

## Session 1 Robot Lesson

Learn the basics and build your first robot driving base.

- 1. Start Here -> Try
- 2. Start Here -> Use, page 3-8 C. Use what you've learned to
- drive your robot across the mat.

### Session 2 Robot Lesson

Program your robot to move and stop in different ways.

- 1. Tutorials -> Basics -> Straight Move
- 2. Tutorials -> Basics -> Stop at Object
- C. Tutorials -> Basics -> Tank Move

#### **Session 3 Robot Lesson**

Program your robot to interact with game objects.

1. Tutorials -> Basics -> Curved Move 2. Tutorials -> Basics -> Move Object

C. Use what you've learned to modify the program and attachment to deliver a health unit to a location on the field.

### Session 4 Robot Lesson

Learn to use sensors in more advanced ways.

1. Tutorials -> Beyond Basics -> Multiple Switch 2. Tutorials -> Beyond Basics -> Sensor Blocks

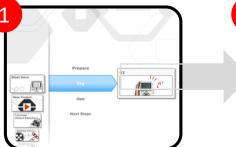
C. Tutorials -> Beyond Basics -> Sensor Blocks, page 5

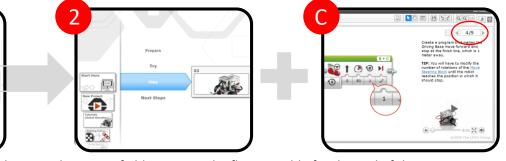
# **Session 5 Robot Lesson**

Learn to stop at and follow lines.

- 1. Tutorials -> Basics -> Stop at Line 2. Tutorials -> Beyond Basics -> Switch
- C. Tutorials -> Beyond Basics -> Color

Sensor – Calibrate





Remember: Make sure you have a robot game field set up on the floor or table for the end of this session. Take the driving base apart at the end of the session, so the other group can build it next time.

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Lab Alternative Robot Lessons

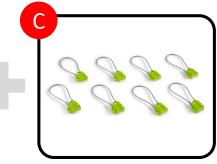
The challenge (C.) in each robot lesson is optional, dependent on time



Remember: N eld in different ways will help you score more points.







Remember: Interacting with and moving objects on the robot game field is how you score points.



Remember: Using different sensors during the game will help your robot be more efficient and effective.

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Rear Project	Basics (Hardware) Basics (Driving Base)	Stop at Line	Rear Prove	Basics (Driving Base)		Inter Here Reserved Antipology	Basics (Hardware) Basics (Driving Base) Feyned Basics (Driving Base)	Color Sensor - Calibrate
	Beyond Basics (Driving Base) Data Logging Tools	Rog at Angle	Received in the second se	9	Martiple Switch		Data Logging Tools	

**Remember:** Following and stopping at lines on the robot game field is a great way to navigate.

### Session 6 Guided Mission

Use the robot skills you have learned to solve this mission! Complete the Pseudocode page for this mission. Apply your line-following skills to reach the model. Can you use the color sensor to follow the lines on the mat? What attachment could you build for your robot to complete this mission?

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