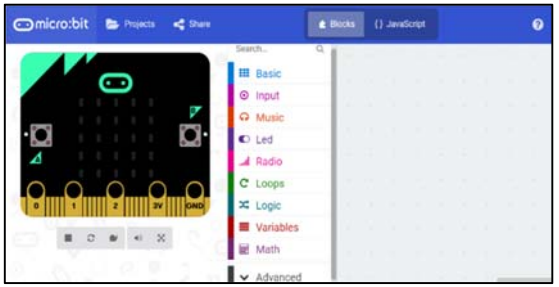
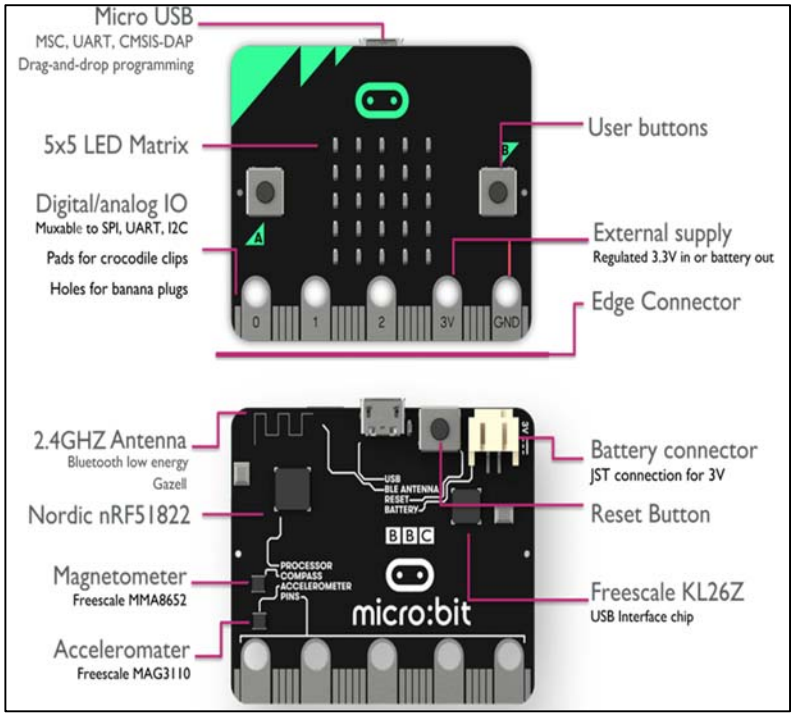
Knowledge Organiser – Year 7 – Micro:bit Programming

Computational thinking	The thought process involved in finding a solution to a problem.
Abstraction	The removal of unnecessary detail within the program to focus on the more important aspects.
Decomposition	Breaking a problem down into smaller, more manageable pieces
Pattern Recognition	Looking for patterns within the problem to allow them to be solved together.
Micro:bit	A device that we will use to program.
Sequence	Putting instructions in a suitable order for your program to function properly.
Selection	A decision within a program which can either be Yes/No, True/ False. Allowing your program to take different paths. (IF statements)
Iteration	Repeating something – either using Forever, For, While or Repeat.
Accelerometer	A device for measuring the acceleration of movement (shaking and tilting in the case of the Microbit)

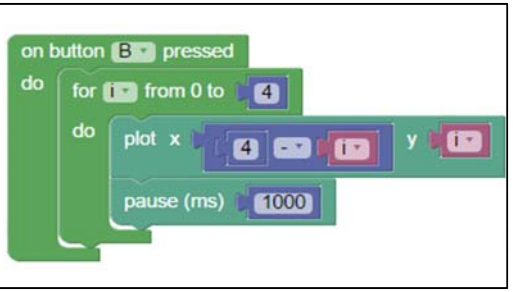
Website:

www.microbit.org – Here you can research, code and find out more about what your microbit can do.



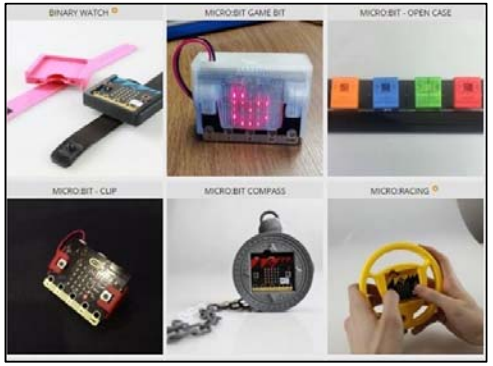


micro:bit



Fancy a Challenge

Code using text or code.



Symbol	Name	Function
	Start/end	An oval represents a start or end point
	Arrows	A line is a connector that shows relationships between the representative shapes
	Input/Output	A parallelogram represents input or output
	Process	A rectangle represents a process
	Decision	A diamond indicates a decision

Flow Chart	A flowchart is a type of diagram that represents an algorithm, workflow or process, it shows the steps as shapes of various kinds.