St. George's CE First School and Nursery

Computing
Long Term Progression Map

Our children will be: - digitally literate - competent computer scientists - responsible, confident users	We use Purple Mash Long Term Planning for Computing. We teach Computing every half term.

	Computer Science	Information Technology	Digital Literacy
EYFS	I can talk about where I am moving a toy vehicle whilst I am moving it. I can describe the route taken by a toy vehicle. I can follow directions to make a route for a toy vehicle. I can plan a route for a toy vehicle. I can follow my own plan for where the toy vehicle should move. I can make a floor robot move. I can control the forwards, backwards and rotation of a floor robot one step at a time. I can program a 3-step route for a floor turtle. I can predict where a floor robot will end up when given the instructions for a 2 or 3 step route. I can plan a route for a floor robot and then carry out these instructions one step at a time. I can plan a route for a floor robot and then carry out these instructions more than one step at a time.	I can select colours when painting on the computer. I can draw pictures on the computer to go with my work. I can use a computer to draw with different widths of pens. I can try the different tools that I can draw with on the computer. I can use the undo button correctly. I can use the erase button. I can use a touchscreen device purposefully. I can draw on a computer using a mouse.	I can talk about what technology is used at home. I can talk about what technology is used outdoors. I can talk about what technology is used in the world around me. I can explain how my work on the computer belongs to me and other people's work belongs to them. I can explain what it means for something to be private. I can talk about how my body feels when I am not comfortable with something. I know who can help me when I am feeling worried. I can show that I understand how to be kind to others. I can choose activities in my free time that help me to be healthy.
Year 1	**Units 1.1-1.9** 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.	**Units 1.1-1.9** Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	**Units 1.1-1.9** 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.
Year 2	**Units 2.1-2.8** 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.	**Units 2.1-2.8** Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	**Units 2.1-2.8** 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.

	Use logical reasoning to predict the behaviour of simple programs.		
Year 3	**Units 3.1-3.9** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selections and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect errors in algorithms and programs. Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	**Units 3.1-3.9** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of pictograms, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	**Units 3.1-3.9** Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.
Year 4	**Units 4.1-4.9** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Use sequence, selections and repetition in programs; work with variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect errors in algorithms and programs. Understand computer networks, including the internet; how they can provide multiple services, such as the World Wide Web, and the opportunities they offer for communication and collaboration.	**Units 4.1-4.9** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of pictograms, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	**Units 4.1-4.9** Use technology safely, respectfully and responsibly; recognize acceptable/unacceptable behaviour; identify a range of ways to report concern about content and contact.