



Computing Toolkit Progression



FS	Y1	Y2	Y3	Y4	Y5	Y6
I know ...						
- the names and basic uses of digital devices (tablets, cameras, screens, interactive boards). - how to press, tap, and swipe to interact with technology. - how to follow simple step-by-step instructions (unplugged algorithms). - how to take a simple photograph or record a sound. - to ask a trusted adult for help when using technology.	- what digital technology is and where it is used around me. - how to use a keyboard, mouse, or trackpad to type text and paint pictures digitally. - how to write simple algorithms and program a floor robot (Bee-Bot) using clear forward, backward, and turn commands. - how to sort objects into groups based on their properties. - how to stay safe online and why I must keep personal information private.	- how information technology (IT) helps us in the real world (e.g. barcodes, scanners). - how to capture, frame, and edit clear digital photographs. - how to debug an algorithm when a robot or sprite does not do what I expect. - how to gather data to create and interpret pictograms and block diagrams. - how to create simple music patterns and algorithms on a screen. - how to use strong passwords and report anything online that makes me feel unsafe.	- how digital devices connect to a network and transfer messages using switches and servers. - how to create stop-frame animations by ordering individual frames and photos. - how to program sequences of code in Scratch using motion, sound, and event blocks. - how to construct a branching database using yes/no questions to group objects. - how to edit fonts, images, and layouts to produce desktop publishing documents. - how to verify information online and show respect to others in digital spaces.	- how the Internet connects networks globally via routers and web servers. - how to record, trim, align, and layer audio tracks to create a podcast. - how to use count-controlled loops (repetition) in Logo and Scratch to write efficient code. - how sensors logging data points over time help us gather and analyze information. - how to edit, crop, adjust, and combine photos to create digital composites. - how digital actions leave a footprint and how to protect my online privacy and identity.	- how web search engines use crawlers, indexing, and ranking algorithms to return results. - how to plan, shoot, split, trim, and edit video footage using different camera angles. - how to write code using selection (if... then...) to control physical microcontrollers (e.g., Crumble) and interactive quizzes. - how flat-file databases use records, fields, and search criteria to organize information. - how to construct vector drawings using layers, grouping, and shape tools. - how search results can be biased and how to identify trusted, copyright-compliant content.	- how data travels across the Internet in packets using IP addresses and DNS protocols. - how to plan, construct, and publish multi-page websites using HTML concepts and navigation links. - how to declare, set, and manipulate variables in block coding to track scores and values. - how to structure data in spreadsheets using formulas and calculations (e.g. SUM). - how to construct, manipulate, and combine 3D shapes on a digital canvas (TinkerCAD). - how to use sensing inputs (Micro:bit inputs like accelerometers) to control digital outputs. - how encryption protects data and how to combat cyberbullying, fake news, and copyright infringement.