

COMPUTING

	Strand 1 e-Safety and Communication	Strand 2 Computer Science	Strand 3 Knowledge of Computing	Strand 4 Digital Literacy	Strand 5 Functional Skills
	e-safety 1, e-safety 2, e-safety 3 Information, R,V & B Impact of ICT	Algorithms Programming	Hardware & Software Binary Networking	Databases Spreadsheets Digital Audio	Word PowerPoint Photoshop
9		<ul style="list-style-type: none"> • Can discuss pros/cons of prototyping. • Can import network modules into code (TCP/IP, peer-peer communication). • Can write standardised documentation of code. 	<ul style="list-style-type: none"> • Can explain risks of loss/damage of data for an organisation and precautions against it. 	<ul style="list-style-type: none"> • Can expand functionality of software beyond its original intent. 	
8	<ul style="list-style-type: none"> • Can explain how various computer laws influence the behaviour of individuals, organisations and society. • Can explain the moral/social effect of ICT in society. 	<ul style="list-style-type: none"> • Can import advanced modules into code (for example, 2D/3D-based GUI). • Can make use of lists and arrays in code. 	<ul style="list-style-type: none"> • Can explain a range of network topologies. • Can use two's complement to convert binary to denary • Can use two's complement to convert denary to binary 	<ul style="list-style-type: none"> • Can create and run macros correctly. • Can create 'vlookup' functions in spreadsheets. • Can create an efficient form interface for a database. 	<ul style="list-style-type: none"> • Can make creative use of abstract functions.
7	<ul style="list-style-type: none"> • Can explain the computer misuse act. 	<ul style="list-style-type: none"> • Can create functions within code. • Can import intermediate modules into code (for example, time file input/output). • Can produce efficient code. 	<ul style="list-style-type: none"> • Can explain and justify a choice of network devices (wired, wireless, router, switch). • Can subtract binary numbers 	<ul style="list-style-type: none"> • Can use two parameter functions (such as, if, count if) in spreadsheets. • Can create complex queries (2+ tables) in databases. 	<ul style="list-style-type: none"> • Can use slide master/kiosk mode effectively in presentations.
6	<ul style="list-style-type: none"> • Can explain the moral/social effect of ICT in their community. 	<ul style="list-style-type: none"> • Can use nested 'ifs' in code. • Can include more detailed comments in code to explain function of code. • Can produce basic sorting/searching algorithms. 	<ul style="list-style-type: none"> • Can explain proprietary and open-source software. • Can select and justify specific hardware and software for specific solutions. 	<ul style="list-style-type: none"> • Can use conditional formatting appropriately in spreadsheets. 	<ul style="list-style-type: none"> • Can use transition and animation timing appropriately in presentations. • Can use a range of editing techniques across all software.
5	<ul style="list-style-type: none"> • Can describe common threats to data security. • Can explain the main principles of data protection law. 	<ul style="list-style-type: none"> • Can use variables in flowcharts. • Can use basic 'while' loops in code. • Can make use of variables of different data types (text, number, Boolean). 	<ul style="list-style-type: none"> • Can explain features of an operating system. • Can explain features of utility software. • Can create accurate truth tables. • Can add binary numbers. 	<ul style="list-style-type: none"> • Can use basic functions (count, counta, countblank, max, min) appropriately in spreadsheets. • Can state a range of data-capture methods (text, survey, open/closed questions). • Can produce reports based on queries in a database. 	<ul style="list-style-type: none"> • Can use hyperlinks in a presentation, document or website. • Can distinguish between vector and raster images.

4	<ul style="list-style-type: none"> • Can highlight risks of data loss and measures to prevent it. • Can suggest a range of precautions against cyberbullying. • Can explain copyright law. • Can explain viruses/worms. 	<ul style="list-style-type: none"> • Can include decisions in flowcharts (yes/no). • Can add basic comments to code to explain its function. • Can use basic 'for' loops in code. 	<ul style="list-style-type: none"> • Can convert binary to denary. • Can convert denary to binary. • Has an understanding of how images are represented by bits. 	<ul style="list-style-type: none"> • Can explain and use data validation in spreadsheets. • Can adjust variables in what-if scenarios. • Can create basic database queries. 	<ul style="list-style-type: none"> • Can choose appropriate layout of text, shapes and other media in documents or presentations.
3	<ul style="list-style-type: none"> • Can identify risks of cyberbullying. 	<ul style="list-style-type: none"> • Can make correct use of relational logic (<, >, =, >=, <=, <>). • Can create flowcharts featuring multiple inputs or outputs. 	<ul style="list-style-type: none"> • Can explain what an operating system is. • Has a basic understanding of binary (1s and 0s). • Can state a range of data types and where they might be used. • Can explain different file formats (.doc .mp3 .html). 	<ul style="list-style-type: none"> • Can use the sum function in a spreadsheet. • Can create a basic chart or graph in a spreadsheet. 	<ul style="list-style-type: none"> • Can use simple media-editing tools (crop, rotate, resize). • Can choose appropriate media to present (image, sound, video). • Can name files and folders appropriately. • Can organise files in appropriate folders/file types.
2	<ul style="list-style-type: none"> • Can describe what copyright means. 	<ul style="list-style-type: none"> • Can create a basic flowchart (start/stop, process). • Can create a simple flowchart with a continuous loop • Can demonstrate knowledge of simple logic (AND/NOT/OR). 	<ul style="list-style-type: none"> • Can define what a CPU is. • Can state some storage devices. • Can define the terms LAN and WAN. • Can explain what hardware is. • Can explain what software is. 	<ul style="list-style-type: none"> • Can use basic spreadsheet formula appropriately. • Can filter and/or sort data in a spreadsheet. 	<ul style="list-style-type: none"> • Can create a linear presentation. • Can combine basic text and graphics.
1		<ul style="list-style-type: none"> • Can explain the terms 'input', 'output', 'process' and 'decision'. • Can recognise the basic flowchart symbols. 	<ul style="list-style-type: none"> • Can state one input or output device and explain what they are. • Can state one example of hardware. • Can state one example of software. 	<ul style="list-style-type: none"> • Can describe data capture. 	<ul style="list-style-type: none"> • Can save work onto a home drive or other media. • Can correct obvious spelling errors.