

@CSTANJ

@CS4NJ

#CSPDWeek2026

#CompSciNJ

@csteachersorg



New Jersey CSPDWeek

This material is based upon work supported by the National Science Foundation under Award No. 2607763.



LCPS
Computer Science

Computer Science For PreK - 3

Daily Activities

Meet the Presenters



Alicia Somers

Classroom Teacher, Prek-2
Spotswood Public Schools

Dedicated to empowering early learners opportunities and exposure to CS and access to inclusive CS tools.



Jahaira Ortiz

Classroom Teacher, K
Union City Public School

Enthusiastic, & passionate STEM & Coding Facilitator dedicated in developing creative experiences, & facilitating project-based learning activities for young learners.



Joann Case

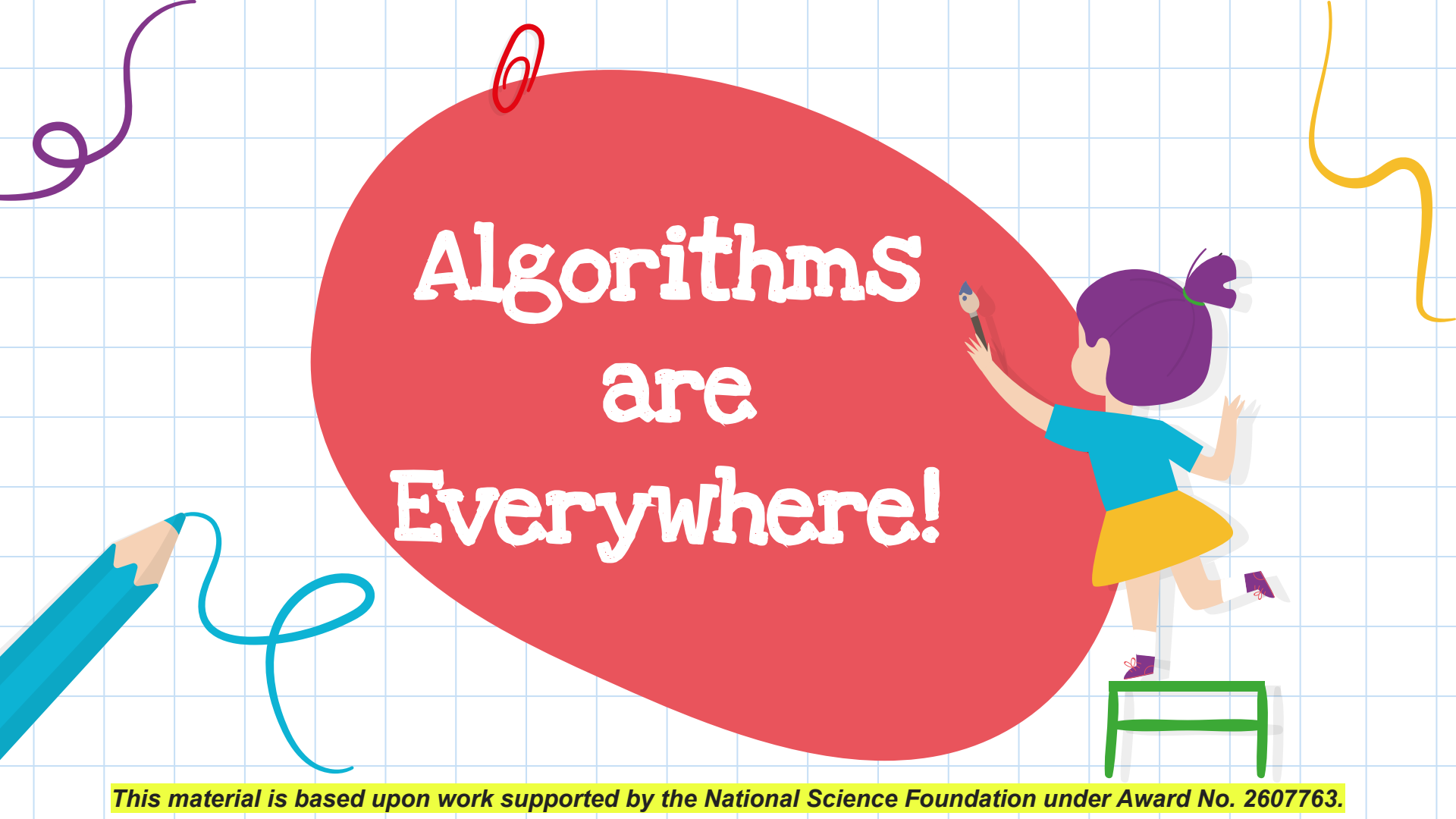
Technology & PLTW Teacher, K-4
North Hanover TWP Public School

Dedicated to empowering the next generation of innovators and problem solvers through coding, robotics, and physical computing.

Prepare Our Future Students



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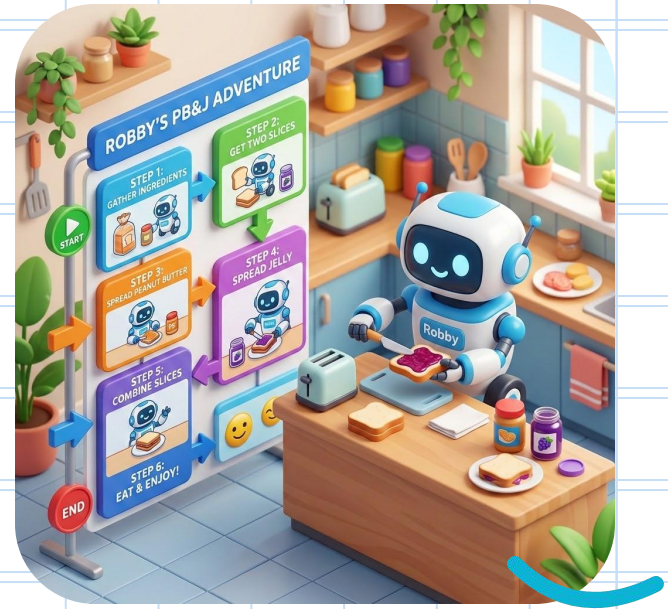
A cartoon illustration of a young girl with purple hair in a ponytail, wearing a blue shirt and a yellow skirt. She is standing on a green step ladder and painting a large red oval on a light blue grid background. The text "Algorithms are Everywhere!" is written in white inside the red oval. A red paperclip is at the top of the oval. A blue pencil is on the left, drawing a blue squiggle. A yellow squiggle is on the right. A purple squiggle is at the top left.

Algorithms
are
Everywhere!

CS Word of the Day

Algorithm

Step-by-step directions that humans and computers follow to complete a task.



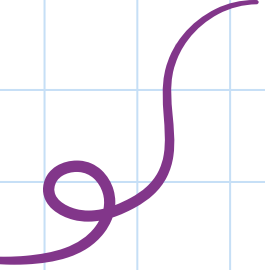
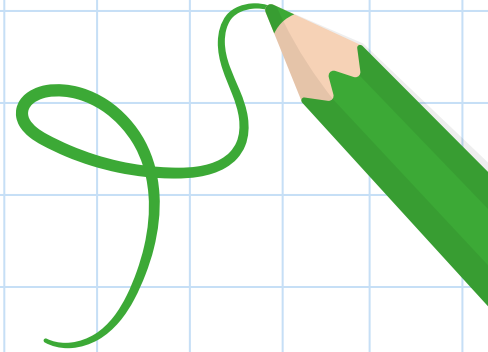
The Algorithm Chef

The Algorithm Chef loves creating algorithms in his kitchen. Watch his video and then think about what algorithms you follow each day.



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Practice Algorithms



Secret Handshake Algorithms

Handshakes are algorithms too! After watching the video, come up with a super cool handshake that you can teach to your friends.



Secret Handshake Video

Handshakes are algorithms too! After watching the video, come up with a super cool handshake that you can teach to your friends.



Secret Handshake Lesson

Explore this Secret Handshake Sequencing idea from #CSinSF.

Name _____

Sequences

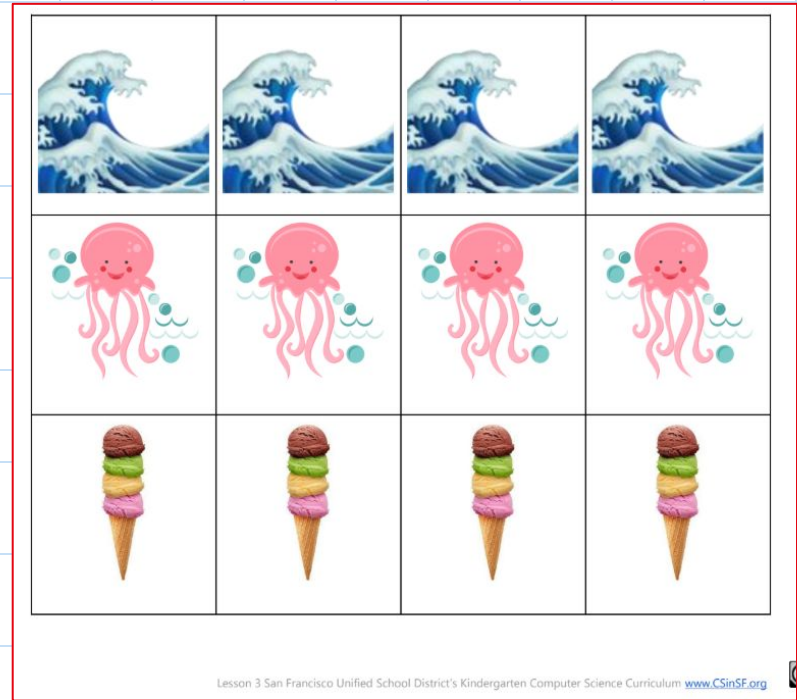
Challenge 1: Three Moves, No Moves Repeat

	→		→	
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Challenge 2: Three Moves, Two Moves Repeat

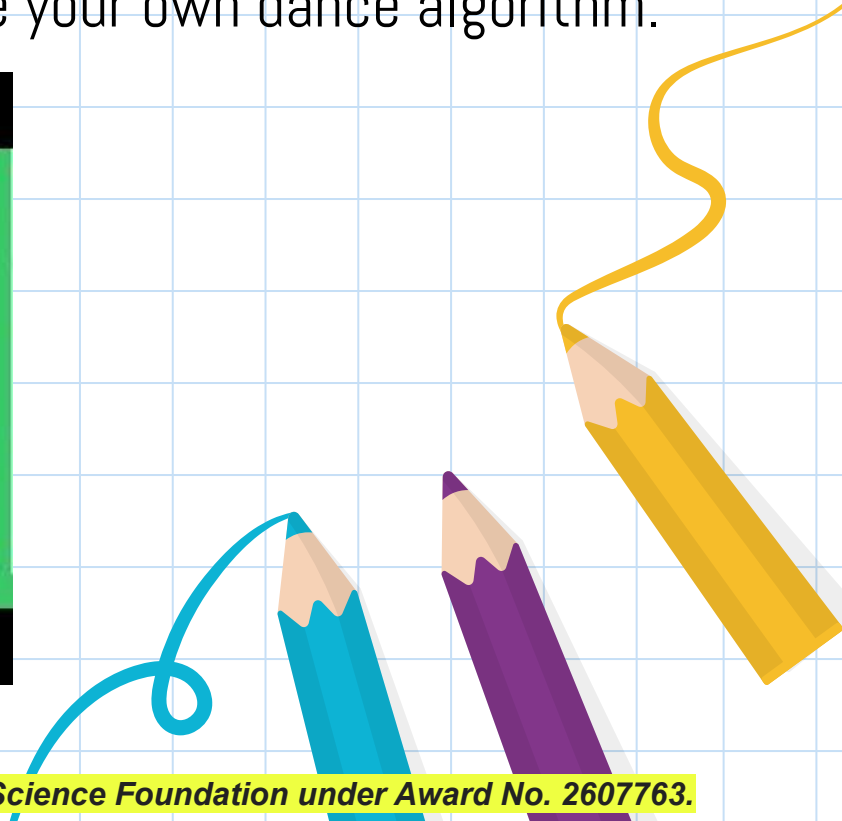
	→		→	
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Lesson 3 San Francisco Unified School District's Kindergarten Computer Science Curriculum www.CSinSF.org



Let's Dance!!!!!!

Dancing is the perfect algorithm to get us up and moving! Practice dancing to the video below and then create your own dance algorithm.



CS Word of the Day

Programme

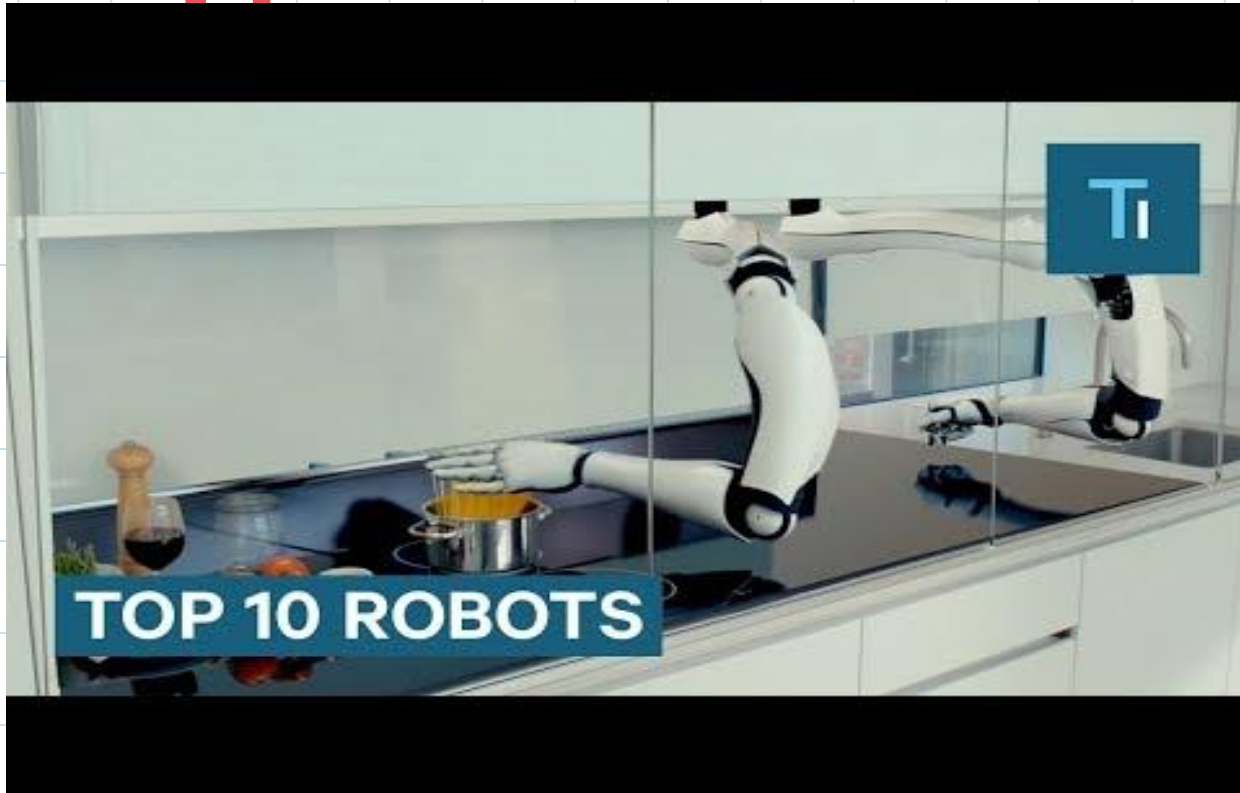
A person who **P**rograms computers. They create and test programs to make sure they work.

Coding Robots!



This material is based upon work supported by the National Science Foundation under Award No. 2607763.

Robots in the Real



Can you think of a robot that you would like to see invented? Type your answer or post a video response in the space below.

Coding with Botley



Screen-Free Coding

- 1 Active play that teaches students coding without any screens, tablets, or phones.

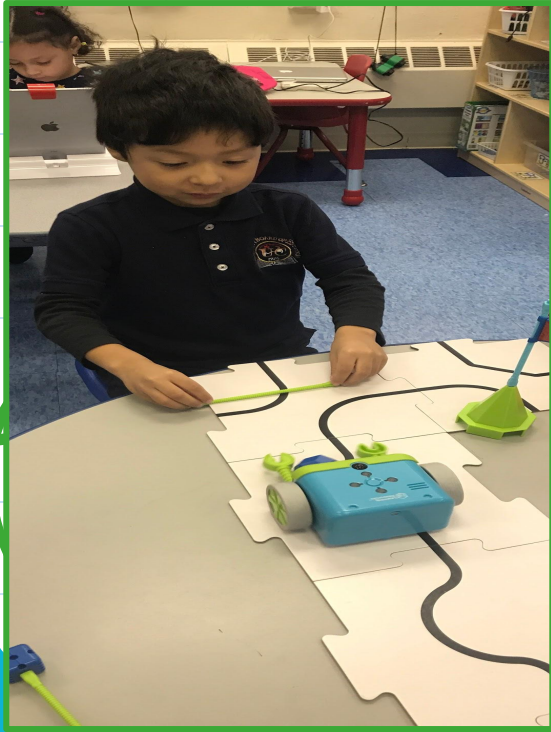
Ready Out of the Box

- 2 No complicated setup required. Botley is ready to go immediately for your classroom.

Easy Programming

- 3 Students use an easy-to-use remote to program commands and send Botley on his way.

Botley Activities



Hands-On STEM Play

Students collaborate to build physical tracks and navigate Botley through obstacles, reinforcing spatial concepts.

Screen-Free Logic

Using the intuitive remote programmer, children learn basic coding sequences, debugging, and computational logic entirely screen-free.

Coding with mTiny



1

Themed Learning

Learn coding and math through themed maps, storybooks, and interactive cards.

2

Simple to Use

Easy and fun for kids to interact with, promoting logical thinking in a friendly format.

3

Ready Out of the Box

No complicated setup required. mTiny is ready for immediate classroom use.

mTiny Coding



**Building puzzle-piece maps to
program pathways**



**Collaborating on interactive coding
challenges**

Coding with Indi



Approachable STEAM (Ages 4+)

1 The most approachable entry-level learning robot that speeds kids into STEAM learning.

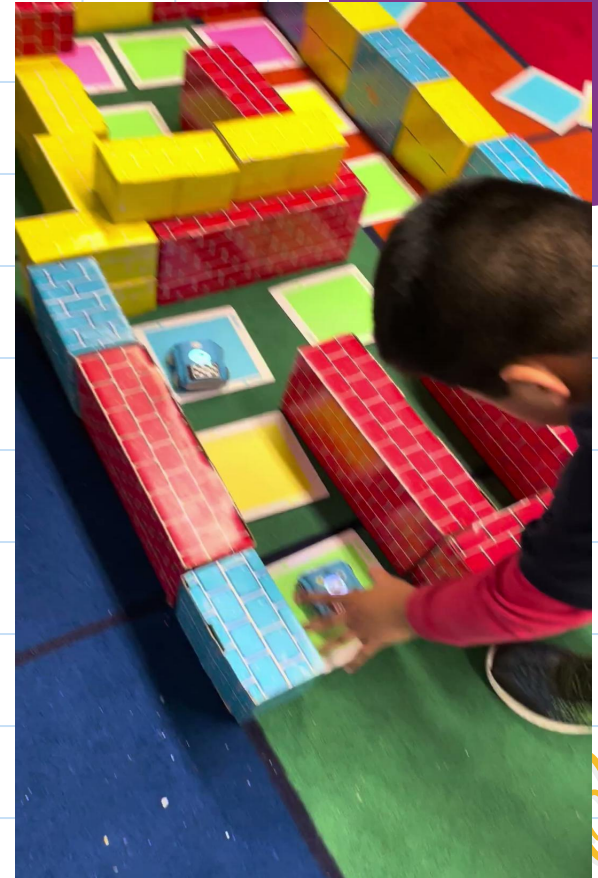
Imaginative Play & Mazes

2 Inspires play-based learning by empowering kids to design and build their own mazes.

Basics of Coding

3 Learn the basics of coding, solve problems, and nurture computational thinking.

Indi Coding



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Coding with Bee-Bots

Welcome to the world of coding!

Meet the Bee-Bot, your new programmable friend designed to make learning fun and interactive.

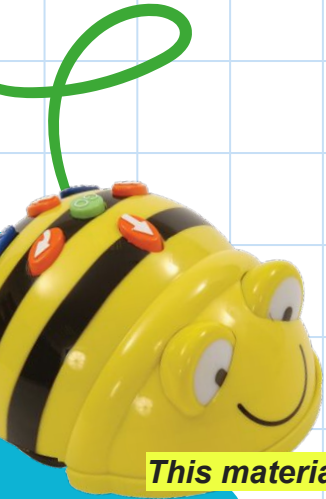
Perfect for developing sequencing, estimation, and problem-solving skills.

For Free CS Materials -
Join the Civil Air Patrol and become an Aerospace Education Member (AEM)



Bee-Bots Mats

Incorporate
content area skills
and vocabulary
while coding.



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Bee-Bot Job Cards



Programmer

Job: Lay out programming cards



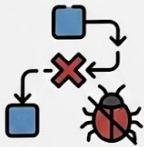
Input Engineer

Job: Rereads the steps in sequence



Debugger

Job: listens to the story and reports errors



Recorder

Job: receives the debugger's report and fixes the problem with the arrow cards



Clear



Bee-Bots Ideas

Incorporate
content area skills
and vocabulary
while coding.



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Bee-Bot Costume Party

Design Challenge

The Mission: What kind of costume would you make for your Bee-Bot? Draw your design and explain your choice!

Get Inspired:

-  [Robot Introduction](#)
-  [2022 Parade Highlights](#)
-  [Ms. Carrie's Class](#)



Building a Maze with Bee-Bots

Challenge Activity

The Mission:

What items can you use to make a maze for the Bee-Bot? Draw out your design and write the code to help it find the exit!

Watch for Inspiration:

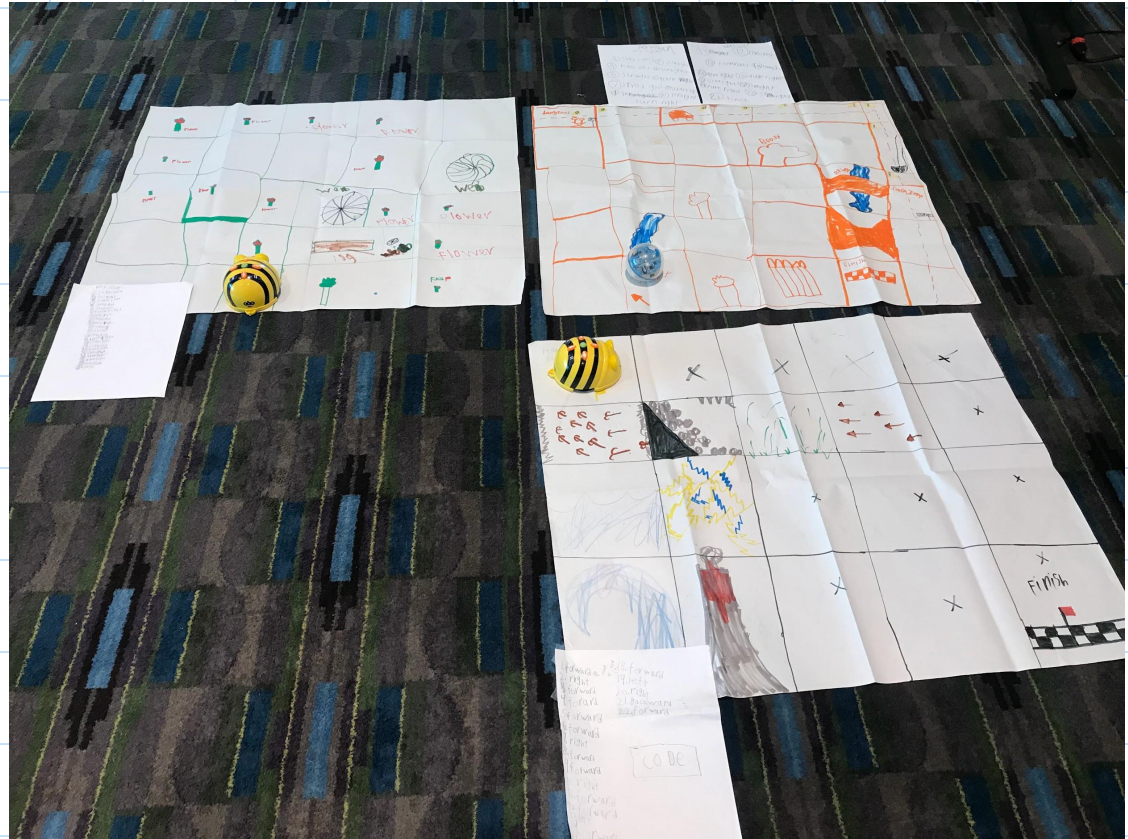
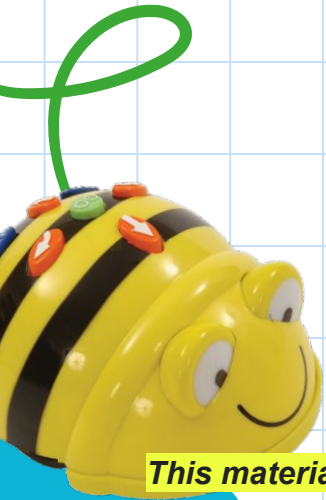


Building a Bee-Bot Maze



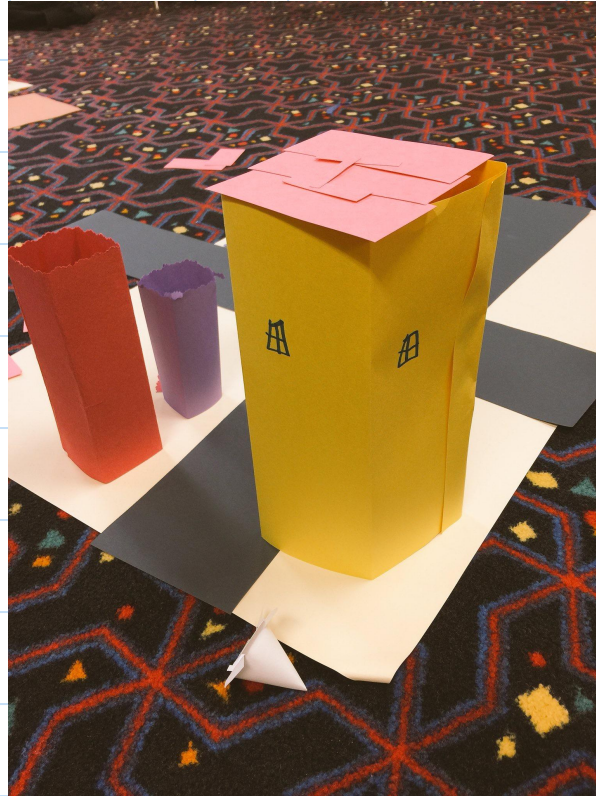
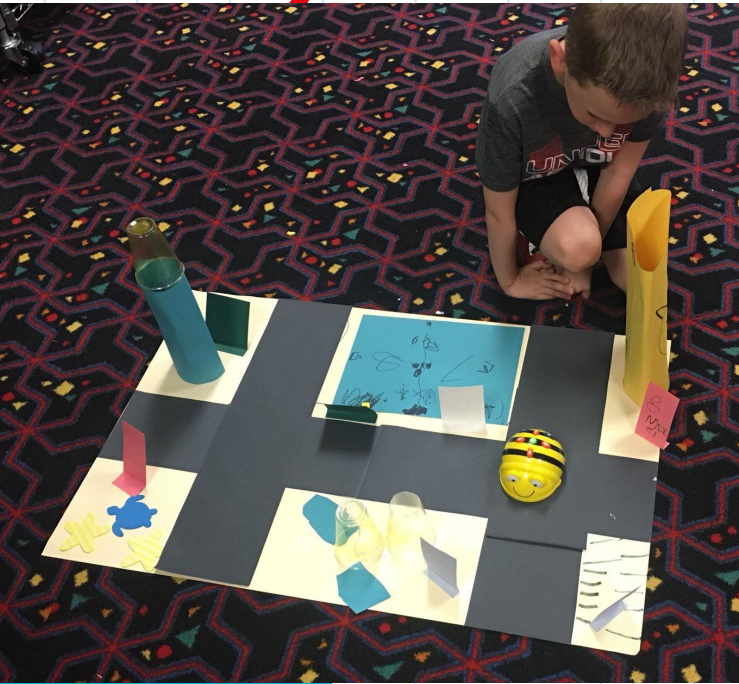
Student Created Bee-Bots Mats

Have students create their own Bee-Bot mats.



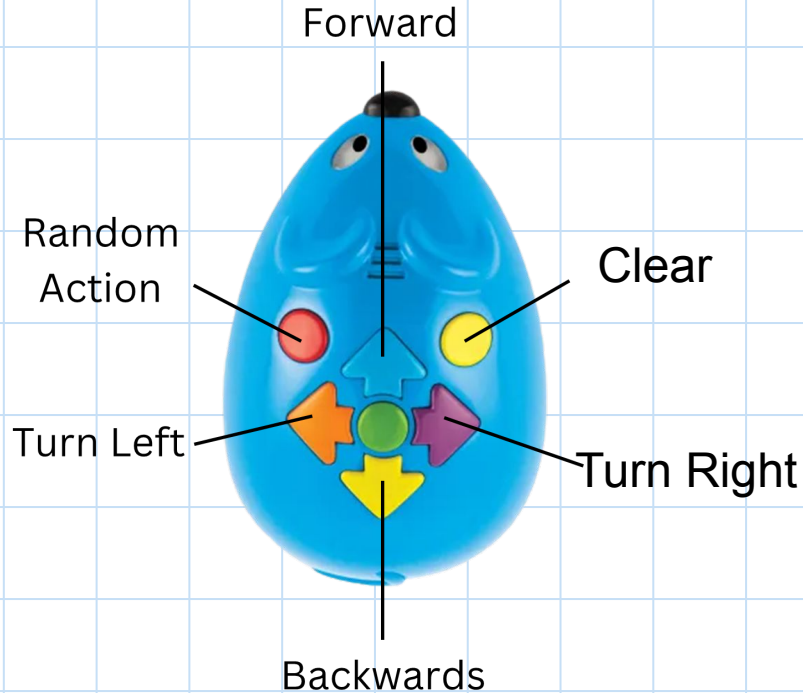
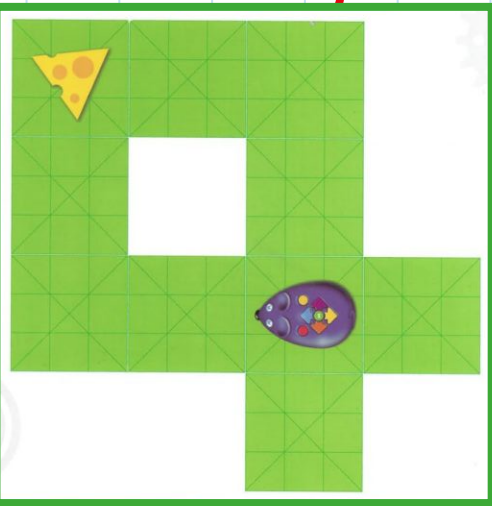
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More Mat Ideas



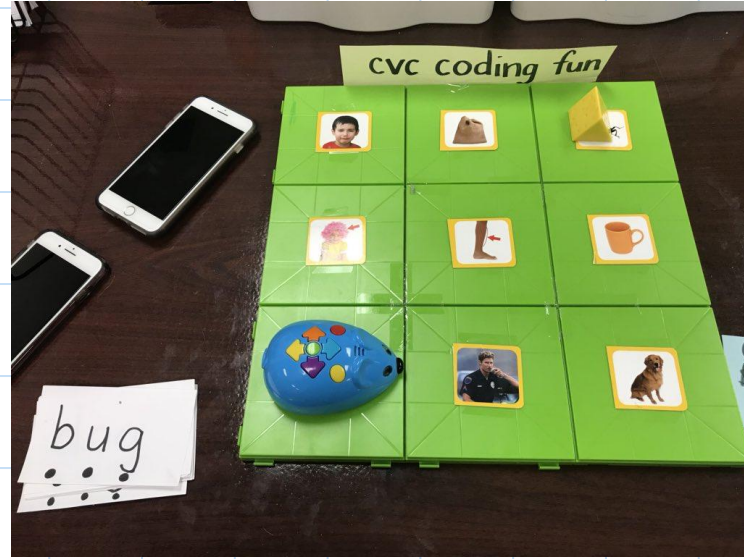
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Coding with Code and Go Mouse



Coding with Code and Go Mouse

Incorporate
content area skills
and vocabulary
while coding.



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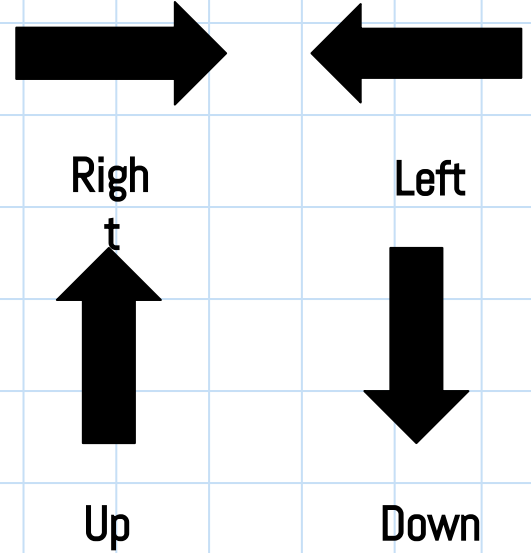
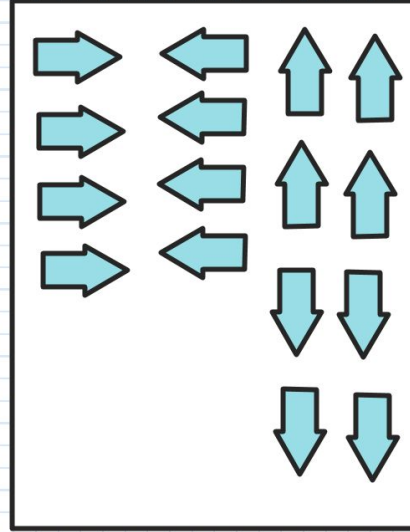
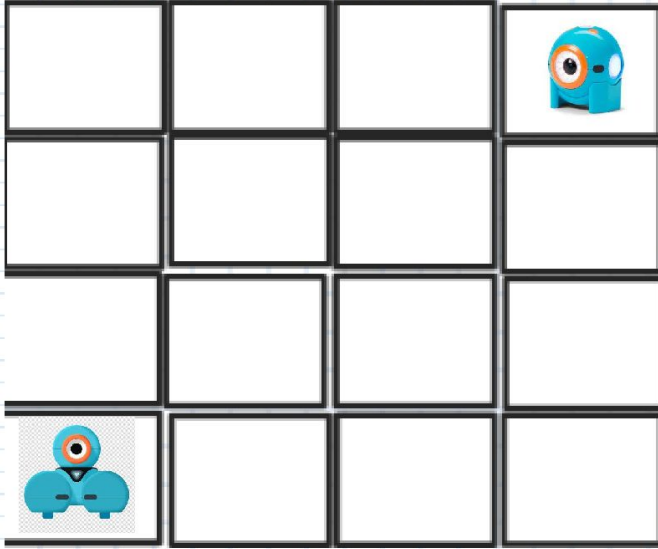
CS Word of the Day

Coding

Giving instructions to a computer in order for it to complete a task.

Coding Directional Arrows

Help Dash the Robot get to Dot the Robot using the arrows to create an algorithm (step by step instruction)



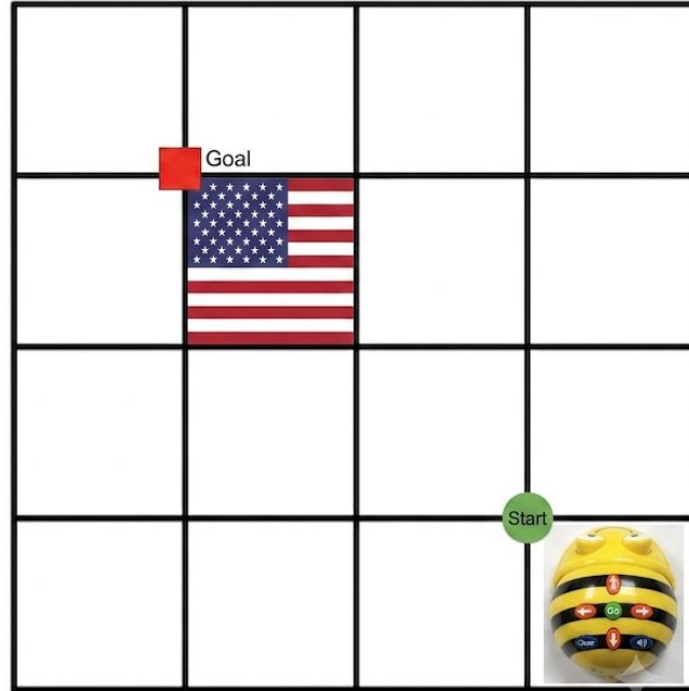
Using Directional Arrows

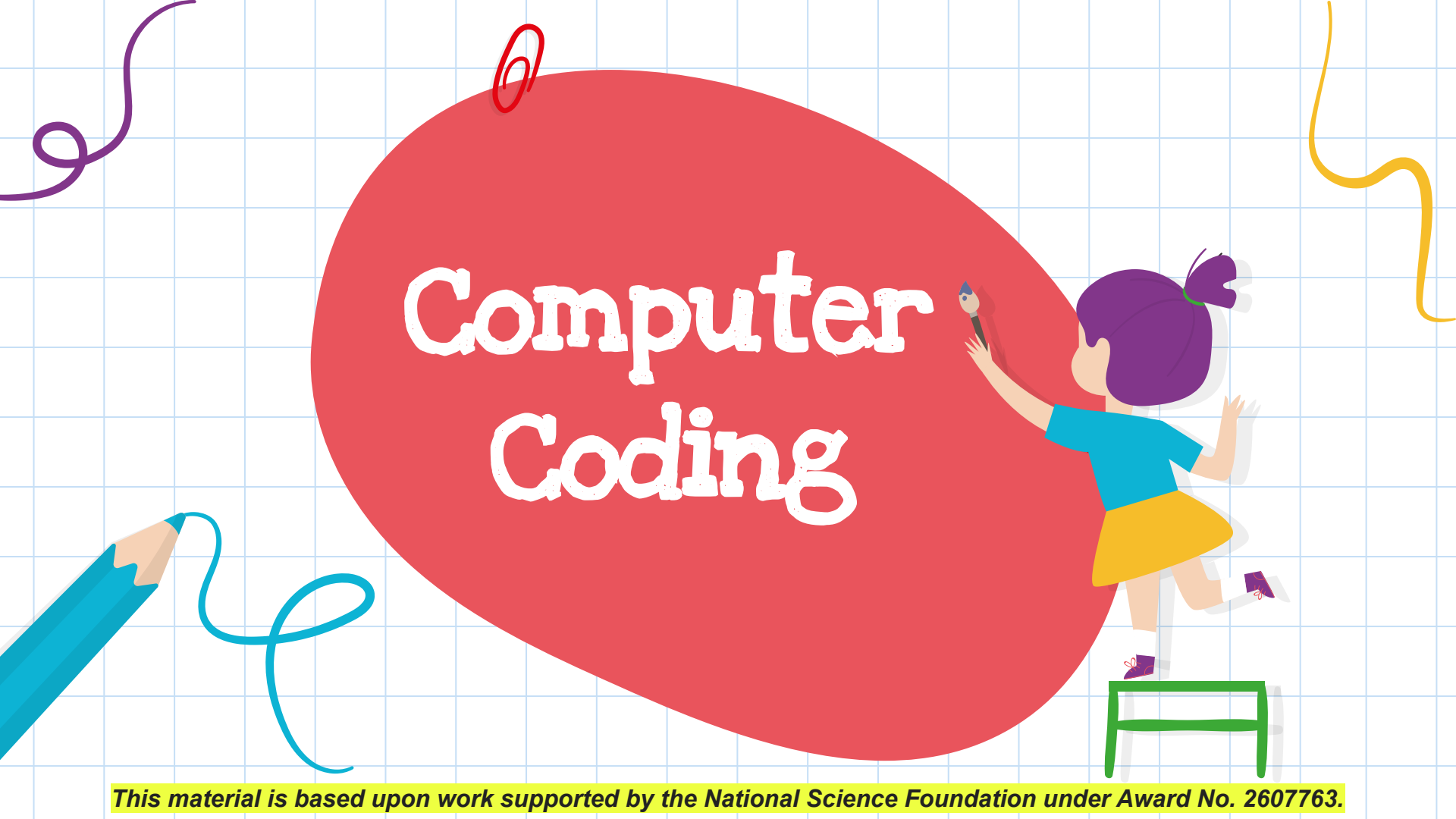


Get your
robot from
one point to
another

Plan your path:
Draw program arrows here:

--	--	--	--	--	--	--	--	--	--	--	--



A stylized illustration on a light blue grid background. A large red oval is the central focus, with the words "Computer Coding" written in white, rounded, hand-drawn font. A girl with purple hair in a bun, wearing a blue shirt and yellow skirt, stands on a green stool, painting the red oval with a brush. A red paperclip is at the top of the oval. A blue pencil is on the left, with a blue squiggly line trailing from its tip. A yellow squiggly line is on the right. The overall theme is creative and educational.

Computer Coding

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CS Words of the Day

Bug

A problem or issue in a program.

Debug

To fix the problem with your program.

Bee-Bots Emulator

Let's practice our coding skills by using an online emulator. We can program our Bee-Bot to travel through different grids. Be sure to look at how many steps are in your algorithm when coding.



Click this image to go to the Bee-Bot emulator website.



Coding with Ozobot

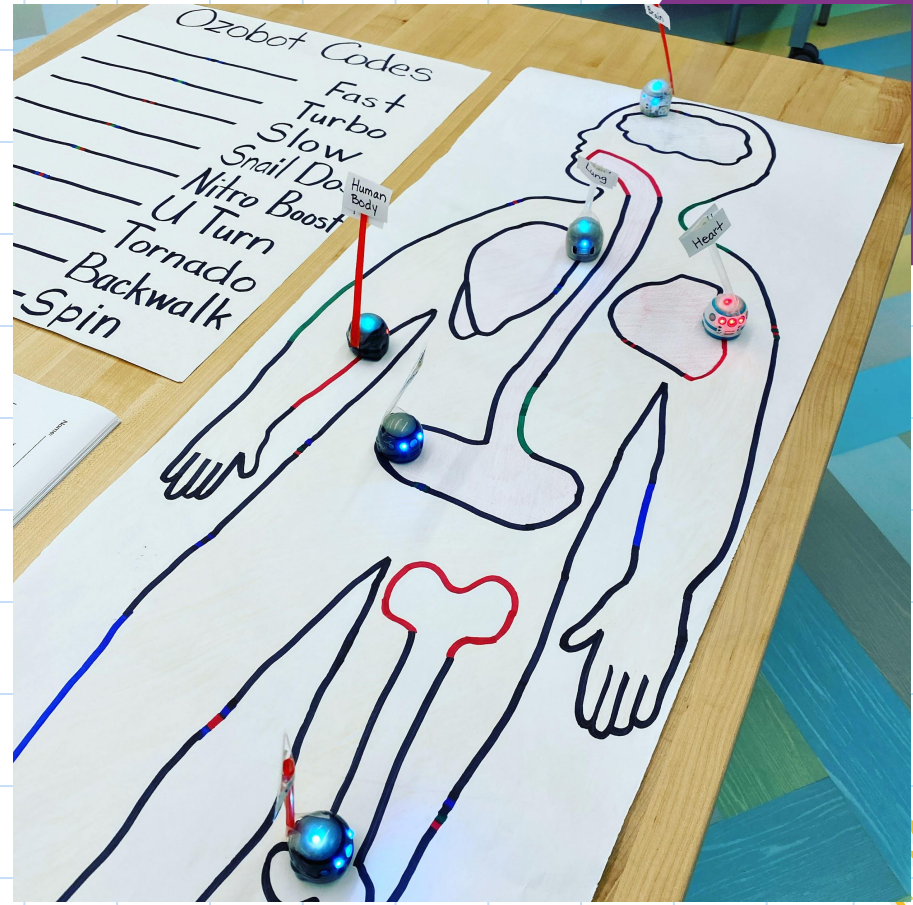
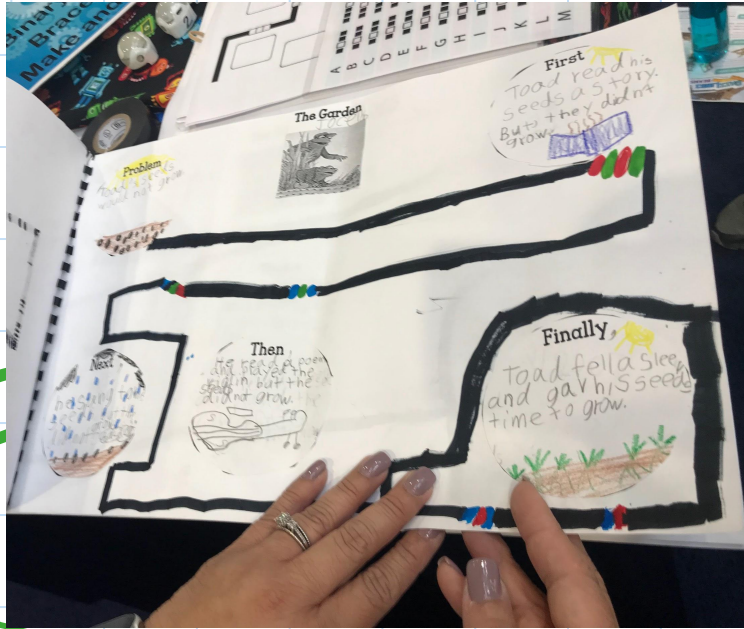
Let's practice our coding skills by using an online emulator. The Ozobot emulator is accessible through **OzoBlockly Games** , which allows you to program and simulate Ozobot movements directly in your web browser without needing a physical robot



Click this image to go to the Ozoblockly Games



Ozobot Ideas



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Computales



COMPUTALES

About

Educators

Help Us

Integrate literacy and comp

Take your students on a one-of-a-kind journey into computational thinking and literacy. Join Martin and his friends as they embark on a journey through Computer Land, where each chapter is filled with standards-aligned activities that develop computational thinking and enhance literacy skills. Designed for grades K-2, CompuTales seamlessly integrates into your existing reading instruction while introducing the foundational skills that will set the stage for future exploration into coding and computer science.

javier.aguilar@efwma.org
Twitter: @javierfaguilar



COMPUTALES

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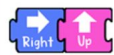
Contact Us

Sign Up

Login

Sample Our Computational Thinking Activities!

Coding



Patterns



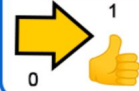
Hardware



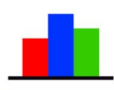
Algorithms



Represent Data



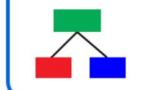
Collect Data



Debugging



Decomposition



Abstraction



Cybersecurity



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Coding with Code Monkey

Jr

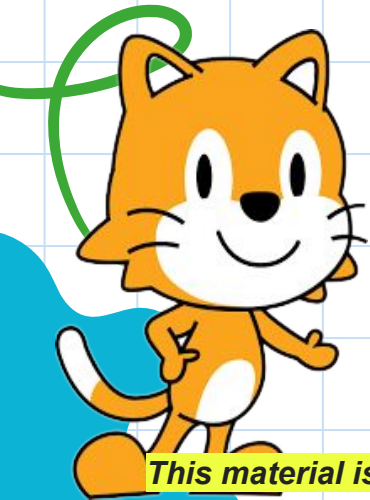
Let's practice our coding skills. Try programming the Code Monkey to get to the treasure chest.

Click this image to go to the Code Monkey Jr website.



Coding with ScratchJr.

Let's practice our coding skills. Try programming ScratchJr. to create interactive stories and games using block-based coding.



Click this image to go to the ScratchJr. website.



Unplugged Activities



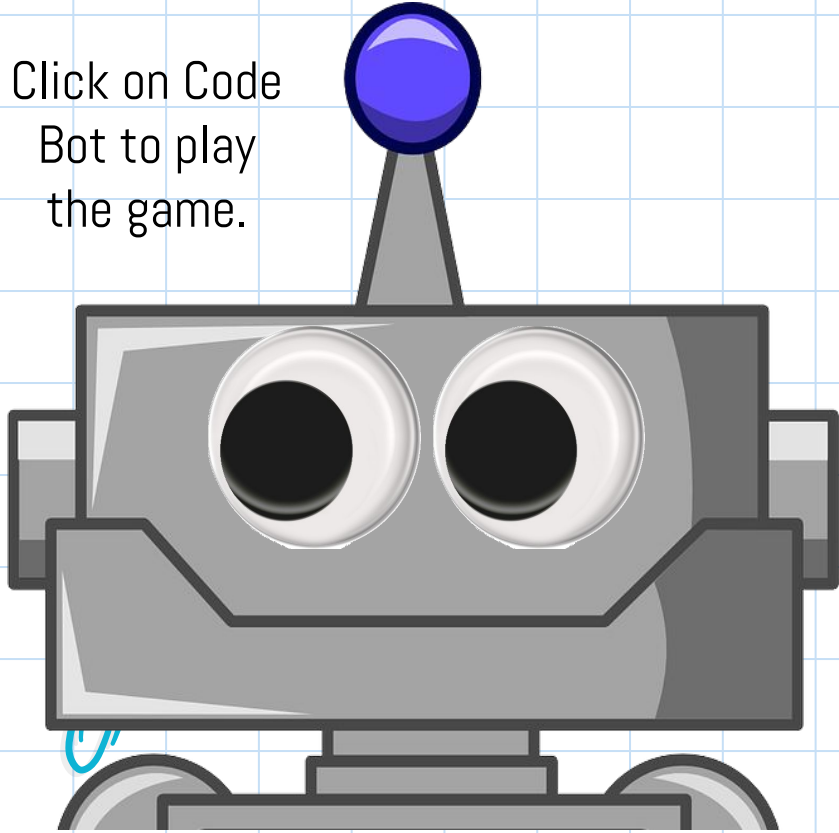
CS Word of the Day

Unplugged

Learning computer science concepts through the use of games and activities.

Code Bot Says

Click on Code Bot to play the game.



Code Bot loves Conditionals. In coding, Conditionals are called If/Then statements. For example, **IF** it is raining, **THEN** I need my umbrella.

Practice Conditionals with Code Bot by playing a game. **IF** you hear "Code Bot Says," **THEN** you have to follow the direction. **IF** you do not hear "Code Bot Says," **THEN** you have to stay still.

Obstacle Course Coding



With permission from an adult, or your teacher, create the most epic obstacle course you can with things around the house/class. Take a video of yourself or someone else completing the course and share it with your teacher.

New 2026 CSTA Standards

Explore the New Guidelines

The Computer Science Teachers Association (CSTA) has updated its standards for 2026. Access the official interactive portal to browse, search, and implement these new computer science education benchmarks in your PreK-12 curriculum.

Here are the new CSTA standards

[PreK/K](#)

[Grade 1](#)

[Grade 2](#)

If you are including Grade 3+ you can find those standards at the bottom of this [webpage](#)

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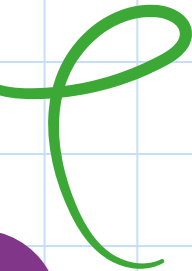
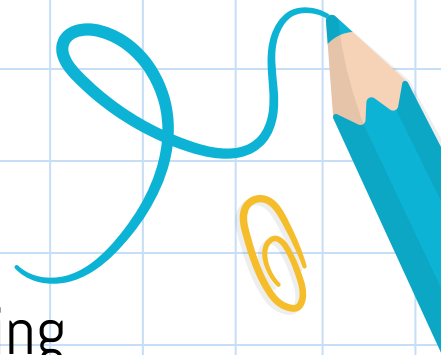
Official CSTA Portal

**2026 CSTA PK-12
Standards**

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Summary

You can see from what we shared that making Computer Science and Computational Thinking part of your classroom routine is easy. You can use these concepts to help with teaching your basic academic concepts. These are new tools for your teacher tool box!



Thank You!

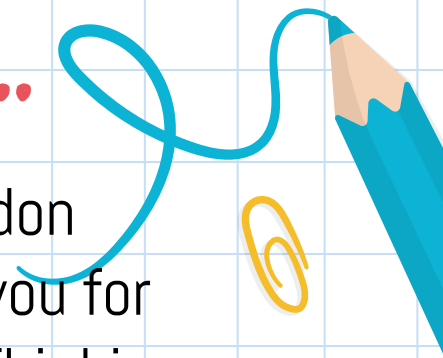


Thank you for your time and participation. We appreciate your dedication to advancing Computer Science and Unplugged Activities in the classroom.

For further resources and collaborations, please reach out to us and visit [CSTANJ](#) to attend chapter meeting that are held every month during the school year. They offer a great deal of resources all year long!

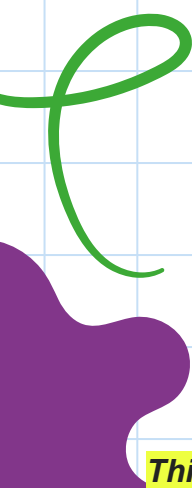
You must complete the survey each day for your stipend!

Credit for the slides Goes to...



The Computer Science Department for Loudoun County Public Schools in Virginia. They thank you for making Computer Science and Computational Thinking part of your classroom routine.

Happy Computer Science Education Week!



Questions? Please contact us.

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shawn.deluca@lcps.org

Loudoun County Public Schools, Virginia



Survey

Please complete the survey
after each session and complete one
at the end of the day for Stipend!

Thank you for choosing CS in your
classrooms!

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#CSPDWeek2026

#CompSciNJ

@csteachersorg



New Jersey CSPDWeek

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