



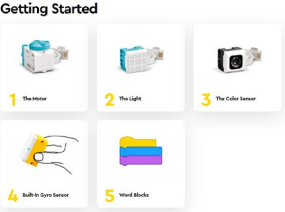


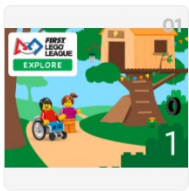





## Activity Sequence for *Engineering Notebook*

Select the app and unit/lessons that correspond to the LEGO Education set you have. If you have a WeDo 2.0 set, choose the WeDo 2.0 app lessons. If you have a SPIKE Essential set, choose the SPIKE App lessons.

	<b>LEGO Education WeDo 2.0 App</b> 	<b>LEGO Education SPIKE App (Choose SPIKE Essential)</b>  
<b>Pre-Sessions: Complete Getting Started Activities</b>		
<b>Unit Plan Name</b>		
<b>Session 2 and 5</b>		 <p>Explore Lesson 1</p>
<b>Session 3 and 6</b>		 <p>Explore Lesson 2</p>
<b>Session 4 and 7</b>		 <p>Explore Lesson 3</p>

**Note:** If you are using SPIKE Essential, do NOT complete page 18 (Session 8) in the *Engineering Notebook*. There are no building instructions or code for motor and hub build. Instead, have the team create their team model WITHOUT a motorized Explore model. Instead, they can create their own part of the team model that they motorize.



MARCO'S  
GROUP

## Session 2



MAY'S GROUP

## Session 5

Find your SPIKE Essential set and device.

- ☐ Open the SPIKE app. Choose SPIKE Essential.
- ☐ Open the FIRST LEGO League Explore Unit Plan. Complete Lesson 1.
- ☐ Answer Max's question in the box below. ....
- ☐ Change the code you created!

**Can you make the model go in a different direction? Turn in both directions?**

- ☐ Change the classic carousel build.

**Can you change the design?**

**Make it taller?**

- ☐ Draw your design on page 30.
- ☐ Share what you did with the team.



Can you make your own code for the build?



You could use the blocks below!



Explain how you could use these blocks to change the code you created!

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MARCO'S  
GROUP

## Session 3



MAY'S GROUP

## Session 6

Find your SPIKE Essential set and device.

- ☐ Open the SPIKE Essential app.
- ☐ Open the FIRST LEGO League Explore Unit Plan. Complete Lesson 2.
- ☐ Answer Max's question in the box below.
- ☐ Change the code you created!

**Can you make it play a different sound?**

**Can you trigger the motor using a sensor?**

- ☐ Change the animal alarm build.

**Can you change the design?**

**Can you create a different animal?**

- ☐ Draw your design on page 30.
- ☐ Share what you did with the team.



Can you make your own code?



You could use the blocks below!



Explain how you could use these blocks to change the code you created!





MARCO'S  
GROUP

## Session 4



MAY'S GROUP

## Session 7

Find your SPIKE Essential set and device.

- ☐ Open the SPIKE Essential app.
- ☐ Open the FIRST LEGO League Explore Unit Plan. Complete Lesson 3.
- ☐ Answer Max's question in the box below.
- ☐ Change the code you created!

**Can your robot move backwards?**

**Can your robot drive on the mat?**

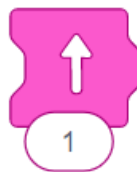
- ☐ Change the arctic ride build.

**Can you change the build so that it has four wheels? Can you change its shape?**

- ☐ Draw your design on page 30.
- ☐ Share what you did with the team.

You could use the blocks below!

Can you make your own code?



Explain how you could use these blocks to change the code you created!

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# Sessions 8 and 9

WHOLE TEAM

Find your Explore set, Explore model, SPIKE Essential set, and device.

- ☐ Think about the questions.
- ☐ Brainstorm ideas for each question.
- ☐ Look over the list of required parts below.
- ☐ Draw your obstacle course design on pages 20-21. Label all the required parts and the places the course is found.

Can you design an obstacle course for us to play on and then build it as your team model?

Can you include fun activities that would raise our heart rates?

Could your obstacle course be built in one of these places or maybe in all of them?



## Team Model



Park



Empty Lot



Choose a Place

### Required Parts:

- ☐ Be made of only LEGO® elements.
- ☐ Include ONE part of the Explore model.
- ☐ Have ONE motorized part.
- ☐ Use LEGO Education SPIKE Essential coding.

