Big Ideas Progression in Computing

Subject Intent: Our Computing curriculum aims to reflect the fact that computing and the use of computer technology has become a significant and largely unavoidable part of everyone's daily life. It is our aim that children are enabled to stay at the forefront of development and change in this area of modern life, inspired and excited about the potential and scope of all that the world of computing can offer. The curriculum is designed to increase the children's knowledge and understanding of technology and to develop the fundamental and transferable skills required to engage with technology not only in computing lessons, but across the curriculum and in their lives outside of school.

Big Idea: **Computational Thinking**

Progression	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statements from EYFS document and National Curriculum		• Predict the behaviour of simple programs. • Understand what algorithms are and how they are implemented on digital devices.	• Create simple programs. • Create and debug simple programs. • Understand that programs execute by following precise and unambiguous instructions.	• Use simple search technologies and recognise that some sources are more reliable than others. • Design, write and debug programmes that control or simulate virtual events.	• Understand how results are selected and ranked by search engines. • Decompose programmes into smaller parts. • Select, use and combine a variety of software, systems and content that accomplish given goals.	• Use filters in search technologies effectively and appreciate how results are selected and ranked. • Independently select, use and combine a variety of software to design and create content for a given audience. • Design, input and test and increasingly complex set of instructions to a program or device. • Design, write and debug programs that accomplish	• Independently select, use and combine a variety of software to design and create content for a given audience, including collecting, analysing, evaluating and presenting data and information. • Include use of sequence, selection and repetition with the hardware used to explore real-world systems. • Create programs which use variables. • Use variables,

| | | | | | | specific goals, including controlling and simulating physical systems.
• Design, write and test simple programs that follow a sequence of instructions or allow a set of instructions to be repeated.
• Design write and test simple programs with opportunities for selection where a particular result will happen based on actions or situations controlled by the user. | sequence, selection and repetition in programs. |

Big Idea: Creative Problem-Solving

Progression	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statements from EYFS document and National Curriculum		•	• Debug simple programs by using logical reasoning to predict the actions instructed by the code.	• Use logical reasoning to explain how some simple algorithms work.	• Use logical reasoning to detect and correct errors in algorithms and programs.	• Use logical reasoning to explain how increasingly complex algorithms to ensure a program's efficiency.	• Solve problems by decomposing them into smaller parts. • Use logical reasoning to explain how increasingly complex

							algorithms work and to detect and correct errors in algorithms and programs efficiently.

Big Idea: Safe, Informed Communication

Progression	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Statements from EYFS document and National Curriculum		• Understand where to go for help and support when he/she has concerns about content or contact on the internet or on other online technologies.	• Use technology safely and keep personal information private.	• Use technology safely and respectfully, keeping personal information private. • Use technology safely and recognise acceptable and unacceptable behaviour.	• Use technology responsibly and understand that communication online maybe seen by others. • Understand where to go for help and support when he/she has concerns about content or contact on the internet or other online technologies.	• Understand the need to only select age-appropriate content.	• Use technology respectfully and responsibly. • Identify a range of ways to report concerns about content and contact in and out of school.