

Getting Started with MicroBlocks | Teacher Notes

MicroBlocks is a blocks based programming language for physical computing inspired by Scratch that runs right inside microcontroller boards such as the micro:bit, Circuit Playground Express, and others. With MicroBlocks, students can create playful animatronic creatures, interactive jewelry, electronic games, "real world" digital instruments, science experiments, and much more.

MicroBlocks is easy to use — colorful blocks snap together to make scripts. Students can test scripts directly on the microcontroller as they work. The scripts run immediately, without tedious downloading pauses. This seamless workflow encourages experimentation and promotes deep engagement.

Follow the steps below to get set up. Feel free to reach out to us at interest@microblocks.fun if you have any questions!

Step 1 | Prepare Your Technology

MicroBlocks is available as a downloadable application and as a Chrome app. To access the version of MicroBlocks that makes the most sense for you, visit microblocks.fun/download. Here, you can also find helpful hints for the operating system you are using. On a Mac, you will need to right click to open the MicroBlocks download and on some versions of Windows, you may have to download drivers separately.

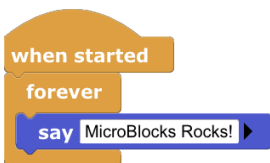
Step 2 | Ready Your Microcontroller

Once the MicroBlocks firmware is installed, you just need to start MicroBlocks and plug in your board. A green circle will appear behind the USB icon to show that the board is connected.

When you first plug in a new microcontroller, or one that does not have the latest version of the firmware installed, MicroBlocks will prompt you to install or update the firmware. For students, we created this [activity card](http://bit.ly/2YMKo68) (<http://bit.ly/2YMKo68>) to assist with getting started!

Step 3 | Program Your Microcontroller

When MicroBlocks connects to a board, it loads any libraries specific to that board. For example, when you plug in a micro:bit, you will see the **Basic Sensors** and **LED Display** libraries appear. In the LED display category, drag a display block to the scripting area and turn on the LED display by clicking the block. Try out some of these [activity cards](http://bit.ly/2YMKo68) (<http://bit.ly/2YMKo68>) to see what else you can make!



For more information, visit microblocks.fun
Questions? Email us at interest@microblocks.fun