



## Learn to Code Part One + Part Two

**Cost:** \$18

**Duration:** 90 Minutes

**For:** Grades 3-6

**When:** 3:30pm – 5:00pm **Pick your date:** April 29<sup>th</sup>, and 30<sup>th</sup>

**Workshop cap:** 8 participants

**Level:** Beginner

**Prior experience needed for Part One:** None

**Prior experience needed for Part Two:** Part One, or previous coding experience (Email [agoldman@whitemountainsscience.org](mailto:agoldman@whitemountainsscience.org) for special cases)

What is code? Learning to code is shorthand for learning how to write programs for computers. Programs are just recipes or sets of instructions for computers. They result in the practical, artistic, and entertaining use of computers and computers are incredible tools for these applications. The bottom line is that writing code is fun. It's the process for making technological magic happen.

### **Part One:**

In this workshop, participants will learn how to write their own programs, many of which will be tied to graphical outputs so they can quickly and easily see the output of their creations. Through these programming projects, participants will learn the basics of program flow, loops, decisions, and variables.

### **Part Two:**

In this follow up workshop, participants will further their knowledge on programming as we delve into more complex code. Participants will break down the code given and dive deeper into the reasoning behind its use. Participants will see the real world applications for code, and see how it relates back to what they are doing in this workshop.

The main programming language we will use is Python but participants will see how learning the basics of writing code can be applied to programming robots, websites, mobile device apps and more. At the end of both workshops, participants will learn how to get Python for their own computers at home so they can keep programming beyond the workshop. Python is free and available on all computer platforms.