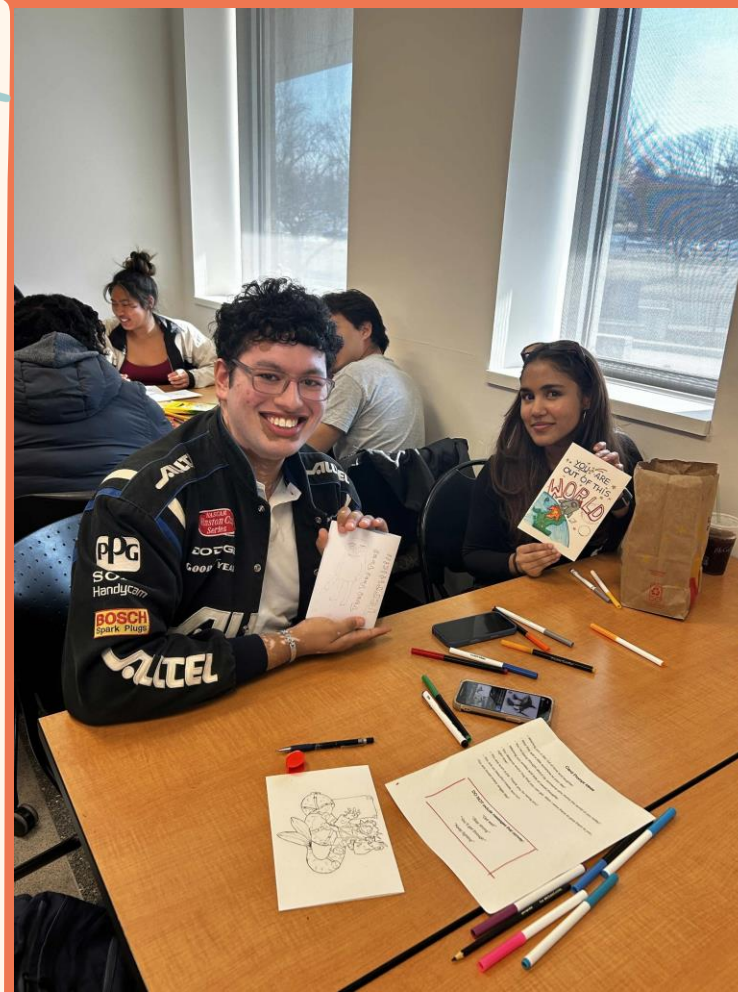
At the conclusion of the competition, the volunteers assisted with the breakdown and packing of all equipment, ensuring that materials were properly stored and the venue was left organized. Their efforts contributed significantly to the overall success and efficiency of the event.



Letters of Love Workshop

Volunteers: Pooja, Stephanie, Camila, Medwin, Moon

On Friday February 20th, 2026 the Letters of Love workshop has hosted by the Medical Careers Club and Student Art League of MC's Rockville Campus. Students created handwritten letters that will be donated to those in Intensive Care units at local hospitals. Many card were made from scratch or using templates. Supplies to decorate the card included markers, crayons, colored pencils, and more. Camila gave directions and informed people of the rules for card making. While other volunteers such as Pooja, Stephanie, Moon, Medwin, and even Camila helped create cards.

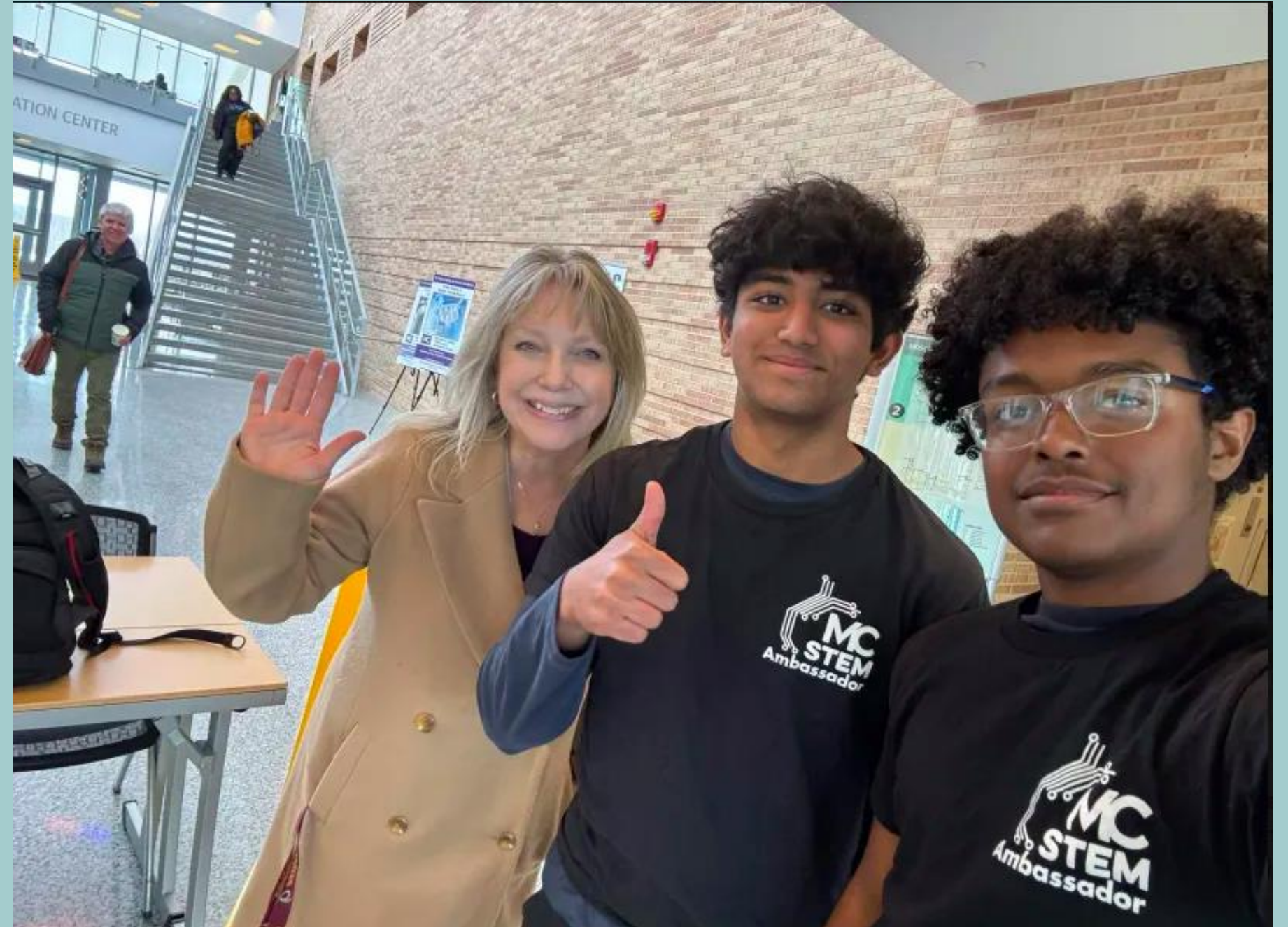



Transfer Fair

Volunteers: Vyomesh, Kedus, Jayden




On Monday, February 23, 2026, the STEM Ambassadors assisted with the setup of tables in preparation for the Transfer Fair, ensuring that all materials and spaces were properly arranged for participating representatives. During the event, STEM Ambassadors communicated with college representatives, informing them about the available food and helping address any immediate needs. In addition, STEM Ambassadors actively engaged with students across campus by distributing flyers and providing directions to the Transfer Fair. Through these efforts, STEM Ambassadors helped increase awareness of the event and encouraged student participation, contributing to its overall success.



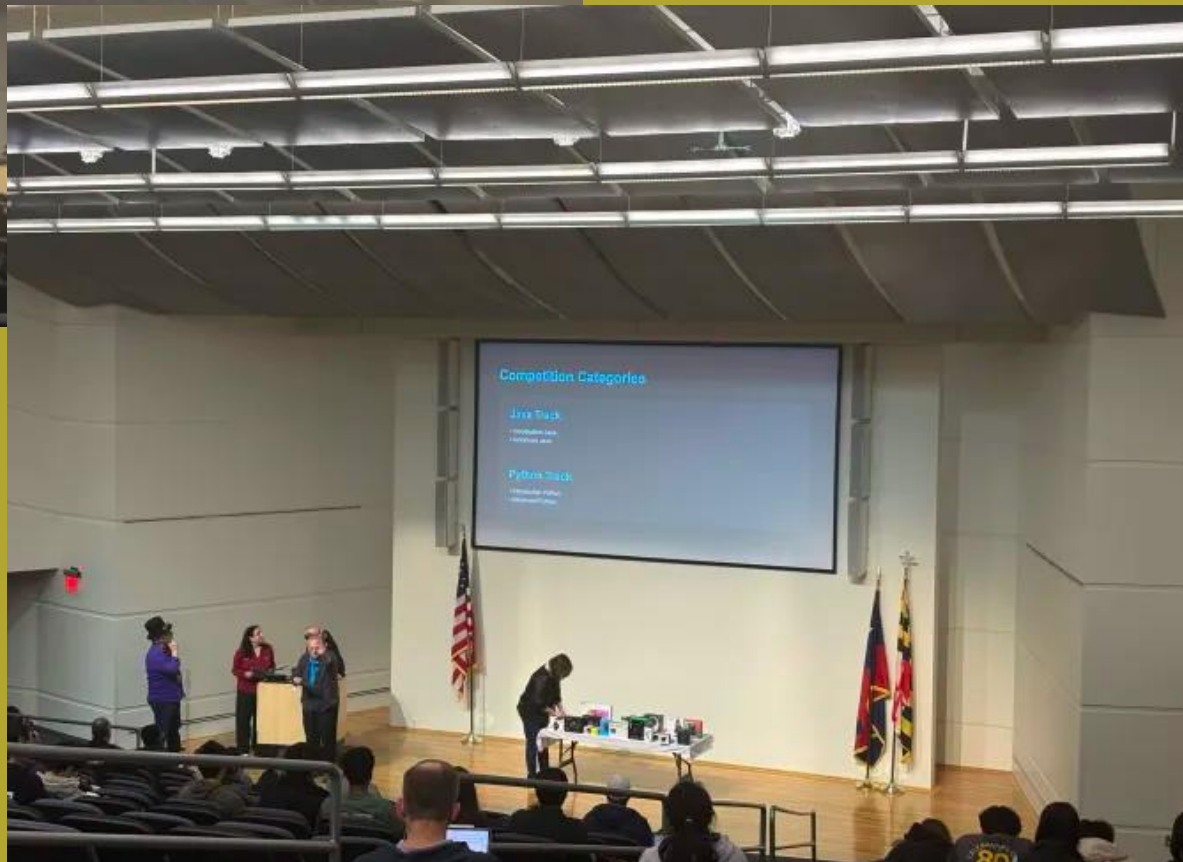



MC-MCPS Programming Competition



Volunteers: Medwin, Kedus, Yuchen, and Afnan

On Friday **February 27th, 2026**, the STEM Ambassadors volunteered at the MC Programming Competition held at the Germantown campus of Montgomery College. The event brought together high school students from across Montgomery County to compete in various programming challenges designed to spark their interest in computer science and develop their problem-solving skills. As volunteers, we helped with a variety of tasks throughout the day, including welcoming students, guiding them to their assigned rooms, setting up the space, helping the proctors, and ensuring the event ran smoothly. During the competition, we walked around the rooms to monitor activity, making sure that students were working independently and following the rules. We also supported the organizers and teachers by answering questions, helping resolve minor issues, and keeping everything organized. The impact on the students was clear: many of them were enthusiastic and engaged, and the competition provided a valuable opportunity for them to experience a real-world coding environment, often for the first time. It was exciting to see them challenge themselves, collaborate with peers, and explore their passion for technology in a setting that also introduced them to the atmosphere of a college campus. As volunteers, we found the experience extremely rewarding. It gave us a chance to give back to the local community, build our own leadership and communication skills, and be part of an event that encouraged the next generation of STEM learners. Seeing the students' excitement and growth throughout the day reminded us why events like these are so important.

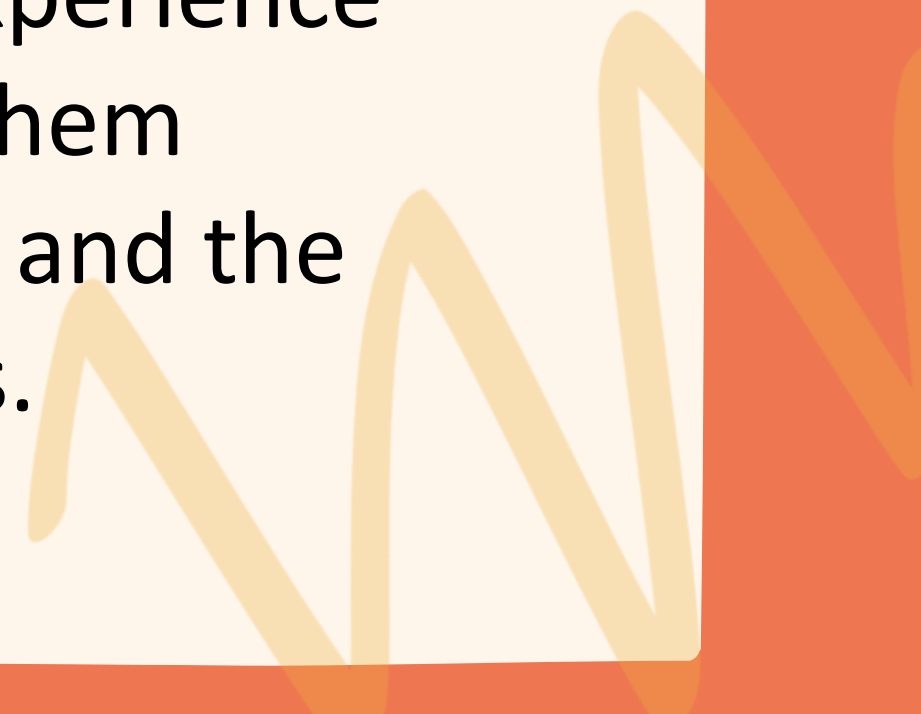




MCPS MESA Projects Judging

Volunteers: Kedus

The MCPS MESA Projects Judging took place **from February 20th to March 2nd, 2026** online. Through this event, volunteers evaluated science projects submitted by elementary, middle, high school students as part of the MESA competition. In addition to assigning grades, volunteers provided constructive feedback to help students learn from their work and improve their future projects. The experience also benefited the volunteers themselves, offering them insight into the types of projects students engage in and the valuable skills students develop through the process.





Planetarium Show

Volunteers: Maleekah



On Saturday, March 7, 2026, Maleekah assisted at the front desk by overseeing guest check-ins and maintaining accurate attendance records throughout the evening. They welcomed attendees, confirmed registrations, and ensured all arrivals were properly documented. Their professionalism and careful attention to detail helped create an organized and welcoming experience for everyone in attendance.

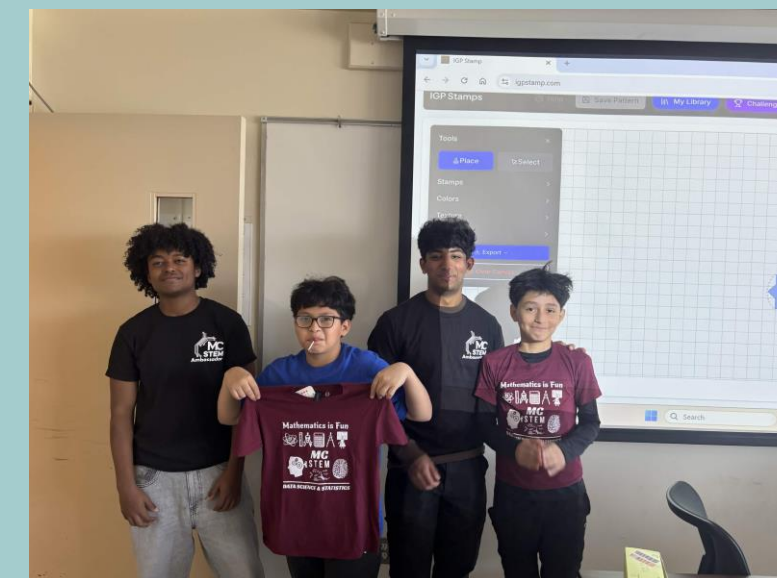


MC STEM Days

Volunteers: Vyomesh, Kedus, Moon, Pooja, Medwin, Stephanie, and Ingrid



On **Tuesday March 31st, 2026** students from various middle schools were split into two rooms. In one, they learned about vectors and got a preview of what college-level math might look like. STEM Ambassadors (Moon, Ingrid, Pooja, and Stephanie) supported the professors and helped students play a interactive computer to explore vectors in a more engaging way. In the second room, Kedus, Medwin, and Vyomesh helped Professor Muhammad with an Islamic geometric pattern workshop. In this workshop, students used 3D printed parts combined with magnets to create various shapes that support tessellation.





Planetarium Night



Volunteers: Maleekah and Option

On **Saturday April 11th 2026**, Option and Maleekah helped at the front desk, managing guest check-ins and maintaining accurate attendance records throughout the evening. They greeted visitors, verified registrations, and ensured that all arrivals were properly documented. Their professionalism and attention to detail contributed to an efficient and welcoming experience for all attendees.



Take Your Child to Work Day

Volunteer: Poojitha, Maleekah, Kedus, Stephanie

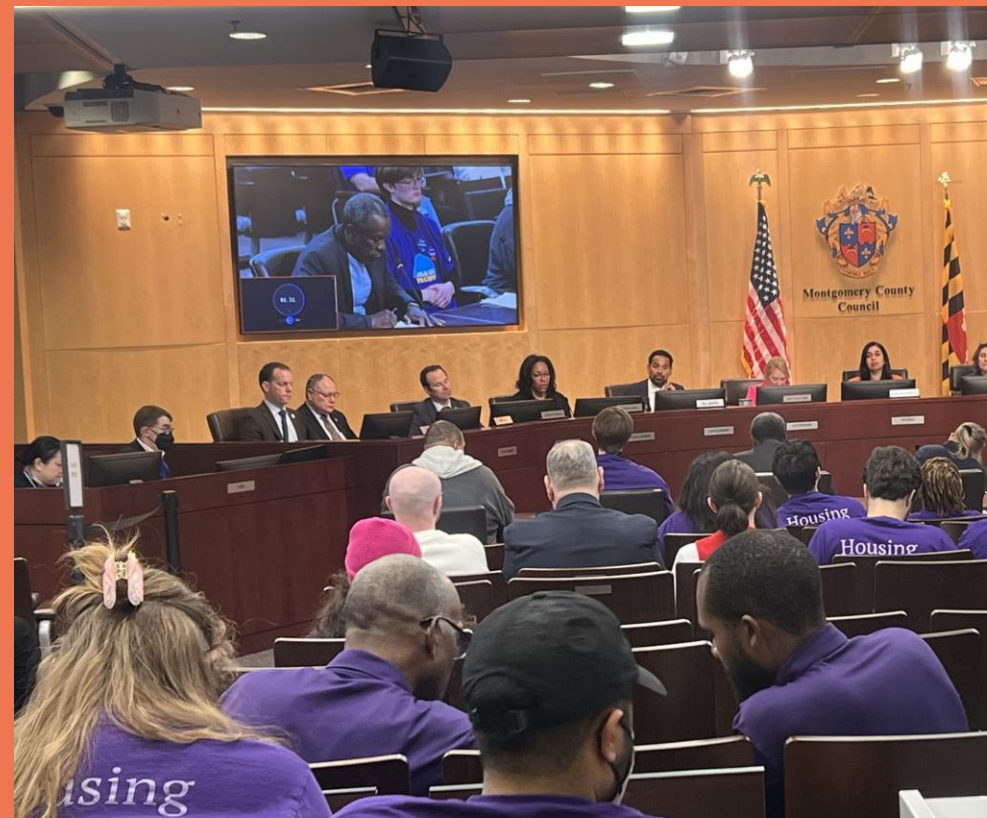
On **Thursday April 23, 2026**, about 30 children at the Montgomery College Germantown Campus participated in a STEM Ambassador-led activity focused on engineering and creativity. The challenge was to design and build the best paper towel tower using limited materials. Students decorated their towers with markers and stickers, adding a creative personal touch to their designs. At the end of the activity, students and parents voted to determine the winners based on stability, weight-bearing capacity, height, and creativity. Prior to this event, STEM Ambassadors also supported a variety of engaging activities, including owl pellet dissection, lava lamp making, a K-pop workshop, 3D printing activities, and more.



Turning the County Council budget hearing PURPLE

Volunteers: Christelle, Medwin, and Anaya

Description: Christelle Anaya and I showed up to the County Council budget Hearing wearing purple to show our support for Montgomery College and the efforts to increase budgeting. We had one speaker, we might have had two, be called up and give their speeches on why Montgomery College deserves a bigger budget because of the impact they have. When our speakers spoke, we rose our hands and shook them to show our support since we could not cheer or clap. 90% of the seats were filled with Montgomery College students wearing purple.





Mathicals





Viers Mill Elementary School



Volunteers: Yuchen Cai, Maleekah Ramadhan, Christelle, Djufu Fopa, and Anaya Hall

On February 26, 2026, Viers Mills Elementary School hosted its annual STEAM Night, and STEM Ambassadors were invited. During this event, volunteers ran a Stomp Rocket experiment. The volunteers explained to students how to build paper rockets and the different parts of a rocket, including their purposes (nose cone, fuselage, and fins). The students loved the hands-on activity of building their own rockets and seeing how they would fly. As each student got the chance to launch them, even the shyer students went all out to see who could launch theirs the farthest. From afar, the parents would encourage their children to make one as well, so they could enjoy the fun too.



Montgomery Knolls Elementary

Volunteer: T. Ruthirakanok (Option)

On March 10, 2026, there were around 20 kids, and they learned about offspring. I provided a slide presentation and a worksheet, both covering the offspring topic. Option was there alone. The kids were enjoying the lesson and were also very interactive. The lesson was about animals and their specific offspring.





Montgomery Knolls Elementary



Volunteer: T. Ruthirakanok (Option) and Anaya Hall

On March 12, 2026, there were around 20 kids, and they learned about motion. I provided a slide presentation and a roller coaster. The kids enjoyed the lesson and were also very interactive. The lesson was about how roller coasters work, with a main focus on the definitions of motion, speed, and direction. The kids had fun with some interactive models too! Students then used this lesson effectively by being roller coaster engineers today and testing their roller coasters out.



Montgomery Knolls Elementary



Volunteers: Anaya Hall

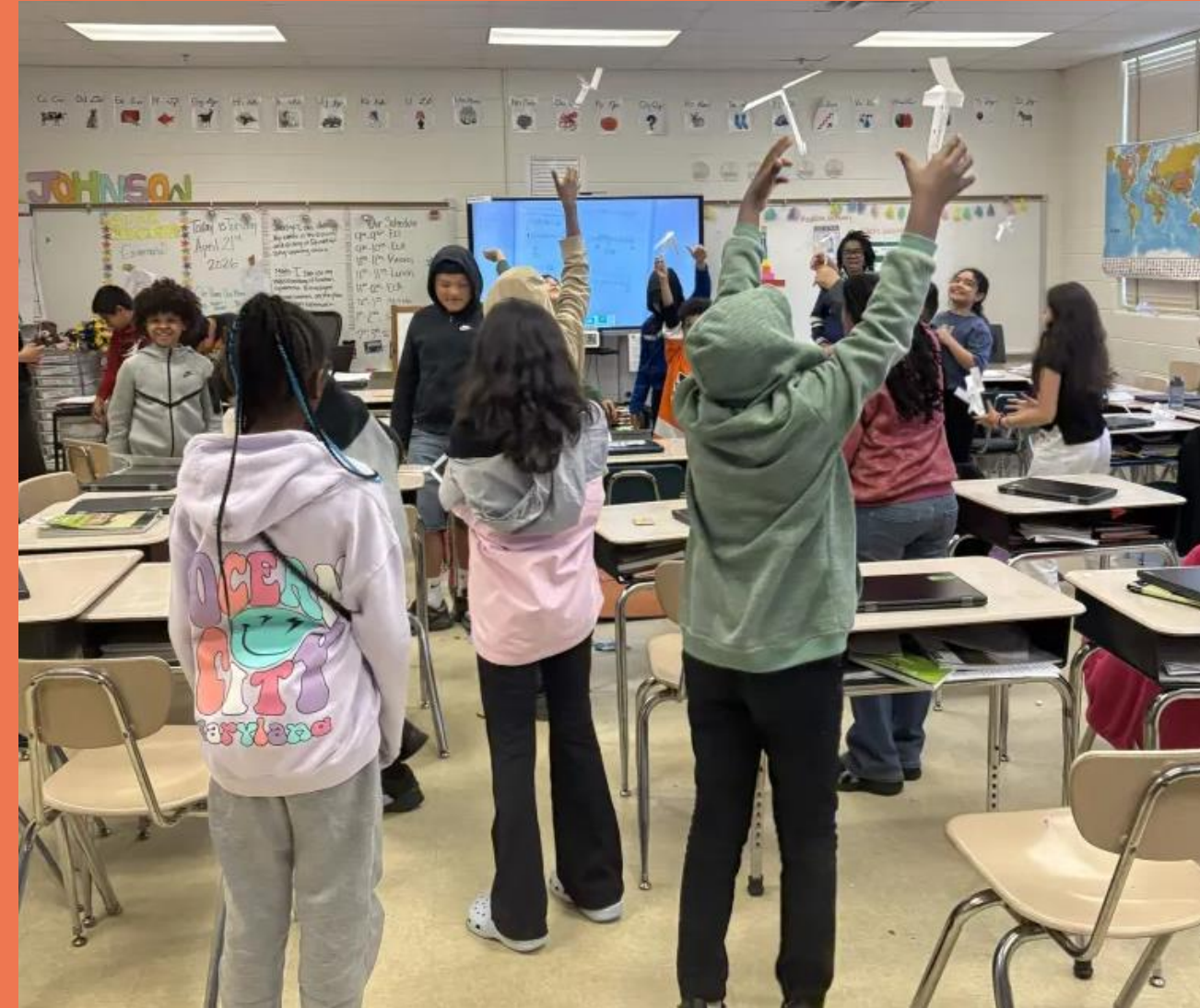
On March 13, 2026, Anaya gave a presentation on offspring to the First Graders. In the presentation, there was an ice breaker, a lesson, and an interactive activity. The students were eager to answer questions and describe their favorite animals. After the presentations, Anaya handed out the offspring worksheet. Anaya then assisted students as they worked on the sheets and explained how to help them. The students enjoyed the activity and were excited.



Strathmore Elementary School

Volunteer: Mi Kha Moon Htaw

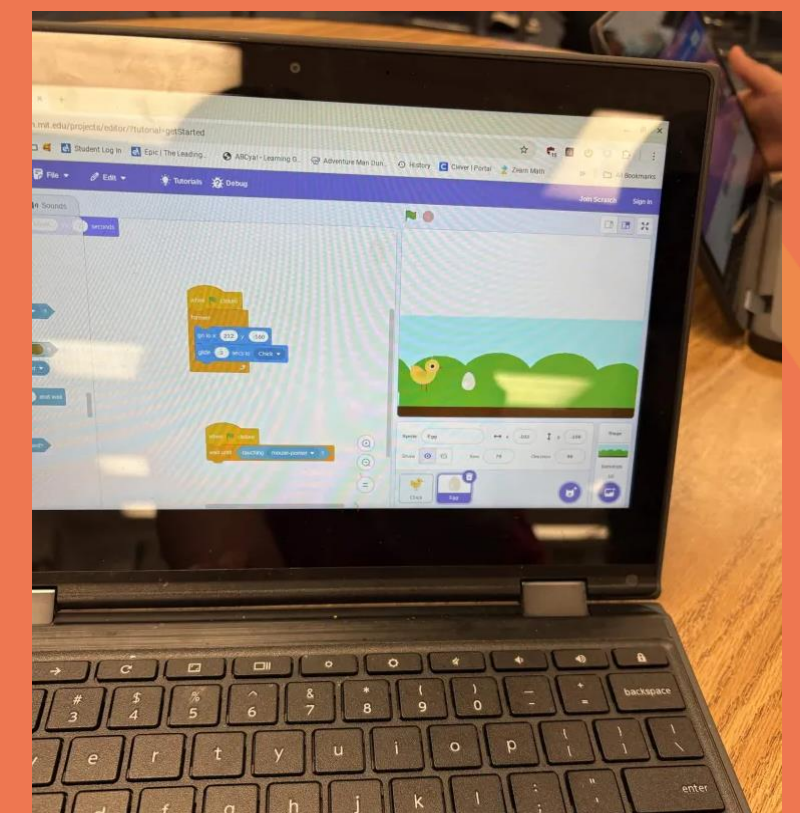
On April 21, 2026, I taught a lesson on air resistance to 4th-grade students. We talked about the forces acting on a falling object, mainly gravity pulling down and air resistance pushing up. I also explained how speed and surface area can change how much air resistance an object experiences. After that, the students made paper helicopters with different wing sizes and tested how fast they fell. They noticed that helicopters with bigger wings fell more slowly. We also added paper clips to change the mass and compared the results. Ms. Row helped supervise and support the students during the activity. At the end, I asked the students questions to review what we learned. Overall, the lesson went well and the students were engaged during the activity.



Strathmore Elementary School

Volunteer: Mi Kha Moon Htaw

On April 28, 2026, I taught a Scratch lesson to 4th-grade students about introductory computer science concepts. We learned about variables, loops, and how coding can be used to create games. The students worked on a Scratch jumping game where a character jumps over a moving obstacle. They used loops to keep the obstacle moving and coded the controls for the character to jump. The students were engaged and excited to test their games. Some students were able to complete the game, while others needed extra help and could not finish during the lesson.



Strathmore Elementary School ✨

Volunteer: Mi Kha Moon Htaw

On May 5, 2026, I reviewed loops and variables with the students using Scratch. We continued working on the jumping game from the previous lesson and finished adding a score system using variables. The students learned how variables can keep track of points while the game is running.

The students practiced testing and debugging their games as they added new features. I also created a Blooket activity for the students to answer questions and review the concepts we learned in class. To encourage participation, I gave candies to students who answered questions correctly and awarded T-shirts to the winners. Overall, the students were engaged and enjoyed completing their games.



Handwritten signature in orange ink.





Programmers of the Future

At Hallie Wells

Volunteers: Vyomesh, Kedus, Leo, Poojitha, and Moon

Starting at March 18th and ending on June 4th Stem Ambassadors provided middle school students at Hallie Wells. The lessons consisted of beginner curriculum on Python based on the lessons taught in AP computer science principles in high school. Students enriched their knowledge through multiple zoom webinars and online classroom assignments allowing students to review the knowledge taught in classes. Students taking part in the first sessions will have projects to present at Hallie Wells Stem Night. At the end of the program on June 4th, we will have about 16 teaching sessions combined between our first and second batch as well as the online webinars.