



Teach Computing: Sequence of Learning



Computing Units						
	Computing Systems and networks	Data and Information	Programming A	Programming B	Creating Media	Creating Media
Year 1	Technology around us	Grouping data	Moving a robot	Programming animations	Digital painting	Digital writing
Year 2	IT around us	Pictograms	Robot algorithms	Programming quizzes	Digital photography	I Digital music
Year 3	Connecting computers	Branching databases	Sequencing sounds	Connecting Events and actions in programs	Desktop publishing	Stop-frame animation
Year 4	The Internet	Data logging	Repetition in shapes	Repetition in games	Audio production	Photo editing
Year 5	Systems and searching	Flat-file databases	Selection in physical computing	Selection in quizzes	Introduction to vector graphics	Video production
Year 6	Communication and collaboration	Spreadsheets	Variables in games	Sensing movement	3D modelling	Web page creation

e-safety Coverage			
	Content	Contact	Conduct
Year 1	<ul style="list-style-type: none"> ● App purchasing ● Upsetting images 	<ul style="list-style-type: none"> ● Unkind comments ● Online strangers 	<ul style="list-style-type: none"> ● What is personal information? ● What is an avatar?
Year 2	<ul style="list-style-type: none"> ● Pop-Ups ● Who to tell? (Inappropriate content) 	<ul style="list-style-type: none"> ● Impact of/Responding to cyberbullying ● Understanding manipulative behaviour 	<ul style="list-style-type: none"> ● When is it ok to share? ● Offline behaviour vs. online behaviour
Year 3	<ul style="list-style-type: none"> ● Scam spotters ● Inappropriate content (revision) 	<ul style="list-style-type: none"> ● Warning signs/expressing opinions ● Identifying different forms of manipulative tactics 	<ul style="list-style-type: none"> ● Who should we share with? ● Why do we have passwords? Generating a strong password ● Spotting the signs (screen time) ● Modifying our online avatars
Year 4	<ul style="list-style-type: none"> ● Downloading (revision) ● Inappropriate content (revision) 	<ul style="list-style-type: none"> ● Communicating online vs. communicating offline ● Like/Admire vs. trust 	<ul style="list-style-type: none"> ● Digital Footprint ● Evaluating passwords ● Maintaining a balance ● Examining online profiles
Year 5	<ul style="list-style-type: none"> ● Sharing content 	<ul style="list-style-type: none"> ● Respect/Disrespect ● Motives 	<ul style="list-style-type: none"> ● Digital Footprint/Personal Information (revision) ● Passwords (revision) ● Analysing online profiles
Year 6	<ul style="list-style-type: none"> ● Ephemeral & Expiring content (revision) ● What's the safest choice? (Video chat/Webcams) ● Fake vs. real/reliability 	<ul style="list-style-type: none"> ● Why does cyberbullying happen? Anonymity ● Grooming (revision) 	<ul style="list-style-type: none"> ● Digital Footprint/Personal Information (revision) ● Creating online profiles

	Computing systems and networks	Creating Media	Creating Media	Data and Information	Programming A	Programming B
Y1	<u>Technology around us</u> Technology Desktop Laptop Computer Mouse Trackpad Login Username Password Keyboard Edit Spacebar	<u>Digital painting</u> Paint tools- fill, brush, shape, line undo Save Retrieve	<u>Digital writing</u> Word processor Keys Space Backspace Caps Lock Bold Italic Underline Double click Font Undo	<u>Grouping Data</u> Object Label Group Data Properties Classify	<u>Moving a robot</u> Robot Direction Command Sequence Predict Program Run	<u>Programming animations</u> Sprite Programming Start block Algorithm Value Programming area Programming block Animation
Y2	<u>IT around us</u> Information technology Device Examples of IT- Barcode scanner, printer, tablet, chip and pin machine, card reader	<u>Digital Photography</u> Capture Digital photograph Portrait Landscape Format Photography composition Retake Artificial light Natural light Camera focus Effects Edit Adjust	<u>Digital Music</u> Rhythm Rhythm pattern Pitch Musical pattern Sequence of notes	<u>Pictograms</u> Pictogram Tally Count Compare Attributes Block diagram	<u>Robot algorithms</u> Outcome Algorithm Execute (run)	<u>Programming quizzes</u> Green flag (Within scratch Jr.) Background Modify Debug
Y3	<u>Connecting computers</u> Input Process	<u>Animation</u> Animation Frame	<u>Desktop publishing</u> Adobe Text	<u>Branching databases</u> Tree structure Branching database	<u>Sequencing music</u> Scratch Backdrop	<u>Events and actions in programs</u> Event

	Output Network Network components Server Wireless Access Point Network switch	Stop-frame animation Storyboard Sequence of frames Onion skinning	Image Desktop publishing Return Shift Template Page orientation Placeholder Layout		Code Motion block Event block Motion Stage	Action Code Programming extension Pen extension Pen down block Bugs Debugging Outcome Pen trail Set up block
Y4	The internet Router World Wide Web Online content	Audio editing Input device Output device Microphone Copyright Recording Podcast Soundwave view 'Trim' recording Import Align Layers (in recording) Sound effect Background music Audio file	Photo editing Rotate Crop Filter Colour effect Cloning Photo retouch Duplicate Combined image	Data logging Data logger Data set Data collection Sensors Data points Data file Logged data	Repetition in shapes Logo (website used) Logo command Code snippet Repeat Loop Count controlled loop Decompose/ decomposition Procedures	Repetition in games Count-controlled loop Loop Snippet of code Infinite loop Event block Code blocks
Y5	Systems and searching Digital system Physical connection Electronic connection Computer system	Video production Visual media Store Retrieve Export	Introduction to vector graphics Vector Vector drawing Alignment grid	Flat file database Record Field Database Sorting	Selection in physical computing Crumble controller Programming environment	Selection in quizzes Conditions 'if...then...else' structure Program flow Branching structure

	<p>Search engine Rank Web search Web crawler Search engine index Content creator</p>	<p>Reshoot</p>	<p>Resize handle Zoom tool Layers Duplicate (images) Group and ungroup (images)</p>	<p>Grouping</p>	<p>Circuit Microcontroller Crumble Sparkle Component Infinite loop Count-controlled loop Condition Conditional loop Selection Action</p>	<p>Setup code</p>
Y6	<p><u>Communication and collaboration</u></p> <p>Web address IP address Domain Name Server (DNS) Data packet Header Data payload Copyright Internet communication Internet collaboration Security Privacy</p>	<p><u>Web page creation</u></p> <p>HTML code Web layout Copyright Copyright-free Fair use Navigation path Hyperlink User experience</p>	<p><u>3D modelling</u></p> <p>3D model Three dimensions Lift Lower Workplane Recolour Placeholders</p>	<p><u>Introduction to databases</u></p> <p>Data input Spreadsheet Cell Cell format Produce calculated data Formula Cell references Duplicate</p>	<p><u>Variables in games</u></p> <p>Variable Program variable Value</p>	<p><u>Sensing movement</u></p> <p>Micro:bit Input, process, output device Emulator Controllable device Selection Accelerometer Operand</p>