TEAM TIPS DURING COVID-19

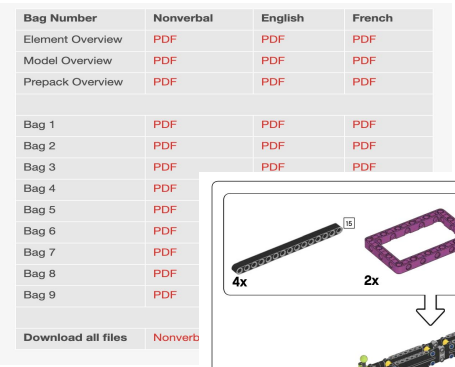
Created for FLLTutorials
By FRC 8027

Building Mission Models

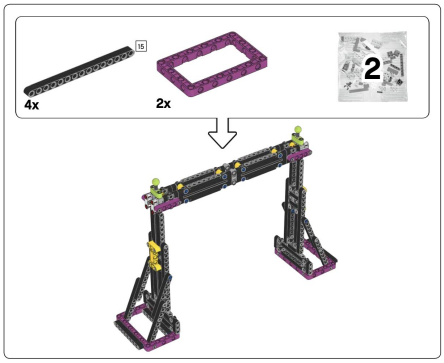




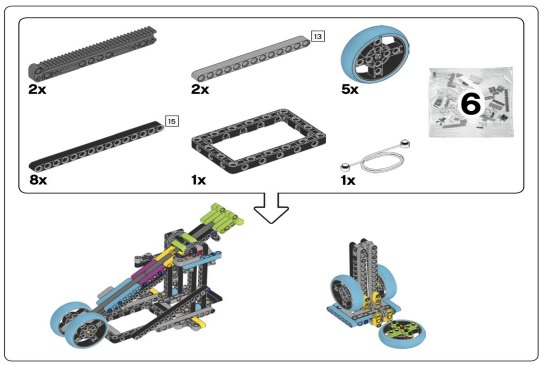

- Mission models are organized by **bag number**. There are a few parts that you will need to collect from unnumbered bags as you build
- There are **9 sets of numbered bags**, **4 unnumbered bags**, **3 loose tires** and a sheet of **3M dual lock** in your set this year.
- Sort your bags into numbers



Bag Number	Nonverbal	English	French
Element Overview	PDF	PDF	PDF
Model Overview	PDF	PDF	PDF
Prepack Overview	PDF	PDF	PDF
Bag 1	PDF	PDF	PDF
Bag 2	PDF	PDF	PDF
Bag 3	PDF	PDF	PDF
Bag 4	PDF		
Bag 5	PDF		
Bag 6	PDF		
Bag 7	PDF		
Bag 8	PDF		
Bag 9	PDF		
Download all files	Nonverb		



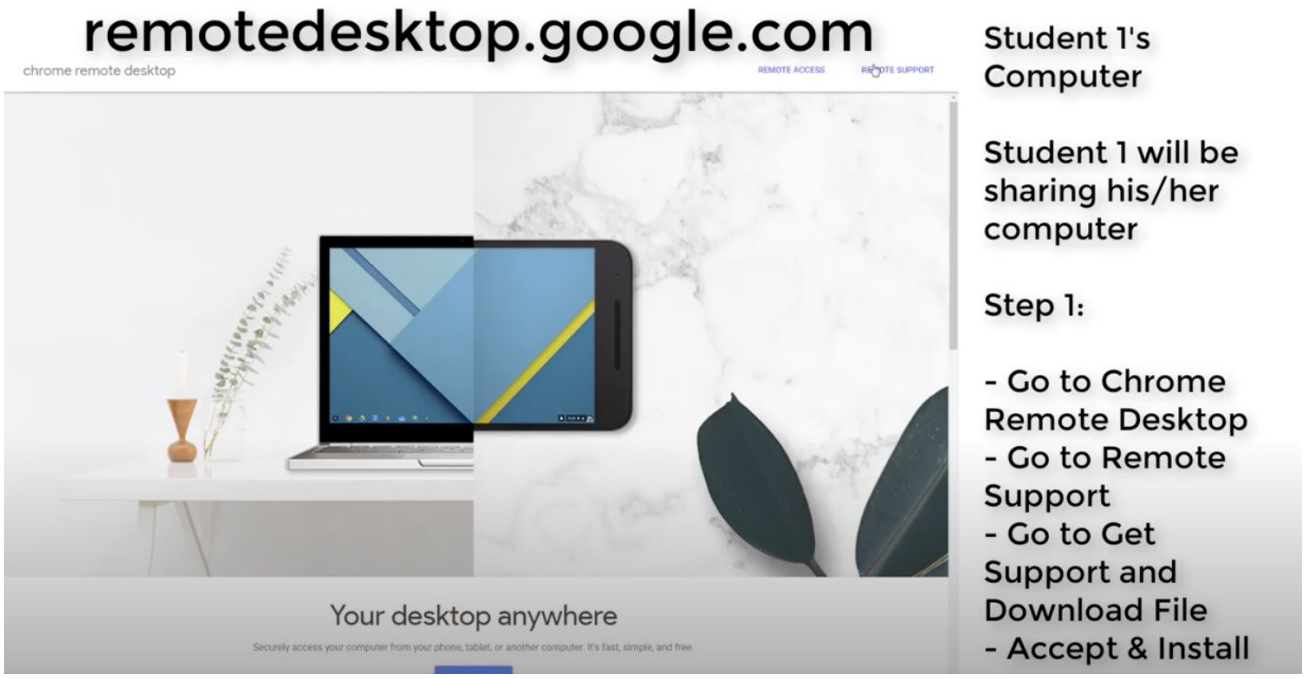
- Open the corresponding PDF Instructions for each bag number (firstlegoleague.org/season#resources)
- Collect the parts you need. Get the additional parts needed for that model from the unnumbered bags or loose parts. (e.g. in this example you need all of Bag 2 + 2 Magenta frames + 4 15M liftarms)



- Distribute the models to your team members to build at home if needed
- Note that some models take longer to build than others.
- Also, there are **no instructions for Bag 8** because students will build their own model using those parts as part of M01
- Some bags also contain parts for multiple models
- It is common to have a few small parts left over

Programming Remotely

- EV3 and SPIKE Prime programs are designed to run on one computer. But there are ways for multiple students to work on a single program together.
- Watch the linked video and install Chrome Remote Desktop. Follow the instructions.
- Have the student who has the FIRST LEGO League Challenge table in their home launch the EV3 or SPIKE Prime programming language. Have other team members code at the same time.
- Have the students also join a Zoom meeting/Discord Channel or similar so that they can chat as they program.



Coding Collaboration

- If using the EV3 software, create My Blocks so that you can input distances and turns in centimeters.
- If using SPIKE Prime, the software has blocks that accept centimeters as the input.
- Use this Planner tool from FLLTutorials.com to draw straight lines. Both the length (in centimeters) as well as the angle of the line from the horizontal plane will be displayed on the screen
- Use the information to write pseudocode or start programming.
- Email the program to the student who has access to the challenge table to test the code.