



WOW! on Wheels – STEM Labs THE OVERALL OF OZOBOTS



Ozobots are small robots that use sensors to identify lines, and colors codes, drawn by the student.

As the Ozobot comes across a sequence of colors, it interprets the colors, and does what that block of color series translates to. For example, if the Ozobot sees a sequence of certain colors, it interprets the directional code and will turn the direction the student has mapped out. As it moves across a different sequence, it will read the speed code, and speed up or slow down. After your students master screen-free coding, they can begin to code online with Ozobot Blockly.



Speed

Speed Codes change your Ozobot's velocity from slowest (Snail Dose) to fastest (Nitro Boost).



Snail Dose

A three-second dose of super slow speed



Slow

A slow speed command effective until the bot reads a new speed code or is turned off



Cruise

The default speed command



Fast

A high speed command effective until the bot reads a new speed code or is turned off



Turbo

An extra high speed command effective until the bot reads a new speed code or is turned off



Fast

A high speed command effective until the bot reads a new speed code or is turned off

Direction

Direction Codes tell your Ozobot what to do at an intersection. Without a given Direction Code, Ozobot's default behavior at intersections is random.



Go Left

A command to turn left at the next intersection



Go Straight

A command to continue straight at the next intersection



Go Right

A command to turn right at the next intersection



Line Jump Left

A command to immediately turn 90 degrees to the left, move forward to a new line, then make a random turn to follow along the new line



Line Jump Straight

A mid-line command to continue straight after the line ends. The code will not work if Ozobot encounters an intersection before the line ends



Line Jump Right

A command to immediately turn 90 degrees to the right, move forward to a new line, then make a random turn to follow along the new line



U-Turn

A mid-line command to turn around 180 degrees and follow the same line in the opposite direction



U-Turn (Line End)

A line-end command to turn around 180 degrees and follow the line in the opposite direction



- Color Codes are short sequences of color that allow you to start coding completely screen-free!
- Color Codes are used to teach basic coding concepts, from cause-and-effect to debugging.
- They are recommended for anyone new to coding—teachers and students alike—and can be ideal for grades K-5.

A few tips:

- Lines and Color Codes should be drawn on plain white paper with black, blue, red, and green markers.
 - o You don't need a specific brand of marker, but you may want ones with a chisel tip.
 - o Ozobot has its own marker. Classic Crayola and Sharpies work well too.
 - For Sharpie markers, use the pastel shades of blue and green.
 - o Crayons and colored pencils are not recommended.
 - o We do not recommend the use of dry erase markers with Ozobots. Their ink can end up inside the bot's internal motor.
- Ozobots must be used indoors on a clean, flat surface.
 - o Evo and Bit rely on optical sensors to read Color Codes. Their optical sensors will not function outdoors in bright sunlight.



<https://ozobot.com>

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