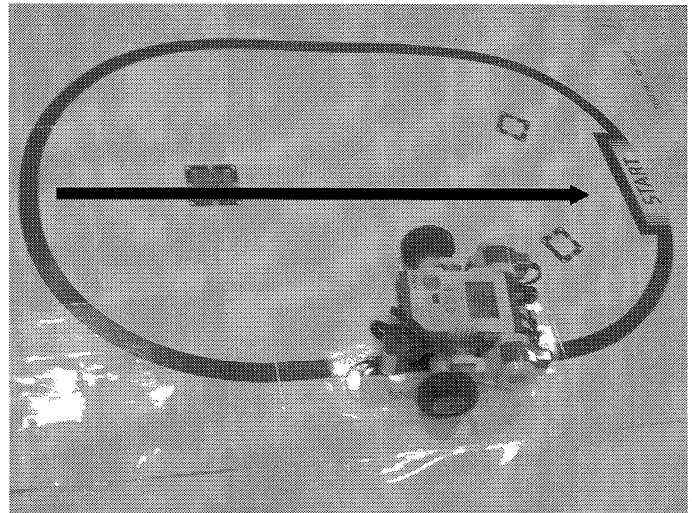


# 22 Half Circle and Back

**Mission:** The robot starts at the lower left hand part and will travel a half circle up and around the first line using the light sensor to follow the line. The robot will cut across the top using a move block, and then it will resume using the line following program to come down the other side and stop at the finish

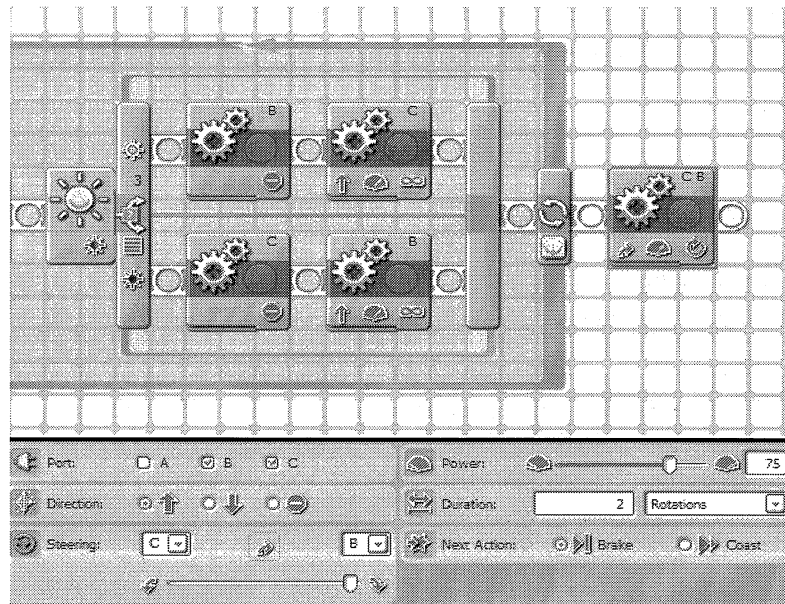


**Equipment:** Practice pad or blue painter's tape to layout the design.

**Sensors:** Light

## Directions:

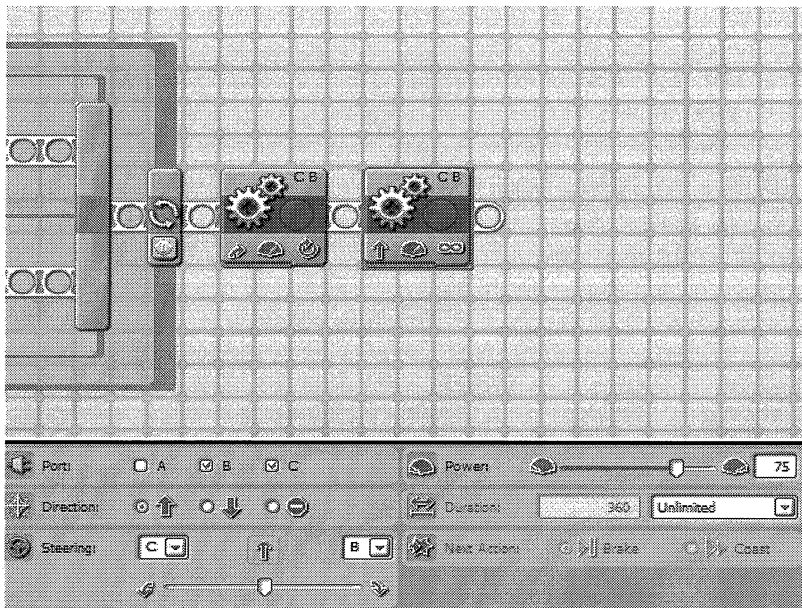
1. Start with the Follow the Line program. Then add a move block after that and move the steering slider all the way to the side.



*The Follow the Line program makes the robot follow the first half of the loop. You will need to set the loop for about 7 seconds. After the line following program ends, the program moves to the move block which turns the robot.*

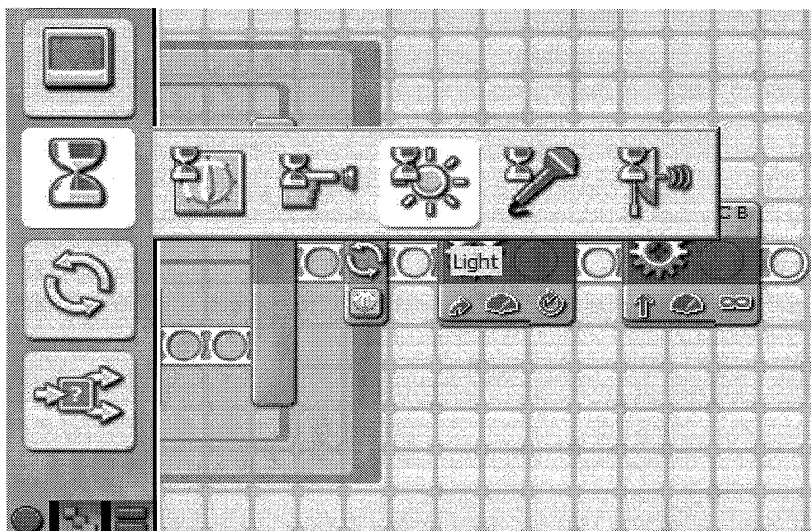
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2. Place move block on the bar and set it to unlimited.



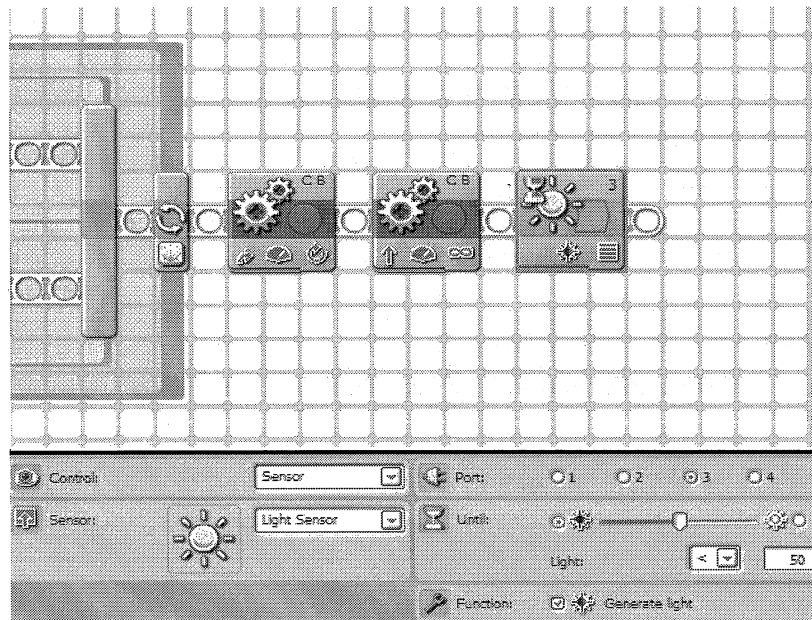
*The move block set to unlimited keeps the robot moving until the next block stops it.*

3. Put the cursor over the wait block and it opens up the different types of wait blocks. Choose the light.



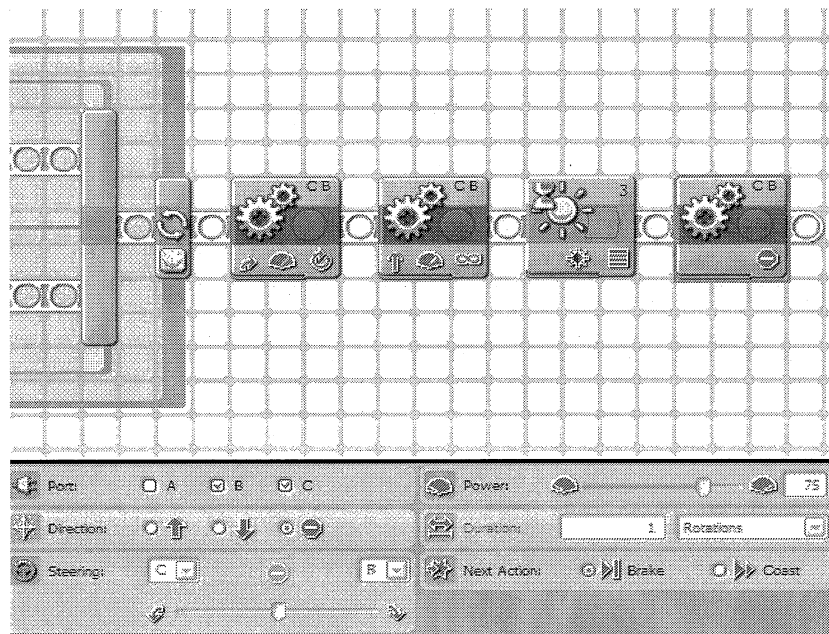
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4. Place the light wait block on the bar and set it to less than and set the light level to 5 points lower than the white part of the practice pad.



*This signals the robot when it crosses the black line of the big oval on the practice pad.*

5. Place a move block on the bar and set it to stop.

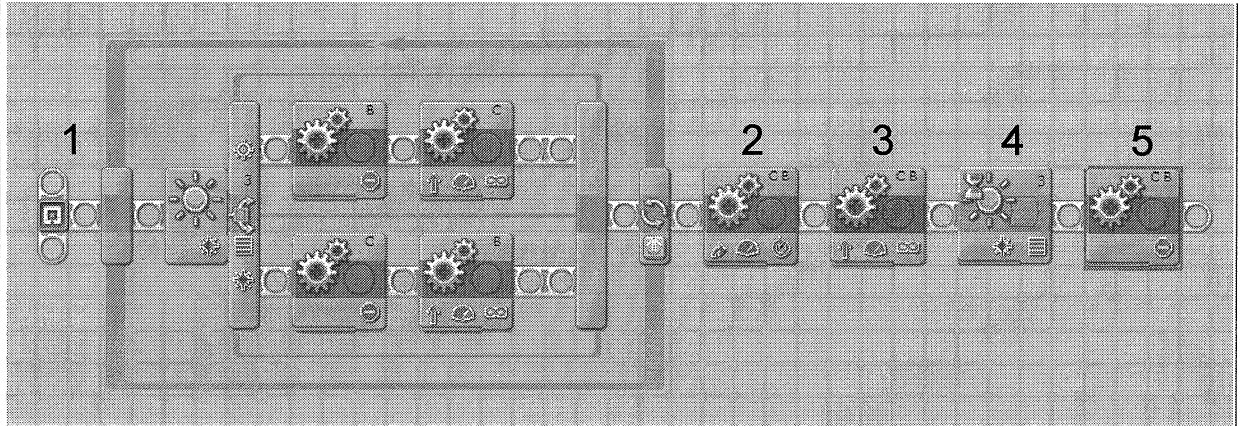


*This stops the robot after it crosses the dark line of the oval.*

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This is the whole program. It works this way:

1. The loop makes the robot follow the line for as long as the time is going.
2. When the time on the loop runs out, the move block turns the robot.
3. The next move block makes the robot keep going until the wait block is triggered.
4. The light block signals when the robot crosses the dark line of the oval.
5. The move block stops the robot.



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