Knowledge Organiser -Micro:Bits

Key vocab	
Micro:bit	A small computer designed by the BBC for use in computer education in the UK.
Processor	Receives inputs from the computer and produces outputs.
USB	The form of power supply used by the Micro:bit - power is transmitted from the computer via a micro-USB cable.
Buttons	Input devices used within the Micro:bit to control or alter programs whilst running.
LED (Light emitting diodes)	(LEDs) - used on the Micro:bit as a screen in a 5x5 grid to display information.
Accelerometer	An input device within the Micro:bit to control or alter programs by tilting or moving the device.
Microsoft Block Editor	The visual programming language used to create
Algorithm	A set of instructions to be followed to complete a given task or solve a problem.
Program	A sequence of instructions used by a computer.
Sequence	The order which the computer will run code in, one line at a time.
Selection	A decision made by a computer, choosing what code should be run only when certain conditions are met.
Condition	Checking to see whether a statement or sum is true or false.
Iteration	When a section of code is repeated several times - also known as looping.
Variable	Something which can be changed in a computer. Made up of a name and some data to be saved.

https://makecode.microbit.org/

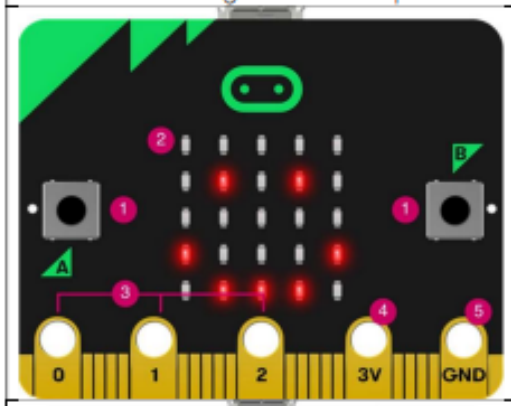
Key features of the micro:bit

On-board motion detector or "accelerometer" that can detect movement and tell other devices you're on the go. Featured actions include shake, tilt and freefall.

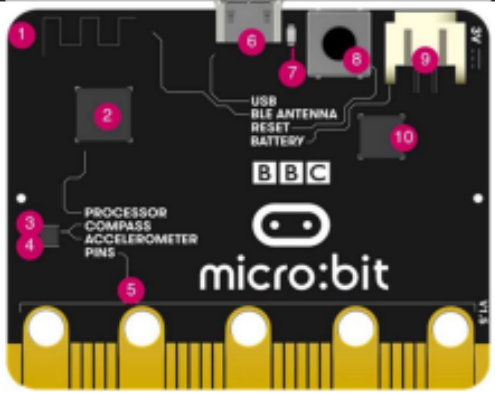
A built-in compass or "magnetometer" to sense which direction you're facing, your movement in degrees, and where you are.

Bluetooth Smart Technology to connect to the internet and interact with the world around you.

Five Input and Output (I/O) rings to connect the micro:bit to devices or sensors using crocodile clips or 4mm banana plugs.



1. Buttons
2. LED display & light sensor
3. Pins - GPIO
4. Pin - 3 volt power
5. Pin - Ground



1. Radio & Bluetooth antenna
2. Processor & temperature sensor
3. Compass
4. Accelerometer
5. Pins
6. Micro USB socket
7. Single LED
8. Reset button
9. Battery socket
10. USB interface chip

Key blocks

For

Repeat

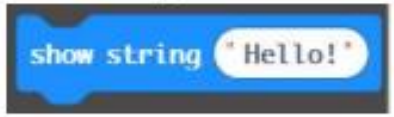
While

Forever

On button pressed

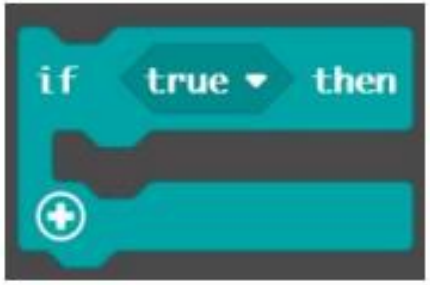
On Shake

Show string

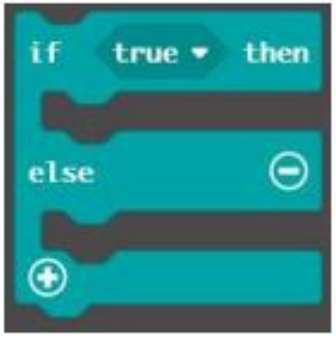


Show LED's

If



If - Else



Show Number

Boolean