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## MapSO Makers - Robotics & STEM Community - [www.mapsomakers.com](http://www.mapsomakers.com)

### MapSO Makers Mission:

To help kids develop the mindset and essential skills necessary to enter the workforce actively engaged in their community. We use the **FIRST® LEGO® League** robotics program to provide this pathway that includes: communication, collaboration, creativity, confidence, critical-thinking and problem-solving.

### Vision:

To be the catalyst for community robotics teams and support new teams. We are committed to having as many children as possible in our community participate, with a special focus on underrepresented communities in the STEM field, especially girls and minorities. We hope to someday see these programs in our schools.

### Who are the MapSO Makers?

Local parent Brad Schenker and community member (and SOMS Choir teacher) Jake Ezzo founded the original robotics team in 2019, made up of nine 7th grade girls. The program has expanded to parent-led teams and mentoring from the Columbia High School Robotics team members. Teams are led by parents or other volunteers in the community. MapSO Makers is not a 501(c)3 at this time.

### What is **FIRST LEGO League**? [FIRST LEGO League Overview](#) [Get Inspired!](#) [I.AM.FIRST \(I.AM.Angel Foundation\)](#)

The worldwide **FIRST® LEGO® League** (FLL) introduces science, technology, engineering, and math (STEM) to children ages 4-14 through fun, exciting hands-on learning. Participants gain real-world problem-solving experience through a guided, global robotics program, helping today's students and teachers build a better future together. The three divisions inspire youth to experiment and grow their critical thinking, coding, and design skills through hands-on STEM learning and robotics.

### How does MapSO Maker's FLL program work?

Our region's season runs August/September through December. MapSO Makers provides mentoring to new coaches and teams. Teams currently meet at homes, with occasional use of the CHS Robotics room.

### How Do I Start a Local Team? YOU CAN DO THIS!!!

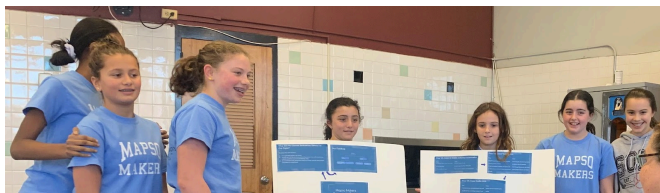
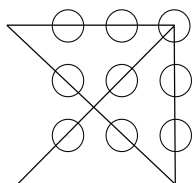
ANY parent can lead a team. Teams need two adult coaches, and we encourage all the parents to help. Season materials are included with registration, and robot kits can be purchased or leased. The coaches facilitate the team's progress, helping with strategy, mentorship, setting goals and keeping the team focused. You can also watch this [20-minute interactive training](#) to learn what coaches and mentors do.

### Time Commitment

It depends on the team's division and participation in festivals and/or competitions. We encourage teams to provide flexibility so kids can enjoy other activities, sports, and family. In the end, it's up to the team!

### Support & Team Set Up

There are plenty of materials available online and via communities of FLL teams worldwide. MapSO Makers work with first year teams to set reasonable goals, with a focus on fun and building the skills needed for further success in year two and beyond. Our teams have won numerous awards and invites to the regional championships.



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The following information is pulled from the [FIRST "Start a Team" webpage](#)



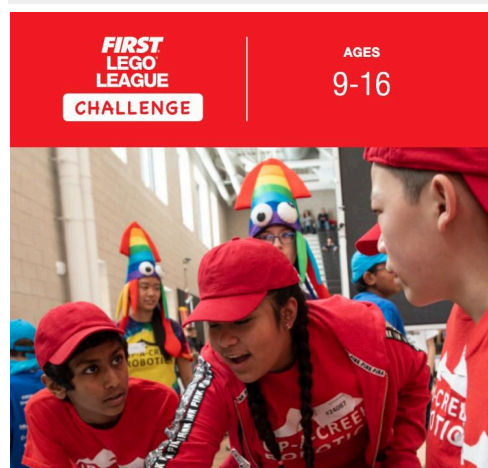
In Explore, teams of students ages 6-10 focus on the fundamentals of engineering as they explore real-world problems, learn to design, and code, and create unique solutions made with LEGO bricks and powered by LEGO® Education WeDo 2.0.

In August, FLL Explore released a new Challenge for teams that focuses on a scientific topic. Teams are sent on a journey of discovery to learn all they can about the topic, then present their findings in the form of a team poster and a LEGO model that moves. You may recruit 2 to 6 interested team members ages 6 to 10 or in the 2-4 grade. A coach is allowed to coach multiple teams. Each team must have at least 2 adult coaches. Once you have at least two team members, you may register.

### **Check out the FIRST Mentor Coach Checklist**

(Don't freak out! MapSO Makers will help you navigate the process)

Estimated Yearly Costs	Cost Range
Registration, Explore Set	\$145
LEGO Spike Essential Kit (1x purchase)	\$335
Regional Partner events	\$30-100
Team expenses (materials, snacks etc.)	\$50-100
MapSO Makers Membership (optional): (Coach mentoring, team support & t-shirts)	\$50/team member



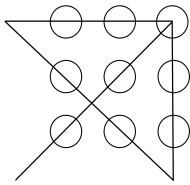
Friendly competition is at the heart of Challenge, as teams of students ages 9-16\* engage in research, problem-solving, coding, and engineering - building and programming a LEGO robot that navigates the missions of a robot game.

Each Challenge season has three parts: the Robot Game, the Innovation Project, and the *FIRST* Core Values. Teams in the United States and Canada may recruit 2 to 10 interested team members ages 9 to 14 or in the 4-8 grade. A coach is allowed to coach multiple teams. Each team must have at least 2 adult coaches. Once you have a team (you do not need all team member names yet), you may register.

### **Check out the FIRST Mentor Coach Checklist**

(Don't freak out! MapSO Makers will help you navigate the process)

Estimated Yearly Costs	Cost Range
Registration & Challenge Set:	\$375
LEGO SPIKE Prime (1x purchase, two kits recommend, lease option available)	\$560/kit
Regional Partner events	\$85-\$250
Portable Practice Table (optional)	\$300
MapSO Makers Membership (optional) (Coach mentoring, team support & t-shirts)	\$65/team member



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### How Do I Start A Local Team?

1. Read through the [FIRST Mentor/Coach Checklist](#), especially the Youth Protection Program

### Here are the MapSO Makers “Cliff Notes” to set up a FIRST LEGO League team.

1. You need a minimum of two adults and two children to start a team
2. Sign up on the [FIRST Dashboard](#) if you are new to FIRST, or log in to [your account](#), and then complete the free youth protection screening and completed the consent and release forms
3. Once registered, click on the blue “Create New Team(s)”
  - a. Select the “Lead Coach 1” or “Administrator
  - b. Select your program (Explore or Challenge)
  - c. Select a team name (it can change)
  - d. Add “lead coach 2”, or add later
  - e. You will received a temporary team number
  - f. Purchase the team registration and challenge sets/robot kits (if needed). This can be done later too. Materials ship in about 7-10 days. We suggest you do NOT open the materials until the official kick off in early August, otherwise pieces may go missing
4. Add team members and/or additional mentors
5. Review the [FIRST training materials for Mentoring and Coaching](#). Its a 20 minute interactive training session.
6. MapSO is part of the FIRST Mid-Atlantic Region. They coordinate the regional events, and offer coach training. [Check out the website](#) and explore additional support
7. If you have not already done so, contact [mapsoFLL@gmail.com](mailto:mapsoFLL@gmail.com) and let MapSO Makers know you registered and your team number. We can help you with the next steps to kick off your season!
8. The goal of year one: HAVE FUN! Set reasonable expectations for yourself, and the team, so they will want to continue for years to come!

### Additional Resources for Teams

[FIRST Mid-Atlantic](#) - Regional resources and information

[Season Resource Library](#)

[Season Resources for the Explore Program](#) (available when season launches in August)

[Season Resources for the Challenge Program](#) (available when season launches in August)

[FIRST YouTube Channel](#)

[FIRST LEGO League YouTube Channel](#)