



Lesson 9 Python Quizzes

Worksheet

K-W-L Chart

What I Know	What I Wonder	What I Learned

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

CyberPi API

```
import cyberpi
```

① **Screen:** `cyberpi.display`, `cyberpi.console`

```
cyberpi.display.clear()
```

```
cyberpi.console.print()
```

```
cyberpi.console.println()
```

② **LED Strip:** `cyberpi.led`

```
cyberpi.led.off()
```

```
cyberpi.led.off(id="3")
```

```
cyberpi.led.on()
```

```
cyberpi.led.on("green", id="all")
```

```
cyberpi.led.on("red", id=3)
```

```
cyberpi.led.show("orange yellow cyan blue purple")
```

```
cyberpi.led.play(name="firefly")
```

③ **Buttons A and B:** `cyberpi.controller.is_press()`

```
cyberpi.controller.is_press("a")
```

```
cyberpi.controller.is_press("b")
```

④ **Joystick:** `cyberpi.controller.is_press()`

```
cyberpi.controller.is_press("up")
```

```
cyberpi.controller.is_press("down")
```

```
cyberpi.controller.is_press("right")
```

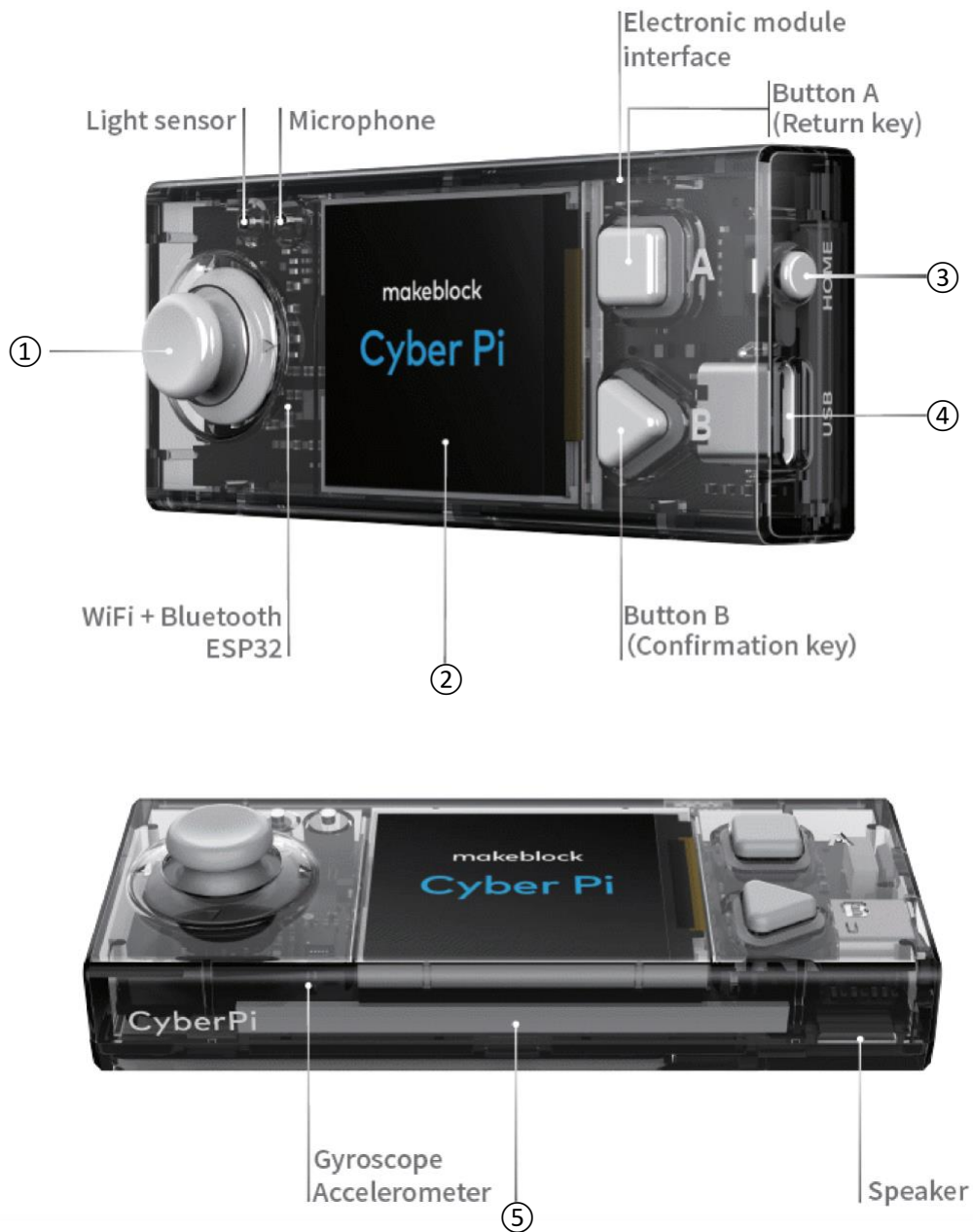
```
cyberpi.controller.is_press("left")
```

```
cyberpi.controller.is_press("middle")
```





Features of CyberPi





Activity 1:

Read the program.

```
1. import cyberpi
2.
3. cyberpi.display.clear()
4. cyberpi.led.off()
5.
6. cyberpi.console.println("A - True")
7. cyberpi.console.println("B - False")
8.
9. cyberpi.led.on(255, 255, 255)
10. cyberpi.console.println("Python is a compiled language.")
11. cyberpi.console.println("Your Answer:")
12.
13. while True:
14.
15.     if cyberpi.controller.is_press("a"):
16.         cyberpi.led.on(255, 0, 0)
17.         cyberpi.console.println("Incorrect.")
18.         cyberpi.console.println("Correct Answer: False")
19.         break
20.
21.     if cyberpi.controller.is_press("b"):
22.         cyberpi.led.on(0, 255, 0)
23.         cyberpi.console.println("Correct!")
24.         break
```

Answer:

- Which module is imported? Explain why we should import this module.
- How to print text on the screen?
- How to light up/off the LED strip?
- How to set the colour of the LED? How to represent the LED colours in Python?
- How to enter the answer?
- How to evaluate the answer?

Draw a Flowchart for the example program:

Activity 2:

Run and compare the two examples:

Example 2(a)

```
import cyberpi  
cyberpi.console.print("Hello, CyberPi!")  
cyberpi.console.print("I can program in Python.")
```

Example 2(b)

```
import cyberpi  
cyberpi.console.println("Hello, CyberPi!")  
cyberpi.console.println("I can program in Python.")
```

**Activity 3:**

Task 1: Modify the quiz and the answers in the example program.

Task 2: Modify the lighting effects.

Task 3: Use the joystick instead of the buttons to enter the answer.

Extension:

Consider a program for multiple-choice questions that provides five options. Use the joystick as an input device to enter the possible input responses: 'Option: A', 'Option: B', 'Option: C', "Option: D", and "Option: None of the Above".