Subject: Computing COMPUTER SCIENCE-	Year group: Year 4	Topic: MICROBIT	Initiation & activation activities: Produce step counters, flashing animals, play rock, paper scissors with a peer.
Prior knowledge required: To know what an algorithm is. Know that programs are made up of a sequence of codes. To be able use these codes or instructions to control devices or objects on screen. To know how to block sections of code together e.g Scratch		Vocabulary: Block code, sensors, input, output, measure, sound wave, lights, wavelength	

Programme of Study: Year 1 & 2

Pupils should be taught to:

- understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions
- create and debug simple programs
- use logical reasoning to predict the behaviour of simple programs
- use technology purposefully to create, organise, store, manipulate and retrieve digital content
- recognise common uses of information technology beyond school
- use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

- Implementation

Knowledge skills and understanding
- Can they explain how block coding works?
- Can they detect errors in a program?
- Can they use the Microbit to control a number of events?
- Can they use the Microbit to produce sound and lights?
- Can they use 'what if' questions by planning different scenarios for controlled devices?
- Can they use input from sensors to trigger events?
- Can they check and refine a series of instructions?
- Can they produce their own pattern of music?

Greater Depth

- Can they use the school radio wavelength to join two Microbits?
- Know how computing is diverse

IMPACT	ASSESMENT