FREE POSTER

# Drawing lines for Ozobot

The drawing rules from Ozobot's official guides, with a separate column for Ari.

## The line



**5 mm** thick (4.5 to 6 mm is okay), actual size

- The same thickness throughout: the robot has trouble reading a line that alternates between narrow and wide.
- Draw with the Ozobot marker, using the flat side of the tip.
- Use white, non-glossy paper. No whiteboard markers, colored pencils, crayons, or highlighters.

**Tip**
First sketch the route lightly in pencil, then add the color codes, and finally draw over it with the black line.

**Want to print your own route?**
Print in color on white, non-glossy paper at 100% (actual size). Then measure one code cell: it should be 5 mm.

## Space around the line

| Rule | Bit+ and Evo | Ari |
|---|---|---|
| Distance between parallel lines (including in a U-turn) | **≥ 25 mm** | **≥ 38 mm** |
| White space on both sides of the line | **± 12 mm** | **± 19 mm** |
| Width of a turn | **≥ 25 mm** | **≥ 38 mm** |
| Distance between Color Codes | **≥ 51 mm** | **≥ 51 mm** |
| Distance from a code to a turn or intersection | **≥ 25 mm** | **≥ 25 mm** |
| Straight section after a Zigzag or Backwalk code | **≥ 64 mm** | **≥ 76 mm** |

Different robots in the classroom? Use Ari's measurements so your route works for all three.

## Corners and intersections

- The ideal angle is 90°. The robot may not follow an acute angle properly, but a wide, rounded turn is fine.
- An intersection has three arms (T) or four (plus), with straight, perpendicular lines. Never place it on a curve.
- Without a direction code, the robot chooses a direction on its own at an intersection.

## Color codes

- Only on a straight section, never on a curve, corner, or intersection.
- Cells measuring 5 × 5 mm, with no white space between them and no overlap.
- Black before and after. Two-color codes go at the end of the line, with about 20 mm of white space after them.




Turn Left, actual size


Free poster from Ozobot Benelux: you may print it and use it in the classroom. Print at 100% (actual size). Ozobot is a brand of Ozo EDU, Inc.