ozobot:

WRITE YOUR NAME WITH OZOCODES

SUMMARY

Students are challenged to turn their name into a track for Ozobot with OzoCodes.

OVERVIEW

Critical thinking and planning are very important STEAM skills, and even the youngest Ozobot programmer can practice these skills with OzoCodes. This lesson tasks students with writing the letters of their name very clearly and place OzoCodes to help Ozobot walk from the beginning of the first letter to the end of the last letter.

LESSON OUTLINE

- 1. Students write their names clearly with Ozobot markers, and plan OzoCodes.
- 2. Students draw a final draft of their name with OzoCodes drawn in.

PREREQUISITES

Experience drawing lines and OzoCodes for Ozobot with markers.

GRADE LEVEL

Pre-K to 2nd

GROUPING Individuals or small groups

MATERIALS

- Ozobot Bit or Evo per group
- Markers, 1 set per group
- Blank paper and pencils
- Optional: White Avery label stickers
- Optional: Ozobot Tips http://files.ozobot.com/stem-education/ozobot-tips.pdf

DURATION

30 minutes

QUESTIONS ABOUT THIS LESSON?

Please contact us at ozoEdu@ozobot.com

LESSON

STEP 1 FIRST DRAFT

"Today, you will turn your first name into a track for Ozobot to walk on."

First, students write their first name in pencil large and clear.

"Be careful of tight corners, rounded shapes, and make everything big!"

Next, they cover the pencil lines with black marker lines that Ozobot can see clearly.

Test Ozobot on the letters. Does Ozobot get stuck on any thin lines, tight corners, or are lines too close together? Students can draw a second draft to test.

STEP 2 PLAN OZOCODES

"With a pencil, draw arrows on your name to show where OzoCodes should go."

Guidelines:

- 1. Ozobot needs to begin at the top of the first letter and end at the bottom of the last letter.
- 2. Not every segment of a letter needs to be walked on (this could be changed for more experienced students).
- 3. Add Cool Moves, color segments and speeds for fun, if there's room.
- 4. The track can end with a Win/Exit code.

Here is an example:

STEP 3 FINAL DRAFT WITH OZOCODES

Using this as a guide, students will draw a final draft of their name with pencil bubble letters and include empty places for the OzoCodes (below, left). Students can trace their track with a finger or pencil to try to find any problems with code placement or lines. When the track looks good, use markers over the draft. Make sure everyone remembers the rules, such as keeping codes far from intersections and not making the lines too thick thin. Check out the Ozobot Tips Sheet or (http://files.ozobot.com/stem-education/ozobot-tips.pdf) for a quick reference guide.



The first version of the final draft might not be perfect. Students can find problems by testing with Ozobot and try again. If they're available, white Avery stickers are very handy for covering bad codes or lines, and, they allow you to draw on them. The final version above needed some white stickers.

You might also notice that the letter 'b' needed to be straightened from the first draft for the code to work the best.

Students should test their map with Ozobots. When they're successful, students can demonstrate their tracks to the class.