

## Robotics FAQs for new parents

### ***What is FIRST?***

FIRST stands for: For Inspiration and Recognition of Science and Technology. It is the big organization that supports and offers programs to kids of all ages. Our team, Team 2180 Zero Gravity, is part of FRC, or First Robotics Competition. This is their website: [www.firstinspires.org](http://www.firstinspires.org)

### ***What is FRC?***

FRC, or First Robotics Competition, is the league our team competes in. Every year, on the first Saturday in January, a new challenge is unveiled. On that day, teams from around the world learn what the game will be, what the rules will be for that year's robots and events. Students then have 6 weeks to design, build, and program a robot to compete with other robots in this game. After the 6 week build season, the team competes in 2 events against other local teams to try to qualify for MAR (Mid-Atlantic Regionals), held in early April in Lehigh PA. Teams who do well at MAR can qualify to go to the World Championships, held at the end of April in Detroit and Houston (our region goes to Detroit).

### ***What is FLL?***

FLL is First Lego League, another FIRST league geared toward kids in grades 4-8. You will hear us talking about FLL because each November Team 2180 hosts an FLL event, The Steinert Slam. This event is a way for our team to do community outreach by supporting younger kids who are into robotics, and also a way for us to raise money. This event takes place on November 23 this year, and it takes a lot of work to make it happen. Many of our fall meetings are devoted to the FLL event. If you are new, it might all sound confusing, but basically we need people to help in all aspects of the event: setup on Friday, the 22nd, during the event on Saturday the 23rd at the concession stand, in the kitchen, registering the teams, and cleanup at the end of the day. It's important to be a part of it even when your child is new to the team, because that's the only way you'll learn what the jobs entail so when the current parents are gone the team can continue to run the event. So come and be a part of it in any way you can! One way we make money on this event is the Adbook for this event, so if you are a business owner and would like to advertise, or know any businesses that might want to place an add, or if you want to place an add as a family for your robotics team member, please do so!

### ***If the Robotics Season doesn't start until January, What is Duel on the Delaware on October 19?***

Duel on the Delaware is an off-season event, where teams get to compete with last year's robot in a more relaxed atmosphere. If you are new to the team, we strongly advise you to go to this event to see what the team will be working towards with the new season. This event takes place on Saturday, October 20, 2019 at Salem Community College in Carney's Point, NJ. The team packs up our robot, takes it down to the event, and then gets to compete with other teams doing the game from last year.

### ***What is build season?***

For the weeks from the time the new challenge is unveiled (probably Jan. 4, 2020) until the events, the team will meet Monday and Wednesday evenings, and Saturday during the day. They will plan, design, and build the robot. This is called build season. Family and friends can sign up to supply a dinner on a Monday or a Wednesday, or Lunch on a Saturday. This build time in the past was a strict 6 weeks long. The rules have changed this year, eliminating that 6 week time limit, so the team is still figuring out how to structure their build time.

### ***What are these events?***

All of the work during build season is in preparation for two or three competitions that the team and robot compete in. Their performance during those competitions, or events, is what determines if the team goes to MAR(Mid-Atlantic Regionals) and Worlds at the end of the season. We are currently registered for one event, at Robbinsville HS March 13-15. We're still waiting to be able to register for other events. On the weekends of an event, on the Friday after school a small "advance" team takes the robot to the venue, sets up the pit (a workspace allotted to each team for robot repairs and prep), and returns home. On Saturday morning, we head to the event bright and early. There are some practice rounds, and then competition begins. All day Saturday and half of Sunday there are qualifying matches. In each qualifying match, our robot is matched up at random with two other teams, and those three teams compete against another set of three teams. At about noon on Sunday, when all qualifying rounds are done, the top 8 teams choose two other teams to go on and compete in the finals with them as an alliance. After the lunch break, the 24 teams that are continuing (as the 8 alliances) have matchups with each other. Each matchup is decided by who wins 2 of a possible three matches. Winning alliances move on to the next level, until the finals, when the last 2 alliances compete in the finals. The alliance that wins 2 out of a possible 3 matches is the overall winner. Here's a link to a video of one of the Championship matches at we were in at an event we won in Westtown. We are on the Red Alliance, and are Team 2180.

[Westtown Competition 2018](https://www.youtube.com/watch?v=Is8khq0zYEQ&index=33&list=TLGGRfUNjsUsWFgyNDA5MjAxOA)

(if the link doesn't work, cut and paste the address below into your browser)

<https://www.youtube.com/watch?v=Is8khq0zYEQ&index=33&list=TLGGRfUNjsUsWFgyNDA5MjAxOA>

### ***If the robot is competing, what do the team members do at an event?***

There are many different things that the kids do at an event. The mechanical team is often in the pit working on the robot and getting it ready for a match or repairing it after a match. There are 4 team members on the "drive team" which actually controls the robot during the matches. Other team members are tasked with scouting the other teams so we know what the other robots' strengths and weaknesses are if we end up in the top eight and get to pick other teams for our alliance. We also need team members to cheer on 2180 Zero Gravity during the matches and interact with other teams in a positive way. This is really important because throughout the event there are judges who are assessing all the teams for their Team Spirit and Gracious Professionalism.

### ***What is Gracious Professionalism:***

Gracious Professionalism is one of the underpinnings of FIRST. It is part of the concept of Coopertition, which means we compete but we also cooperate. All team members, mentors, and fans are expected to operate in this spirit of coopertition. Gracious Professionalism means to act in a professional way and help others when you are able, even if helping someone you are currently competing against. All of this is more important than winning. In fact, the team that most exemplifies the spirit of FIRST at an event wins an award called The Chairman's Award, and it is regarded as the highest award a team can win.

### ***What is SHRPA?***

SHRPA is the Steinert High Robotics Parents Association. SHRPA helps the team with fundraising, grantwriting, getting sponsorships, basically like a booster club. The current executive Board of SHRPA is:

Amy Stemhagen -- President and team member Ravi D'Elia's mom

Rob Stiebritz -- Vice-President and former team member Noah Stiebritz's dad

Missy Fox -- Treasurer and team member Jack Rishko's mom

Karen Omiatek -- Secretary and team member TJ Omiatek's mom

### ***What am I expected to do as a parent?***

Make sure your child attends the meetings, activities, events, fundraisers, etc. The more they participate, the better their experience on the team will be. And, of course, the team needs whatever his/her special contribution turns out to be! We'd also like YOU to be as involved with the team and with SHRPA as you can manage. We have about one meeting per month, and we send out regular email updates and Remind Texts to try to keep everyone up to date. If you can't make a meeting, make sure you read the emails so you know what's going on. Also, join our Remind texting group so you get all the information! The information to sign up is at the end of this document.

### ***What is the cost of being on the team?***

Team 2180 gets no financial support from the school. The robot itself costs about \$16,000 to build each year, and then there are fees to enter events that can range from \$250 for offseason events up to \$5,000 to enter Worlds. The cost for each child to join the team is \$75.00. This helps to cover the cost of a team t-shirt to wear to events, and pizza/food/water that is ordered during the season when we don't have a family covering the meal, or when we have an extra/unexpected meeting, or on the evening of FLL setup. Any money leftover goes toward supporting the expenses to keep 2180 afloat. We'd like to ask that you pay by check, and write your child's name in the memo line, to make sure we can credit your payment, and to serve as your receipt. If you must pay cash, please hand it personally to a member of the Executive Board, and they will give you a receipt.

Your child will be expected to participate in fundraising activities that are occasionally scheduled. Some examples are bagging groceries, collecting donations in front of Caesar's Bagels, car washes, FLL Adbook, and fundraising sales. The money we raise this way helps

to offset some of the Robot costs, but the bulk of our revenue comes from grants and sponsorships. If you have a connection to a company that might be willing to sponsor the team, or that provides grants, please let the Grants Committee know!

IF we go to MAR(Mid-Atlantic Regionals) in early April in Lehigh, PA and/or Worlds in late April in Detroit, MI, attendance at those events is optional, because it can be expensive to get there. SHRPA pays (or tries to get grants to pay) entrance fees for these events, but bussing to the event is very costly. If we make it to Nationals, the cost could be \$400 per student for the bus. Hotel/Food/Spending money would be additional. Please do not let the idea of these costs keep you from allowing your child to join the team; other than the \$75 at the beginning of the year, the other expenses are only IF we qualify, and even then, attendance is optional. We just want to let everyone know about this possibility so no one is shocked in April.

***How do I sign up for the Remind?***

Text the message: @zg2180  
To the number: 81010

If you have any questions (about Remind, or anything else Robotics-related), please let me know:

[SHRPApres@gmail.com](mailto:SHRPApres@gmail.com),  
Or text/call: 609-915-6315

I hope all this helped you to understand a bit better about Robotics in general and Steinert Robotics in particular. We're lucky to have a very kind and helpful group of parents, and all of us have been in the same position as you when our child first joined the team. Please feel free to ask any of us to clarify if what we're saying confuses you. We want you to enjoy your experience as a parent of a Zero Gravity 2180 Team Member!

Amy Stemhagen