



Elective Virtual Learning

6th Grade Intro to Gateways

Intro to Microcontrollers

April 14, 2020



7th & 8th Grade Multimedia Lesson: April 14, 2020

**Objective/Learning Target:
I can code a microcontroller to create sound**

Warm-Up #1

Have your Focus Sheet out. ([here](#))

You will be adding to this page today

Did you find items that you think have a microcontroller in them?
Did you get stumped?

Warm-Up #2

Refresh your memory of what a microcontroller is.

Look at the picture of the Circuit Playground. Did you label any parts you used when you were coding yesterday?

One of the things you learn was how to light up LEDs. What is an LED?

[Watch this video to find out more about LEDs](#)



Lesson Introduction/Background Information:



As you watch
this...

Write down any
items you did not
list as having a
microcontroller in
them on your focus
sheet.

Practice:

Watch the Video:

[Behind the MakeCode: The speaker on the Circuit Playground](#)

Watch the video all the way through once.

Open Your Browser > Go To makecode.adafruit.com

Then go back through the video & be sure to do the Twinkle Twinkle Little Star song.




You may need to pause the video to complete the steps being shown. You may also have to rewatch the video to get ALL the steps!.

Continued Practice:

Go Back to your Focus Sheet - Identify the speaker on your previous focused notes & what it does. Identify any other parts you learned but have not labeled yet

Self-Assessment:

- What surrounds the Voice coil that makes it work?
- Draw 2 different speakers from common objects and compare the size of speaker in the Circuit Playground in your drawing.
- Play your coded Circuit Playground of Twinkle Twinkle Little Star to a family member.



Email your teacher if you have questions

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