



Course 1

OVERVIEW

Students create computer programs with loops and events and write algorithms for everyday tasks. Through this they learn to collaborate with others meaningfully, investigate different problem-solving techniques, persist in the face of difficult tasks, and learn about Internet safety. By the end of this course, students create their very own custom game or story that they can share. Students starting in Course 1 will be early-readers in the lower elementary grades.

Lesson Sequence

Online lessons are in regular text and unplugged activities are in **bolded** text.

#	Lesson Name	Description
1	Happy Maps	Students create algorithms (sets of instructions) to move a character through a maze using a single command.
2	Move It, Move It	Students learn what it's like to instruct their classmates to move through a maze in their classroom.
3	Jigsaw: Learn to drag and drop	Students gain familiarity with a computer by solving jigsaw puzzles, which accustom them to the Code.org system and also to the idea of dragging and dropping. Students learn how to collaborate with others on assignments at the computer.
4	Maze: Sequence	Students write programs (algorithms for the computer) that get a character through a maze. They'll understand the importance of sequence in the programs they write.
5	Maze: Debugging	Using the same environment as the prior lesson, students are presented with a maze and a pre-written program that fails to get the character to the goal. Students will have to "debug" or fix the pre-written program.
6	Real-Life Algorithms	Over the first 5 lessons in this curriculum, students have been writing algorithms. This lesson calls out ways we use algorithms in our daily lives. This lesson also focuses on the bigger picture of computer science and how algorithms play an essential part.
7	Bee: Sequence	Students write programs that move a cartoon bee around that gathers nectar and makes honey. This is a more complex version of Maze.

#	Lesson Name	Description
8	Artist: Sequence	Students write programs that move a character around, drawing a line behind it wherever it goes.
9	Building a Foundation	Students build a marshmallow structure using only provided supplies. Structures must complete a task (reach a certain height or bear a certain weight), and students discuss the idea of persisting during a task.
10	Artist: Shapes	Students write programs that draw simple shapes, while describing their position relative to other shapes (above, below, etc).
11	Spelling Bee	Students write programs that moves a Bee around a grid of letters. The path the bee takes spells out simple words.
12	Getting Loopy	This lesson introduces the programming concept of loops (repeated instructions) through a dance activity. Students will learn simple choreography and then be instructed to repeat it.
13	Maze: Loops	Students write programs in the Maze that involve using a loop.
14	Bee: Loops	Students write programs in the Bee environment that involve using a loop.
15	The Big Event	Students are introduced to the programming concept of “events,” which are actions that a computer constantly monitors for. The teacher will press buttons on a fake remote, and students have to shout specific phases depending on which button is pressed.
16	Play Lab: Create a Story	Students write event-driven programs that create games or tell stories. There are puzzles with certain goals and at the end, students are encouraged to express their creativity to create whatever they’d like.
17	Going Places Safely	The Internet is a powerful, but sometimes dangerous place. Teachers introduce to students how to stay safe while navigating the Internet.
18	Artist: Loops	Students write programs that draw interesting and beautiful patterns using loops.