

OurTeam

We are Girl Powered team 35216A. Our team is made up of 4 girls. Our names are Lucy He, Sara White, Hannah White, and Aleena Roy. We have each helped contribute to the STEM Robotics community in a variety of ways such as introducing the VEX community to many females that weren't involved in STEM. Each of us play a different role in helping our team succeed, but we always work together and motivate each other as a team.



When we hear the term "Girl Powered," we think about motivated females working towards their engineering goal. Valentina Tereshkova, the first woman to step on the moon, is a great role model to many female engineers all around the world, including ourselves. She held onto the chance of being able to go, and worked hard towards her engineering goal. We would've never been able to reach the moon without the impact from the creativity and imagination of female minds all working together. As you can see, "Girl Power" has impacted not only our engineering community, but also the world.

How We Portray "Girl Powered"

As this season has advanced, our team has started portraying our idea of "Girl Powered" more and more. For example, we always motivate each other and we always help each other in conflict situations. This is just one of the many reasons we represent the term "Girl Powered".

Another example is that we have been risking a lot of money and time discussing grants and sponsorships to buy the Clawbot Kit, without even knowing whether or not it will work. However, we keep motivating each other's ideas about the situation.



At the end of the day, we always support each other's decisions and help each other when we're conflicted. We have also been keeping our minds open to each other's suggestions for our robot design. As we talk about our new ideas, we are always working as diligently as we can on our notebook. Ever since the establishment of our team, we have been working towards our goal.

Lucy He☆

Lucy is in 7th grade, and she is currently 12 years old. This is her 2nd year in the VEX community, and her 4th in all coding or robotics. Lucy has had the most VEX Robotics experience, but this is her first time being on an all girls team in VEX Robotics, or otherwise. Her main role in this team is designing and leading the team because of her past experience. One essential thing she does to help our team succeed is plan redesigns to make our robot better. Lucy helps our team significantly by advising the team and helping out with the notebook.

☆Sara White

Sara is in 7th grade, and she is also currently 12 years old. Although this is her first year in VEX, it's currently her 4th year in all STEM Robotics. Sara is the oldest in our group, and she is also our main coder. The main role Sara takes is being our coder, and one of our alternative drivers. Sara was the driver for our first few tournaments, and she also plays a significant role in our building process. Sara also has the most experience driving.



lucy



sara

Hannah White☆

Hannah is in 6th grade, and she is currently 11 years old. This is her 3rd year in robotics, but also her first in VEX. This is also her first all-girls team, in VEX or otherwise. Hannah helps out with many factors, but mainly building with Sara. She has helped with coding as well. Hannah contributes to the design process of the robot, such as the claw and the chain train. One beneficial thing she does is that she helps everyone in their activities and contributes to everything.

☆Aleena Roy

Aleena is in 6th grade as well, and she is 12 years old. Aleena is one of our alternate drivers, along with Sara. She takes a large role in our building process, and she occasionally will help with coding. Aleena has had 2 years of robotics experience, and also took a coding camp over the summer. Aleena always helps us brainstorm solutions whether the problem is the code, the design, or the build. She helps out significantly whenever we are building, coding, or designing.



hannah



aleena

Our team has taken initiative to include more people in the robotics community. On December 5, we introduced multiple Girl Scout troops to the engineering world. All of the girl scouts were given an engineering notebook they used to record the activities they did and the process of building their robot. We compared inventions to animals, and they were able to receive 3 badges for their work. We showed them pages from our engineering notebook, then helped them with theirs.



They were able to color and draw in their notebooks, and bring them home. The girls had a lot of fun, and we did as well helping them.





Each individual on our team has tried out various roles, including designing, building, driving, programming, and many others. For example, we tend to alternate between drivers during competitions. Sara and Aleena take turns driving between rounds. Sara has the most experience with driving, but she has been helping Aleena during practice. So far, Sara has been our driver during tournaments, but Aleena will start driving with her soon at the State Competition and US Open.



In this photo, Sara is driving, Aleena is directing Sara while watching the opponents, and Lucy is placing down a purple cube won from the autonomous round. Everyone in our team has been practicing driving. Sara taught Lucy and Hannah the controls so they could drive in case something comes up on a competition day.



Diversity of perspective changes many things in our design, ability to succeed, and many other things. For instance, different opinions on designs lead to debates. These debates help us develop new additions to our robot, leading us in a more successful path. Although debating with each other could be frowned upon, it's always friendly and nobody takes it personally because they are all to help our team succeed. We use the diversity within our team to our advantage by brainstorming different ideas, then choosing which one will lead to the best robot design we can create.



If we didn't have any diversity in the way we think, or in any other factors, our robot would lack creativity. Our varying strengths and abilities help us be able to work together efficiently and cooperatively.

One specific female engineer we greatly admire is Valentina Tereshkova, as we mentioned before. She was the first woman to step on the moon. She worked hard towards her engineering goal and contributed to their mission with her intelligence and willpower. Not only was she the first woman to land on the moon, but also the youngest to this day. Since we are young female engineers, she is even bigger of an inspiration to us. We are hoping to follow in the footsteps of Valentina by reaching our engineering goal.



"(We know the human limits. And for us this remains a dream. But I am ready." -[/alentina Tereshkova One of the biggest challenges we had to face in our building process was the small amount of time we were given to build a working robot. We constantly had to plan multiple extra practices outside of our regular school week. During these practices, we planned out our design and how we were going to make it work before we ran out of time. The time crunch we were put in motivated us to work even harder, and we started building as soon as we could. During our practices, everyone would work on several different factors to quicken the process. We constantly recorded our progress in our engineering notebook, then our first competition came.

In the competition, we found many problems with our robot, and the design we were planning to finish. We fixed these as quickly as possible, and redesigned multiple times. Round after round, we altered our robot to do the best it could even in its unfinished state. We competed in the quarterfinals, then we started planning new designs. Once we got back in the lab, we quickly started fixing our mistakes, preparing for our second competition, which was just the next week. We had to plan one more practice, and got most of the job done.

Our second competition, we competed until the semifinals, along with another one of our school's teams. We found the solution to our biggest problem, and kept recording our progress. Day by day, our robot was getting better, and we couldn't wait for the next competition to arrive.We started driving around our personal field, and competed against some of the other teams in our school, then the 3rd competition came.

The third competition, we ended up in 5th place for qualifiers, and competed in semifinals. We were interviewed by the judges, then awards came. When Middle School Excellence came, 35216A was called, and we walked up to receive our award. Afterwards, we were interviewed for the Anniston Star, Anniston's local newspaper.

