



FLL Team Timeline

Week 1

Build with the Spike Prime sets. Figure out how the pieces work. Becoming familiar with the lego set.

Read this flyer the project as a team: [Masterpiece Project](#)

Innovation Project

How we share our own hobbies and interests with others can be an expression of our creative selves. People who work in the arts can teach us a lot about how to communicate, how to engage, and how to entertain an audience of any size. What can you learn from museums, theaters, and films that can help you share what you love to do?

START How can you use technology and the arts to help engage others or increase participation in what you love to do?

Start having discussions about the project. What are hobbies are you interested in? What problems can you think of associated with sharing your hobbies? Do some research.

Brainstorm team name ideas!

Watch the project how to to learn all about the project: [Project How-To](#) & [Project How-To 2](#)

Download the Spike App :[SPIKE™ App Download | LEGO® Education](#)

Start following the FLL Competition ready Unit Plan. Build the small dummy robot in the plan.

Unit Plans

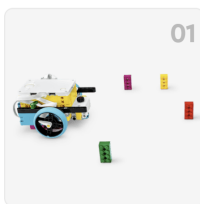
All of the SPIKE Prime lessons, grouped into themed units to actively engage middle school students in STEAM learning.



Competition Ready

Ready to expand your robotics skills? This unit also includes a guided FIRST LEGO League mission!





01

Training Camp 1: Driving Around

Controlling Movements using the Gyro Sensor

START

🕒 30-45 min.

> MORE

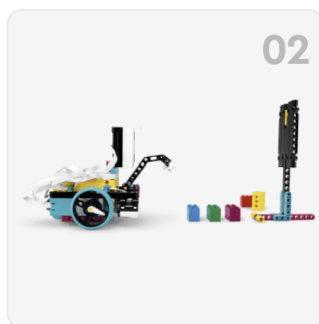
Week 2

Decide on a **team name!**

Reread this flier on the project as a team: [Masterpiece Project](#)

Keep thinking about the project. Narrow down the focus. What type of hobby are you interested in? Music, Movies, Museums, Dance or something else? Have your team **research** all about that type of hobby and the problems with sharing it.

Continue with the FLL unit plans. **Finish** Training Camp 1 and start Training Camp 2.



02

Training Camp 2: Playing with Objects

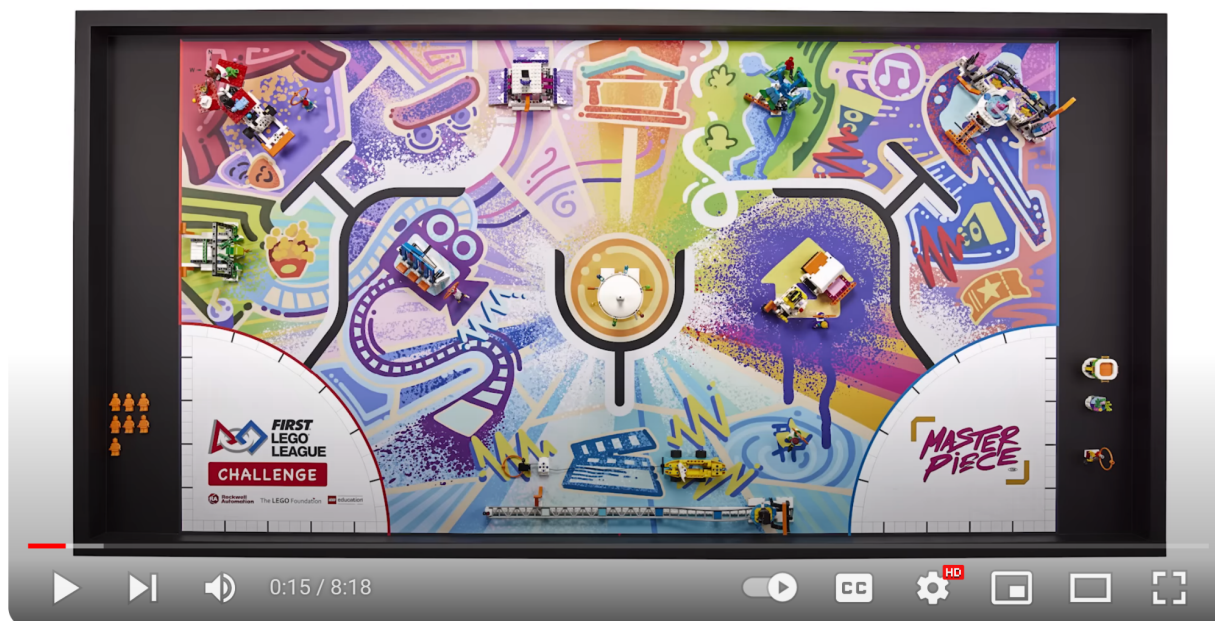
Controlling Movements Using the Distance Sensor

START

🕒 30-45 min.

> MORE

Watch as a team to learn about the game field: [Mission Modules](#)



FIRST LEGO League Challenge MASTERPIECE Robot Game Missions



FIRST LEGO League
38.5K subscribers

Subscribe

1.3K

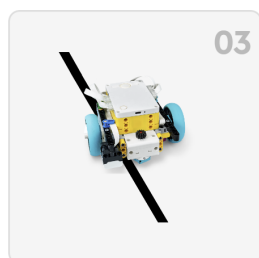


Share



Keep researching the project. **Decide** on the hobby you want to focus on. Think about problems with sharing that hobby with others. How can tech help make that hobby more accessible?

Finish Training Camp 2 and start (and try to finish) Training Camp 3



03

Training Camp 3: Reacting to Lines

Control Movements Using the Color Sensor

> MORE

START

30-45 min.

Week 3

Decide on your Project problem. Start researching all the possible solutions



Build your mission modules if you have not already: [Season | FIRST LEGO League](#) (Go to Mission Model Building Instructions). Whats App Amelia (+1 772 262 0117) to confirm you are opening the field so she can provide some guidance!

Mission Model Building Instructions Collapse

Building Instructions for the MASTERPIECESM Season

How do I build the Mission Models?

1. Sort the LEGO element bags (found in your Challenge Set box) by bag number. They are labeled.
2. Match the bag numbers with the corresponding bag numbers below.
3. Open the correct pdf files and have an awesome time assembling the models. We strongly recommend opening one set of bags at a time so elements are not mixed up.
4. Have fun!

Missing LEGO elements?

- Visit the missing parts/customer service page of the [LEGO website](#), identify missing element(s), and order.
- Or call 1-844-903-5346 (US/CAN) or 00800 5346 5555 (International) and a rep should be able to help. Team must mention *FIRST* LEGO League.

Bag Number	Nonverbal	English	French
Element Overview	PDF	PDF	PDF

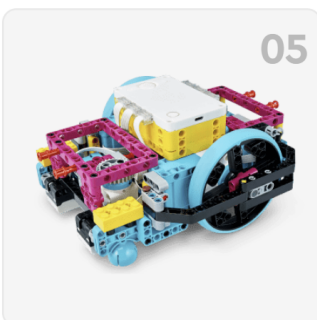
Work on guided the guided Mission challenge

Keep researching all the possible solutions to your project problem. Reach out to experts online. **Email** local energy companies or experts. **Find mentors** in the energy field.

Decide on your solution. Start writing about how your solution would work, how are you going to implement your solution into the real world? Start designing a prototype.

Finish building your mission modules if you have not already: [Season | FIRST LEGO League](#) (Go to Mission Model Building Instructions)

Work on the Assembling and Advanced Driving base:



05

Assembling an Advanced Driving Base

Practicing building techniques

> MORE



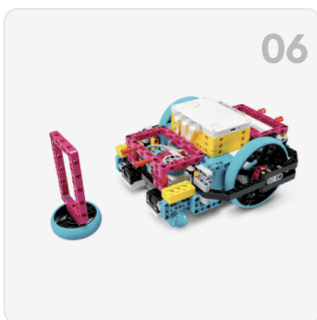
🕒 90-120 min.



Week 4

Think about which **mission modules** you want to try and solve.

Work on using **MyBlocks** with the My Code, Our Program plan.



06

My Code, Our Program

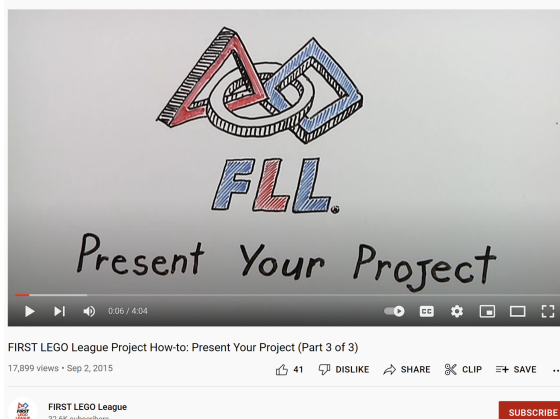
Programming Using MyBlocks

> MORE

START

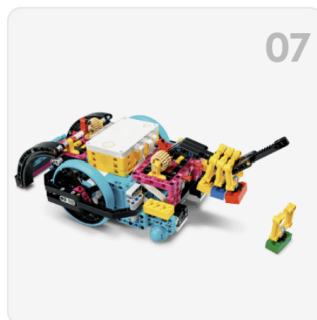
🕒 90-120 min.

Watch this video and think about your Project Presentation: [Project Presentation](#)



Keep on working on **writing** up your project and **decide** how you want to build your **prototype**.

Finish up the unit plan by working on Time for an Upgrade and Mission ready.



07

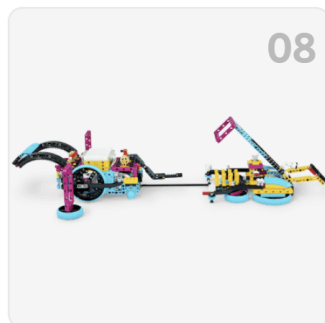
Time for an Upgrade

Using modular tools

> MORE

START

🕒 90-120 min.



Mission Ready

Problem-solving as a team

> MORE



🕒 120+ min.

Week 5

Continue to **work** on your project

Think about **sponsorship**. Reach out to some local companies to try and fundraise to buy a team t-shirt or hat. **Email** the sponsors explaining who you are, what you are doing, and what you are asking for.

Decide on your **robot design**. How do you want to build your competition robot? Look at some examples online: [Robot example 1](#) & [Robot Example 2](#)

Watch some example on how to solve the missions: [Solving Masterpiece Missions - YouTube](#)

Build some **attachments** that will solve the missions.

Take a look at the FLL rubrics: [Rubrics](#)

Remember this is how the judges will be grading you. They will assess your team and give you marks in each of the categories.

Start writing your project presentation script. Do you want to have everyone give a speech? Do you want to make it a play? Do you want to make it a song? There are many options! Make sure you include your prototype.

Finish your robot design.

Program some mission model runs.



Decide on who will be the “technicians” (the two people who will be at the robot table playing the different robot runs and changing attachments) You can also decide to have different technicians during different runs if there are different people working on different runs.

Week 6+

Plan your **Robot Presentation**. What features of your robot are particularly interesting? What do you want to **show the judges** that will impress them?

Practice your project presentation so that it is **exactly 5 minutes long**.

Work on **solving missions** and **programming runs**. Make sure your runs are less than 2 minutes and 30 seconds!

Have the **2 technicians practice** the robot runs making sure they are under two minutes

Practice your project presentation. Make sure you have it down solid and you are showing all the important information. Take a look over the project rubric again to make sure you cover all the topics.

Think about **making a poster board** showing what your team has been working on. On your poster board you can explain all about your project, your robot, and your team. Also think about how you want to set up your table at the competition. **Each team will have a table to showcase whatever they want (project, poster board, robot) you decide!**

Practice your robot presentation. You want to make sure you highlight the important, impressive aspects of your robot in **5 minutes**.

Make sure **everyone talks** in each presentation!

Work on **solving missions** and **programming runs**. Make sure your runs are less than 2 minutes and 30 seconds!



Before the Competition

Run through your project and robot presentations!

Make sure you have your robot and it is fully charged. **Bring** the battery charger and some replacement parts in case some pieces break at the competition.

Make sure you have **all your materials** you want to use to present to the judges. You want your **prototype for the project and poster boards**.

Get ready to have some fun! You got this!