



## Tech Apps and Coding: Intro to micro:bit Materials List

The following materials are needed to complete the *Introduction to Computing with micro:bit* module in the Tech Apps and Coding CodeHS course. Students can work in groups (2-3) or individually through the course. Having groups larger than 3 students is not recommended.

Item (with suggested link)	Amount (per group or per student)	Descriptions/Notes
<a href="#">Micro:bit</a> with USB cable	1	This microcontroller is used in every project. There are many kits available through Amazon, but be sure to check that the actual micro:bit board is included. ( <a href="#">This kit includes #2: a battery pack!</a> )
<a href="#">Battery Pack with JST connector</a>	1	You'll also need <b>2 AAA</b> batteries to go inside each battery pack. This will allow students to run programs on their micro:bit when unplugged from the computer and plugs directly into the micro:bit. Though the micro:bit can be run using computer power, there are many scenarios where students will want to run their programs without being tethered to the computer.
<a href="#">Alligator Clip Jumper Wires</a>	10-20	Wires are used to connect external components to the micro:bit in a good number of projects. To connect components together, alligator clip jumper wires are needed.
<a href="#">LEDs</a>	10-15	LEDs are used in many projects throughout this course. A variety of colors is suggested, though due to the power limitation of the micro:bit at 3V, standard red, orange, and yellow LEDs are the best options. Additional colors can be used along with the external battery pack.
<a href="#">Resistors</a>	10-20	Resistors are used to limit the amount of current flowing through various components. Due to the long, skinny legs of resistors, students may struggle getting them into the breadboard. For this reason, it might be helpful to have a pair of <a href="#">wire cutters</a> on hand.