



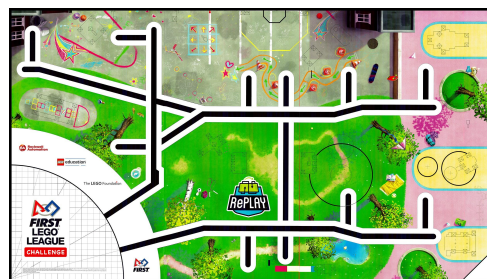
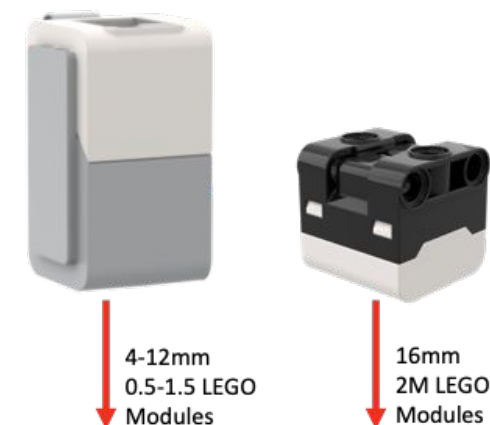
# *FIRST* LEGO LEAGUE CHALLENGE

Programming Skills Quick Guide

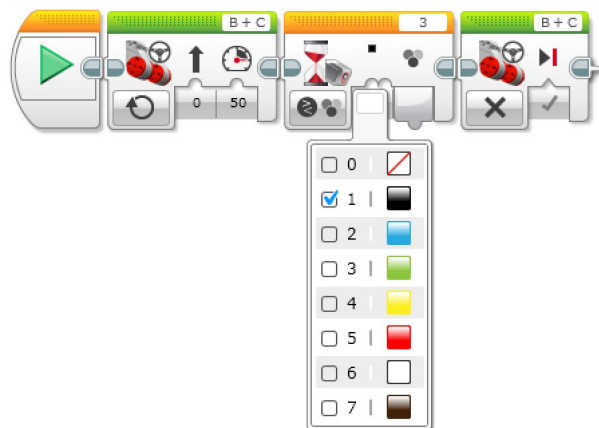


# Move Until Black

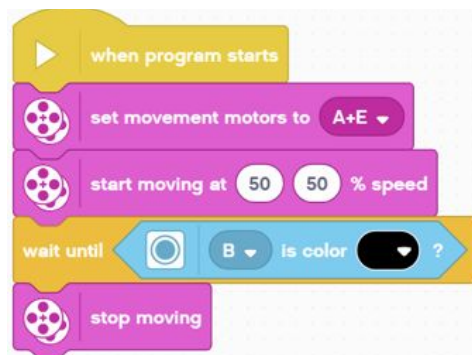
- **Objective:** Program your robot to move straight until the color sensor sees black
- Make sure you check the height of your color sensor before you begin
- Use a line on the *FIRST* LEGO League challenge mat or create one using black electrical tape on a white paper.
- Line up your robot as far away from the black line as you want and see if you can make it stop on the line.



- Start motors
- Use the Wait For block in color mode to detect when the color sensor sees black
- Stop Motors

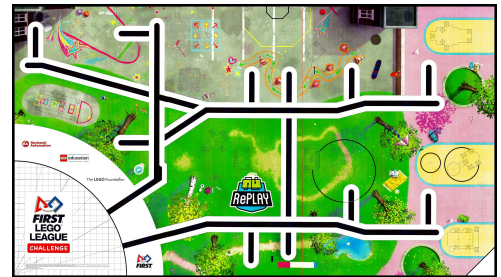
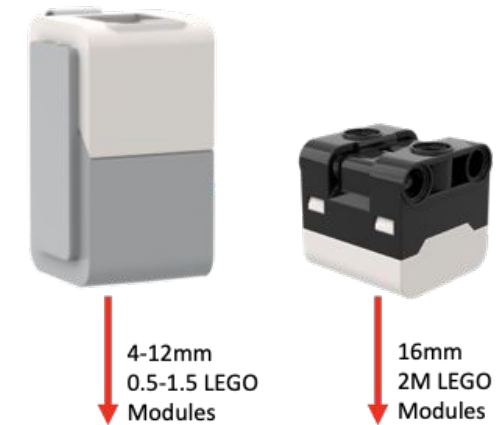


- Set the movement motors for your robot
- Start moving straight at % speed
- Use the wait until block to detect when the color sensor sees black
- Stop moving

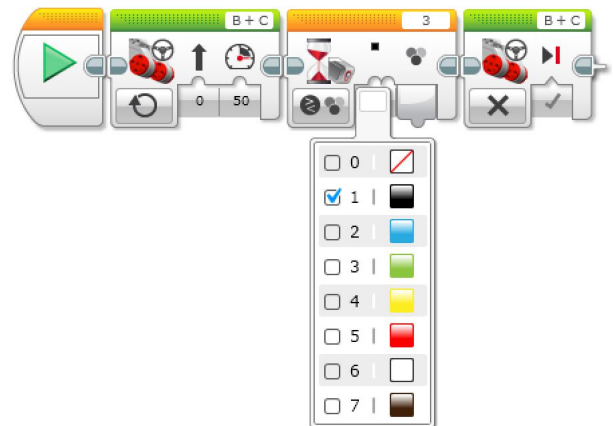


# Line Follow for Distance

- **Objective:** Program your robot to follow a line for a specified distance.
- Make sure you check the height of your color sensor before you begin
- Use a line on the *FIRST* LEGO League challenge mat or create one using black electrical tape on a white paper.
- Make sure your color sensor starts on the correct side of the line.



- Pseudocode here



- Pseudocode here

