

Computer Science Education Toys and Tangibles: A K12 teacher's getting started guide

Computer Science (CS) underlies most innovation today - from biotechnology to geoscience to national security. Yet three out of five U.S. schools do not offer CS classes that include programming or coding¹.

**Want to teach your students CS but don't know where to start?
Don't worry, we got you covered!**

In this document, you will find a selection of easy to use CS toys that can teach your students the basics of CS. Your students will grasp the fundamentals of coding and programming in no time!

The toys outlined in this document are all valuable well beyond the CS classroom as they teach students design, logical reasoning, and problem solving.

The CS toys are easy to set up, affordable, and require no previous experience with CS.

This work has been a project of the Index In Bounds CS Education Research Lab at Western Washington University.

Contributions by Corben Roszak, James "Garnet" Droppo, Mark Rogers, Sukhdip Singh, Olivia Coleman, and Lori Torres under the guidance of Dr. Caroline D. Hardin. For more information, email caroline.hardin@wwu.edu

¹Trends in the State of Computer Science in U.S. K-12 Schools, [Google](#).

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Standalone Toys (No devices required)

Name	Price per Unit	Price per Classroom	Grade Level
Code-a-Pillar Twist	\$34.99	\$839.76	PreK - K
Code Hopper	\$52.40	\$419.20	PreK - 2
Code Master	\$21.99	\$527.76	3 - 12
Cubetto	\$206.74	\$1240.44	PreK - 3
Kids First Coding	\$129.95	\$779.70	K - 2
Kinderbot	\$59.99	\$1439.76	PreK - 1
Let's Go Code!	\$34.99	\$279.92	PreK - 2
Turing Tumble	\$69.95	\$509.80	4 - 12

Toys with Required Devices

Name	Price per Unit	Price per Classroom	Grade Level	Tech Platform
Code Gamer	\$169.95	\$1359.60	6 - 12	iOS Android
Cue Robot	\$199.99	\$2400.00	6 - 8	iOS Android
Dash Robot	\$149.99	\$1799.88	K - 5	iOS Android
DIY Coding Kit	\$99.99	\$799.92	2 - 8	iOS Android
Finch Robot	\$119.00	\$2856.00	K - 12	PC Mac Android
Finch Robot with Micro Bit	\$139.00	1A 1B 2 CS AP IC \$3336.00	K - 12	PC Mac Android
Kano Coding Kit	\$39.99	\$959.76	1 - 8	PC Mac Android
Evo Robot (Ozobot)	\$149.99	\$1799.88	K - 12	iOS Android
Sphero SPRK+	\$129.99	\$2649.99	K - 12	PC Mac Android
Strawbees Coding & Robotics Kit	\$99.90	\$695.00	5 - 11	PC Mac

Code-a-Pillar Twist



Grade level: PreK - K

Students Per Item: 1 - 2

Price

- **Single Unit Price: \$34.99**
- **Average Price Per Classroom (Est. 24 students): \$839.76**

Product Summary

Think & Learn Code-a-pillar Twist™ lets kids discover the fun of coding as they use their problem-solving and sequencing skills to code a path for their buddy to follow. Just twist the dials to program a path and watch Code-a-pillar Twist™ go!

Early coding and problem-solving toy for preschoolers ages 3-6 years. Students will learn:

- Reasoning and Problem Solving:
Programming a path for Code-a-pillar Twist™ opens the door to problem solving as kids figure out how to get their pal to go wherever they want!
- Planning and Sequencing:
After twisting the segments a few times, kids will discover that if they plan a path and twist the dials to create the right sequence, they can get Code-a-pillar Twist™ to follow their plan!
- Critical Thinking:
By programming different combinations to send Code-a-pillar Twist™ down various paths, preschoolers can try and try again, exercising those critical thinking skills!



More than 1,000 possible coding combinations! Screenless; No Additional Tech Required!

Additional Information

The Think & Learn Code-a-pillar Twist™ has more than 1,000 possible coding combinations for kids to explore as they send their pal here, there, and everywhere! Preschoolers can twist the dials on the caterpillar's segments to create a sequence and send their pal along the programmed path with moves like forward, turn right, and turn left. They can even add exciting lights and sound effects! This friendly learning toy encourages your kiddo to experiment while they play, exercising important skills like problem solving, planning and sequencing, and more. Where will Code-a-pillar Twist™ go next?

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

Code a Pillar twist [Link](#)

Code Hopper



Grade level: PreK - 2

Students Per Item: 1 - 5

Price

- Single Unit Price: \$52.40
- Average Price Per Classroom (Est. 24 students): \$419.20

Learn Through Play! Screenless and no Technology Required

Product Summary

Code Hopper teaches the advanced concept of algorithmic thinking in three basic elements:

- SEQUENCING (DO this)
Code Hopper’s Action mats tell your child what to do. When your child puts them in a sequence, they create the “program,” which is executed by hopping along the mats
- CONDITIONALS (IF-THEN)
Yes and No mats extend the programming to include decision making. The Yes and No mats “branch” off, so the path your child will take may change based on the conditions.
- REPETITION (REPEAT)
Computers can repeat things thousands of times with the same results!



Additional Information

- Although very simple to play, Code Hopper teaches the advanced concept of algorithmic thinking
- This screen-free active coding game comes with 12 two-sided mats and a parent guide to help kids learn the concepts and explore various activities that will keep their brains and their bodies busy!

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Code Hopper Link](#)

Code Gamer



Grade level: 6 - 12

Students Per Item: 1 - 3

Price

- **Single Unit Price: \$169.95**
- **Average Price Per Classroom (Est. 24 students): \$1359.60**

Device Requirement(s)

Smartphone or tablet and a computer with Internet access. Compatible with all smartphones and tablets using iOS 7 and Android 4.3 and later. The device must support Bluetooth 4 or higher.

Product Summary

Award winning Code Gamer comes with 34 experiments and a 64 page manual. With Code Gamer:

- Learn to code by playing a video game
- Gaming: Use sensors to control the game with this innovative gamepad
- Coding: Solve puzzles and challenges in the game to learn the Arduino programming language
- Making: Write your own programs and develop new applications for the sensors



Additional Information

GAMING

Connect the physical and digital worlds! Use the gamepad to play through 15 fun game levels on your tablet. Plug one of the four sensorbots into the gamepad to activate its special powers.

- The sensorbot named Kelvin melts ice blocks when you warm its temperature sensor with your hand.
- The Decibels sensorbot will assist you if you trigger its sound sensor with noise.
- Lumen reveals things hidden in dark spaces when you shine light on its light sensor.
- Newton will force its way through obstacles in your path if you shake the touch sensor.
- Level Editor: Design and create your own game levels, share them, and access other players' levels.

CODING

Level by level, learn the basics of the Arduino programming language!

- Solve increasingly complex Arduino puzzles.
- Discover which program commands make the LEDs on your gamepad blink and the sound module activate.
- Learn how your gamepad works and how you can configure it yourself.

MAKING

Apply your new programming knowledge in cool projects!

- Use the sensors in new applications to bring your own ideas to life.
- Use the light sensor to count how many times a drawer is opened or program an alarm system that sends you messages.
- Enter the digital maker's world and unleash your creativity.

Computer Science Standard(s)

- Washington State CS Standards: Computing Systems, Algorithms and Programming

NGSS Correlation MS-PS4-2 Waves and Their Applications in Technologies for Information Transfer

MS-PS4-3 Waves and Their Applications in Technologies for Information Transfer

For More Information:

[Code Gamer Link](#)

Code 'n Go Kinderbot



Grade level: PreK - 1

Students Per Item: 1 - 2

Price

- **Single Unit Price: \$59.99**
- **Average Price Per Classroom (Est. 24 students): \$1439.76**

**Inspiring little learners to be big thinkers!
Screenless and no Technology Required!**

Product Summary

With Code 'n Learn Kinderbot™, your kiddo gets to decide how their pal moves and where he goes. And while little engineers are coding all sorts of cool new paths, they're also learning important stuff they'll need as they head into kindergarten!

- **Academics:**
Code 'n Learn Kinderbot™ teaches early math concepts, colors, letters and more through exciting coding challenges.
- **Reasoning & Problem Solving:**
Kids can practice their coding and problem-solving skills as they figure out how to "program" paths for their robot
- **Engineering & Building:**
As kids try out different experiments with the robot and the simple machine accessories, they're practicing engineering and building skills—just like a real engineer!



Additional Information

With the Fisher-Price® Code 'n Learn Kinderbot™, preschoolers enter different codes to control their robot friend's movements. This interactive learning toy comes to life with lights and phrases, offering coding challenges that teach about early math concepts, colors, shapes, and more. There are three ways to play, a cool secret code book, and four machine accessories to expand the play for your junior engineer!

- Interactive robot friend for preschoolers ages 3-6 years
- 3 ways to play: free coding, learning challenges, and “secret codes”
- Input a code to decide where Code 'n Learn Kinderbot™ goes!
- 4 simple machine accessories & secret code booklet to unlock more learning!
- Helps get kids ready for kindergarten with lights, actions, and fun phrases about colors, shapes, and more!

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Kinderbot Link](#)

Cubetto



Grade level: PreK - 3

Students Per Item: 1 - 4

Price

- Single Unit Price: \$206.74
- Average Price Per Classroom (Est. 24 students): \$1240.44

The easiest way to bring coding to life in your early years' classroom

Product Summary

An award-winning friendly wooden robot that will teach your child the basics of computer programming through adventure and hands on play. Cubetto is screenless, friendly and ready to play. **No additional tech required!** Montessori approved; LOGO Turtle inspired. 20,000+ schools already use Cubetto!

- Coding without the screen
Cubetto lets you teach coding without screens, increasing engagement, and enhancing learning
- Inclusive & gender neutral
Cubetto is designed to help children play collaboratively, irrespective of reading ability or language
- More learning, less prep
Cubetto works straight out of the box, with little prep or prior experience required to start teaching.



Additional Information

How does it work?

- Coding Blocks
A coding language you can touch and manipulate like LEGO®. Each block is an action. Combine them to create programs.
- Control Board
Place the blocks on the board to tell Cubetto where to go. Hit the blue button and Cubetto executes your very first program.
- Maps and Books
Expand play time with world maps, educational story book and challenges that take your child on epic coding adventures.

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Cubetto Link](#)

Cue Robot



Grade level: 6 - 8

Students Per Item: 1 - 2

Price

- **Single Unit Price: \$199.99**
Comes with 40 challenges to keep kids engaged for hours on end.
- **Average Price Per Classroom (Est. 24 students): \$2,400.00**
Includes: 12 Cue in onyx. Online lesson plans and Curriculum Guide can be found [here](#).

Device Requirement(s)

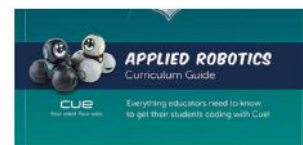
iOS or Android Device Required



Product Summary

The award-winning Cue robot is designed for kids who have an interest in coding. Cue will help them **transition from block-based code to state-machine and text-based programming.**

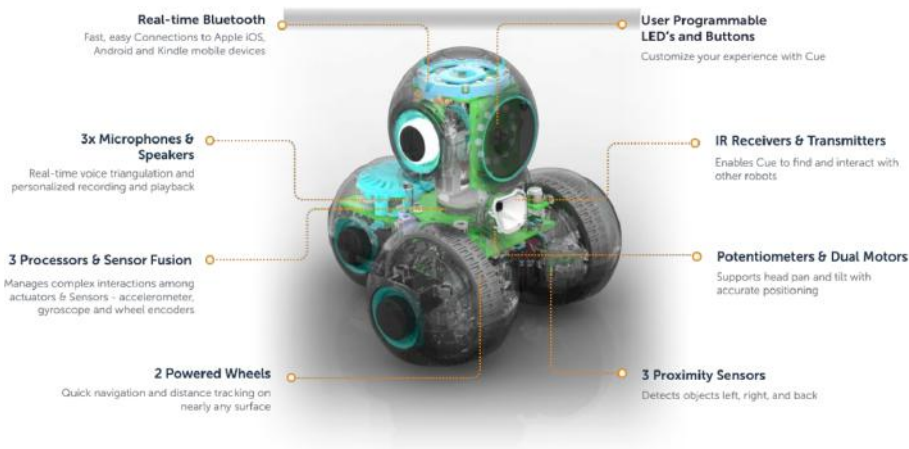
- With a growing library of in-app demos, tutorial, and challenges, Cue supports kids' **self-guided exploration of programming languages, robotic capabilities, and personally meaningful projects.**
- Cue's motors and sensors work together seamlessly to provide accurate and versatile behavior while reacting in real time to its surroundings, inspiring kids to **build problem-solving skills through coding, engineering, and design.**



Full curriculum guides and lesson plans available to incorporate Cue into Arts, Coding, ELA, and Math available!

Additional Information

- Three ways to learn coding:
Cue robot engages kids as they build coding proficiency by transitioning from Block-Based coding to text-based JavaScript. We've also included Wonder, a state machine-based language designed specifically for our Robots.
- Interactive AI:
With four unique personality avatars that you can try, Cue is a comedian trapped inside a robot's body. Cue can chat with you about books or tell you jokes and has a vocabulary of over 170,000 words and 30,000 text responses.
- 30+ hours of play in a single charge:
Cue uses a rechargeable ION battery for endless STEM learning. You can group strings of instructions together, as Cue has microphones and more. Cue comes with 40 challenges to keep kids engaged for hours on end.
- Real-time bluetooth:
Active communication is one of cue's main Features and is ready to give you simple tasks and helping you get started right out of the box. The Bluetooth commands work with iOS, Android, chrome books, windows 10, and Kindle Fire.



Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Single Cue Link](#)

[Cue 12 Pack](#)

[Curriculum & Lesson Plans](#)

Dash Robot



Grade level: K - 5

Students Per Item: 1 - 2

Price

- Single Unit Price: \$149.99

Device Requirement(s)

iOS or Android Device Required



Product Summary

Bring coding to life!

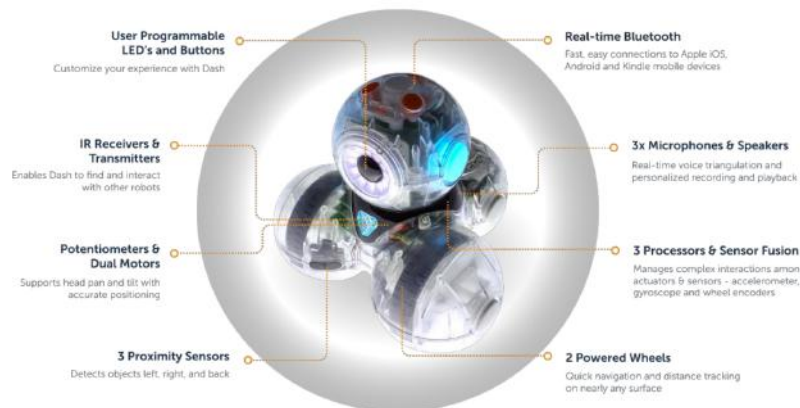
- Kids can watch their **virtual coding turn into tangible learning experiences in real time** as Dash, with its performance and multiple sensors, interacts with and responds to its surroundings.
- Kids can give Dash Robot voice commands and **explore loops, events, conditions, and sequences** with the five free apps that come with Dash Robot.



Dash is used in over 20,000 schools today and expanding rapidly. Curricula and lesson plans to use Dash in the classroom are also available!

Additional Information

- With Dash robot, kids ages 6 and up can create anything they can imagine.
- Dash is a real robot that responds to voice commands or any of our five free downloadable apps to sing, draw, and move around.
- It's more than learning to code. Dash lets kids explore loops, events, conditions, and sequences and see how they result in dash's real-life movements.
- Dash helps kids engage with technology in an open-ended and significant way – it's not just a toy, it's real-world problem solving. Kids will grow in their confidence as digital citizens and architects by seeing their own designs come to life.
- Dash robot comes charged and ready to enjoy straight out of the box and includes two free building brick connectors. Transform Dash into an animal, a delivery truck, and even a catapult using your own LEGO bricks.
- Dash can start at any skill level and build from there, so it's perfect for kids ages 6 and up. The grown-ups might find themselves unable to resist the fun of putting Dash through his paces.
- Dash is perfect for classrooms, families, and friends, letting kids work solo or come together for Group coding projects.
- Dash provides up to 5 hours of active play and up to 30 days of standby time with a rechargeable lithium-ion battery, and it recharges with the included power adapter or via USB.



Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Single Dash Robot Link](#)

DIY Coding Kit



Grade level: 2 - 8

Students Per Item: 1 - 3

Price

- **Single Unit Price: \$99.99 (without warranty)**
- **Average Price Per Classroom (Est. 24 students): \$799.92 (without warranty)**

Device Requirement(s)

iOS or Android Device Required

Product Summary

Let your kids learn and play at the same time with this STEM learning Coding Kit! Computer programming for kids made easy, the kit includes all the essentials for children to grasp the **fundamentals of coding and develop programming skills**. Children can **start to code and create an infinite number of projects easily**.

- Everything a child needs to give a head start to coding is in the kit
- Free Twinner - STEAM and Robotics mobile app is also available for download for easy guidance
- Sample projects will encourage children to develop & design
- Using the manual, children can start building, playing & coding as fast as possible
- The modules are produced to be LEGO compatible so that it can be easily designed & played



Additional Information

Product includes:

- Servo motor
- Ultrasonic sensor
- Arduino module
- Jumper cables
- Buzzer
- USB data cable

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming, Computing Systems

For More Information:

[*DIY Coding Kit Link*](#)

Evo Robot (Ozobot)



Grade level: K - 12

Students Per Item: 1 - 2

Price

- **Single Unit Price: \$110.00**
- **12 Evo Robot Classroom Kit 2.0 Price: \$1,500**
- **18 Evo Robot Classroom Kit 2.0 Price: \$2,000**



Device Requirement(s)

iOS or Android Device



Product Upkeep

Markers (for screen free coding)

For All Grade Levels & Subjects



Product Summary

Ozobot robots teach coding in two ways: with and without screens! Ozobot Classroom Kit includes 12 or 18 Ozobot Evos (depending on your selection) plus full access to Ozobot Classroom LMS. Free, standards-aligned lesson library of interdisciplinary lessons covering all grades and STEAM subjects.

Additional Information

STEAM made simple with 18 robots, tons of educator tools, and 2 ways to code

The Evo Classroom Kit comes with 12 or 18 Evo robots, accessories, and 1 Ozobot Classroom license. K-12 students can code Evo two ways: screen-free with Color Code markers and online with OzoBlockly visual programming. Ozobot Classroom software unlocks teacher training, lesson library access, and real-time information about student engagement for both online and offline student activity.

Tech Specs: Evo is a pocket-sized robot packed with tech, including:

- Bluetooth® Smart connection (30 ft. range)
- Proximity sensors* for Tricks and obstacle detection
- Optical sensors* for detecting lines and color codes
- LED lights*
- Built-in speaker*
- Strong polycarbonate shell
- Automatic firmware updates
- Regular app updates with new features and games
- Rechargeable LiPo battery (60 min. charge time)

* Program these Evo features and more with OzoBlockly!

Recommended Devices:

Evo doesn't require a smart device to empower creativity and coding. You can always go screen-free and code Evo with markers and stickers. For running the Evo app, however, we recommend devices with these specs or higher:

- iOS 7.0, 1GB RAM (iPhone, iPad, or iPod touch)
- Android 4.0, 2GB RAM
- Bluetooth 4.0

The following devices have been tested and confirmed to work with Evo and the Evo app:

- iPhone 5 and newer
- iPad 3 and newer
- Samsung Galaxy 6 and newer
- Google Pixel 1 and newer

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Evo Robot Link](#)

[Personalized Educator Packages](#)



Finch Robot



Grade level: K - 12

Students Per Item: 1 - 2

Price

- Single Unit Price without Micro Bit: \$119.00
- Single Unit Price with Micro Bit: \$139.00
- Average Price Per Classroom without Micro Bit(Est. 24 students): \$2856.00
- Average Price Per Classroom with Micro Bit(Est. 24 students): \$3336.00

Device Requirement(s)

Micro Bit Required

iOS, Android, MacOS, or Windows Required

Thousands of classrooms are using Finch Robots!



Product Summary

Bring hands-on learning into your classroom with physical computing!

The core philosophy in designing Finch 2.0 is that it should be of **equal use and appeal to any age or gender**. This is accomplished this with an engaging design, and a suite of **programming options including icon-, block-, and text-based languages, including Makecode, Javascript, Python, and Java**.

The Finch 2.0 can be used in kindergarten to introduce **computational thinking** as readily as it can be used in CS1 to **introduce lists, variables, or control structures**.



Additional Information

Finch Robot 2.0 includes the following features:

- Bluetooth wireless connection
- Integrated and rechargeable battery (lasts 6+ hours)
- Centrally positioned marker holder for drawing
- 5 tri-color LEDs
- Multi-tonal buzzer
- 2 light sensors, 1 distance / obstacle / ultrasonic sensor, 2 infrared line tracking sensors
- Compatible with plastic bricks for adding accessories & building fun
- Marks on wheels for counting revolutions
- Surface can be written on with whiteboard markers
- micro:bit features: accelerometer, radio, compass, buttons
- RoHS compliant

Finch Robot 2.0 will launch with access to the following programming languages:

- FinchBlox (icon-based for pre-readers - available on iOS, Android, Fire OS)
- BirdBlox (block-based - available on iOS, Android, Fire OS)
- MakeCode (block-based - available on Chrome, Mac, Windows, Linux)
- Snap! (block-based - available on Mac, Windows)
- Python (text-based - available on Mac, Windows)
- Java (text-based - available on Mac, Windows)

Notes:

A Bluetooth dongle is required for Snap!, Python, and Java on Windows and pre-2014 Macs.

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Finch Robot Link](#)

For personalized educator discounts, email: info@birdbraintechnologies.com

The Force or Frozen II Kano Coding Kit

Grade level: 1 - 8

Students Per Item: 1

Price

- **Single Unit Price: \$39.99**
- **Average Price Per Classroom (Est. 24 students): \$959.76**

Device Requirement(s)

iOS, Android, MacOS, Windows Required

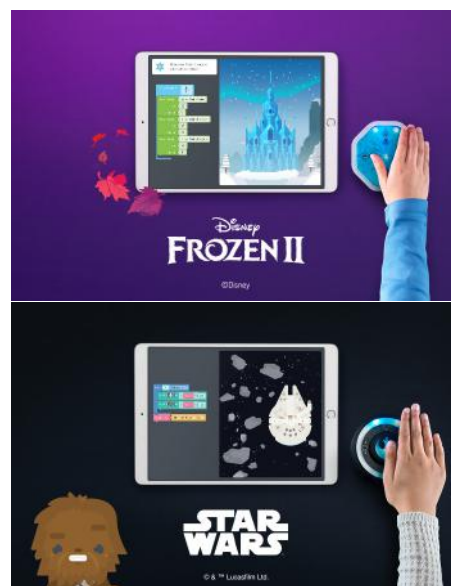
Product Upkeep

AA Batteries

Control code with a wave of a hand!

Product Summary

- Build your own sensor:
Open the box, pull out the pieces, button and board. Follow the simple steps, build your own wand, learn how it works. Connect it to your tablet or computer, and start creating.
- Learn to code with step-by-step creative challenges:
Discover new powers with step-by-step challenges. Connect code blocks, see the JavaScript. Learn about loops, logic, and variables.
- Create, share, and play with the Kano community:
Join our creative community. Be inspired, make, share and play with magical creations by people all over the world. Safe and friendly.



Additional Information

- Comes with sensor parts, batteries, step-by-step book, stickers, poster, and free Kano app. Tablet not included.
- Endless play with Kano world. Remix art, games, and music made by a creative community.
- No coding experience necessary. Includes Lifetime care and 1 year Warranty. Ages 6+.

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Frozen II Kano Coding Kit Link](#)

[Star Wars Kano Coding Kit Link](#)

[Special Education Discounts](#)

Kids First Coding & Robotics



Grade level: K - 2

Students Per Item: 1 - 4

Price

- **Single Unit Price: \$129.95**
- **Average Price Per Classroom (Est. 24 students): \$779.70**

Product Summary

Meet Sammy. This cute little peanut butter and jelly sandwich is actually a robot that teaches coding principles and skills to children in grades K-2.

- Early STEM learning:
An introduction to the fundamentals of coding and robotics
- Unplugged:
No software, apps, or smart devices required!
- Clear explanations:
The 64-page, full-color experiment manual guides kids through the Coding lessons and model building exercises.
- Story-based:
Six different storylines are included, Each with a Series of model-building and coding lessons, like a mouse moving through a maze to find cheese or a soccer player moving a ball into the goal!
- Correlated curriculum:
The 30 coding lessons are aligned with the teaching standards developed by the computer science teacher's association (crystal), The international Society for technology Education (ISTE), and code.org
- **A parents' Choice Gold award winner**



Additional Information

You don't need a tablet, smartphone, or computer to program this robot; programs are created by simply laying down a sequence of physical code cards. As the robot drives over the code cards, an OID optical scanner on the bottom of the robot reads the code cards one by one and loads the program. Next, place the robot on a grid made of map cards, and the robot runs the program. You can program the robot to move in different directions, activate its output gear, light up its LED, play sounds, and respond to different function cards. The integrated output gear makes it possible to build simple robotic creations with arms or other moving parts that respond according to the program's instructions.

This robot kit also teaches physical engineering and problem-solving skills through a series of building and coding lessons. The 30 lessons are aligned with standards for computer science education developed by the Computer Science Teachers Association (CSTA) and the International Society for Technology (ISTE) Education, as well as courses from Code.org. The lessons progress in complexity through the illustrated manual, allowing the kit to be appropriate for a child as young as four years with help from an adult and as old as eight years. The lessons cover these six key areas in coding: sequencing, loops, events, conditionals, functions, and variables.

In addition to Sammy, there are five other stories, each with a series of model-building and coding challenges and lessons related to it: a mouse moves through a maze to find cheese; a penguin wanders around a zoo; a soccer player moves a ball into the goal; a fire truck puts out a fire; and a factory robot performs tasks in a factory scene. A full color illustrated manual guides users through the coding lessons and the assembly of the different models.

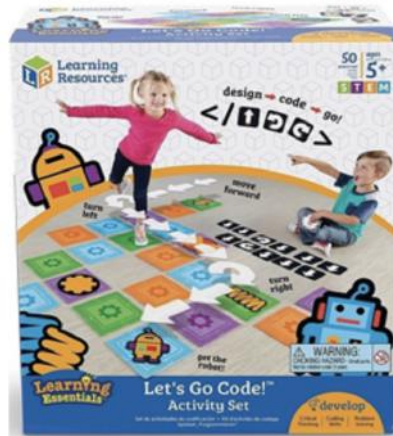
Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming
- Next Generation Science Standards : K-2-ETS1-2 Engineering Design K-PS2-2 Motion and Stability: Forces and Interactions

For More Information:

[*Kids First Coding & Robotics Link*](#)

Let's Go Code! Activity Set



Grade level: PreK - 2

Students Per Item: 1 - 5

Price

- Single Unit Price: \$34.99
- Average Price Per Classroom (Est. 24 students): \$279.92

**Learn through Play!
Screenless And No Technology Required!**

Product Summary

Help your little learners learn early coding concepts in this engaging, non-digital game.

- Children will hop, turn, step and jump their way across the activity mat as they practice their problem-solving skills.
- This step-by-step approach is the perfect way to help youngsters understand the basics of coding.
- Plus, they'll build their gross motor skills along the way.



Additional Information

- This engaging new set includes 16 EVA foam mats, 20 coding cards, and the following die-cut pieces: 2 robots, 2 gears, 2 springs, 2 arrows, and 2 Xs.
- The full-color guide covers a coding overview and provides maze samples.
- Color mats measure approximately 10" x 10".

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Let's Go Code Link](#)

Sphero SPRK+



Grade level: K - 12

Students Per Item: 1 - 2

Price

- **Single Unit Price: \$129.99**
- **Sphero BOLT 15 Pack \$2,024.99**
- **Sphero BOLT Power Pack (15 Sphero Robots): \$2649.99**

Device Requirement(s)

iOS, Android, Amazon Fire OS, MacOS, Windows, or Chrome OS

Product Summary

SPRK+ is a programmable robot ball designed to **inspire creativity and curiosity through coding and play. Easily learn programming, complete hands-on activities, and share your creations** with the community in the Sphero Edu app.

Educators, coders, makers, artists, problem solvers and curious-minded people everywhere use Sphero's educational kits and robots to bring effective STEAM learning into the classroom.

Free teacher resources designed to keep you informed and enrich your classroom experiences available!



Additional Information

Learning is Evolving. Get on the Ball!

Equipped with Bluetooth SMART and a scratch-resistant, durable shell, SPRK+ takes hands-on learning up a notch. Programmable sensors like motor encoders, LED lights, accelerometer, and a gyroscope allow for countless experiences and coding conditions. SPRK+ will foster a love of robotics, coding, and STEAM principles. . . all through play.

- Program Your Robot
The Sphero Edu app empowers anyone to program their robot. Drag and drop actions, controls, operators, and more to give your bot the orders.
- Complete Awesome Activities
Program a painting. Navigate a maze. Mimic the solar system. Swim across the water. Have a dance party. . . The only limit is your imagination.
- Share with the World
Join the growing community, share your creations to inspire and be inspired, and keep track of your class all in one place. Preparing for the future has never been so fun.



Product Features:

Durable, UV-coated, waterproof, clear plastic shell

Bluetooth smart connection

Inductive charging station included

Maze tape, 360-degree protractor, and sticker sheet

Compatible with Sphero Edu app for iOS, Android, Amazon Fire OS, macOS, Windows, & Chrome OS

Compatible with Sphero Play app for iOS, Android, & Amazon Fire OS

Compatible with Swift Playgrounds for iOS

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Sphero SPRK+ Link](#)

For special deals [visit](#)

Strawbees Coding & Robotics



Grade level: 5 - 11

Students Per Item: 12 - 40
(Classroom set)

Price

- Classroom Set Price: \$695.00
- Single Set Price: \$99.90

Device Requirement(s)

Windows & Mac OS apps, or Chromebook webpage

Product Summary

Learn **creative coding and building** with the classroom set of Quirkbots! Make a walker, a blinking star, or a pig shake in fear when it senses darkness. Connect to the computer, code, and upload a program that can tell your invention to move, blink, or both. The Quirkbot has a **rechargeable battery** and can be removed from the computer to let your project come alive in the real world.

You can learn how to program in **three different ways**: flow, block, and C++ text **designed for all levels of experience**.



Additional Information

Key Features

- Physical Computing
extend programming to the physical world beyond the computer screen with creating interactive projects with the Strawbees building system.
- Creative Coding
3 ways to program for all levels of experience using our customized Strawbees CODE platform.
- Material Containers
individual organizer boxes for holding all hardware together ready to use in the classroom.
- Electronic Building Set
all electronics easily connect to Strawbees connectors and straws.
- Color-coded pieces
making it easy to follow the activity instructions
- All materials are custom-made, durable, and reusable
finish building, disassemble, and begin a new project.

Included in the Classroom Kit:

Quirkbots × 12
Servo backpacks × 12
Servo Motor 120 (SM-S2309S) × 12
Alligator cables × 24
Dual-color LEDs Red/Blue × 72
Light sensors × 12
USB cables × 12
Mini screwdrivers × 12
Organizer boxes × 12
Building straws (in colors Blue, Pink, Yellow, Black)– 600
Connectors - 1-leg Blue (408), 2-leg Yellow (192), 3-leg Green (128), and 5-leg Red (72)
Teacher booklet × 1
Free access to lesson plans at Strawbees Learning
Free access to the coding software Strawbees CODE

Computer Science Standard(s)

- Washington State CS Standards: Algorithms and Programming

For More Information:

[Strawbees Coding & Robotics Kit Classroom Set Link](#)
[Strawbees Coding & Robotics Kit Individual Set Link](#)



Turing Tumble



Grade level: 4 - 12

Students Per Item: 1 - 3

Price

- **Single Unit Price: \$69.95**
- **Average Price Per Classroom (Est. 24 students): \$509.80**
For special educator discount, email hello@turingtumble.com



Product Summary

Great for classrooms, camps, libraries, and STEM events. Educator Guide, Computer Logic Lesson, & Online Simulator Available!

- Teaches coding strategy as well as abstract concepts like binary, binary operations, and logic gates in a fun, tangible way.
- Works great in math stations, unit studies, for learning engineering concepts, introducing computer science principles, or for free choice time.
- Offers students the opportunity to peek under the hood of computers and discover how they work.



It is hands-on (no screens or batteries needed), easy to learn, and the logic is all right there in front of them.

Additional Information

Discover how computers work!

See how simple switches, connected together in clever ways, can do incredibly smart things.

- **Build marble-powered computers:** Turing Tumble is a revolutionary new game where players (ages 8 to adult) build mechanical computers powered by marbles to solve logic puzzles. It's fun, addicting, and while you're at it, you discover how computers work.
- **Discover how computers work:** Computers are full of ingenious logic and astonishing creativity. They're everywhere, but most of us don't understand how they work. With Turing Tumble, you can see for yourself how computers work: The logic isn't hidden inside a computer chip, it's right there in front of you.
- **Hands on, screen off:** Have a blast learning to code in a language without words. Turing Tumble blurs the line between coding and building machinery. There's no syntax to learn, no abstraction, and no electronics at all.

Computer Science Standard(s)

- Washington State CS Standards: Computing Systems, Algorithms and Programming

For More Information:

[Turing Tumble Link](#)

[Educator Info and Resources Link](#)

Set Up Suggestions:

The following toys are best if set up to play with on the floor or a low large table:

- Code & Go Robot Mouse Activity Set
- Finch Robot 2.0 (to draw, add a whiteboard on surface)

The following toys are best if set up to play on the floor:

- Code Hopper (requires a lot of free space as kids are hopping and jumping on mats)
- Let's Go Code Activity Set (requires a lot of free space as kids are hopping and jumping on mats)
- Cubetto (has small parts that can get lost / choking hazard; requires fair amount of free space)
- Code 'n Learn Kinderbot (does not require a lot of space)
- Code-a-pillar Twist (does not require a lot of space)
- Cue Robot (does not require a lot of space)
- Dash Robot (does not require a lot of space)
- Evo Robot (does not require a lot of space)
- Sphero SPRK (does not require a lot of space)
- Coding & Robotics (requires fair amount of space / has small parts that can be lost)

The following toys are best if set up to play on a table:

- CodeMaster (has small parts that can get lost / choking hazard)
- DIY Coding Kit for Ages 8-12

The following toys are best if set up on independent small stations:

- Turing Tumble (has several small pieces that can be lost / choking hazard)
- Code Gamer (can play using small smart device while sitting in a chair and table)
- Harry Potter Kano