

Follow the Line

No walls this time. A black tape line curves across the floor and ends at the green tile. The color sensor under your car has to **see the edge of the line** and steer to stay on it.

BEFORE YOU START

Your toolkit

Everything on your car. The highlighted parts are the ones this mission needs.

SPIKE Hub

the brain · has a built-in gyro

USED THIS MISSION

2 Medium motors

left + right wheels · ports A, E

USED THIS MISSION

Large motor

steers the back · port D

USED THIS MISSION

Large motor

the

turret

· port C · keep it centred, facing forward

NOT NEEDED

Distance sensor

port B · port B

NOT NEEDED

Color sensor

underneath, pointing down · port F

USED THIS MISSION

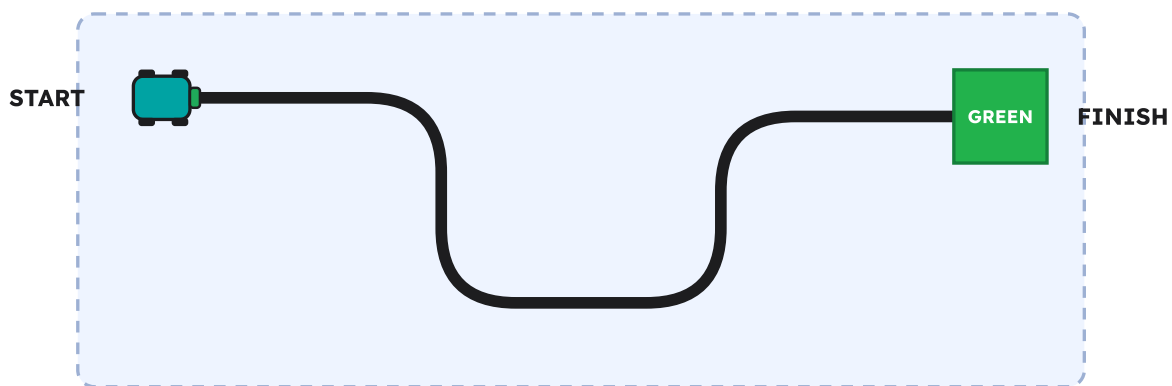
Hub gyro

level-up: exact 90° turns

OPTIONAL LEVEL-UP

Your car: the Delivery Cart with a large-motor turret carrying the distance sensor at the front, and a color sensor underneath. How to build it →

THE MAZE



YOUR MISSION

What the car must do

- Follow the black line with the **belly color sensor** — edge following.
- Steer in proportion to how far the reading is from the edge.
- Stop on the green tile and play a sound.

Line tracing

Proportional steering

Color sensor

BUILD IT

Maze size

Along the route	Whole maze
3 → 2.2 → 3 → 2 → 2.5 lane widths	about 10.3 × 3.5 lane widths

With a 30 cm lane width the maze is about 309 × 105 cm. Lane spacing is one lane width plus a wall.

DONE WHEN

Success looks like

- The car stays on the line through all four bends.
- It steers harder as the reading drifts further from the edge.
- It stops on green and plays its sound.

Keep going: All missions → [index.pdf](#) | Hints → [mission-6-hints.pdf](#)
The same content is in the matching .html files.