

OZOBOT

THE TINY SMART ROBOT



TASK – POLLEN LOVE WITH BEES!

Using Color Codes (or OzoBlockly) students will dress up their Ozobot like a bee. Then, they will recreate the bee's daily journey.

What you will need:

- 1 Evo or Bit Ozobot per group
- 1 Markers per group
- 1 Paper per group
- 1 Supplies to make bee costume per group
- 1 Tablet or computer (if using OzoBlockly) per group

Lesson Objectives

Explain the process of pollination orally and through a drawing

Student Practice (Student Facing Instructions):

- 1 Using the materials provided, create a bee costume to put on your Ozobot.
Goals: Create and attach a bee costume to Ozobot.
- 2 Create a map to tell a story of the day in the life of a bee. You must include drawings.
Goals: A map of the bee's journey.
- 3 If using Color Codes, draw a black line to guide your Ozobot bee. You must include at least two different Color Codes along the journey.

For OzoBlockly, code your Ozobot bee on your tablet or computer. You must include at least two block codes that are not directions.

Goals: Code the Ozobot bee's journey.



Direct Instruction (Teacher Facing Instructions):

- 1 Start by giving a quick explanation of the pollination process and background info on bees. How do bees pollinate flowers? What are some threats that bees face daily? Where do bees live? Why is pollination important?
- 2 Pair students up in groups (the number of students per group is up to you) and give them markers, a sheet of paper, and any materials you have for them to create a bee costume for their Ozobot. NOTE: If using OzoBlockly, also provide them with a tablet or computer.
- 3 Instruct the students to recreate a day in the life of a bee. They must create a map (if using Color Codes) that will guide their Ozo-Bee around. They must include pollination, a bee threat, and a beehive. NOTE: If using OzoBlockly, the students will still create a map, just not use black lines. They will code Ozobot to move using OzoBlockly.
- 4 The students must include at least two different Color Codes on their map, such as stopping at flowers to pollinate or speeding away from a bird.
- 5 You can have students present their maps to the class, or even record them.

The Ozobot Evo is an award-winning coding robot for the next generation of creators. It can be coded in two ways: online with OzoBlockly programming, and screen-free with Colour Code markers.



OzoBlockly is a graphical programming language based on Blockly which is used by a wide range of educational coding tools. What makes OzoBlockly different is the five progressive programming modes that it offers.

Whichever skill level you are using, OzoBlockly has a built-in help file and plenty of challenges to keep your students busy. Simply colour-print the challenge "maps" on A4 paper and follow the task instructions.



Suitable even for reception age children, Pre-Reader is the most basic mode in OzoBlockly. It has clear picture-based blocks that are large and easy to assemble.



Beginner mode extends from Pre-Reader with the introduction of simple loops. Blocks are now described with text titles as well as pictures.



Control Ozobot's ability to follow lines using the line navigation category. Intermediate mode also introduces some simple if/else logic blocks.



Advanced mode significantly expands Ozobot's programmability with the introduction of repeat, while and for loops, more logic, integers, variables and functions.



Take full control over Ozobot in Master mode with the addition of lists and arrays

To try Ozobot in your classroom for free please contact education@rapidonline.com for details on the free Robotics trial.