

Elective Virtual Learning

6th Grade Intro to Gateways

Intro to Microcontrollers April 15, 2020



7th & 8th Grade Multimedia Lesson: April 15, 2020

Objective/Learning Target: I can code a microcontroller to make music

Warm-Up #1

So far you have: Learned to code LEDs - What is an LED?_____

How does it get its color?_____

Your Circuit Playground has RGB LEDs. Why are some LEDs called RGB? ______

Background Information:

Have your Focus Sheet out. (here)

Did you Share your song with someone in your family yesterday? Do you understand that the Circuit Playground has a tiny tiny Speaker that will not only play sounds as in your first coded tutorial, but also play music? Fortunately, when playing the circuit playground virtually, it can be heard much louder through your computer's speaker! Lesson & Practice:

Watch the Video:

Let's combine our skills to play Music with LED Animation

Watch the video all the way through once.

Open Your Browser> Go To <u>makecode.adafruit.com</u> Then go back through the video & be sure to do the step that I show..



Play around with the notes and your LEDs. Don't be afraid to try things out. If you get stuck start over. If you have questions write them on your focus notes.

CHALLENGE!

Can you figure out the notes to another song? Feel free to send me your file if you do!

Self-Assessment:

- Play your coded Circuit Playground of the Star Wars Theme & light show to a family member.
- Take a video or couple of images of your program or download your code to email to me. Instructions for downloading were at the end of the video.



