11 kicked off the school’s first ever STEAM Inspiration event, when they brought in women in STEAM (science, technology, engineering, art and music) professions to inspire girls to pursue careers in those fields. Following the assembly, the girls went to different rooms where the women conducted hands-on experiments and activities all focused on STEAM.

The event purposefully coincided with the 10th International Day of the Girl, the day of action for a youth-led movement fighting for gender justice and youth rights that believes that girls are the experts on issues affecting girls.

“The 25 women volunteers are here to inspire you and show you the possibility of STEAM choices,” Associate Director of Primary Education Bella Patel told the crowd.

“So why do we do that? Well, women are underrepresented in these fields, so our hope is today, you work with these amazing women and maybe you’ll be inspired.”

According to Head of School Ann Klotz, early studies from the Laurel School’s Center for Research on Girls shows that girls outpace boys by almost every measure of achievement except in the STEM fields, and while there are many female doctors today, mechanical engineering, coding and hard math areas continue to elude women. Those results have been confirmed from various federal studies, listed on the International Day of the Girl website.

A 2011 United States Commerce Department study showed that only one in seven engineers is a woman. Federal statistics show that women account for less than 20 percent of bachelor degrees in computer science, even though women hold about 60 percent of all bachelor’s degrees. In 2011, only 19 percent of the students who took the AP computer science test were women. And only 18 out of Cisco’s 100 CEO Leaders in STEM were women in 2013.

“Women enter the program but they don’t stay, so it’s not a pipeline problem. It’s further down than we can address in a K-12 girls setting. So we turned our mind to how can we strengthen our women’s network, include stories of struggle, opportunities for STEM projects, and make them feel like they can make a difference,” Ms. Klotz said. “Early research shows the importance of female role models and the importance of mentorship cannot be overemphasized.”

“The more role models they see, the more they can picture themselves in the field” Ms. Patel said. “We wanted to put females in front of them in a range of fields so that they could consider the possibilities.”

In one room, fifth-graders Tatum Zollar of Cleveland and Sophia Rucker of Dayton worked together to build a flotation device for a can of soup in a session led by engineer and Laurel graduate, Alison Streiff of Chardon. “We put foam around it and we hot glued it so it could float, and we’re going to put balloons onto the structure and we’re putting corks inside because corks float,” Tatum explained.

In the room next door, third-grader Lilly Ionna of Gates Mills designed a playground that was accessible to people with sensory and physical disabilities in a session led by her mother and Laurel graduate Seema Rao, who is a user experience designer.

Lilly’s design featured a tree house with ramps and buttons to automatically open doors. To help blind children who were using the tree house, Lilly added Braille to the buttons and doors. Other students brainstormed ways to make monkey bars and zip lines more accessible to children in wheelchairs.

“The best learning is hands on and these girls had a chance to do something completely different than regular classes. Some of the things I saw going on was beyond what I anticipated,” Ms. Patel said. “I saw coding being compared to teaching someone how to dance. Little kids learned about architecture and design. A traffic engineer talked about sustainable roads. There was a nurse anesthetist who taught the girls how to incubate dolls.”

That nurse anesthetist was Monica Shein of Chagrin Falls who also had the girls dress up in scrubs and showed them how to run electricity through a patient’s muscles to determine whether they’re paralyzed. Ms. Shein graduated from Laurel 20 years ago, and her daughter is now a preschooler there.

“It’s nice for girls to see women in the field of medicine,” Ms. Shein said. “They see how women can be in any profession, and it’s important for my daughter to see that I’m a mom and I also have a career.”