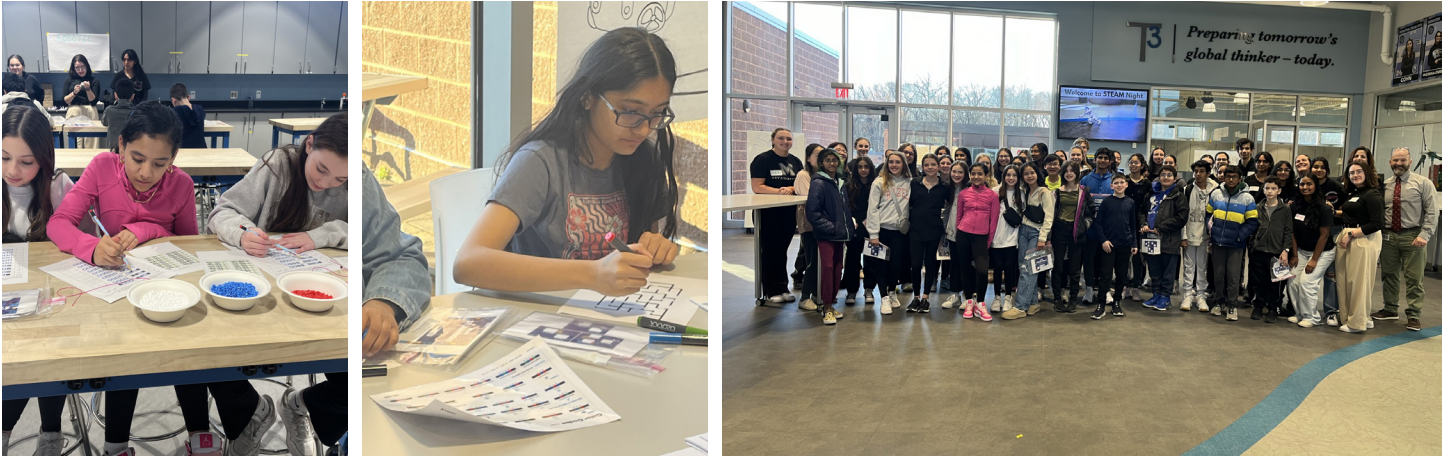# MAHWAH TOWNSHIP PUBLIC SCHOOLS CELEBRATE SCIENCE AND TECHNOLOGY

High School G.E.M.S. Club Hosts STEAM Night for MS Students

Mahwah Township Public Schools and its High School G.E.M.S. (Girls Excelling in Math and Science) Club celebrated Science, Technology, Engineering, Arts, and Mathematics (STEAM) with a special evening of fun-filled activities offering middle school students a taste of the innovative science, technology and robotics programming they will get to experience when they attend the high school.

"Everybody should enjoy STEAM," said Mahwah High School senior Callia Nickels, the G.E.M.S. Club president who greeted the Ramapo Ridge Middle School students as they arrived at the event in the high school T3 building March 25. Callia, who said she would like to pursue a career in medicine, noted that G.E.M.S. started planning this event a few years ago, but it was delayed due to the pandemic.

The evening coincides with Mahwah Township Public School's commitment to providing a robust integrative STEAM (Science, Technology, Engineering, Art, and Math) education program, which has been recognized by the International Technology and Engineering Education Association's (ITEEA) STEM Center for Teaching and Learning. Mahwah High School, which is ranked 46th out of 425 NJ high schools and #9 in high schools in Bergen County, offers 19 electives in Visual and Integrated Design, 17 electives in Engineering and Technology, 12 electives in Information and Computer Science Technology, and 15 electives in Biotechnology Research and Health Science. It also offers 24 courses that qualify for college credit, a Thunderbird Externship Program with Career Pathway Exploration & Job Shadowing, and a Thunderbird Internship Program with career and academic internships.

High School Teacher and G.E.M.S. Advisor Kimberly Loesche welcomed students and parents to the event, introducing students to the many available activities at the program and inviting parents attending to enjoy a student-led tour of the lab. The club planned all the events including creative stations in constructing straw rockets, making maps for Ozobots, turning student names into binary code, printmaking, building robotic hands using straws and string, and bookmark making.

The event was a tremendous success, according to Callia and other G.E.M.S. members and volunteers who said they hope the event continues to grow with even more students participating next year. "I think the G.E.M.S. Night is really helpful to introduce the different classes and the work we do at the high school," said Keira Sarkissian, a sophomore, who helped with the Ozobot, or mini robot, station at the event.

Eighth grader Harinita Palanivelu created a map with colored codes and placed an Ozobot on it and watched as it navigated around the map she created.

 "This event is a big opportunity for kids who want to go into mechanical or electrical engineering, robotics or computer engineering," said Harinita, who plans to pursue a career in engineering design and architecture. Harinita made sure to try every station at the event.

In a nearby classroom, students turned their names into binary code and then created necklaces using beads. "I'm having fun getting to learn things like robotics, binary code and rockets," said Shravani Pawar, an eighth grader.

Callia said that although G.E.M.S. stands for Girls Excelling in Math and Science, the club opened the event to everyone to enjoy and celebrate the amazing science, technology, and robotics programs that the high school offers.

Seventh grade students Jai Bellara and Dominic Hertler were some of the boys also enjoying the event as they created planes from paper, straws and balloons and they tried to get them to fly. "I like how you get to use your creativity to develop an understanding of technology that you can apply to your future," he said.