Computing Curriculum Objectives Progression

The objectives of teaching computing in our school have been written with reference to the aims of the National Curriculum and are separated into three strands:

- Computer Science – children are taught the principles of information and computation, how digital systems work and how to apply this knowledge to programming.
- Information technology – creating programs and systems with a range of content.
- Digital Literacy – using technology, expressing themselves and developing their own ideas as active participants in a digital world.

Year Group	Digital Literacy	Information technology	Computer Science
EYFS	How to ask permission to use devices and the internet To understand what devices are (computer, iPad, tablet, etc)	Log on to computers Navigate using a mouse Type their name Begin to navigate programmes, including Purple Mash	Follow a simple set of instructions Begin to programme Beebots to follow commands Begin to use commands such as forwards, backwards, turn, sideways
Year 1	Use technology safely Keep personal information private Recognises common uses of technology beyond school	Use technology purposefully to create digital content Use technology purposefully to store digital content Use technology purposefully to retrieve digital content	Understand what algorithms are Create simple programs
Year 2	Use technology respectfully Identify where to go for help and support when concerns about content	Use technology purposefully to organise digital content Use technology purposefully to manipulate digital content	Understand that algorithms are implemented as programs on digital devices Understand that programs execute by following precise and unambiguous instructions Debug simple programs Use logical reasoning to predict the behaviour of simple programs
Year 3	Use technology safely, respectfully and responsibly Identify a range of ways to report concerns about contact	Use search technologies effectively Use a variety of software to accomplish given goals Collect information Present information Design and create content	Write programs which accomplish specific goals Use sequence in programs Work with various forms of input and output
Year 4	Identify a range of ways to report concerns about content Recognise acceptable and unacceptable behaviours online	Select a variety of software to accomplish given goals Select, use and combine internet services Analyse information Collect and present data	Design and create programs Debug programs that accomplish specific goals Use repetition in programs Control physical systems Use logical reasoning to detect errors

Year 5	Begin to understand the opportunities computer networks offer for collaboration Begin to evaluate digital content	Combine a variety of software to accomplish given goals Select and use software on a range of digital devices Design and create systems Analyse and evaluate simple data	Begin to use selection in programs Work with variables Apply logical reasoning to explain how simple algorithms work Understand computer networks, including the internet
Year 6	Understand the opportunities computer networks offer for collaboration Evaluate digital content more accurately Understanding the benefits of privacy settings and applying them	Combine a variety of software to accomplish given goals Select, use and combine software on a range of digital devices Analyse and evaluate data Design and create more complex systems	Solve problems by decomposing into smaller parts Use selection in programs Use logical reasoning to detect and correct errors in algorithms Appreciate how search results are ranked Understand how computer networks provide multiple services (eg. WWW)