Computing Curriculum Overview

Computing	Autumn	Spring	Summer
Nursery	Computer systems Using a computer Children should have opportunities to explore and use a range of digital technology.	Computer systems two Exploring networks Children should have opportunities to explore and use a range of digital technology.	Introduction to coding Bee bots Children should be able to select and use technology for particular purposes. Children should have opportunities to explore and use a range of digital technology.
Reception	Computer systems Using a computer Children should have opportunities to explore and use a range of digital technology.	Data handling Introduction to Data Children should have opportunities to explore and use a range of digital technology. Children should be able to select and use technology for particular purposes.	Programming All about coding Children should be able to select and use technology for particular purposes. Children should be able to select and use technology for particular purposes.
Year 1	Improve mouse skills Children should be able to select and use technology for particular purposes.	Digital imagery Use technology purposefully to create, organise, store, manipulate and retrieve digital content.	Bee bots Virtual bee bots Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Virtual bee bots Create and debug simple programs.
Year 2	Computer systems What is actually is a computer Recognise common uses of information technology beyond school."	Identify safe information Online safety unity 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	Scratch Jr Create an animation Create and debug simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content.

		the internet or other online technologies. 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 3	Networks What is a network 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.	Video trailers Craft and edit a video trailer. 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 programs, systems and content that accomplish given goals.	Journey inside a computer Explore components of a computer Understand and use electrical systems in their products (for example, series circuits incorporating switches, bulbs, buzzers and motors).
Year 4	Collaborative learning How do connect work with computers 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.	Investigating weather Use computing to collect and present data creatively. Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	Further coding with Scratch Advanced block coding 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, selection, and repetition in programs; work with variables and various forms of input and output.
Year 5	Search engines How to accurately use a search engine Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content.	Mars Rover Use Binary code Understand how numbers can be represented in binary, and be able to carry out simple operations such as binary addition.	Programming music Programme music for a specific purpose. Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts. Select, use, and combine a variety of

			software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
Year 6	Computing through time Bletchley park Understand the history of computing and its impact on the world	Big data How data is transported via barcodes and QR codes Select, use, and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information. 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.	Introduction to python Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.

Digital literacy, Information Technology, Computer Science.