Year 9 spring 2 Computing: Physical computing

A) Key knowledge		B) Key knowledge		C) Key knowledge		D) Key knowledge	
Buttons: input	Capture user input to make things happen	**Compass: input**	Find magnetic north or measure the strength of magnetic fields	**The flash button**	The **Flash button** translates your program and transfers it to the micro:bit.	**.read_digital()**	The read_digital method returns either 0 or 1, depending on the voltage detected on the pin.
LED display: output	Show pictures, words, and numbers	**Accelero meter: input**	Detect gestures and measure movement in 3 dimensions	**Randint**	The randint function, imported from the random module, returns a random integer within a specified range	**.write_digital()**	The write_digital method turns the voltage on the pin on or off, depending on the value of its argument, which can be either 0 or 1.
Light sensor: input	Measure how much light is falling on the micro:bit	**Radio: communic ation i/o**	Communicate with micro:bits and other devices	**The condition in the while loop**	The condition in the while loop is always True: the statements in the while block with be repeated forever	**radio.receive()**	The receive method returns the next incoming message on the message queue. It returns None if there are no pending messages.
GPIO pins: input and output	Connect headphones, sense touch, and add other electronics	**Display**	display represents the micro:bit's 5×5 LED display.	**.read_light_l evel()**	.read_light_level() returns a value that is assigned to the light variable.	**Decompose**	Break down your project into smaller tasks. If possible, work on them in parallel.
Temperat ure sensor: input	Measure how warm the environment is	**Scroll**	scroll is an action you can perform on the display.	**GPIO**	**GPIO** means **G**eneral-**P**urpose **I**nput **O**utput	**Test often**	Whenever you make changes, test thoroughly. Only move on to the next step when you are sure what you have so far works.
Homework: How does a mobile computer receive input and provide output?		**Homework:** Describe any communication component on the micro:bit that allows it to communicate with other devices.		**Homework:** Describe a possible micro:bit project in three sentences.		**Homework:** Describe the difference between = and == in Python.	