

# Welcome! We'll begin shortly.

If you'd like to participate in the hands-on activity, please set up your device now.

## Please join our VEXnet Server

**Network Name:**  
Main Stage

**Password:**  
vex12345

Once connected, visit  
[vexnet.com](https://vexnet.com)

**VEX**  
VEXnet Server

Everything you need to teach with VEX can be accessed directly from this local server. The VEXnet Server is ideal for classrooms, workshops, and events where internet access is limited.

Select a platform tile below to access VEXcode, curriculum, build instructions, and resources from the VEX Library and API Reference.

Certificate warning: VEXnet SSL cert(s) are 14 days from expiring. Expires: 5/7/2026, 6:02:22 PM. Plan renewal.

 <p>VEX 123</p>	 <p>VEX GO</p>	 <p>VEX AIM</p>	 <p>VEX IQ 1st gen</p>	 <p>VEX IQ 2nd gen</p>
 <p>VEX EXP</p>	 <p>VEX VS</p>	 <p>VEX CTE Workcell</p>	 <p>VEX AIR</p>	 <p>VEX CODE VR</p>

1. Select VEXcode VR on the VEXnet Server home screen
2. Open VEXcode VR (web-based)
3. Login with code: EDUCATOR



VEXcode

Code your robot with VEXcode.

[Open VEXcode VR \(web-based\)](#)

The image shows a screenshot of the VEXcode website. At the top, there is a brown header with the text "VEXcode" in white. Below the header, the text "Code your robot with VEXcode." is displayed. At the bottom, there is a blue button with white text that says "Open VEXcode VR (web-based)". The button is highlighted with a red rectangular border.

Login

Enter Class Code or Team Number:

EDUCATOR

Submit

The image shows a screenshot of a login form. At the top, there is a title "Login" and a close button (an 'X' icon). Below the title, the text "Enter Class Code or Team Number:" is displayed. There is a text input field containing the code "EDUCATOR". Below the input field is a blue button with white text that says "Submit". Both the input field and the button are highlighted with red rectangular borders.

★ *Member of* ★



**Learning  
Cabinet**

[learningcabinet.org](https://learningcabinet.org)

**VEXcode VR** has been officially included in the **Learning Cabinet** – a curated discovery platform for EdTech solutions that demonstrate evidence of impact and potential to scale.

The Learning Cabinet is guided by the EdTech for Good Framework, created by **UNICEF**, the **Ministry for Foreign Affairs of Finland**, **Arm**, and the **Asian Development Bank (ADB)**, in collaboration with global partners.

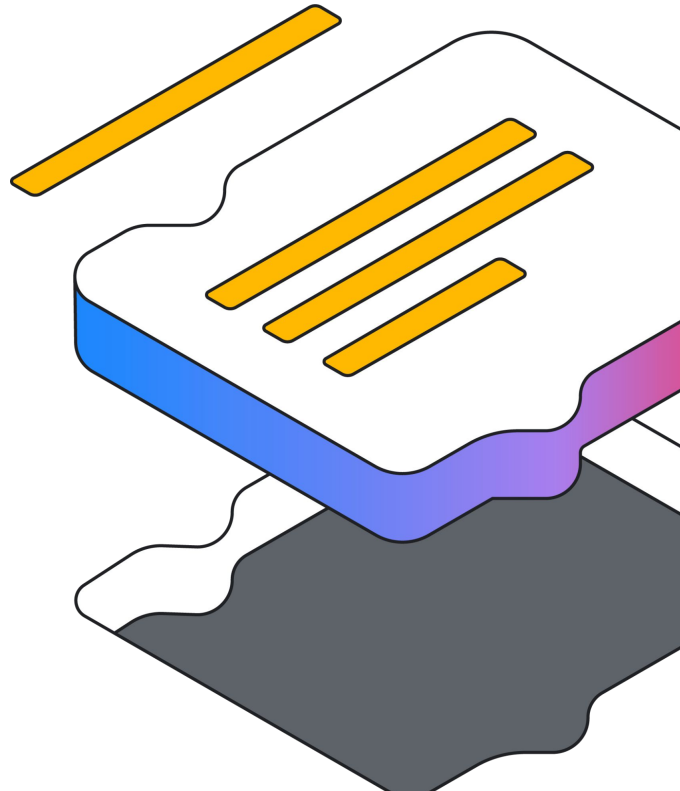


# Customizing Activities with VEXcode VR

Catherine Kettner and Sardorbek Omonkulov

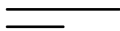
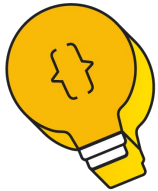
Software Developers

VEX Robotics



# Agenda

- 01 Welcome & Introduction
- 02 How to Use VEXcode VR
- 03 Constellation Creator
- 04 Navigate the Maze
- 05 Learn More



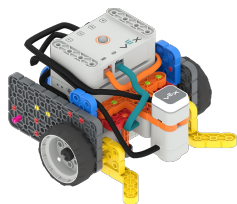
# The VEX Continuum



**VEX 123**

Coding Starts Early

Ages 4+



**VEX GO**

STEM Starts Early

Ages 8+



**VEX AIM**

Real World Coding

Ages 8+



**VEX IQ**

Applied STEM Learning

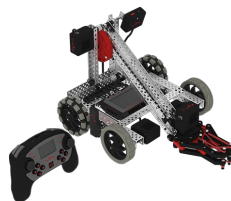
Ages 11+



**VEX EXP**

Real World STEM for Classrooms

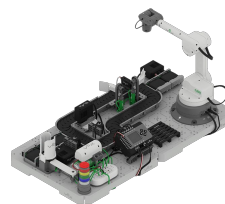
Ages 14+



**VEX VS**

Real World STEM for Competition

Ages 14+



**VEX CTE**

Workforce Readiness

Ages 14+



**VEX AIR**

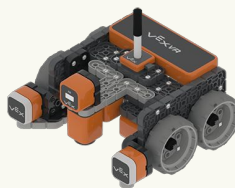
STEM Skills Take Flight

Ages 14+

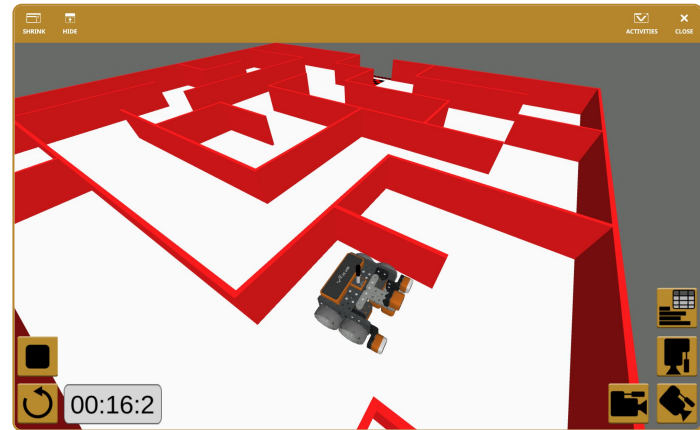
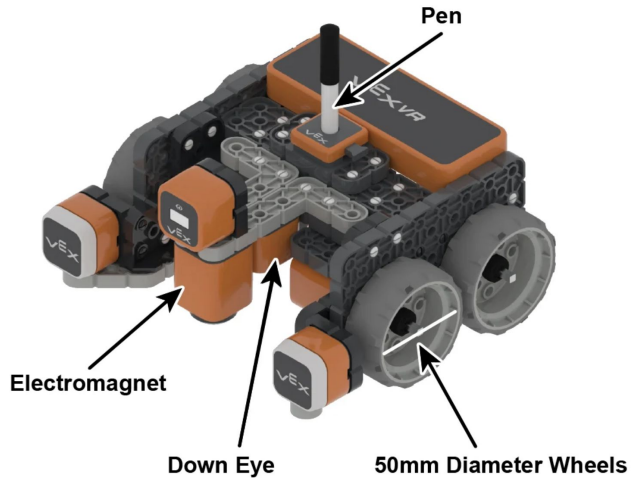
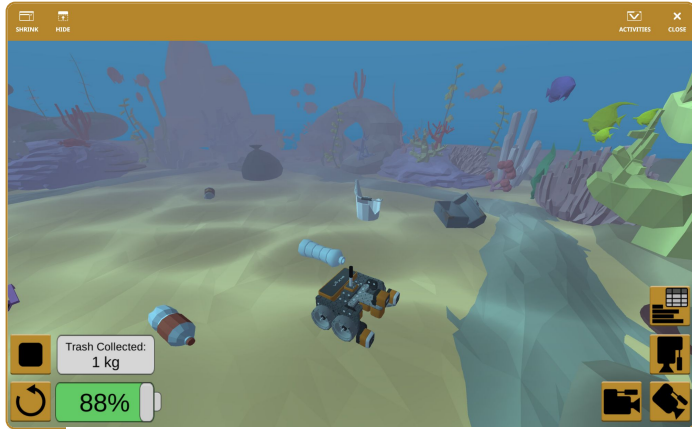
**VEX CODE VR**

Virtual Robot Coding

Ages 8+



# What is VEXcode VR?



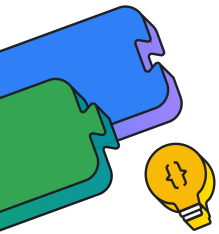
# Activity: Constellation Creator - Art Canvas+

**Setup:** visit [content.vexnet.com](https://content.vexnet.com) to download the blank constellation image as a PNG and upload it to Art Canvas+.

## Challenge Levels:

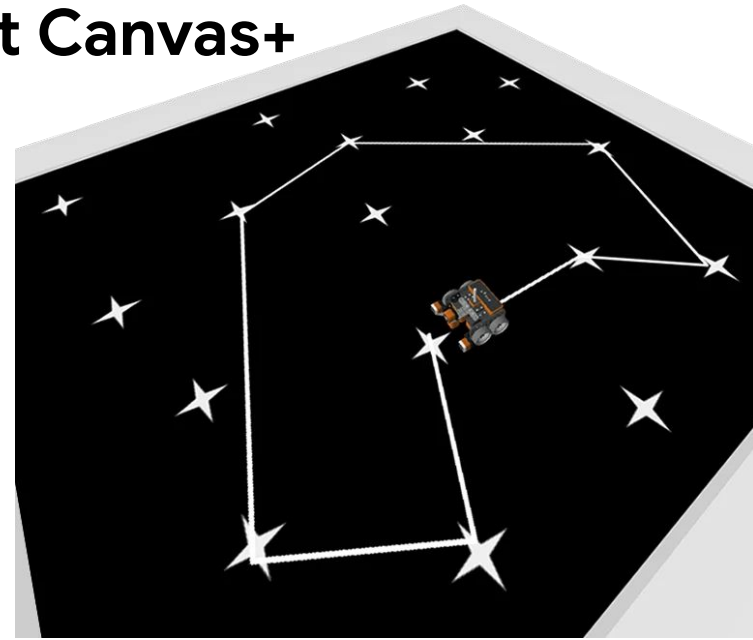
- **Level 1:** Connect 4 stars
- **Level 2:** Connect 6 stars

Use the Pen on the VR Robot+ to draw your constellation.



**Tip:** Use a story, character, or event as inspiration

Mix pen colors to customize your design



## OBJECTIVE:

Connect 4, 6, or 8 stars to create a constellation. Add a note about your shape and the story behind it.

## TIME LIMIT:

10-15 minutes

# Share and discuss

Discuss with someone next to you or with your partner.

- What was your plan before you started?
- How did testing your code help?
- What challenges did you run into?
- How did you solve them?
- What's one way this activity could be incorporated into the classroom?

**Time: 5 minutes**



# Activity: Navigate the Maze - Wall Maze+

Customize your maze on the Wall Maze+ playground

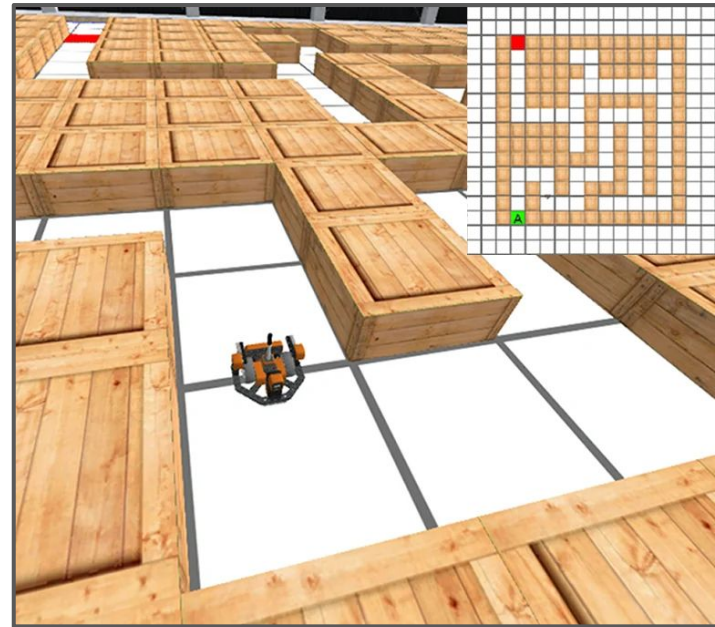
**Setup:** Select the pencil icon to start building your maze



## Bonus Challenges:

- Solve your maze without hitting a wall
- Start your maze from a second starting point
- Use the pen to trace your path while solving the maze

**Tip:** *The distance across one maze square is 300mm.*



## OBJECTIVE:

Complete the maze as fast as you can

## TIME LIMIT:

15 minutes



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- What was your plan before you started?
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- How did you solve them?
- What's one way this activity could be incorporated into the classroom?

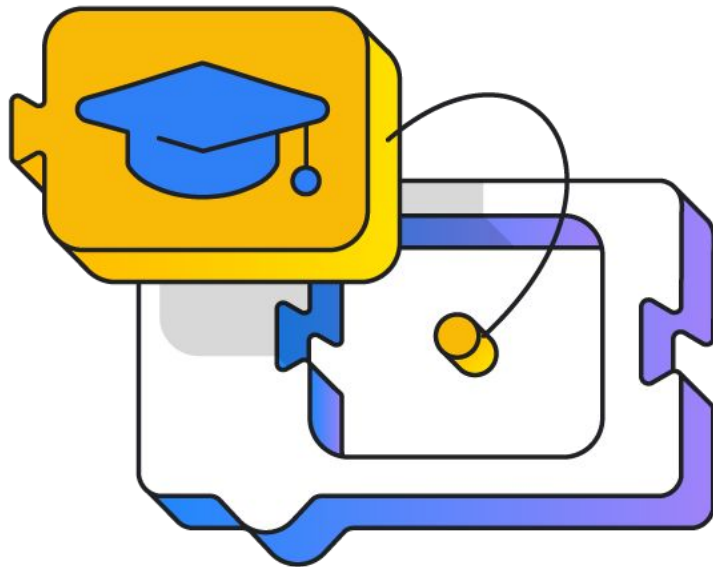
**Time: 5 minutes**



# Want to Learn More?

Join VEX PD+ as an All-Access Member!

- Schedule a 1-on-1 Session in VEX PD+
- **Take a VEX Masterclass** — Making the Most Of Teaching with VEXcode VR



To learn more about VEX PD+ go to [pd.vex.com](https://pd.vex.com)

# Switch Blocks

- **Smooth Transition from Blocks to Python**

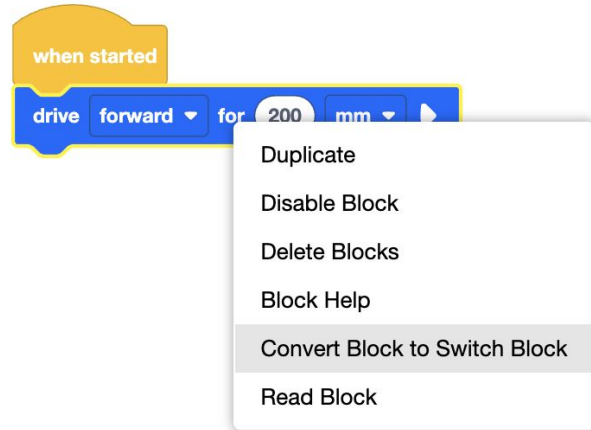
- Convert individual blocks to their Python equivalent
- Code in Python without leaving the blocks project
- Supports gradual progression

- **Differentiated Learning for Every Student**

- Convert and edit code at their own pace.

- **Inspires Continued Learning**

- Taps into students' growing interest in text-based coding—making the transition from blocks motivating and meaningful rather than a barrier.



# World Champions



# Who Is VEX?

VEX Robotics is educational robotics for everyone.

Through fun challenges and guided lessons, students of all ages can develop core STEM and computational skills.

