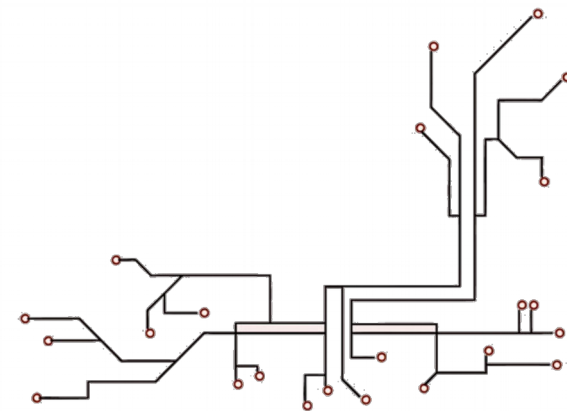
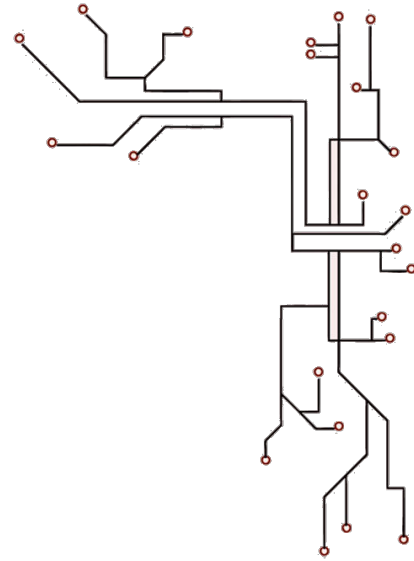


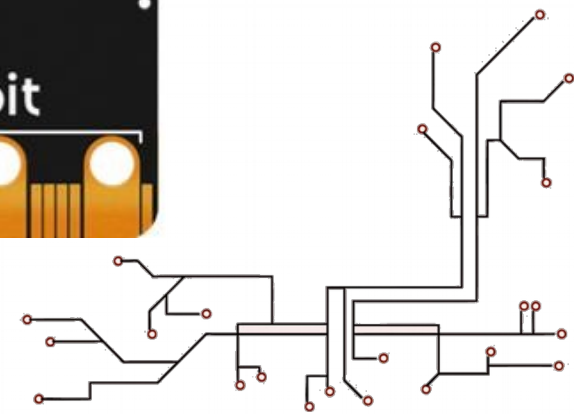
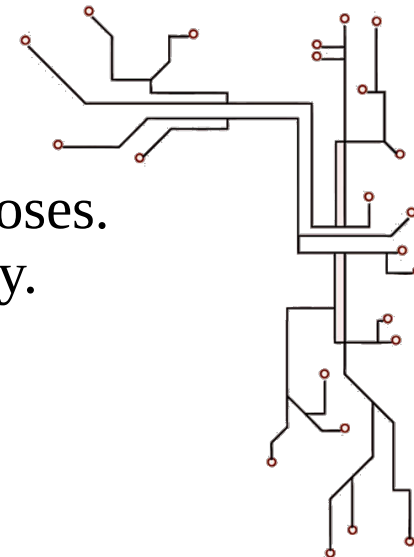
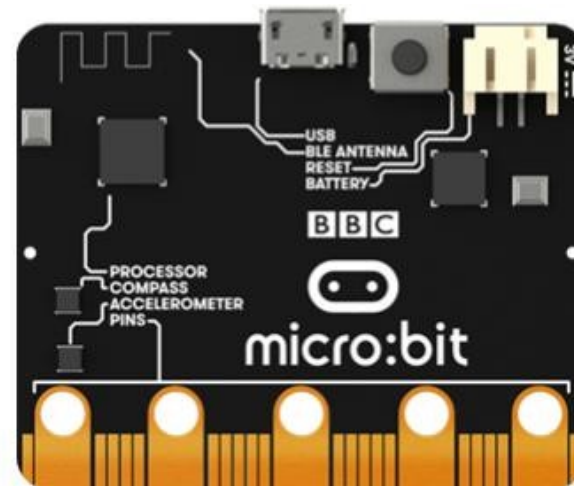
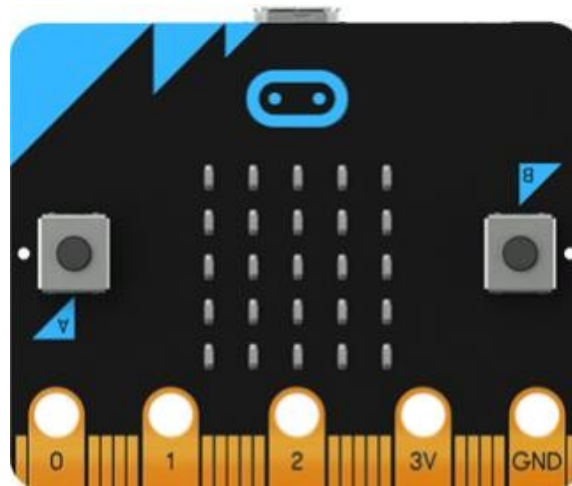
micro:bit Basics

- micro:bit
- micro:mojis – Movie
- micro:coding – Loops
- micro:mojis – Experiment



First, meet micro:bit!

The micro:bit is a pocket computer designed for education purposes. We can use it to help us imagine and design a smarter, future city.



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micro:bit Programming

micro:bit Projects Share Blocks JavaScript Microsoft

Getting Started

Search...

- Basic
- More
- Input
- Music
- Led
- Radio
- Loops
- Logic
- Variables
- Math
- Advanced

show number 0

show leds

show icon

show string "Hello!"

forever

pause (ms) 100

on start

on start

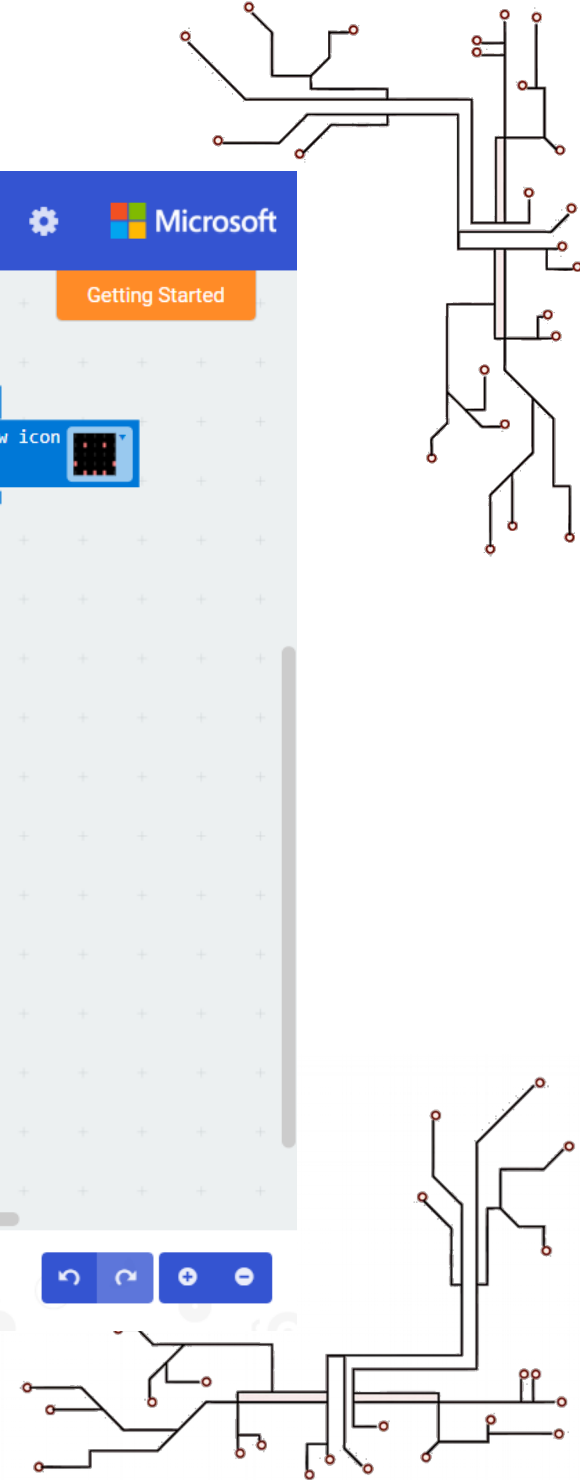
show icon

Download

Timer

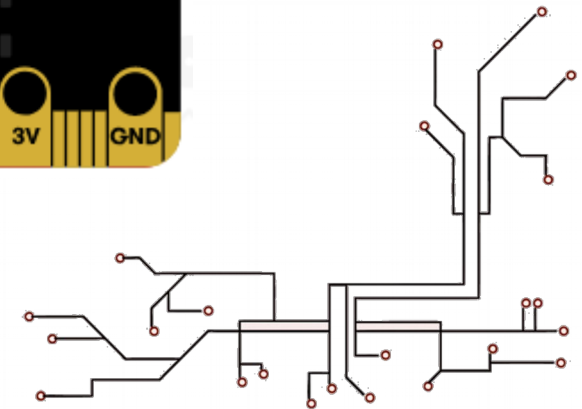
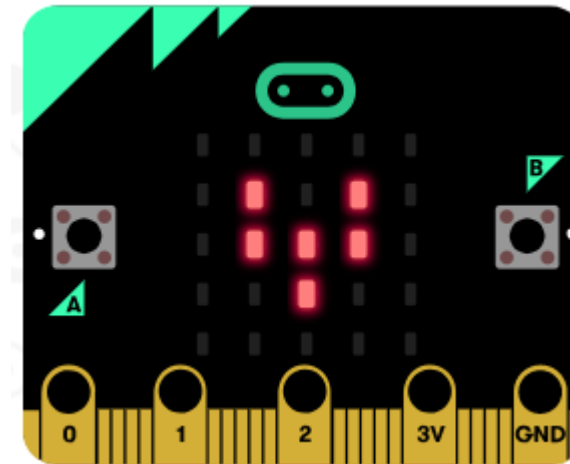
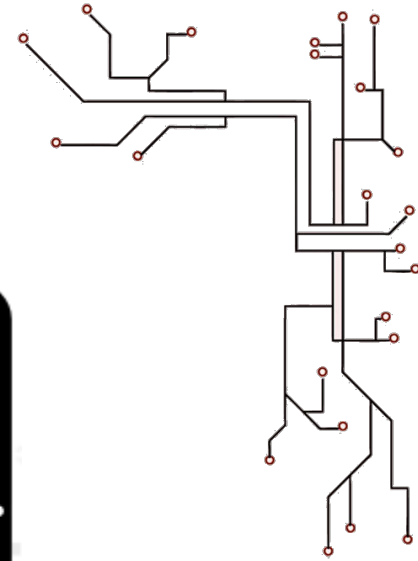
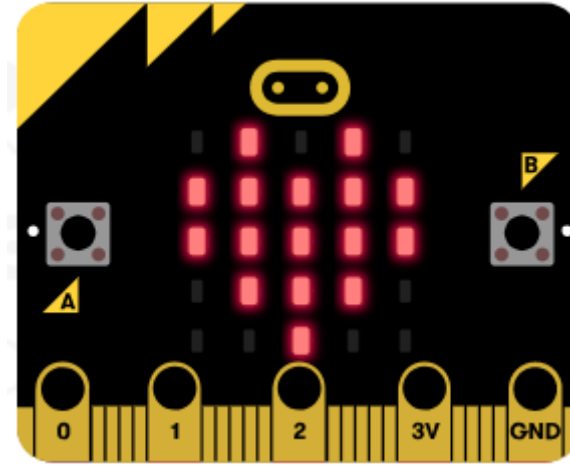
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Let's Make

A micro:bit
Emoji Movie

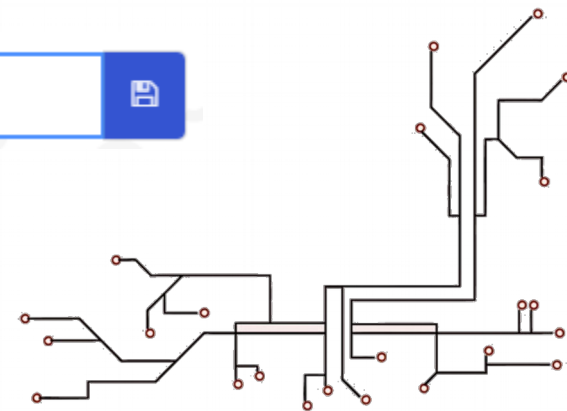
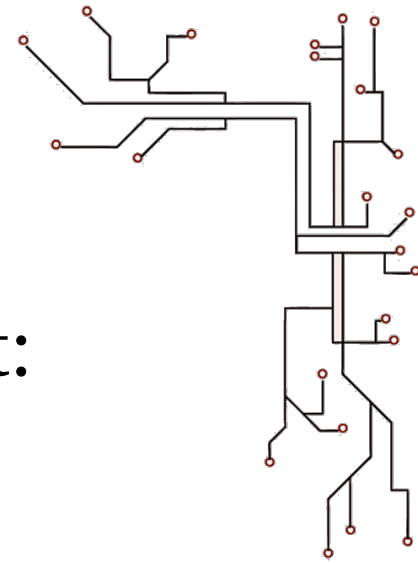


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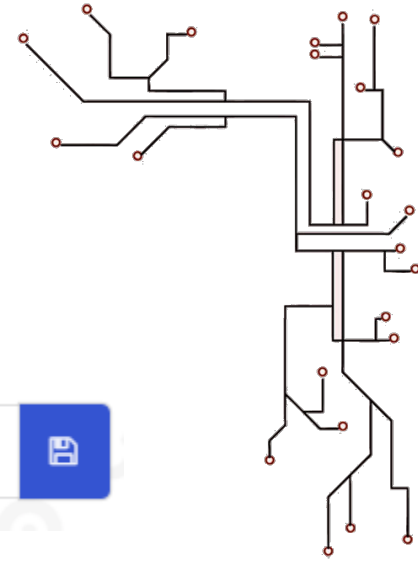
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micro:Movie

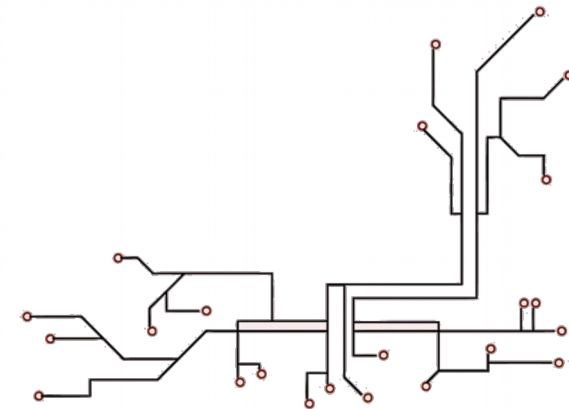
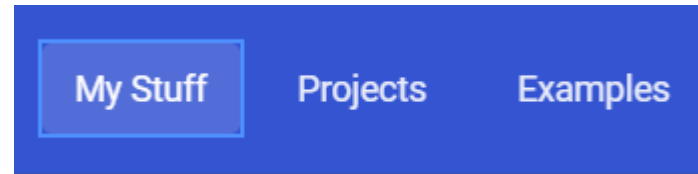
- Animate a Sustainability issue you care about:
 - **Pick/create** LED images
 - Show them **in order**
 - Can **add text** (like in a silent movie)
- Simulator vs. physical micro:bit
 - **Test in Simulator**
 - **Download** to see micro:bit come to life



micro:save!



Opening Saved Projects

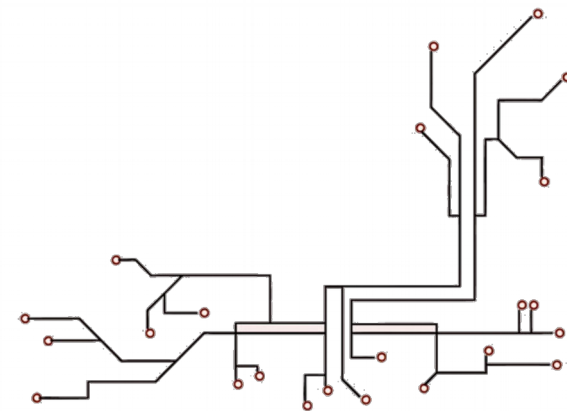
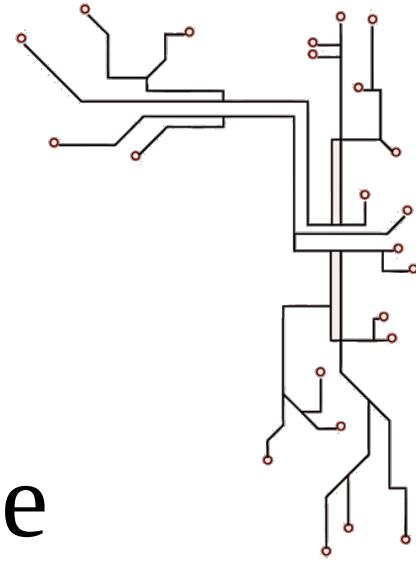


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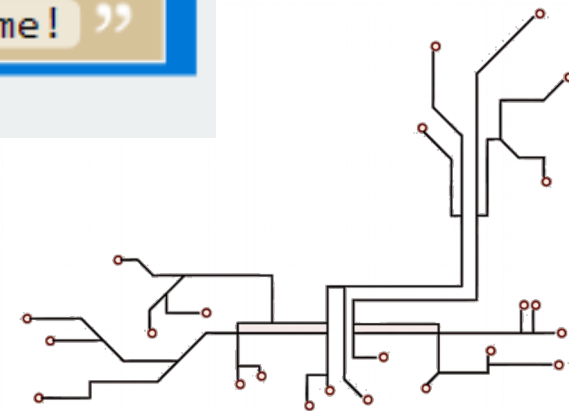
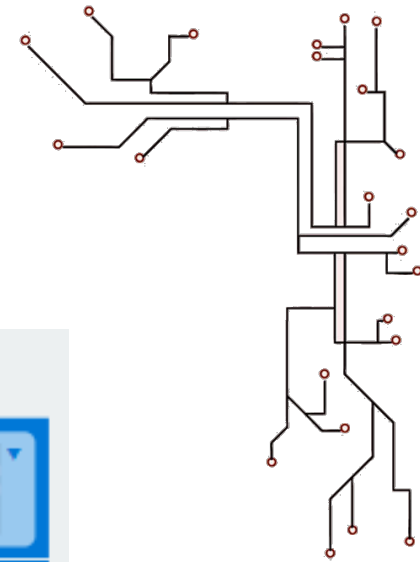
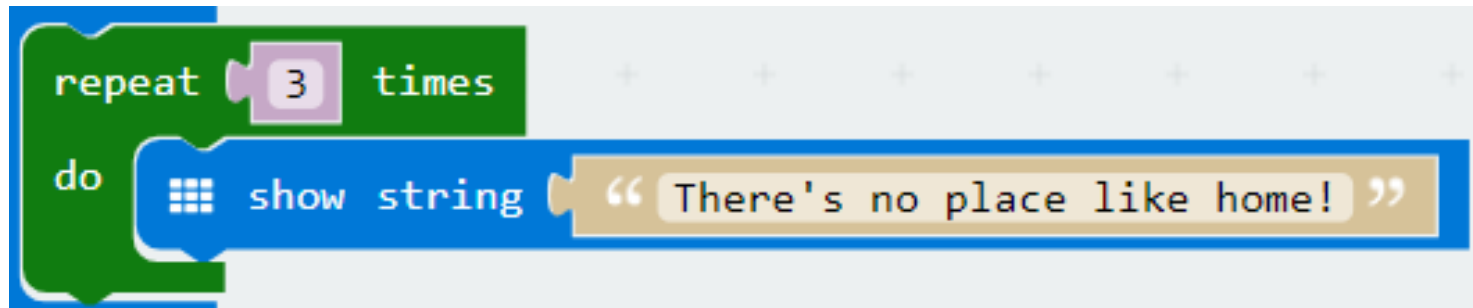
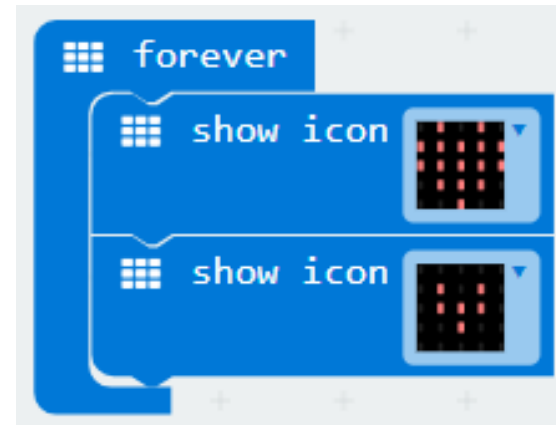
micro:Wha?

What is the **difference** between
putting your movie sequence inside
on start
vs. inside
forever
block?



micro:Loops

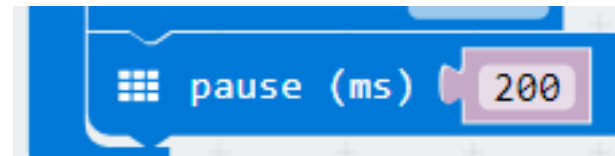
- Loops
 - A way to **repeat** instructions **multiple times**



micro:mojis Timing

Slowing things down:

- **Pause** between images to slow the movie down...



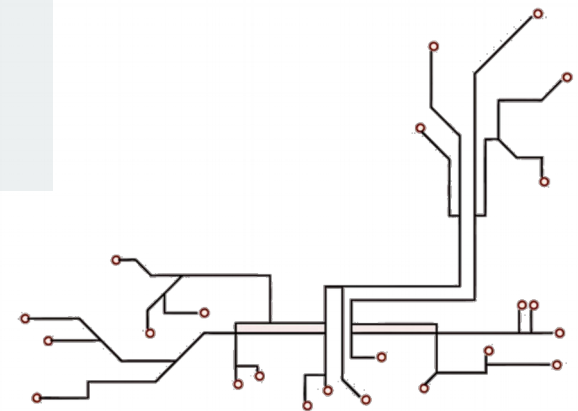
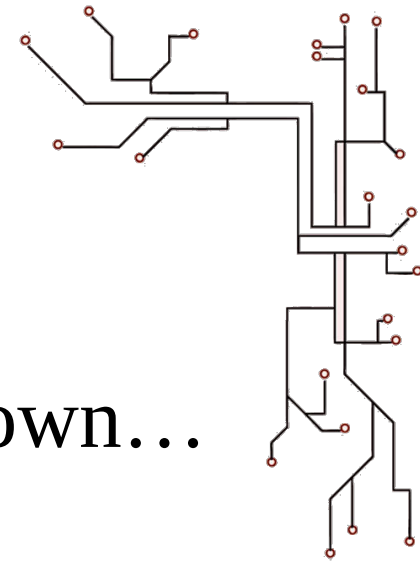
Speeding things up (advanced):

- In **JavaScript**, use *intervals* to speed animation...

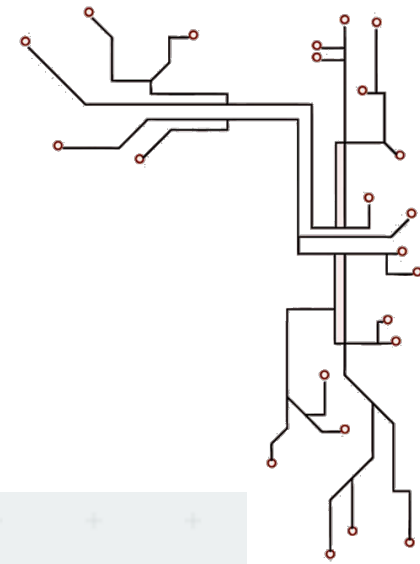
```
1 while (true) {  
2   basic.showIcon(IconNames.Happy, 100)  
3   basic.showIcon(IconNames.Sad, 100)  
4 }  
5
```

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micro:Buttons

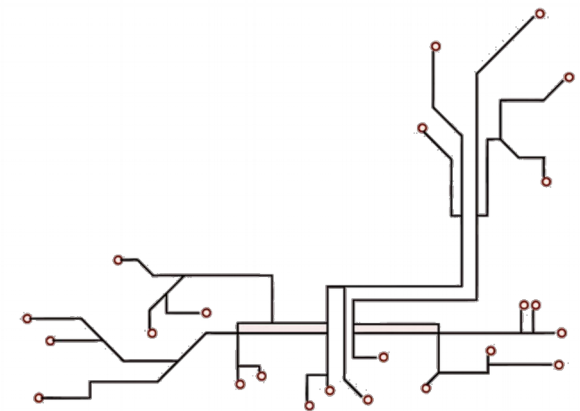


Make two endings of your movie, or two different movies.

Play one if you press 'A' button.

Play the other if you press 'B' button.

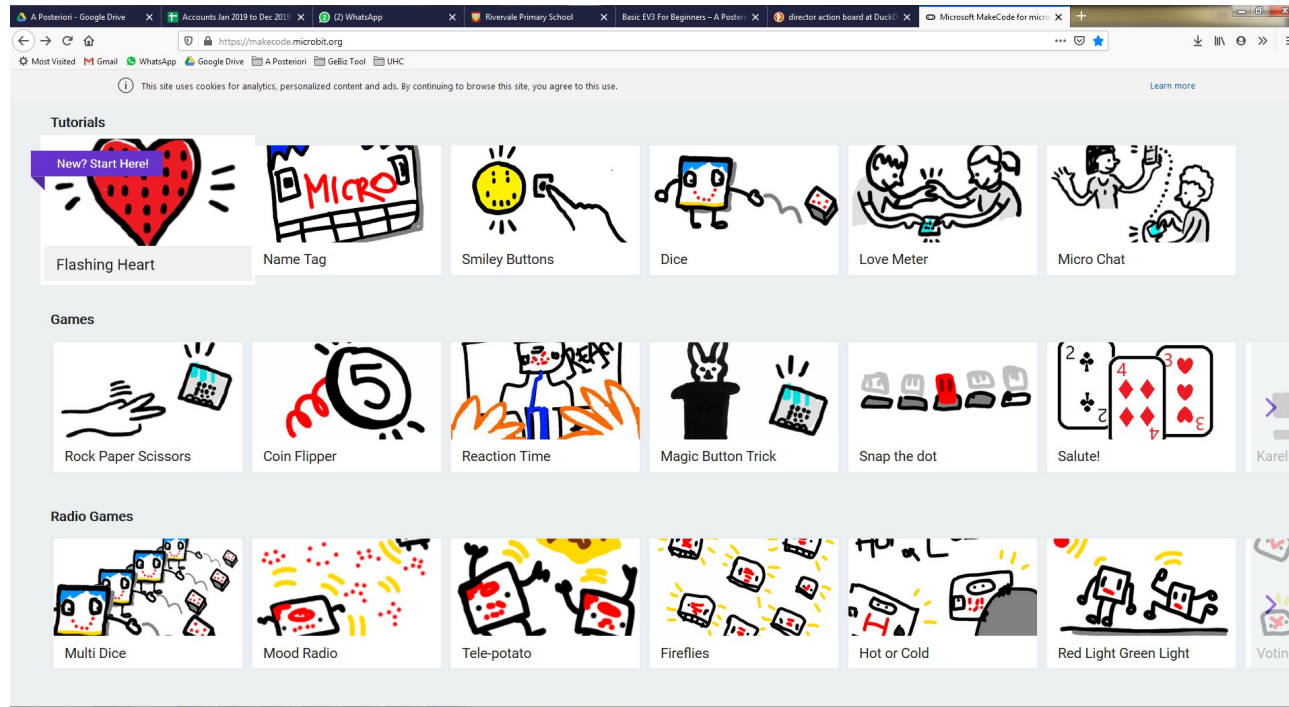
```
on button A pressed
  show icon [Micro:Bit icon]
  show string "Today I'm Happy!"
  show icon [Micro:Bit icon]
  show string "I've got Music class!"
```



micro:Free-For-All

Experiment with the micro:bit environment.

What would you like to do?



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