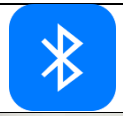
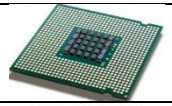
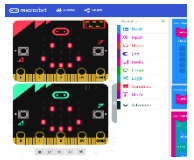
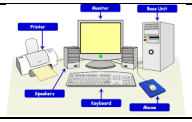
Year 5 Computing — Unit 6.1 — Summer 2

We are toy makers

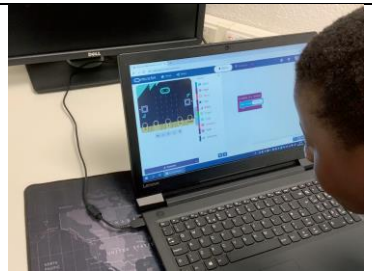
Prior Knowledge

You used presentation software in **Unit 2.4: We are safe researchers**.
You developed use of presentation software in **Unit 3.3: We are presenters**.
You experienced audio recording in **Unit 3.4: We are who we are** and **Unit 4.3: We are musicians**

Key Vocabulary:

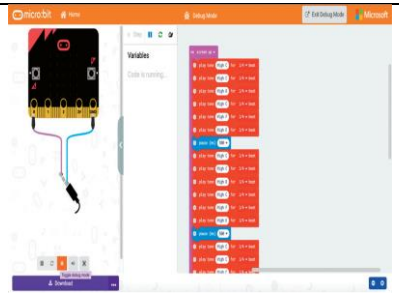
accelerometer		hardware component providing data on changes in motion, typically in three directions	LED		light emitting diode, an electronic component that lights up when current flows in one direction
Bluetooth		wireless digital communication protocol using low energy signals over short distances	makecode		block- and text-based editor from Microsoft, supporting a variety of hardware platforms including the micro: bit
controller		programmable device that determines electronic output based on electronic input	micro:bit		simple, single board programmable computer with integrated input, output and network capabilities
decomposition		breaking a problem down into smaller parts	microprocessor		single silicon chip that performs all the functions of a computer's central processing unit
edge connector		part of a circuit board that allows input and output components to be directly connected	output		information produced by a computer
embedded system		computer hardware and software that forms part of a device or product	simulator		software allowing one computer system to behave as another; in this case, the MakeCode editor includes an on-screen simulator of a micro:bit so that programs can be tested
input		data supplied to a computer	system		a set of components (perhaps of different types, such as hardware and software) working together
interactive		system whose output is determined by the input provided			

Key learning: How can we make our toys interactive?



Session 1: Experimenting with MakeCode

What are the differences between input and output?



Session 4: Programming in MakeCode

What does Micro:bit Make Code have in common with Scratch?

Sessions 2 and 3: Researching and planning toys

How are programs transferred to BBC micro-bit?

Sessions 5 and 6: Preparing and connecting the micro:bit to the toy

How can we make our toys interactive?

Key Applications (apps)

BBC micro:bit

MakeCode

Next Steps

Building on what you have learned in your computing lessons in High School.