

Final Challenges

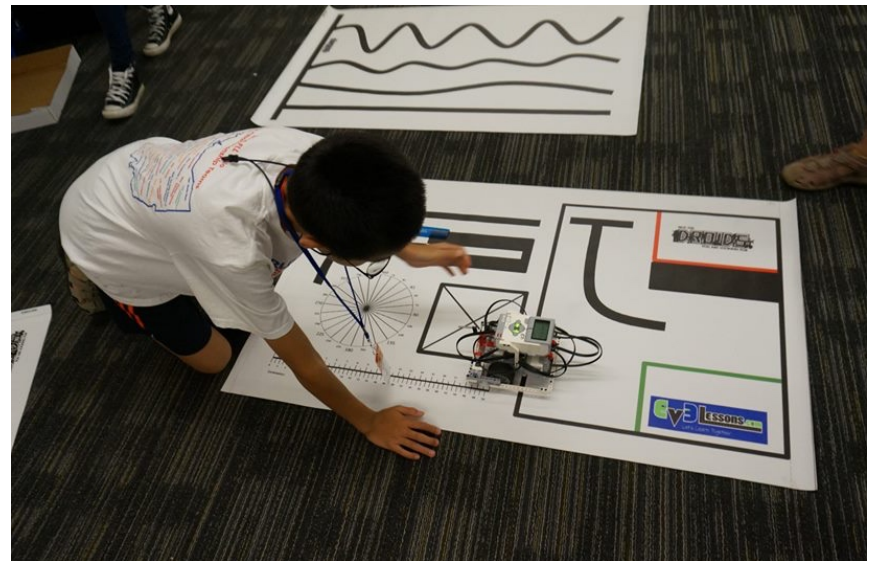
By Sanjay and Arvind Seshan



BEGINNER PROGRAMMING LESSON

TEACHER INSTRUCTIONS

- You can set up any challenge you want using colored electric tape on a white board (available at home improvement/hardware stores). You can also use large white poster paper on a hard floor.
- Note that the electric tape colors do not match LEGO's colors. So your sensors may have trouble reading those colors.
- You can also use old FIRST LEGO League Mats for practice. They are sometimes available on eBay or other teams.

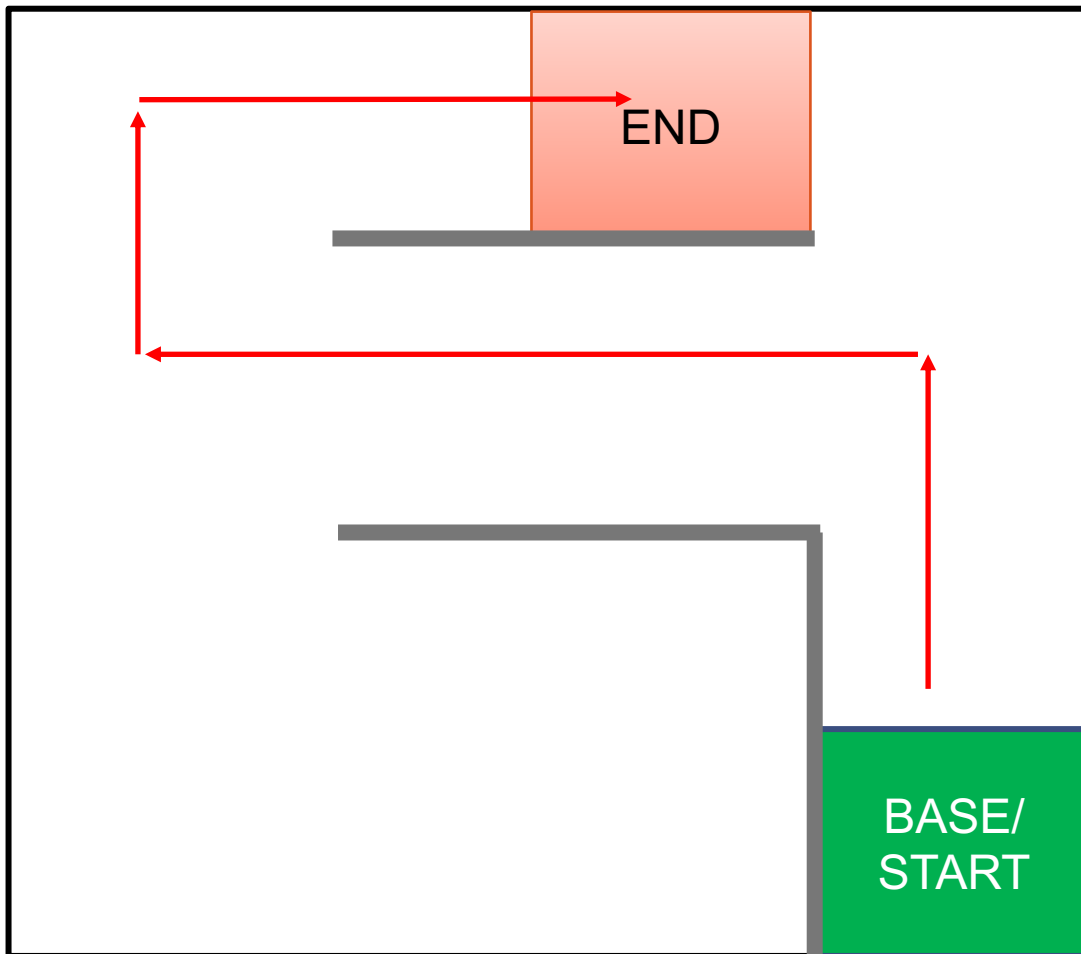


CHALLENGES IN THIS LESSON

- The following slides have a few examples of challenges that incorporate the Beginner Lessons.
- Solutions are not provided. Students should use everything they have discovered in the Beginner Lessons series to solve the missions
- Image on the right features EV3Lessons.com's training mats. These are not for sale, but the designs are given away free to anyone who donates to the site.

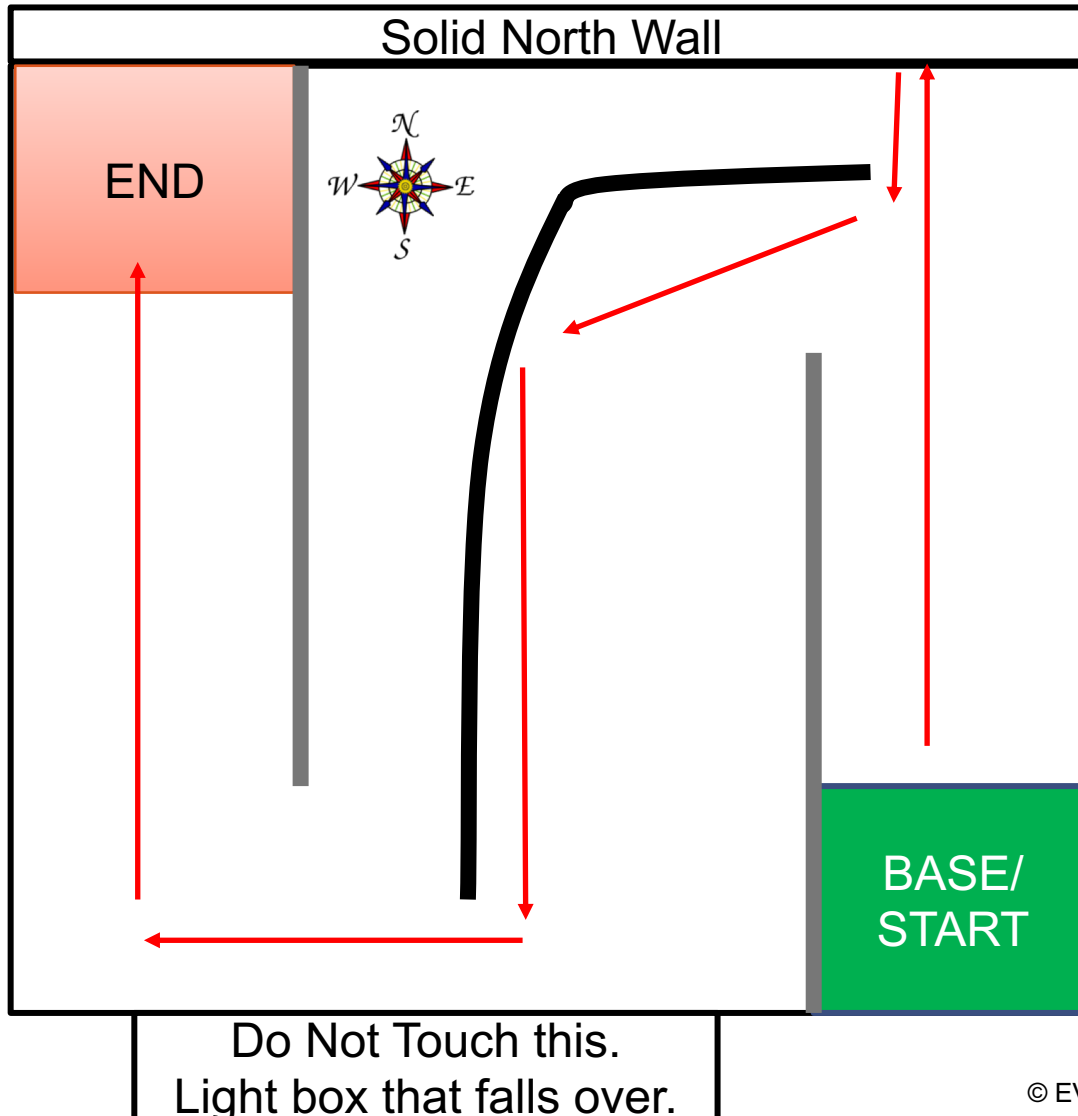


MAZE 1: MOVING STRAIGHT AND TURNING PRACTICE



- 1) Go out of base
- 2) Turn left into the passage
- 3) Turn right
- 4) Turn right and head to the END

MAZE 2: SENSOR USAGE PRACTICE



- 1) Go out of base
- 2) Go up to the North wall and **touch it**.
- 3) Back up turn and navigate through the passage
- 4) Go to the “do not touch this wall”. **Don't touch it**.
- 5) Turn and go to the West wall.
- 6) Turn and head to the END!

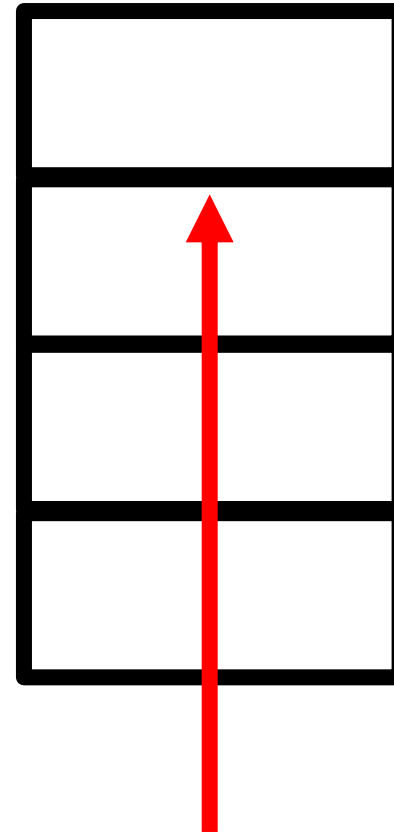
USE 2-3 SENSORS!

STOP ON THE LINE

Program your robot to move forward and then stop exactly at the 3rd line.

You must use a loop and a sensor!

What sensor will you use?



CREDITS

- This tutorial was created by Sanjay Seshan and Arvind Seshan
- More lessons are available at www.ev3lessons.com



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