

ICT Key Stage 3 Curriculum Overview

	Autumn		Spring		Summer	
Year	1	2	3	4	5	6
7	Introduction to the School Network Creating Passwords Email Staying Safe On-line CAT Testing	History of Computers What is a PC? Moore's Law Hardware / Software	How Computers Think Binary Numbers Intro to Algorithms & Flowcharts Designing Solutions to problems	Programming with Scratch Creating Sprites Inputting Values Using Variables Understanding Operators	Python Turtle Changing direction Changing Width Changing Visibility	Dispelling Myths when using the World Wide Web Reliability & Bias Advance Searching Social Media Recognising On-line Grooming
8	Computer Graphics Bitmap v Vector Graphics File Types Copyright Law	Boolean Logic AND, OR, NOT Gates Truth Tables & Logic Gates	Hardware & Computer Systems Input & Output Devices Memory v Storage General Purpose v Embedded Systems	Introduction to Programming in Python Basic Syntax & Recognising Errors Input Function, Strings & Variables If-else Conditions Creating a "Chatbox"	Calculating in Code BODMAS Using Variables, Integers & Floats Comparison Operators Importing Random Modules	Creating & Drawing in Code Drawing shapes & changing dimensions Simultaneous shapes Repeating Patterns
9	Computer Networks & the Internet Hardware – Advantages/Disadvantages Topologies LANs/WANs Data Packets & Routing WIFI, Ethernet & Fibre Optic Cables	Computational Thinking De-composition Recognising Patterns Abstraction of Relevant Data Creating Flowcharts Converting Algorithms	Computer Logic Using Pseudocode to Solve a Problem Writing IF, THEN, ELSE Conditions Analogue v Digital Sound Files Using ASCII & Binary to represent data Converting Denary to Binary	HTML Creating a simple webpage using HTML Using Tags & Inserting images Creating Cascading Style Sheets (CSS) Creating webpages using CSS	Representing Images How Pixels affect resolution Lossy v Lossless File Formats Vector Graphics – Anchor Points Combining Bitmap v Vector Images	Programming in Python – Re-cap Basic Syntax & Recognising Errors Input Function Concatenate Strings & Variables Recognising If-Else Conditions & Responses