



Coding for Kids

Recommended Age: 5 and up

Explore coding and programming concepts with this fun and instructive kit. Learn to program with the board game Robot Turtles, code Awbie on your iPad, and program the Robot Mouse to get to the cheese.



Steam Kits were supported in whole or in part by the U.S. Institute of Museum and Library Services under the provisions of the Library Services and Technology Act, administered in California by the State Librarian.



Contents List

- **Book: Hello Ruby: Adventures in Coding by Linda Liukas**
- **Book: DK Find Out! Coding**
- **Robot Mouse**
 - 16 green board pieces
 - Code & Go Robot Mouse Activity Guide
 - 10 Activity Cards
 - Blue robot mouse
 - Yellow cheese
 - 3 Orange arches
 - 22 purple dividers
 - 30 green cards
 - 40 gray cards
- **Osmo Awbie**
 - Osmo base
 - 4 blue blocks
 - One red block
 - 2 orange blocks
 - 8 number blocks
 - One green block
 - One purple block
 - 2 gray blocks
- **Robot Turtles**
 - Board
 - Instructions
 - 4 bug tiles
 - 20 stone wall tiles
 - 12 ice wall tiles
 - 4 crate tiles
 - 4 robot turtle tiles
 - 4 jewel tiles
 - 4 code card decks (44 cards in each)



Getting Started Guide

The Coding for Kids kit has lots of fun activities, both low-tech and high-tech, to help you explore the basic concepts of coding and programming.

Robot Turtles is a fun board game that teaches kids to think like programmers. They learn how to write code by writing a program in small steps, giving one command at a time and watching the outcome, that when a program isn't working properly it has a BUG and fixing the bug is called debugging –it's just like making a mistake and correcting it, that code is a Language by using simple commands (move forward, turn left, turn right) in the form of Code Cards to “speak” to the computer and tell it exactly what to do, and that functions can be used to represent a repeating sequence and to create a shortcut. When parents and kids play Robot Turtles together, they can explore and internalize the building blocks of programming while having fun. Look through the instructions included in the game box to get started.

Learn coding basics with Colby, the robot mouse in the Code & Go Robot Mouse set. Follow the instructions in the activity guide that comes with the set to learn how to program Colby to get through a maze that you design to the cheese at the end. Playing with Colby teaches kids to think in sequential steps and build a set of instructions, or program, for Colby to follow to get to the cheese. Included in the set are activity cards to help build more challenging mazes, or build your own! The included coding cards also help kids keep track of the instructions, program, that their building for Colby to follow. Remember, always make sure to clear the previous program out of Colby by pressing the yellow button before giving him new instructions to follow!



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Getting Started Guide (cont.)

Step into a beginner friendly introduction to block-based coding with Awbie, the Osmo coding game you can play on your iPad. To use Awbie, you will need an iPad and you'll need to download the free Osmo Coding Awbie app from the App Store. Place your iPad in the included Osmo base and attach the red piece to the top of the iPad over the camera. Then you can place the Awbie code blocks in sequence in front of the iPad to tell Awbie what to do. Your kid-coder will learn how to place physical blocks into sequences, loops and if/or actions, so on-screen Awbie can walk around, jump over obstacles and grab strawberries in a magical world. It's a great way for kids to learn about coding and have fun at the same time. Awbie is a great way to try block-based coding, similar to Scratch, in a physical environment. Kids can actually touch and manipulate the blocks, rather than having to work with them digitally. See the included Getting Started with Coding Awbie sheets for more information on how to play with Awbie.



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Additional Information

When returning the kit, please check if all contents are in the box. If something is missing, please inform staff.

For a full list of available Pasadena Public Library STEAM Kits visit our website at:

<https://www.cityofpasadena.net/library/steam/#steam-kits>