Girls in STEM - There is no limit!

Team: 842T

Location: Chester Springs, Pennsylvania

Team Members:

Aanya

Chloe

Lily

Diya

Arya

"Girl Powered", to our team 842T Nova, means that all girls are capable of performing equally and working collaboratively with others in all fields, including STEM. STEM stands for science, technology, engineering, and math. STEM is in every aspect of life and is a pathway to achievement in our eyes, especially for girls who are interested in these fields. We want to encourage and inspire girls who are motivated towards STEM and have them know that they have the opportunity to explore their interests. Every component of STEM is for everyone, not just boys.



We want to inspire young women that whatever you desire most in life, you always have to work hard to achieve your goal, whether you want your job to be anything related to STEM, or wanting a job in music and/or art. We believe that the sky's the limit for anything you dream of in life.



Many famous women have made a mark in this world by discovering the unknown, researching new ideas, understanding and introducing new technology, and so much more. Think about the famous physicist and chemist, Marie Curie; she made a huge influence on our world almost a century ago, when she showed that women and men have equal rights when it comes to anything. Marie Curie discovered the elements, Radium, and Polonium, and won the Nobel Prize. The fact that she had done that at a time when generally only men were scientists, inspired other females to push their limits and boundaries. She made a difference in everybody's lives and proved that people can do anything, whether they are male or female.



Team Members Lily, Aanya, Chloe, Arya, and Diya

Another example of a woman who inspires future generations is the American astronaut and physicist, Sally Ride. Although she passed away ten years ago, she had left a mark for girls, proving that they are ambitious people who can achieve anything. She went on two space missions abroad the Orbiter Challenger, which is a major accomplishment for anyone. After retiring from NASA, she became a champion for science education, especially for girls, and formed a company called Sally Ride Science. She also wrote many books on science for kids to encourage them. Unfortunately, she isn't as well-known as other astronauts like Neil Armstrong or Michael Collins. This is what 'Girl Powered' wants to change and a mission our team wants to contribute to. Both Marie Curie and Sally Ride are our role models. We want to build the confidence within us, as well as in kids around us, to realize that women can do more, especially to pursue and be successful in STEM careers.



Our team is formed entirely of girls, and we are confident that we can achieve a lot. One girl may want to pursue an interest, such as robotics, but what could stop her is that many people in society have characterized it as a boy's activity for many years. For example, some of us are interested in programming, ice hockey, video games, and football, which are mostly considered as "boy things", but that does not stop us from desiring such divertissements. Our dreams help us collaborate effectively in our robotics team. When we started our VEX team, some of us had no knowledge of robotics. But we did not let that stop us from taking on the challenge and learning all the aspects of robotics.



A cheerful moment captured during our team's community service online challenge

Our team consists of girls with varying interests. For example, Lily's interest in VEX components and blueprinting helps us in designing the robot, while Chloe's interest in electronics and video games gives an advantage for driving the robot. Arya has an interest in photography and filming as well as writing and reading, which helps us with the engineering notebook and team interviews. Even though each one of us excels in different areas of robotics, that does not mean that we just focus on one aspect each. We always value everyone's talents and use them to help us have certain advantages in robotics, but all of us teach and learn from one another to create a happier and more productive environment. Whether it is programming, driving, building, or designing, all of us contribute to the team and collaborate with each other, every single meeting. All of the components of a VEX team that our team members want to pursue is important to all of us because we wouldn't necessarily be a cooperative team if we didn't listen to everyone's opinions about certain decisions that we need to make. Our team never just focuses on one component of robotics. Everything in robotics is fascinating and all of our team members wish to be part of it and see how everything works. Everyone got to choose the roles that they thought were right for them, and they are doing excellently with what we chose.



Diya and Chloe adjusting the robot



842T at the invitational events, VEX HAUNTED in Brentwood, Tennessee (10/29/21-10/31/21) and WPI in Wooster, Massachusetts (12/2/21-12/4/21)

To inspire other girls to do the same, we have been spreading the word to our friends at school on how robotics is a fun and educational experience. We have also been taking part in STEM activities such as 'Future Cities' at our school, science fairs, and the regional science carnivals, with our friends who aren't aware of 'Girl Powered'. Everyone must understand the goals of the 'Girl Powered' organization, which focuses on mentoring girls to understand that they have the capability of doing those STEM activities that they don't always get an opportunity to be part of.

Since the members of our team come from different ethnic backgrounds, we are well aware that girls in many families across the world don't get to pursue careers in STEM fields. When one of our team members visited her home country, she noticed that a lot of kids, especially girls who don't receive an opportunity to study for a career in the STEM fields because their gender or race typically doesn't do it. This isn't equitable because everyone deserves to gain understanding and learn more about whatever they want to, no matter if it is more feminine or more masculine. We want to share our knowledge and experiences from our robotics activities to young girls who want to participate in STEM activities, and who really want to get involved with a specific topic in STEM.

The famous actress and UN Women's Goodwill Ambassador, Emma Watson once said, "Girls should never be afraid to be smart." Girls should be able to show their talent in the STEM fields, without being judged that they're doing things that are 'for boys.' We want to share our fascinations in our community and even take it a step further by using our creativity for greater things. We love being a team of all girls because we can show people the things that girls can do. We believe that all girls can accomplish their dreams and do what they want to do, even if it isn't stereotypically 'feminine.' A general mindset that we have is the saying "the sky's the limit" and we want to make sure that we can actually show that the sky is the limit, and prove that not all things related to STEM are 'boy things.' We are 842T Nova and we are a proud 'Girl Powered' team!



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