ozobat.

Kindergarten Pacing Guide



Overview

The **Elementary Vertical Pacing** is a simplified guide to the hundreds of free lessons available for you and your students. We created it for two primary purposes:

- A guide for schools and programs that plan on using Ozobot year-over-year with their students and need to pace out concepts and lessons. Coding skills build on one another each year to expose students to new content at increasing levels of complexity.
- A "playlist" of our best lessons, curated for you! This guide is a one-stop-shop for anyone looking to browse our most engaging lessons aligned to each grade-level.

A few notes:

- We have included **Color Codes** as the focus for Kinder, 1st and 2nd grade and **Blockly** as the focus for 3rd, 4th, and 5th grade for the purpose of pacing over several years of instruction with Ozobot. We have spread the introductory lessons for each coding type across two grade levels (Kinder and 1st for Color Codes; 3rd and 4th for Blockly) and provides additional skill-building for each coding type in 2nd (Color Codes) and 5th (Blockly).
- This progression is a suggestion for the purpose of pacing only; we know you know your students best! We believe Kindergartners can access Blockly in the same way we believe 5th graders can be engaged with Color Codes.



Lesson	Objective	Aligned K-2 Standard CSTA
1 Introduction to Ozobot: Get to Know Evo	Students will be able to identify and label the hardware components of Ozobot Evo.	CSTA.1A-CS-02: Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).
2 Introduction to Color Codes 01: Basic Training	Students will be able to demonstrate understanding of powering on/off and calibration. Students will be able to program Ozobot by drawing lines of color code.	CSTA.1A-CS-02: Use appropriate terminology in identifying and describing the function of common physical components of computing systems (hardware).
3 <u>Introduction to Color Codes 02:</u> <u>Speed</u>	Students will be able to draw color codes to program their bot to move at different speeds.	CSTA.1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.
4 Introduction to Color Codes 03: Special Moves & Win/Exit	Students will be able to program their bot to perform special moves with Color Codes and connect the input of a code with the output of a special move.	CSTA 1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes.
5 Introduction to Color Codes 04: Direction	Students will be able to program their Ozobot to turn a specifc direction at an intersection.	CSTA.1A-AP-10 Develop programs with sequences and simple loops, to express ideas or address a problem.

Lesson	Objective	Aligned K-2 Standard CSTA
6 Introduction to Color Codes 05: Skills Check 1 (Grades K-2)	Students will be able to apply their understanding of foundational color codes by reading about an intended outcome and programming their Ozobot accordingly.	CSTA 1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes.
7 <u>Write Your Name With</u> Color Codes	Students will plan color codes to write their name and iterate on their project to create a final draft.	CSTA 1A-AP-08 Model daily processes by creating and following algorithms (steps of step- by-step instructions) to complete tasks.
8 Loop My Day	Students will represent a loop by drawing a line to connect a sequence of events for their Ozobot to follow.	CSTA.1A-AP-10: Develop programs with sequences and simple loops, to express ideas or address a problem.
9 <u>Ozobot Race Track</u>	Students will learn how to use Color Codes to program Ozobot to move at diferent speeds.	CSTA 1A-AP-08 Model daily processes by creating and following algorithms (steps of step- by-step instructions) to complete tasks.
10 Polar Animals	Student will demonstrate their understanding of directionality and Color Coding by programming a track for Ozobot.	CSTA.1A-AP-10 Develop programs with sequences and simple loops, to express ideas or address a problem.

Content Integration Options					
STEAM	ELA	Math	Holiday	Seasonal	
How to Make Earth Happy	Preposition Party	Classify by Amount	<u>Ozobot</u> <u>Trick or Treat</u>	<u>Winter</u> Scavenger Hunt	
Trash Sorter	CVC Words	Classify by Size	Reinbot Landing Practice	Ozobot for President (Beginner)	
Winter Wonderland	My Favorite Holiday Dish	Trash Sorter	Hanukkah	Snowman Skip Counting	
	The Little Old Lady Who Wasn't Afraid of Anything	Bowling for Numbers	Kwanzaa	<u>100th Day</u> of School	
		Addition Storytime	Lunar New Year		
		<u>Snowman</u> Skip Counting	Run Turkey Run		
			Thanksgiving Feast		
			My Favorite Holiday Dish		
			Easter Egg Hunt		
			Spooky Patterns		