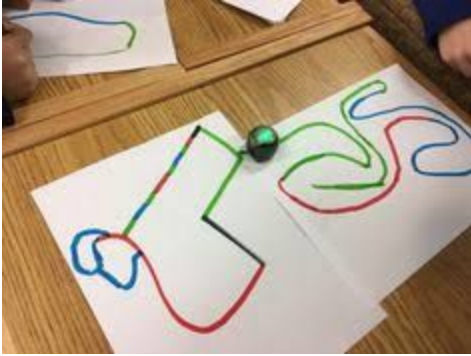


## Ozobot EVO

Ozobot is a miniature smart robot that can follow lines or roam around freely, detect colors, and can also be programmed. Your students will learn hands-on about robotics and programming while working on



STEM/STREAM applications. Ozobot teaches them in a fun way so they learn while being engaged and playing.



Ozobot can teach kids of many ages. Elementary school students can start programming Ozobot with visual color codes on a tablet using our free apps, or with markers on a piece of paper. Starting in elementary school and all the way to high school, students have the additional option to learn advanced programming skills with Ozobot Bit and OzoBlockly.

Ozobot can play on paper or on a tablet, so even if your school does not have access to tablets, you can still use Ozobot in your classroom. Many lessons, workshops and activities are meant for markers and paper only, and some lessons that suggest the use of a tablet may be adapted for markers and paper. However, if you are working with Ozobot Bit and OzoBlockly, you do need either a tablet or computer to program and load Ozobot.

### **Start with the Basics:**

Using the markers and the colour codes have EVO move to forward, stop and spin.

### **Resources:**

Quick Start: <https://ozobot.com/stem-education/education-getting-started>

Lessons: <https://portal.ozobot.com/lessons>

### **Think About:**

Were you able to get the WeDo to work for you? What would you try differently? How did you persevere with the task or did you simply change it?

# TEACHER ACTIVITY: Ozobot EVO

## OBJECTIVE:

To travel in a square using either drawn code or block code.

## PROCEDURE:

1. Calibrate your EVO using the instructions on the handout
2. Review the OzoCodes to determine the codes required to have your EVO travel to make a square.
3. Using the markers draw the code on the paper.

## Extension:

Use the Ozobot Evo app to block code the Evo to travel to make the shape of a square

Go to <http://ozoblockly.com/> to use the block coding.

- 1.1. Open ozoblocksly.com
- 1.2. Make sure the bit/evo tabs have EVO highlighted.
- 1.3. Drop blocks of code for Evo to follow.
- 1.4. Hold EVO over the plain white shape of EVO on the iPad.
- 1.5. Click EVO's power button once to turn it on.
- 1.6. Keep hovering, hold EVO's power button for 1\_\_2 seconds until the light changes slightly.
- 1.7. Tap the LOAD EVO button and set EVO down on the white shape of EVO.
  - 1.7.1. EVO's top light should be flashing green while it takes in the code.
  - 1.7.2. EVO will power off when done.
- 1.8. Push EVO's power button once to turn it on. Evo's top light will shine green and its front lights shine will shine white.
- 1.9. THEN Double push EVO's power button to activate the code. EVO **should** run your code.
- 1.10. REPEAT steps 2.1-2.9 every time you change the code.

*NOTE: if the EVO battery is low (flashing green when plugged in), you may experience difficulty running your code.*

### Sample Competency of a Dash and Dot Activity

Core Competency	<ul style="list-style-type: none"><li><input type="checkbox"/> "I can recount simple experiences and activities and tell something I learned."</li><li><input type="checkbox"/> "I can monitor my progress and adjust my actions to make sure I achieve what I want."</li><li><input type="checkbox"/> "I can persevere with challenging tasks."</li><li><input type="checkbox"/> "I analyzed our process and looked for ways (sequences) to make it better."</li></ul>
Curricular Competency	Ideating, Prototyping, Testing, Making, Sharing
Content	Computational Thinking, Robotics, Computers and Communications Devices