

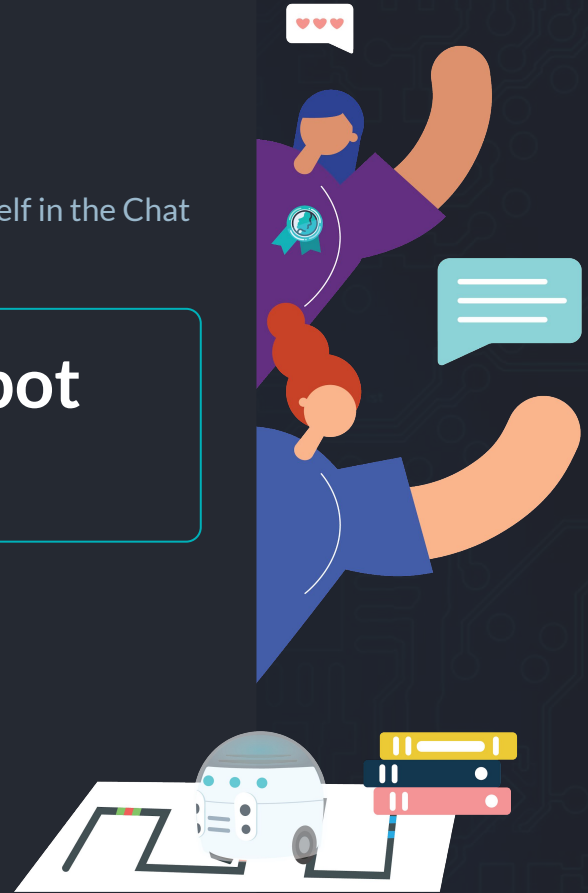
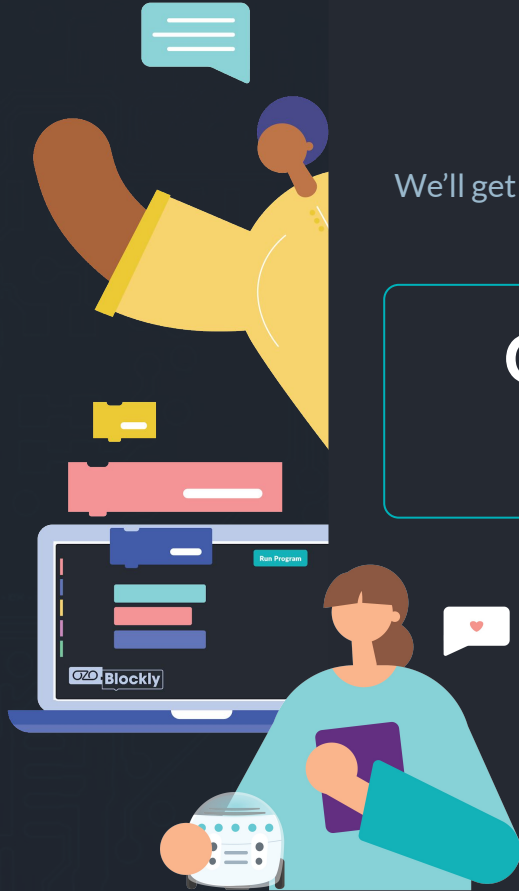
Update for Fall 2021

We'll get started soon. In the meantime, introduce yourself in the Chat

Tip: select "All Panelists and Attendees" in the Chat drop-down

Get to Know the Ozobot Lesson Library

ozobot®



Updates for Back 2 School 2021

Ozobot Classroom

Agenda

1

Housekeeping +
Recording

2

Ozobot Classroom
Updates

3

Pacing Guides

4

New Introduction
Lesson Series

5

Feedback Survey

6

Q & A

Your Hosts



Jen Maher

**Customer Experience & Curriculum
Developer**

Former MS Math and Science Teacher,
K-8 Dance Teacher
MEd Curriculum and Instruction



Melissa Toohey

Director of Education

Former Founding Coding, Engineering, and Design
Thinking Teacher at KIPP Ignite, Computer Science
Coach, & K-1 Teacher UCLA Educational Leadership
Program, Ed.D



Natalie Sanchez

Curriculum Developer

Former Professional Development Specialist,
Computer Science Immersion Coach & Elementary
Education Teacher

Your Hosts



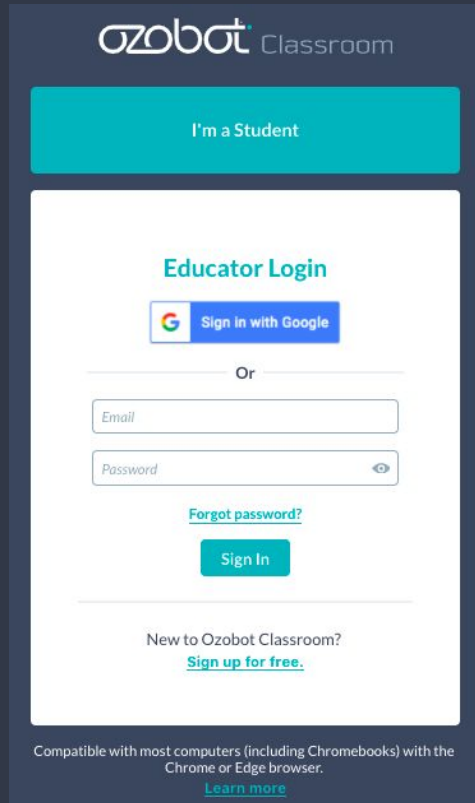
Melissa Toohey
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Former Founding Coding, Engineering, and Design Thinking
Teacher at KIPP Ignite, Computer Science Coach, & K-1 Teacher
UCLA Educational Leadership Program, Ed.D



Jen Maher
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The screenshot shows the Ozobot Classroom login interface. At the top, the 'ozobot Classroom' logo is displayed. Below it is a teal button labeled 'I'm a Student'. The main login area is white and contains the 'Educator Login' heading. A 'Sign in with Google' button with the Google logo is prominent. Below this, the text 'Or' is centered. There are input fields for 'Email' and 'Password', with a toggle icon for the password field. A link for 'Forgot password?' is located below the password field. A teal 'Sign In' button is at the bottom of the login section. Below the login section, the text 'New to Ozobot Classroom?' is followed by a link 'Sign up for free.'. At the very bottom, a note states 'Compatible with most computers (including Chromebooks) with the Chrome or Edge browser.' and a link 'Learn more'.

ozobot Classroom

I'm a Student

Educator Login

Sign in with Google

Or

Email

Password

[Forgot password?](#)

Sign In

New to Ozobot Classroom?

[Sign up for free.](#)

Compatible with most computers (including Chromebooks) with the Chrome or Edge browser.

[Learn more](#)

Create your free Ozobot Classroom account

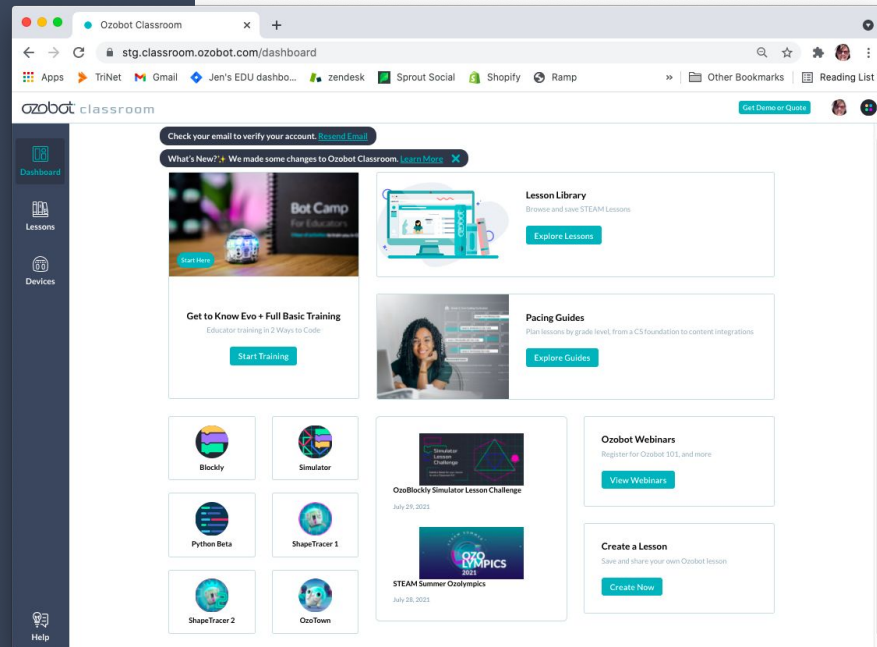
1. Go to classroom.ozobot.com
2. Click “Sign in with Google”

classroom.ozobot.com

Ozobot Classroom: Dashboard

Find the Lesson Library, Pacing Guides, Webinars, Links to Ozobot Challenges, and Create a Lesson

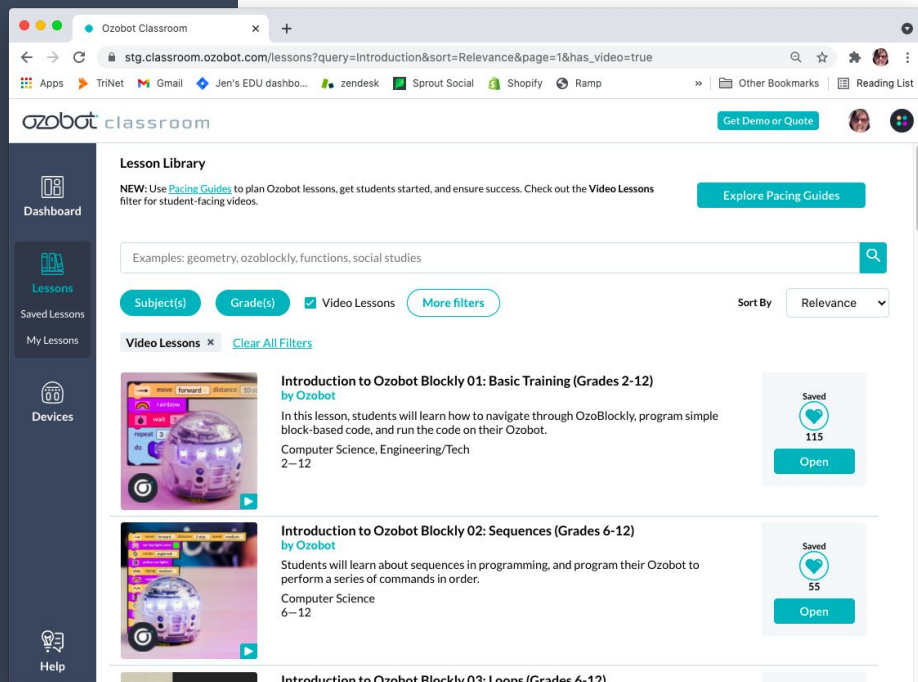
1. Lesson Library to find lessons.
2. Pacing Guides to assist in planning.
3. Webinar Schedule - teaching help and other topics
4. Create a lesson with the Lesson Creator Tool.
5. Links to Ozobot Blockly, Python Beta, and Challenges.

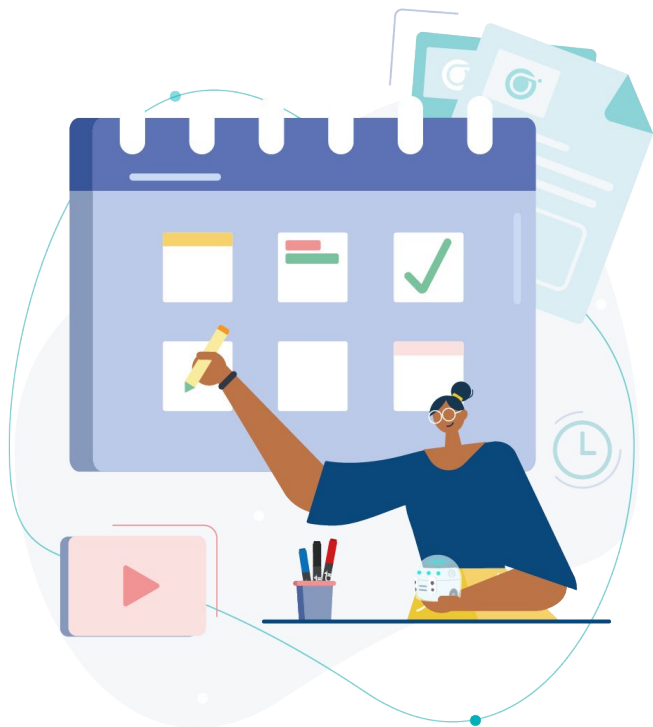


Ozobot Classroom: Lesson Library

Find content or grade specific material.
Assign lessons to your students.

1. Click on “Lessons”.
2. Filter search by Subject, Grade, or Video Lessons.
3. Click “Open” to check out the lesson.
4. Click “Save” to add to Saved Lessons.
5. Open the lesson, click “Share with Students” and send students the link to the lesson.





Pacing Guide | Grade 4

This guide makes it easy to plan and pace your Ozobot lessons.

We recommend all students begin with the Introduction to Color Codes and Introduction to Blockly series for a foundation in CS, before moving into optional content-integrated lessons for math, ELA, or STEAM. This pacing guide allows for flexibility.

Lesson pacing can include a regular cadence of:

- one lesson per week for a year
- 2-3 lessons per week for a semester or unit

Length of each Lesson: 45-60 min.

Standards: CSTA, NGSS, CCSS Math/ELA

Pacing Guide | Grade 4

	Lesson Title & Link	Description	Primary Academic Standard
<input type="checkbox"/> 1	Introduction to Ozobot: Get to Know Evo	Students identify and name 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).
<input type="checkbox"/> 2	Introduction to Color Codes 01: Basic Training	Students learn the basics of Ozobot's line-following capabilities.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.
<input type="checkbox"/> 3	Introduction to Color Codes 02: Speed	Students learn the various speed Color Codes to program their bot to move at different speeds.	CSTA.1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes.
<input type="checkbox"/> 4	Introduction to Color Codes 03: Special Moves & Win/Exit	Students learn how to program their bot to perform special moves with Color Codes.	CSTA.1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes.
<input type="checkbox"/> 5	Introduction to Color Codes 04: Direction	Students learn the directional Color Codes to program their bot to move in a specific direction.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.
<input type="checkbox"/> 6	Introduction to Color Codes 05: Skills Check 1 (Grades 3-5)	Students apply the concepts and skills they learned in previous lessons to program their bot to complete a challenge.	CSTA.1A-AP-12 Develop plans that describe a program's sequence of events, goals, and expected outcomes.
<input type="checkbox"/> 7	Introduction to Color Codes 06: Timers	Students learn about the timer Color Codes to complete a challenge.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.
<input type="checkbox"/> 8	Introduction to Color Codes 07: Line Switch	Students learn about the line switch Color Codes to complete a challenge.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.



Pacing Guide | Grade 4

	Lesson Title & Link	Description	Primary Academic Standard
<input type="checkbox"/> 9	Introduction to Color Codes 08: Counters	Students learn about the counters Color Codes to complete a challenge.	CSTA.1B-AP-11 Decompose (break down) problems into smaller, manageable subproblems to facilitate the program development process.
<input type="checkbox"/> 10	Introduction to Color Codes 09: Skills Check 2	Students apply the concepts and skills they learned in all lessons to program their bot to complete a challenge.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.
<input type="checkbox"/> 11	Energy Road Trip	In this STEAM-integrated lesson, students use Color Codes to model changes in energy.	NGSS.4-PS3-1 Energy-Use evidence to construct an explanation relating the speed of an object to the energy of that object.
<input type="checkbox"/> 12	Ozobot's Trip with Prepositions	In this ELA-integrated lesson, students use Color Codes to illustrate prepositions in a written story.	CCSS.ELA-LITERACY.L.4.1.E Form and use prepositional phrases.
<input type="checkbox"/> 13	ID the Structure	In this ELA-integrated lesson, students use Color Codes to identify structures in writing samples.	CCSS.ELA-LITERACY.RI.4.5 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
<input type="checkbox"/> 14	Division Maze	In this math-integrated lesson, students use Color Codes to complete a maze by solving division problems.	CCSS.MATH.CONTENT.4.NBT.B.6 Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division.
<input type="checkbox"/> 15	All About Symmetry	In this math-integrated lesson, students use Color Codes to determine if shapes are symmetric or asymmetric.	CCSS.MATH.CONTENT.4.G.A.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.
<input type="checkbox"/> 16	Introduction to Ozobot Blockly 01: Basic Training	Students learn the basics of how to navigate Ozobot Blockly, program a simple code, and run it on their bot.	CSTA.1B-AP-10 Create programs that include sequences, events, loops, and conditionals.



Pacing Guide | Grade 4

	Lesson Title & Link	Description	Primary Academic Standard
<input type="checkbox"/> 17	Introduction to Ozobot Blockly 02: Sequences	Students learn to program a simple sequence in Ozobot Blockly.	CSTA.1B-AP-10 Create programs that include sequences, events, loops, and conditionals.
<input type="checkbox"/> 18	Introduction to Ozobot Blockly 03: Loops	Students learn to program with loops to create a dance sequence.	CSTA.1B-AP-10 Create programs that include sequences, events, loops, and conditionals.
<input type="checkbox"/> 19	Introduction to Ozobot Blockly 04: Debugging	Students learn to use debugging skills by building a program and fixing errors.	CSTA.1B-AP-15 Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended.
<input type="checkbox"/> 20	Introduction to Ozobot Blockly 05: Skills Check 1	Students apply the concepts and skills they learned in previous lessons to program their bot to complete a challenge.	CSTA.1B-AP-15 CSTA 1B-AP-15 Test and debug (identify and fix errors) a program or algorithm to ensure it runs as intended.
<input type="checkbox"/> 21	Introduction to Ozobot Blockly 06: Conditionals	Students learn to program with conditionals to play a game of tag.	CSTA.1B-AP-10 Create programs that include sequences, events, loops, and conditionals.
<input type="checkbox"/> 22	Introduction to Ozobot Blockly 07: Variables	Students learn to program with variables using the color sensor.	CSTA.1B-AP-09 Create programs that use variables to store and modify data.
<input type="checkbox"/> 23	Introduction to Ozobot Blockly 08: Skills Check 2	Students apply the concepts and skills they learned in previous lessons to program their bot to complete a challenge.	CSTA.1B-AP-09 Create programs that use variables to store and modify data.
<input type="checkbox"/> 24	Introduction to Ozobot Blockly 09: Line Navigation	Students learn about the line navigation blocks to program their bot to move from location to location.	CSTA.1B-CS-02 Model how computer hardware and software work together as a system to accomplish tasks.



Pacing Guide | Grade 4

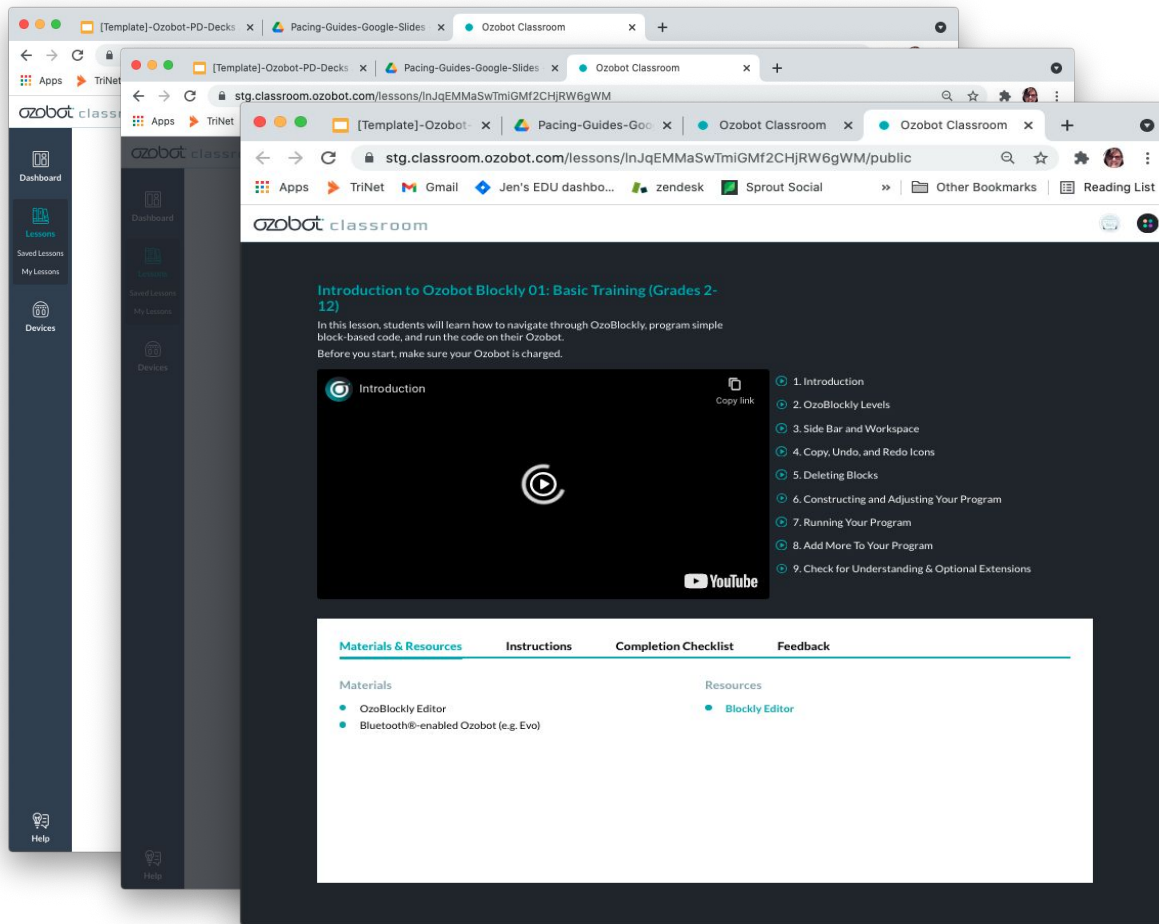
	Lesson Title & Link	Description	Primary Academic Standard
<input type="checkbox"/> 25	Fact Families Coming Soon!	In this math-integrated lesson, students use Ozobot Blockly to program their bot to choose two random numbers and an operator and create four math facts for each group of numbers.	CCSS.MATH.CONTENT.4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number.
<input type="checkbox"/> 26	Multiples Coming Soon!	In this math-integrated lesson, students use Ozobot Blockly to program their bot to randomly choose numbers 2-12. Students write the multiples of those numbers, then, program their bot to say multiples to help them check their work.	CCSS.MATH.CONTENT.4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.
<input type="checkbox"/> 27	Prime and Composite Numbers Coming Soon!	In this math-integrated lesson, students use their knowledge of multiples and their Ozobot's program to say multiples to apply the Sieve of Eratosthenes to discover prime numbers between 1 and 100.	CCSS.MATH.CONTENT.4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.
<input type="checkbox"/> 28	Factor Magic Coming Soon!	In this math-integrated lesson, students use Ozobot Blockly to program their bot to help them discover the factors of a number.	CCSS.MATH.CONTENT.4.OA.B.4 Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.
<input type="checkbox"/> 29	OzoBlockly ELA/STEAM Integration Coming Soon!	More content-integrated lessons are currently being developed. Visit the Ozobot Classroom Lesson Library to find the latest lessons.	Standard Coming Soon!
<input type="checkbox"/> 30	OzoBlockly ELA/STEAM Integration Coming Soon!		Standard Coming Soon!
<input type="checkbox"/> 31	OzoBlockly ELA/STEAM Integration Coming Soon!		Standard Coming Soon!



Content Integration Options | Grade 4

STEAM	ELA	Math	Holiday
Energy Road Trip	Ozobot's Trip with Prepositions	Division Maze	Ozobot for President! (Beginner)
Patterns and Waves Part 1	ID the Structure	Division Race	Ozobot for President! (Advanced)
Patterns and Waves Part 2	What's the Word Relay	Division Race with Remainders	Ozobot Trick or Treat
Patterns and Waves Part 3	Ozobot's Day of Similes	All About Symmetry	Holiday Series: Thanksgiving/Gratitude Party
		Fact Families	Holiday Series: Reinbot Landing Practice
		Multiples	Holiday Series: Hanukkah
		Factor Magic	Holiday Series: Kwanzaa
		Prime and Composite Numbers	Holiday Series: Lunar New Year
			Black History: 2-5 Grade

Find these lessons, plus content from the Ozobot community, in **Ozobot Classroom**: classroom.ozobot.com



Assigning a Lesson

1. Open the lesson.
2. Click “Share with Students”
3. Send students the link to the lesson using your LMS or email.

To view what your students see, click on “Open Lesson As Student”

Ozobot Classroom: Devices

Update and rename your bots

1. When using Classroom Communicator for multiple bots, connect the Communicator first, then bots will populate.
2. Bot will flash when renamed or selected.
3. Update your bots when first received.

Ozobot Classroom

stg.classroom.ozobot.com/devices

Devices

How To Use Devices:

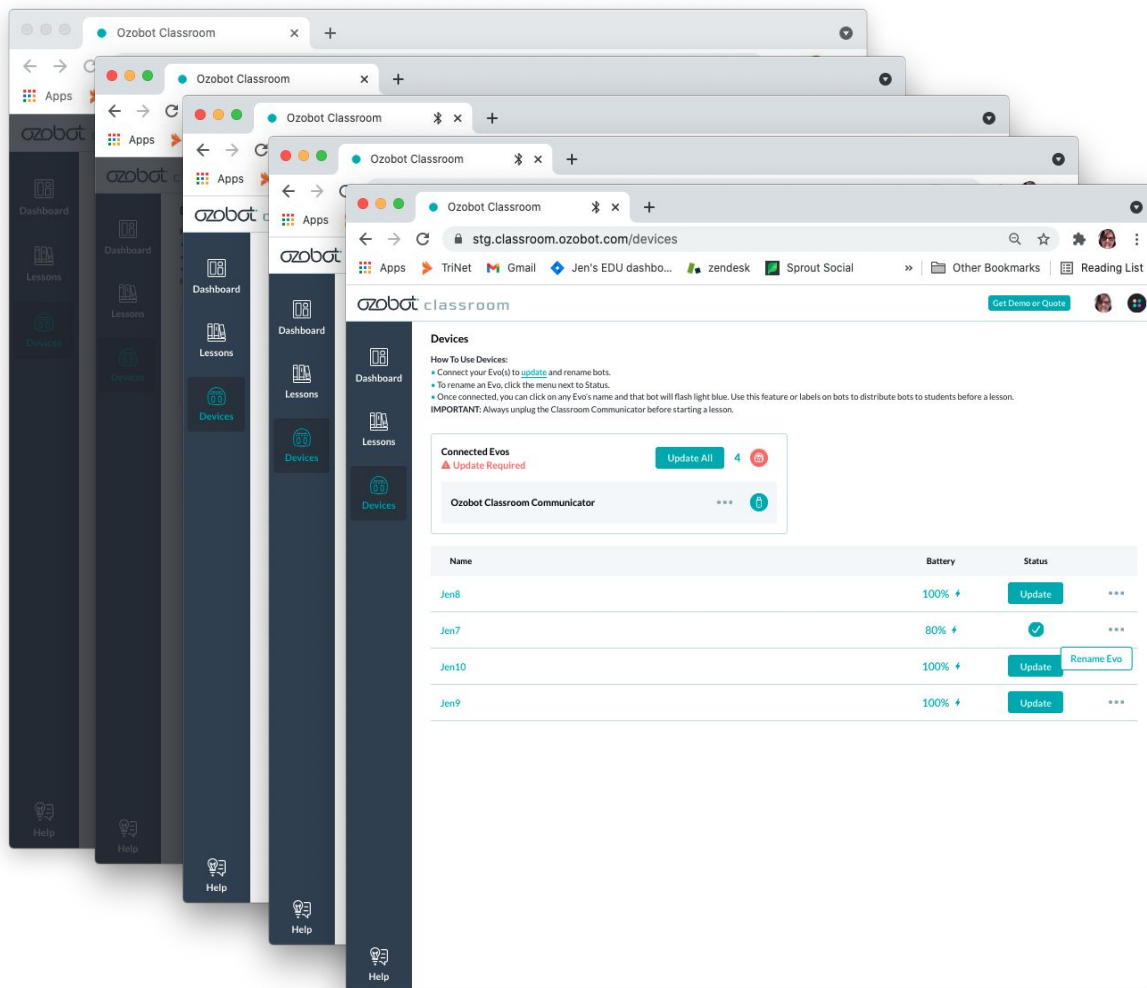
- Connect your Evo(s) to [update](#) and rename bots.
- To rename an Evo, click the menu next to Status.
- Once connected, you can click on any Evo's name and that bot will flash light blue. Use this feature or labels on bots to distribute bots to students before a lesson.

IMPORTANT: Always unplug the Classroom Communicator before starting a lesson.

Connect Evos

Single Evo [Pair Now](#) Multiple Evos + Classroom Communicator [Pair Now](#)

Name	Battery	Status
Evo		Not Connected



Update and Rename Evo

- Pair OCC first
- Bots that are powered on or plugged in will populate.
- When updating top LED will be blue
- When finished updating, top LED will turn green.
- Select a bot, front LEDs will flash blue.

Hint: While updating, stay on the update page. If you navigate away from it or your computer goes to sleep, the update will terminate.

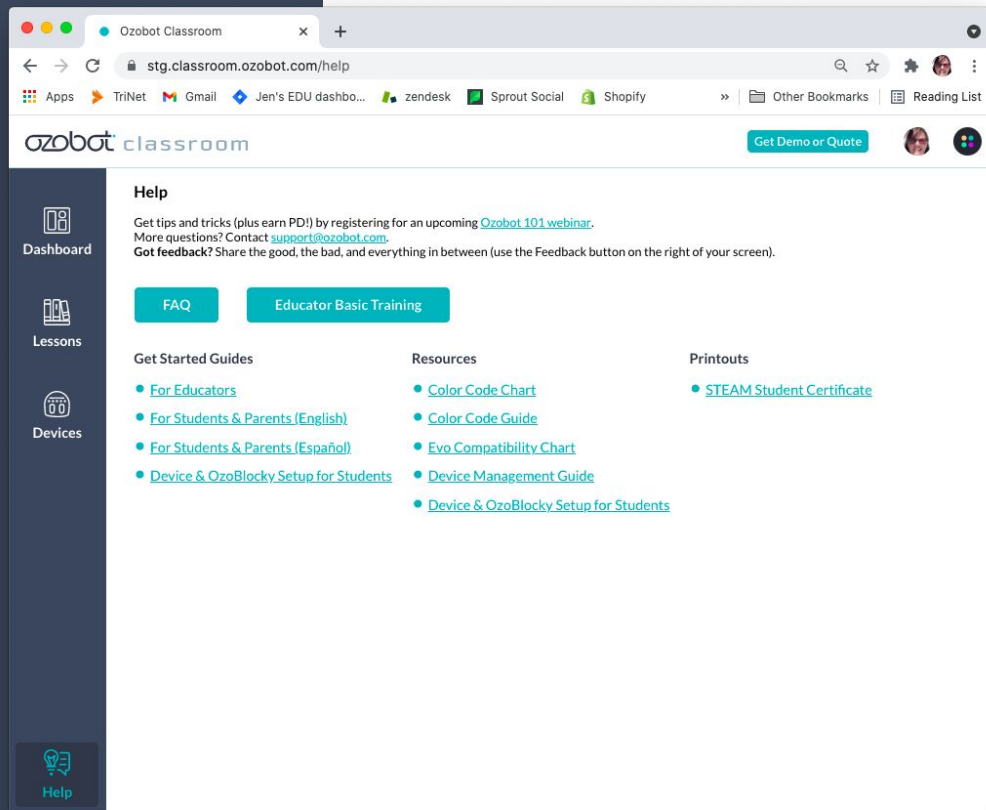
[Device Management Videos](#)

Ozobot Classroom: Support Resources

Find additional support in the Help section of Classroom.

- FAQ
- Get Started Guides
- Resources
- Certificate for printing

[Device Management Videos](#)



Video Lessons

Overview

[Classroom.ozobot.com](https://classroom.ozobot.com)

STEAM in Hybrid, Remote, or In-Person Settings

All Lessons include:

- Lesson Plan
- Instructional Video
- 45 minutes
- Student Activity Guide
- Student Activity Sheets
- Teacher Answer Key/Potential Solution

Video Lessons

Overview

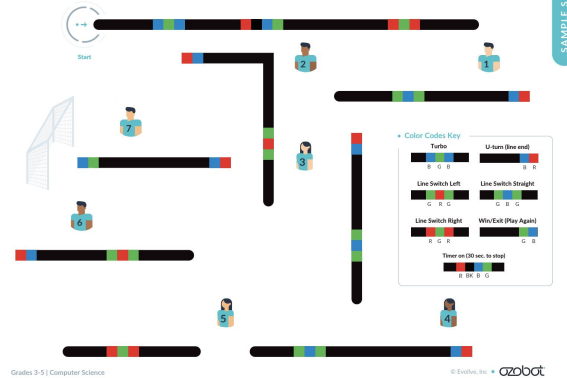
Classroom.Ozobot.com

- **2-8th Grade lessons**
ELA, Science, and CSTA/ISTE standards aligned
 - **Each lesson will be aligned with at least**
 - 1 ISTE Standard
 - 1 CSTA Standard
 - 1 Content Standard

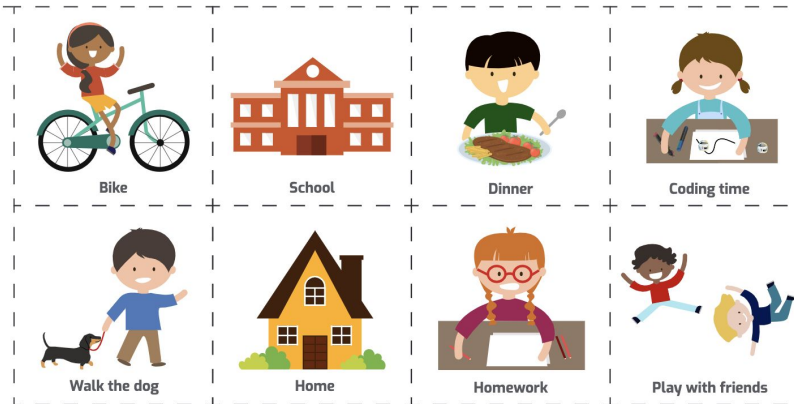
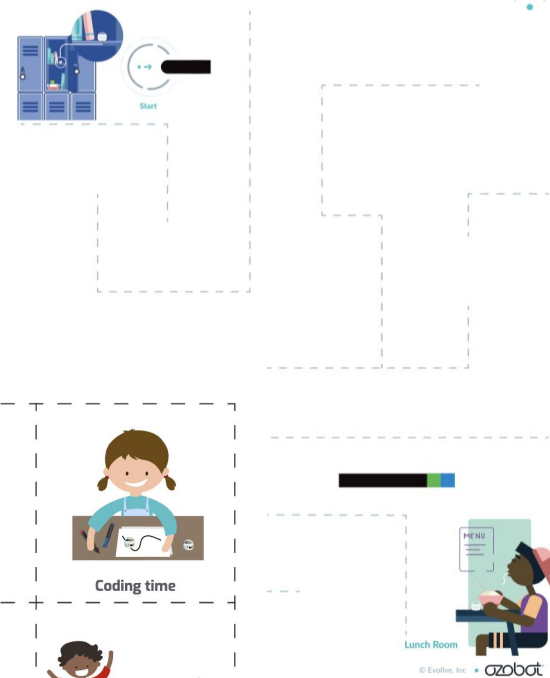
Representation Matters!

Diversity and Inclusion
in all content

Introduction to Color Codes 09: Skills Check 2



Engineering Design Process



Teacher and Student Instructions

LESSON PLAN | FOR EDUCATORS

Introduction to Ozobot Blockly 01: Basic Training (Grades 2-12)

Author: Ozobot



Grades: 2–12
Subject(s): Computer Science, Engineering/Tech
Pre-Reader/ESL-Friendly? No

Compatible Bot(s): Evo
Coding Method: Ozoblockly

Quick Summary:

In this lesson, students will learn how to navigate through Ozoblockly, program simple block-based code, and run the code on their Ozobot.

Duration: 45 min

Objectives & Outcomes

- 1 Student will be able to build programs in Ozoblockly using blocks from the categories: Loops, Sounds, Timing, Movement, and Light Effects.
- 2 Student will be able to run their block-based code on any Bluetooth®-enabled Ozobot (e.g. Evo).
- 3 Student will be able to navigate through and select a level in Ozoblockly.
- 4 Student will be able to use the delete, duplicate, undo, and redo icons in Ozoblockly.

Preparation

Teacher Materials & Digital Resources

- [ozobot-6-12-Introduction-to-Ozoblockly-Basic-Train...](#)
- [6-12GR-CS: Introduction to Ozoblockly 01: Basic Training](#)
- [solution-ozobot-6-12-Introduction-to-Ozoblockly-B...](#)
- [Introduction to Ozoblockly 01: Basic Training \[Full\]](#)

Video

- [6-12GR-CS: Introduction to Ozoblockly 01: Basic Training](#)
- [Introduction to Ozoblockly 01: Basic Training \[Full\]](#)

Student Materials

- 1 Ozoblockly Editor per student
- 1 Bluetooth®-enabled Ozobot (e.g. Evo) per student

- [Blockly Editor](#)

Background Knowledge

Completed lesson

- Introduction to Ozobot: Get to Know Evo <https://classroom.ozobot.com/lessons/tnHs4KD0kXTgueqAiT7p7QT3>

ACTIVITY GUIDE | FOR STUDENTS

Introduction to Ozobot Blockly 01: Basic Training (Grades 2-12)

What We'll Cover:

- 1 We'll be able to build programs in Ozoblockly using blocks from the categories: Loops, Sounds, Timing, Movement, and Light Effects.
- 2 We'll be able to run their block-based code on any Bluetooth®-enabled Ozobot (e.g. Evo).
- 3 We'll be able to navigate through and select a level in Ozoblockly.
- 4 We'll be able to use the delete, duplicate, undo, and redo icons in Ozoblockly.

Materials:

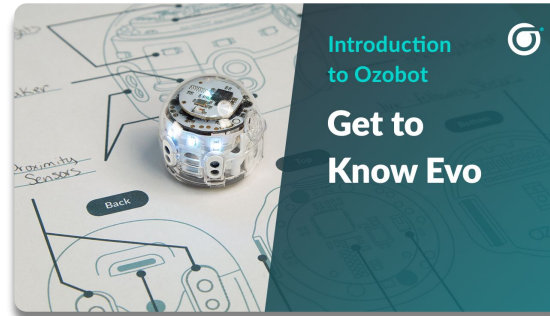
- 1 Ozoblockly Editor per student
- [Blockly Editor](#)
- 1 Bluetooth®-enabled Ozobot (e.g. Evo) per student

Activity Instructions:

- 1 Today, we will learn how to use Ozoblockly! Before we dive in, let's talk about some vocabulary: Code and Program. Let's define the terms: Code: Instructions written in a programming language. Program: A complete set of instructions written in code that the computer executes to achieve a particular objective. What's the difference? Think of it this way, pieces of code are combined to create programs. Today, you will use Ozoblockly to build block-based programs. Ozoblockly is a block-based editor. This editor allows you to create programs for Ozobot using blocks that can be selected, dragged, dropped, and connected together like puzzle pieces. Programs written with Ozoblockly can be sent to Ozobot Evo via Bluetooth. This means Ozoblockly sends the program wirelessly to Ozobot, and Ozobot can run the program.

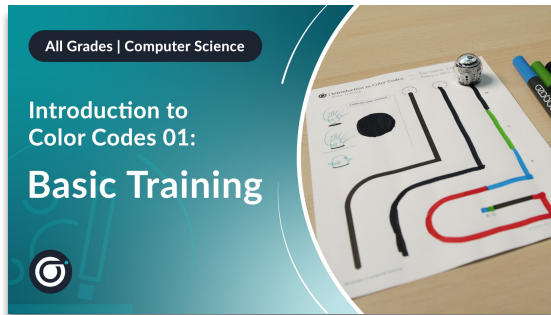
Introduction: youtu.be/KPpFY0oabUK

The Basics



[Introduction to Ozobot: Get to Know Evo](#)

[Evo Diagram](#)

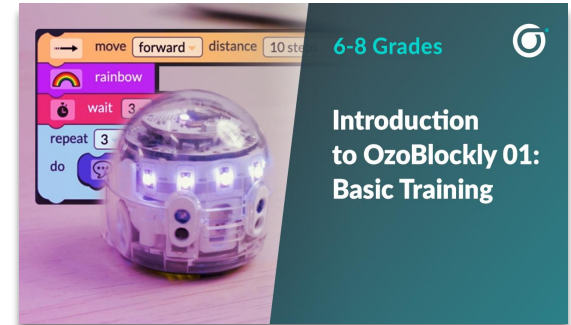


[Intro to Color Codes 01: Basic Training](#)

[Activity Sheets](#)

[Intro to Ozobot Blockly 01: Basic Training](#)

[Activity Sheets](#)



Video Lessons

Grades K-12

classroom.ozobot.com

Color Codes

1. Introduction to Color Codes 01: Basic Training
2. Introduction to Color Codes 02: Speed
3. Introduction to Color Codes 03: Special Moves and Win
4. Introduction to Color Codes 04: Direction
5. Introduction to Color Codes 05: Skills Check 1 (by grade)
6. Introduction to Color Codes 06: Timers
7. Introduction to Color Codes 07: Line Switch
8. Introduction to Color Codes 08: Counters
9. Introduction to Color Codes 09: Skills Check 2 (by grade)

Video Lessons

Grades 2-5

classroom.ozobot.com

OzoBlockly (Grades 2-5)

1. Introduction to Ozobot Blockly 01: Basic Training
2. Introduction to Ozobot Blockly 02: Sequences
3. Introduction to Ozobot Blockly 03: Loops
4. Introduction to Ozobot Blockly 04: Debugging
5. Introduction to Ozobot Blockly 05: Skills Check 1
6. Introduction to Ozobot Blockly 06: Conditionals
7. Introduction to Ozobot Blockly 07: Variables
8. Introduction to Ozobot Blockly 08: Skills Check 2

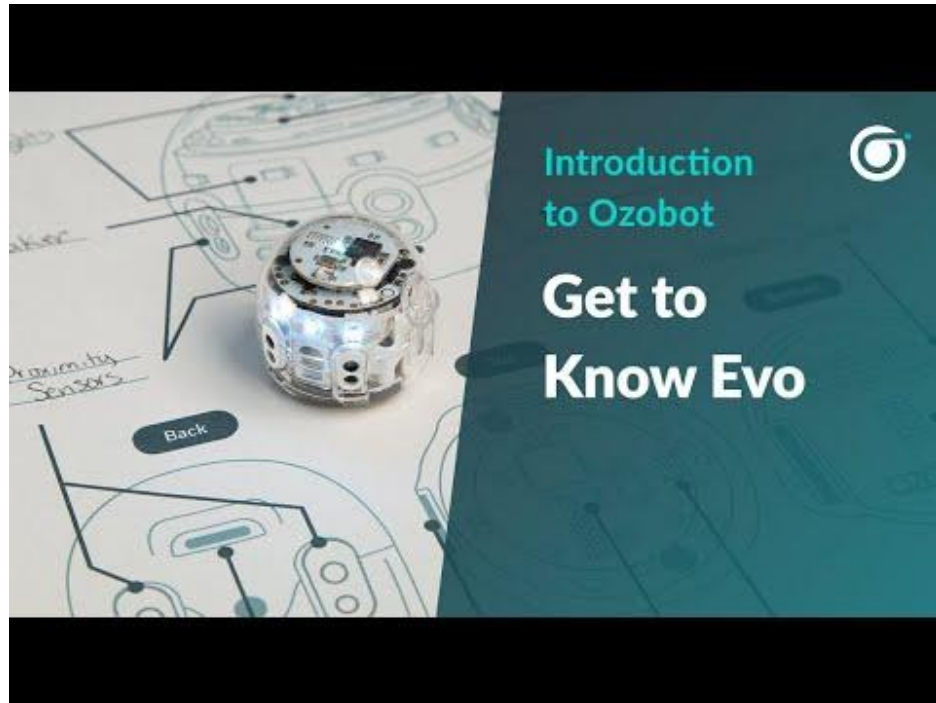
Video Lessons

Grades 6-8

classroom.ozobot.com

OzoBlockly (Grades 6-8)

1. Introduction to Ozobot Blockly 01: Basic Training
2. Introduction to Ozobot Blockly 02: Sequences
3. Introduction to Ozobot Blockly 03: Loops
4. Introduction to Ozobot Blockly 04: Conditionals
5. Introduction to Ozobot Blockly 05: Skills Check 1
6. Introduction to Ozobot Blockly 06: Variables
7. Introduction to Ozobot Blockly 07: Line Following
8. Introduction to Ozobot Blockly 08: Debugging
9. Introduction to Ozobot Blockly 09: Skills Check 2

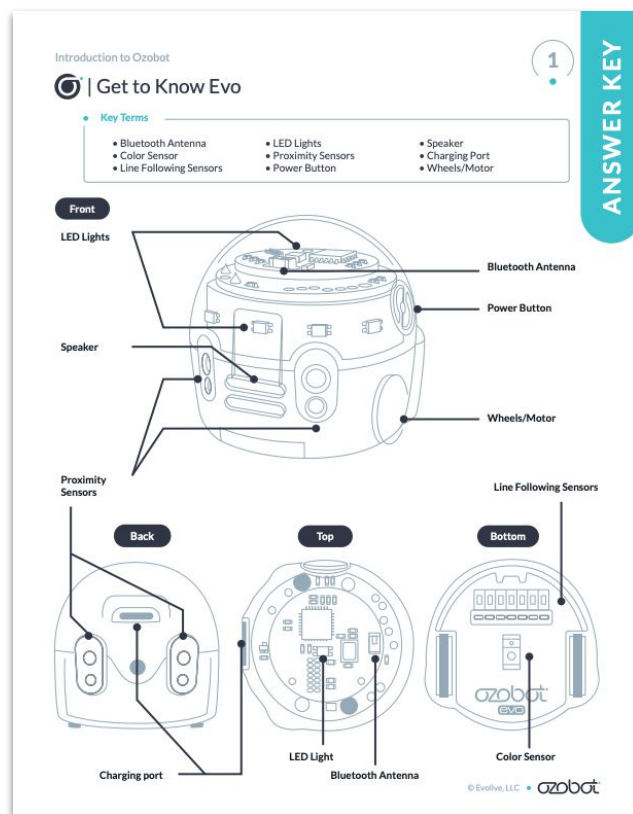
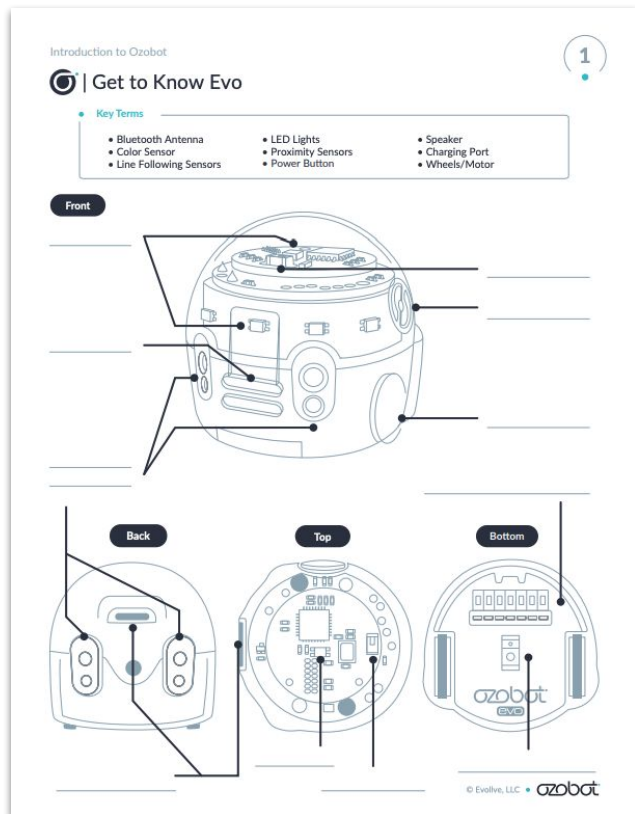


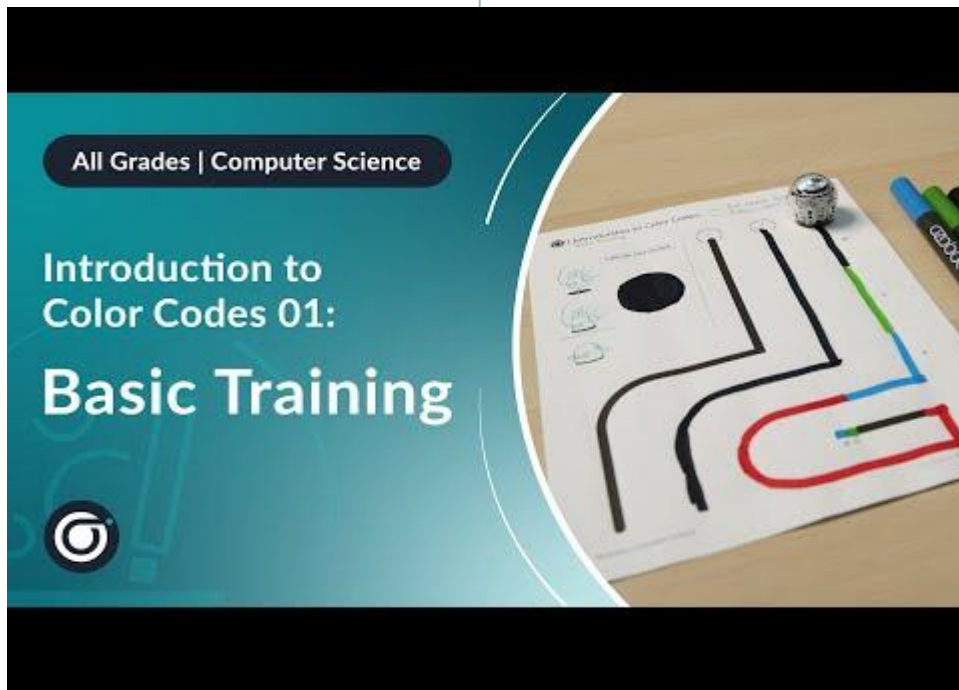
Introduction to Ozobot: Get to Know Evo

Objective:

Students will identify and label
Evo's hardware components.

Introduction to Ozobot: Get to Know Evo





Introduction to Color Codes 01: Basic Training

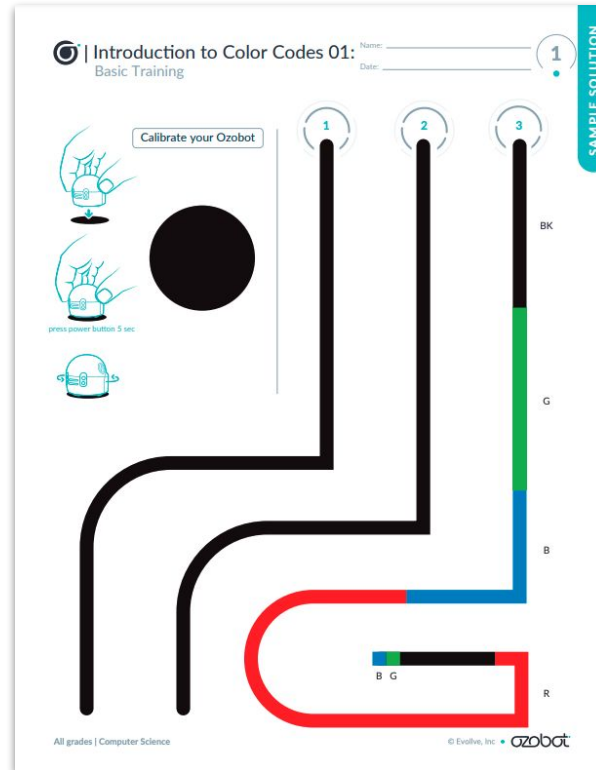
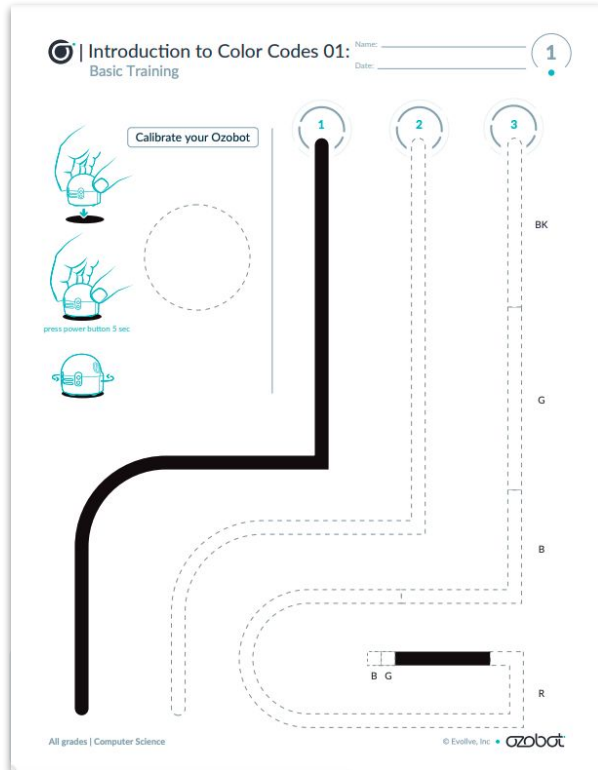
Objective:

Students will be able to calibrate their bot and draw lines for their bot to follow.

[Lesson Link](#)

Introduction to Color Codes 01: Basic Training

Calibrate your Ozobot, draw black lines and lines with color.



[Activity Sheets](#)

Introduction to Color Codes 01: Basic Training

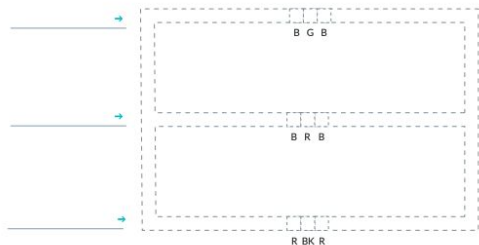
Symmetric and Asymmetric Color Codes

Introduction to Color Codes 01: Basic Training

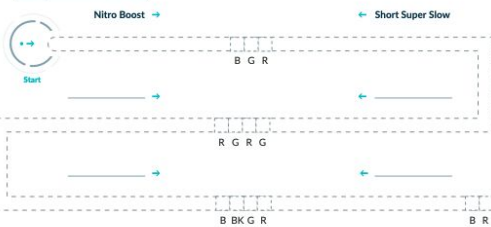
2

Symmetric Codes

The Color Code programs my bot to:



Asymmetric Codes



All grades | Computer Science

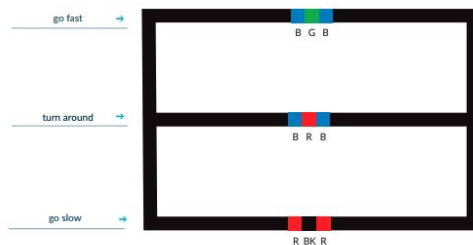
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Introduction to Color Codes 01: Basic Training

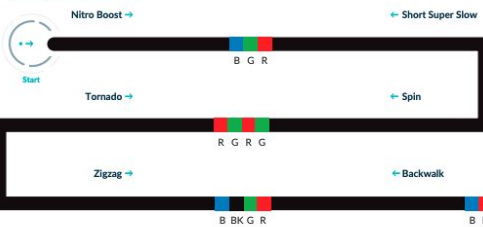
2

Symmetric Codes

The Color Code programs my bot to:



Asymmetric Codes



All grades | Computer Science

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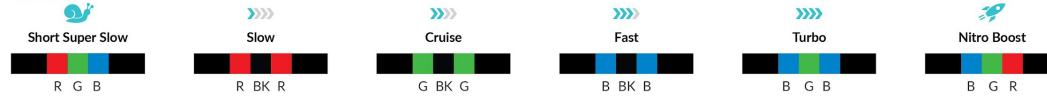
SAMPLE SOLUTION

[Activity Sheets](#)

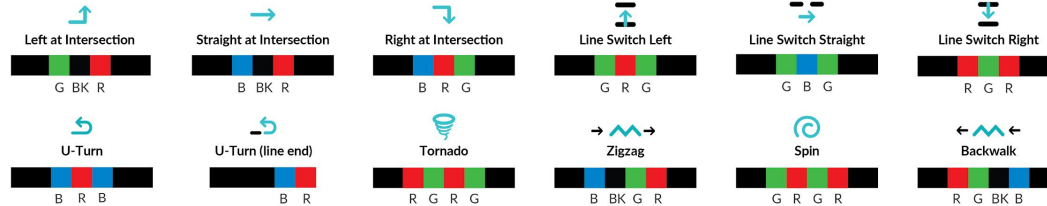
Introduction to Color Codes 01: Basic Training

Color Codes | Chart

Speed



Direction & Special Moves



Timers



Wins/Exits



Counters See reverse for definitions





Introduction to Ozobot Blockly 01: Basic Training Grades (2-12)

Objective:

Students will learn how to navigate through OzoBlockly, program simple block-based code, and run the code on their Ozobot.

[Lesson Link](#)

●

We value your feedback!

[Ozobot Implementation Survey](#)

Q & A

15 min

Wrap-Up

If you have any questions or comments, email:
support@ozobot.com or your Account Executive

To receive updates, [Opt-in on Ozobot.com](#)

Access today's Video Lessons in Ozobot Classroom:

[Introduction to Ozobot: Get to Know Evo](#)

[Introduction to Color Codes 01: Basic Training](#)

[Introduction to Ozobot Blockly 01: Basic Training](#)

Recap on how to use the lessons on the Ozobot Blog:

[ozobot.com/blog](https://www.ozobot.com/blog)

Thank You



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