

Brockwell Junior School Computing Progression Map

“Technology is nothing. What’s important is that you have a faith in people, that they’re basically good and smart, and if you give them tools, they’ll do wonderful things with them.”
Steve Jobs

Year Group	Year 3			Year 4			Year 5			Year 6		
Term	Sep - Dec	Jan - Apr	May - July	Sep - Dec	Jan - Apr	May - July	Sep - Dec	Jan - Apr	May - July	Sep - Dec	Jan - Apr	May - July
Learning Challenge												
	Programming A – Sequence in music Programming B – Events and actions	Computing Systems and networks – Connecting computers	Creating media – Animation Creating media – Dekstop publishing	Programming – Repetition in shapes Programmin – repetition in games	Computing systems and networks – The internet	Creating media – Audio editing Creating media – photo editing	Programming – Selection in physical computing Programming – Selection in quizzes	Computing systems and networks – Sharing information	Creating media – vector drawing Creating media – Video editing	Programming – Variables in games Programming - Sensing	Computing systems and networks - communication	Creating media – 3D Modelling Creating media – Web page creation
Subject Coverage												
	Explore the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. Explore the links between events and actions, whilst consolidating prior learning relating to sequencing.	Develop understanding of digital devices, with an initial focus on inputs, processes, and outputs.	Use a range of techniques to create a stop frame animation using tablets. Next, they will apply those skills to create a story-based animation. Use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents.	Create programs by planning, modifying, and testing commands to create shapes and patterns. Explore the concept of repetition in programming using the Scratch environment. Look at the difference between count-controlled and infinite loops, and use their knowledge to modify existing animations and games using repetition.	Apply knowledge and understanding of networks, to appreciate the internet as a network of networks which need to be kept secure.	Examine devices capable of recording digital audio, which will include identifying the input device (microphone) and output devices (speaker or headphones) if available develop their understanding of how digital images can be changed and edited, and how they can then be resaved and reused.	Explore the concept of selection in programming through the use of the Crumble programming environment. Develop their knowledge of selection by revisiting how conditions can be used in programs and then learning how the If... Then... Else structure can be used to select different outcomes depending on whether a condition is true or false.	Develop their understanding of computer systems and how information is transferred between systems and devices.	Learn how to use the different drawing tools and how images are created in layers. Develop the skills of capturing, editing, and manipulating video.	Explores the concept of variables in programming through games in Scratch. Bring together elements of all the four programming constructs: sequence from year 3, repetition from year 4, selection from year 5 and variables, introduced in year 6, programming A.	Explore the World Wide Web as a communication tool.	Develop knowledge and understanding of using a computer to produce 3D models. Introduce learners to the creation of websites for a chosen purpose.
Online Safety												
	Project Evolve Self image and Identity Online Relationships Onlie Bullying	Project Evolve Online Reputation Managing Online Information	Project Evolve Health, Well being and Lifestyle Privacy and Security Copyright and Ownership	Project Evolve Self image and Identity Online Relationships Onlie Bullying	Project Evolve Online Reputation Managing Online Information	Project Evolve Health, Well being and Lifestyle Privacy and Security Copyright and Ownership	Project Evolve Self image and Identity Online Relationships Onlie Bullying	Project Evolve Online Reputation Managing Online Information	Project Evolve Health, Well being and Lifestyle Privacy and Security Copyright and Ownership	Project Evolve Self image and Identity Online Relationships Onlie Bullying	Project Evolve Online Reputation Managing Online Information	Project Evolve Health, Well being and Lifestyle Privacy and Security Copyright and Ownership
Skills and Key Concepts												

Computing @ Brockwell

At Brockwell we aim to give all children access to an engaging and inclusive STEM curriculum (Computing and D&T) focussing on high quality 'computational thinking' and reasoning skills. Keeping safe in an ever-changing, digital world underpins our entire STEM curriculum and is taught implicitly across all areas of the curriculum. We aim for all children to be able to succeed in the digital world, by the end of KS2. Children will develop an acute awareness of the dangers faced in the digital world and gain the necessary skills to deal with these appropriately.

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