





Welcome!

-  As we wait for everyone to join us, please take this time to mute your microphone. It's up to you if you want your camera on.
-  If you have questions throughout the presentation, please use the comment section, and I will address them during the Q & A session.
-  This presentation will be recorded and posted on the Shakopee Community Education website within the next couple of days.
-  The presentation will be starting shortly. Thanks for joining us!



FIRST[®]
LEGO[®]
LEAGUE

A Quick Look

Teamwork + Robotics + Problem Solving

Shakopee Community Education

What is FIRST LEGO?

**FIRST® = For Inspiration and Recognition
of Science & Technology**

**FIRST® LEGO® League is an alliance
between FIRST and the LEGO Group.**

**FIRST LEGO Education engages students
in hands-on STEM experiences to build
confidence, grow in their knowledge, and
develop positive learning habits.**

FIRST LEGO Mission

- To inspire young people to be science and technology leaders and innovators by engaging them in exciting mentor-based programs that build science, engineering, and technology skills.
- To inspire innovation and foster self-confidence, communication, and leadership.

How do they accomplish this?

FIRST® LEGO® League (FLL)
encourages students to come
together to innovate and solve
problems by researching a challenge
and preparing a presentation that
explains a solution to a real-world
problem.

FIRST Programs

- 🌐 FIRST LEGO League Discovery – Pre-K through 1st grade, classroom curriculum
- 🌐 FIRST LEGO League Explore – Grades 2-4, up to 6 students per team
- 🌐 FIRST LEGO League Challenge – Grades 4-8, up to 10 students per team



DISCOVER



EXPLORE



CHALLENGE

FIRST LEGO League

Explore (Formerly FLL JR.)

- 🌐 Participants in grades 2-4.
- 🌐 Teams of up to 6 students.
- 🌐 Challenges are released in August.
- 🌐 Guided by adult coaches, students will meet on a weekly basis to build models using LEGO® Education WeDo 2.0 and create Show Me posters to present their solution to the challenge at the regional expo. It is a non-competitive competition.
- 🌐 The focus is to build interest in STEM through a real-world challenge – to be solved by research, critical thinking, and imagination.



FIRST LEGO League Challenge

(formerly FLL)

- Participants in grades 4-8.
- Teams of up to 10 students.
- Challenges are released in August.
- Students begin meeting with their team weekly to work on their solution. Teams will design, build, program and test an autonomous robot using a LEGO® Ev3 robot and Mindstorms software. Students will present their solution and complete robot missions at the regional tournament with the chance to advance to Sectionals.



FIRST LEGO League

- Each challenge contains 3 parts:
 - The Robot Game
 - The Innovation Project
 - The Core Values

1: The Robot Game

- 🌐 Teams design, build, test and program an autonomous EV3 robot to score points on a thematic playing field.
- 🌐 Points are scored by moving the robot around the field and by moving objects on the field (pushing, lifting, tossing or more) completing specific missions to earn points.
- 🌐 There are three 2.5 minute rounds.
- 🌐 Teams are evaluated on mechanical design, programming, innovation and strategy.

The playing field

Example of a playing field

New challenge mat will be reveal May 15!









2: The Innovation Project

- 🌐 For the Innovation Project, the team will brainstorm possible solutions to the challenge that is released in August, provide research, and create a presentation explaining their solution.
- 🌐 They will be evaluated on their research, innovative solution and presentation.

3: The Core Values




“The *FIRST* Core Values are the cornerstones of all of the *FIRST* LEGO programs. Teams are evaluated on *HOW* they work together, as well as inspiration, teamwork and Gracious Professionalism®.”

This is accomplished by using the following concepts:

-  **Discovery:** *We explore new skills and ideas.*
-  **Innovation:** *We use creativity and persistence to solve problems.*
-  **Impact:** *We apply what we learn to improve our world.*
-  **Inclusion:** *We respect each other and embrace our differences.*
-  **Teamwork:** *We are stronger when we work together.*
-  **Fun:** *We enjoy and celebrate what we do!*

3: The Core Values cont.

What is Gracious Professionalism®?

-  “Gracious Professionalism is strong competition but a mutual respect and appreciation of your opponents.”
-  It allows for different opinions amongst team members to be evaluated and tested in order to figure out which idea might work better for the challenge.
-  It teaches students how to work through real-world situations by working together and with others.


What does this look like?

- Adults volunteer to coach a team for the season. Each team must have 2 adult coaches.
- Once teams have been formed, the adult coaches will work with families to set a meeting time and place (usually once or twice a week).
- Teams will work on their solutions for the regional tournament or expo, that is held sometime between November-March.

What is this year's challenge?



Game Changer Challenge

 It's time for us to redefine the game and revolutionize the way we play and move. This season, we'll celebrate the evolution of our sports and activities that make us physically and mentally strong. As part of *FIRST*, we're building a culture that recognizes the athlete in each of us. We know that when we move, play, and compete in any sport, we use our minds—our creativity, imagination, and critical thinking—as much as we use our muscles. Let's work together to champion the strengths of every person who plays the game and gives us a reason to cheer. It's time to be GAME CHANGERS.

 [Season Preview Video](#)

Details

FLL Explore and FLL Challenge Season

- June - August teams work on programming the robot
- August – 2020-21 Challenge is released
- August – November teams work on their challenge solution and robot missions
- November – January teams present their solutions at the regional tournament or expo.
- January - Sectionals tournament
- February – State tournament
- March – World Festival

Details

Registration fee for FIRST LEGO Explore = \$119

- Team registration
- Expo fee
- Coach's training
- Team t-shirt
- Some team supplies

Due to generous donations from local businesses, new teams will NOT have to pay for their robot kit. Thank you Emerson, KEB America, and the Shakopee Rotary Club!

Details

Registration fee for FLL Challenge= \$149

- Team registration fee and challenge kit**
- Team t-shirt**
- Adult coach training**
- Regional tournament**

Due to generous donations from local businesses, new teams will NOT have to pay for their robot kit. Thank you Emerson, KEB America, and the Shakopee Rotary Club!

Details

FLL Challenge registration fee does NOT include:

- Optional tournaments after the regional tournament (approx. an extra \$30-\$40 per student per tournament)
- Optional team supplies for items such as a team poster, costumes, robot expansion kits, etc.
- A laptop

Adult Coaches

- 🌐 Each team must have 2 adult coaches in order to register nationally.
- 🌐 EV3 training, rookie training, and yearly coaches training is provided.
- 🌐 Receive a 50% discount for one of your children to participate in 2020-21 FLL season.
- 🌐 You will receive resources, newsletters, and an online community and returning coaches to turn to for support.

I'm interested, so now what?

Step 1: Form a team including two adult coaches.

Step 2: Contact Autumn to register your adult coaches.

Step 3: Go to www.shakopee.k12.mn.us and register for FLL under the Community Education tab. You will have to register under your team name.

Step 4: Your adult coaches will work with you to chose a time and place to meet each week.

Questions?