Computing Overview – coverage and sequencing summary

Brookburn's rationale behind the computing curriculum design:

Computing Systems and Networks   **Creating Media**   **Programming**   **Data and Information**

Through our computing curriculum, we aim to ensure that children at Brookburn receive a good breadth of opportunity and experience in using a range of hardware and software. The curriculum provides opportunities for the children to develop their skills and understanding in the essential elements of the computing curriculum: Computer Science (programming and logical thinking), Information Technology (storing, retrieving and creating digital content) and E-Safety (safe and appropriate use, reporting concerns and evaluating content).

We want our children to gain the basic skills connected to use of technology in everyday life and education whilst also seeing how technology can be used to present, engage and enhance learning. We also want children to develop logical thinking skills that can be transferred to other areas of learning. Alongside our core computing curriculum, we aim to use computing opportunities in the wider curriculum to give computing skills a sense of purpose and integration with the other learning that children are engaged in at school.

By the end of primary school, Brookburn children will have studied:

Computing Systems and Network(CS): Technology Around Us, IT Around Us, Connecting Computers, The Internet, Systems and Searching, Communication and Collaboration

Creating media(IT): Digital Painting, Digital Writing, Digital Photography, Digital Music, Stop-Frame Animation, Desktop Publishing, Audio Production, Photo Editing, Video Production, Vector Graphics, Web-page Creation, 3D Modelling

Programming(CS): Moving a Robot, Programming Animations, Robot Algorithms, Programming Quizzes, Sequencing Sounds, Events and Actions in Programs, Repetition in Shapes, Repetition in Games, Selection in Physical Computing, Selection in Quizzes, Variables in Games, Sensing Movement

Data and Information(IT): Grouping Data, Pictograms, Branching Databases, Data-logging, Flat-File Databases, Spreadsheets

E-Safety: Self-image and identity, Online relationships , Privacy and Security, Health, Well-being and Lifestyle, Managing Information Online, Online Bullying, Copyright and Ownership, Online Reputation

	Rising Stars	Rising Stars	Computer Systems and Networks	Creating Media	Programming	Creating Media
Year 1	We are Treasure Hunters (programming)	Digital safeguarding – keeping safe on-line and we are not bullies	Technology Around Us (1.1) Responsible internet use / Safer Internet	Digital painting (1.2)	Moving a Robot (1.3)	Digital Writing (1.5)
Year 2	We are Astronomers (programming)	Information Technology Around Us. (2.1-computer systems and networks) Developing on-line safety: Anti-Bullying	Digital Photography (2.2 – creating Media) Responsible internet use	Robot Algorithms (2.3 – Programming) Keeping Information Safe	Pictograms (2.4- data information) Digital Citizenship	Digital Music (2.5)
Year 3	We are Programmers (programming) Developing On-Line Safety	Connecting Computers (3.1 – Computer systems and networks) We are digital friends	Stop Frame Animation (3.2 – Creating Media) Responsible Internet Use	Sequencing Sounds (3.3-programming) Keeping information safe	Branching Data-bases (3.4-data and information) Digital citizenship	Desktop Publishing (3.5)
Year 4	We are Software Developers (programming) Developing on-line safety	We are Toy Developers (creating media) We are standing up to peer pressure	The Internet (4.1) Responsible use of the internet	Audio-production (4.2) Keeping information safe on-line	Repetition in shapes (4.3) Digital Citizenship	Photo Editing (4.5)
Year 5	We are artists (creating media) On-line safety	Jimu Robots (programming) We are responsible on-line	Systems and Searching (5.1) Responsible internet use	Video production (5.2) Keeping information safe	Selection in physical computing (5.3) Digital citizenship	Introduction to Vector Graphics (5.5)
Year 6	We are bloggers (creating media) On-line safety	We are animators (creating media) Appropriate use of internet & sharing images	Communication and Collaboration (6.1) Responsible internet use.	Webpage creation (6.2) Keeping information safe	Variables in games (6.3) Digital citizenship	Creating Media 3D Modelling On-line reputation (6.5)