



Remix Culture

Worksheet

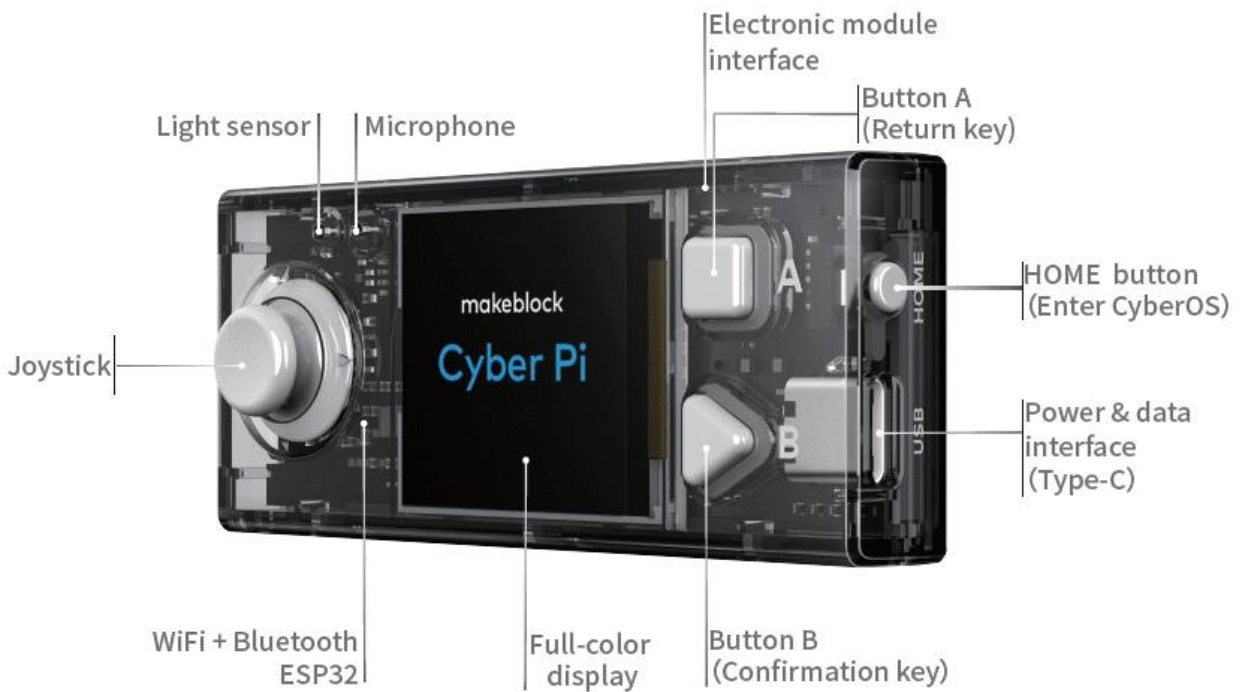
K-W-L Chart

What I Know	What I Wonder	What I Learnt

New Commands: make a list of all the new Python commands you learn throughout the lesson



Features of CyberPi



Activity 1: Read the program.

```
1. import cyberpi
2. from pynput.keyboard import Key, Listener
3. cyberpi.audio.set_vol(50)
4.
5. def bar1():
6.     cyberpi.audio.play_music(60, 0.2)
7.     cyberpi.audio.play_music(64, 0.2)
8.     cyberpi.audio.play_music(67, 0.2)
9.
10. def bar2():
11.     cyberpi.audio.play_music(64, 0.2)
12.     cyberpi.audio.play_music(65, 0.2)
13.     cyberpi.audio.play_music(69, 0.2)
14.
15. def bar3():
16.     cyberpi.audio.play_music(64, 0.2)
17.     cyberpi.audio.play_music(67, 0.2)
18.     cyberpi.audio.play_music(71, 0.2)
19.
20. def bar4():
21.     cyberpi.audio.play_music(65, 0.2)
22.     cyberpi.audio.play_music(69, 0.2)
23.     cyberpi.audio.play_music(72, 0.2)
24.
25. def on_press(key):
26.     if key.char == "1":
27.         cyberpi.led.on("red")
28.         bar1()
29.     if key.char == "2":
30.         cyberpi.led.on("orange")
31.         bar2()
32.     if key.char == "3":
33.         cyberpi.led.on("yellow")
34.         bar3()
35.     if key.char == "4":
36.         cyberpi.led.on("green")
37.         bar4()
38.
39. def on_release(key):
40.     cyberpi.led.off()
41.     pass
42.
43. with Listener(on_press=on_press, on_release=on_release) as listener:
44.     listener.join()
```

**Answer:**

- Identify the new module that can monitor the input from your keyboard.
- What is meant by the Python keyword 'def'?
- Why does it separate the set of expressions within each 'def' code block?
- How to produce interactive sound and light effects?

Draw a Flowchart for the example program:

Activity 2:

Task 1: Modify the parameters in the example program. Use letters instead to replace the numeric parameters.

Task 2: Modify the 'bar' functions. Find some pieces of songs from music textbooks and combine different parts of them together to make a new song. Consider how to combine the sound effects and LED lights.

Extension:

- Good coding conventions ask to keep programs as modular ("full of functions") as possible
- Go back to previous lessons and create functions to complete specific tasks