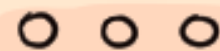


1715B - BIGGER BRAINS



GIRL
POWERED

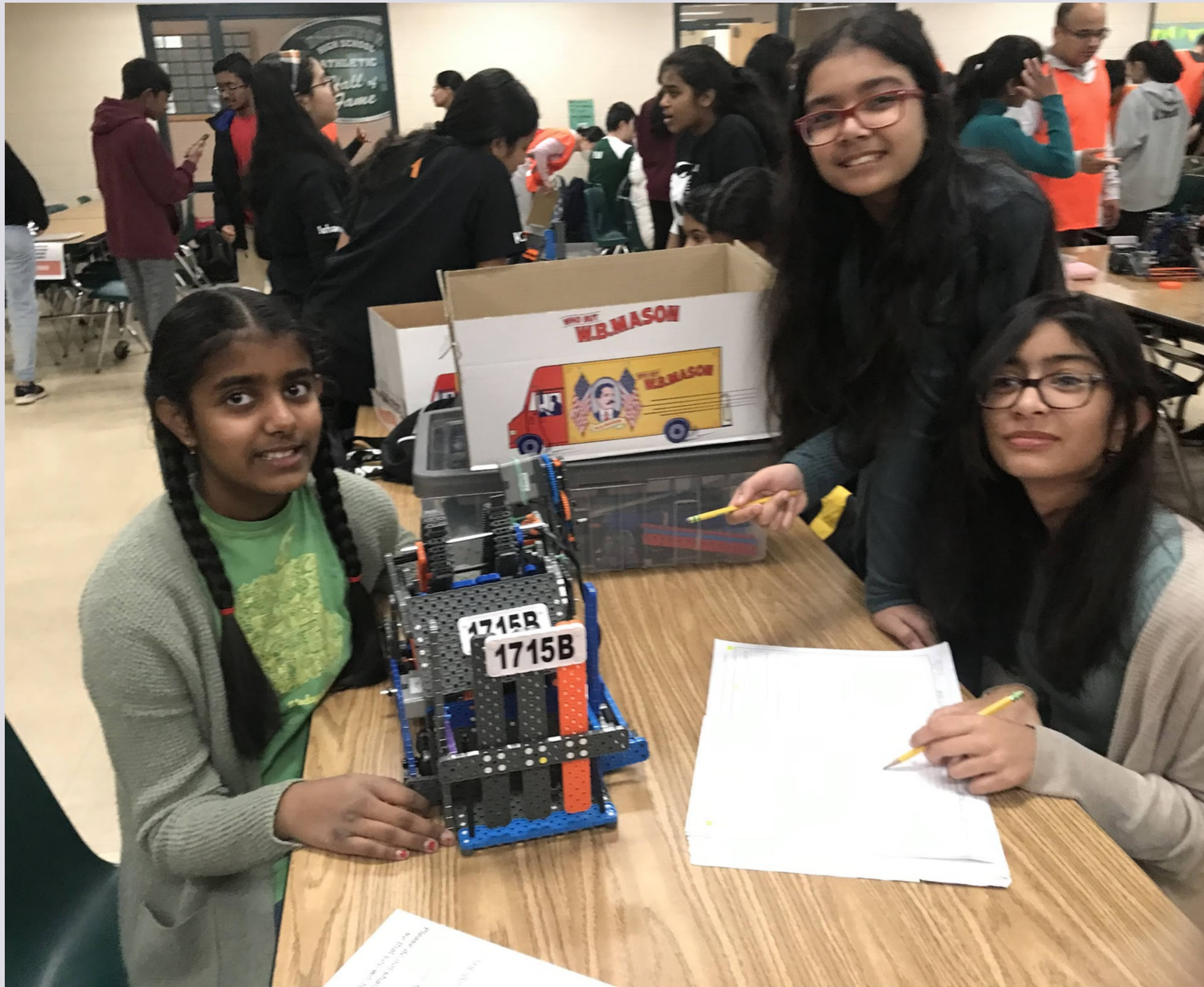


WHAT GIRL
POWERED
MEANS TO
US?



Girl Powered is a movement to encourage and engage girls and young women to get more involved in STEM which is Science, Technology, Engineering, and Mathematics. For us, our simple belief is that girls should get the same amount of equality and opportunity that boys have!

Our robotics team - 1715B, Bigger Brains, is committed to the Girl Powered initiative and has made a conscious effort to recruit ONLY girls, to make a completely Girl Powered team.



OUR
JOURNEY,
SO FAR



Our team's journey into Robotics started when I, Anjali, went to VEX Worlds last year accompanying my brother. As I volunteered and hung around for 3 days at Worlds, I was intrigued and decided to do Robotics this year. I told a few of my friends and they were interested and we decided to form a team.

We noticed that in our after-school robotics program at Hopkinton Middle School that there aren't as much girls getting involved as many boys. This is why we wanted to make a full-on girl-powered team!

We started recruiting girls to join our team and many of them had no clue on robotics. So, we had to advertise a little about robotics, our team, and what we do. We scouted and talked to anyone who showed interest to try and learn new things.

In all, we made a team of 8 girls and it was great!

Once the girls joined the team, we made sure that their voices were heard, and that we all got the respect we deserved.

We all were girls, 6th graders, new to robotics and therefore encouraged ourselves to try things out of our comfort zone to allow us to find our strengths and passions. We gave us different tasks that include designing, building, programming, driving, and strategizing.

It was lots of fun, but not everything went well. As weeks passed by, one after another girls started quitting robotics.

For three girls, robotics was "hard". We encouraged to try to continue, by giving a different role, by supporting with their tasks, etc. They returned, only to quit again.

For a couple of other girls, their parents asked them to concentrate on other sports, like gymnastics. In the end, we lost 5 girls from our team. As each one left, we gave ourselves additional roles. We are at the point now that we all are playing every role in the team.



WHAT WE LEARN'T



First and foremost, we learnt that we can learn a lot by supporting each other and applying different perspectives. At first, we started building hero bot and we couldn't even figure out what was the drivetrain, and we really got stuck on many topics like that. We eventually learnt due to everyone pitching in from their perspective and helping each other to learn.

When we recruited more team members, we were able to approach this problem from multiple angles and come up with various solutions, over a period of meetings. This has made an impact on our robot design and has helped us make unique designs.

In our last competition, so many people told us that our intake and robot were unique. It got stuck and we were not able to get many points, but our design was unique from 40 teams competing on that day.

In addition to the benefits of the teamwork, participating in the robotics program has made us better individuals. We have learned basic skills to be "strong", both physically and mentally. We also have learned that it is important to listen to others more. We also learned that it is important to include everyone's ideas because sometimes they can be the key to fixes, and sometimes that is the answer you're looking for. Another thing was that there is really no wrong, or right answer, it's just what you think and what you believe in.



OUR STEM ROLE MODEL

One role model who has inspired our team to work harder is Kalpana Chawla, the first Indian - American woman to travel to space. Chawla was interested in STEM and showed it very often.

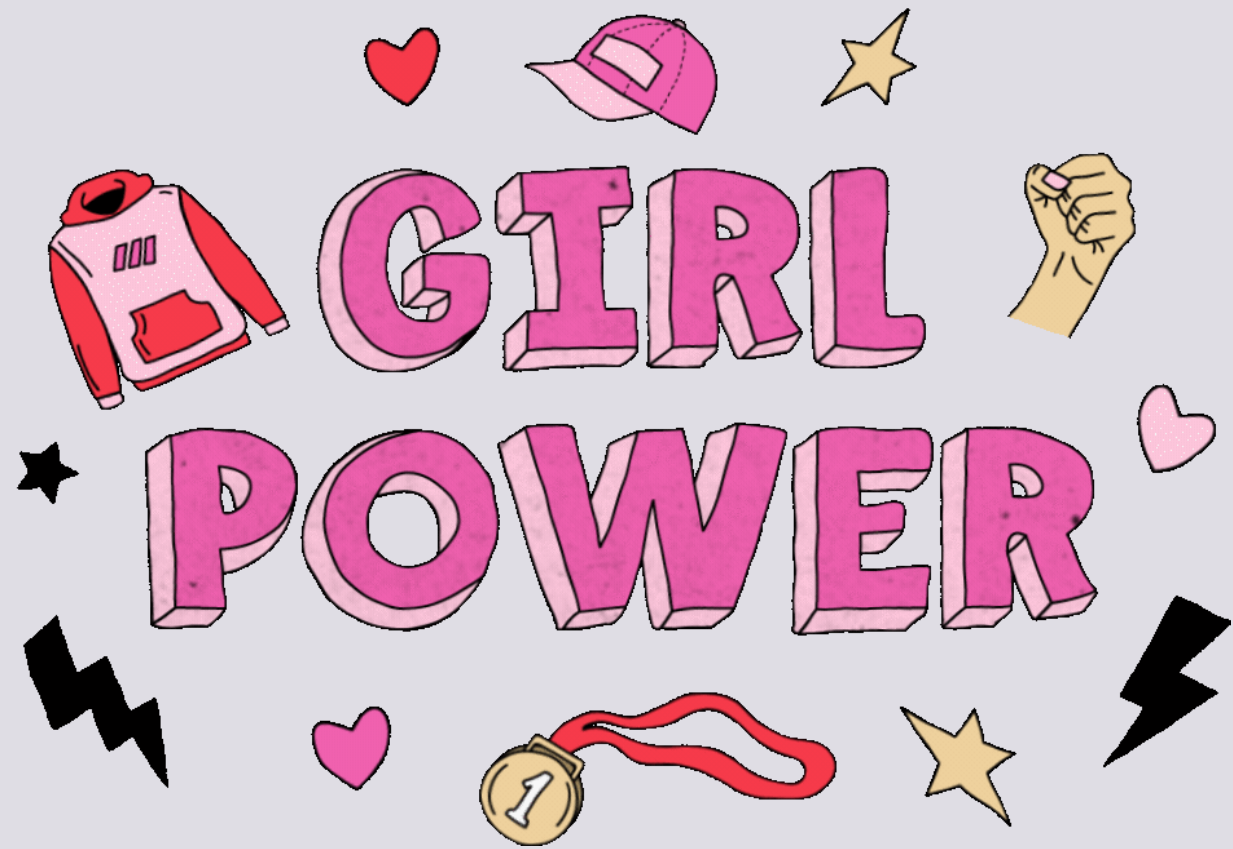
She studied to be an aeronautical engineer. An aeronautical engineer's job is to design aircraft.

She then decided to become an astronaut and she worked for NASA.

Chawla went on two missions in her life; the first mission was exciting because she and her crew traveled 6.5 million miles! She also did 252 orbits of the earth, traveling for more than 378 hours, which is 15 days and 16 hours.

After the completion of the first mission, she got to work on the space station. After the completion of her work in space station, when her rocket tried to re-enter the earth's atmosphere, the rocket disintegrated and the people inside the rocket, including Kalpana died.

Our team got inspired by this story because Kalpana was never afraid of trying new things, like studying to be an engineer, be an astronaut, traveling to space, working in space station, somethings that women did not do before.



Our Goal:
Inspire
more girls
to join our
team next
year for
robotics