Computing – Year 3

Autumn 2	Programming A - Sequencing sounds					
Prior learning	This unit assumes that learners will have some prior experience of programming; via the KS1 NCCE units. They will have experienced programming via floor robots; Moving A Robot Year 1 and Robot algorithms Year 2, alongside the use of ScratchJr through Programming animations Year 1 and Programming quizzes Year 2.					
Lesson objective	To explore a new programming environment	To identify that commands have an outcome	To explain that a program has a start	To recognise that a sequence of commands can have an order	To change the appearance of my project	To create a project from a task description
Key vocabulary	Scratch, programming, blocks, commands, code, sprite, costume, stage, backdrop	Sprites, programming blocks, motion, turn, point in direction, go to, glide	Sequence, event, task, design, code, run the code	Sequence, order, note, chord, Algorithm.	Sprite, stage, costume, backdrop	Design, algorithm, bug, debug
Creative context						
Substantive knowledge	Commands make a figure move in a program. The sprite are made of code (commands), costumes (look) and sounds.	Commands make a figure move in a program. Each sprite is controlled by the commands chosen.	Sequence is a pattern or process in which one thing follows another. Objects in a project will respond exactly to the code. An event block starts a project.	Algorithm is a precise set of ordered instructions. A chord is created when certain notes are played at the same time.	Backdrops and costumes can change the apparance of a project.	Debugging is the process of **finding and fixing errors (bugs) in an algorithm or computer program** to ensure it functions as intended.
Disciplinary knowledge	How to program a figure to move in scratch. How to edit a figure in scratch. How to add a background in scratch.	How to progam action in multiple sprites. How to get a sprite to point in a specific direction, turn, or glide.	How to start a program. How to create a sequence of connected commands.	How to program specific sounds/notes to play. How to program a chord.	How to change the apparance of a sprite by using costumes. How to change the background by adding a backdrop.	How to name a sprite. How to debug a program by testing it to find any errors and fixing them.
Recorded learning	Creating their own project - Add at least two new sprite	Create a project – Add multiple sprites with movement	Create a project with three spritesthat move in different ways and	Create a project to code a musical	Design and create a project with sprite that move and make	Design, create, test a debug a project to

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	objects, at least two new backdrops and add move commands. (**Save this**).	commands, including point in a specific direction, turn, or glide. (**Save this**).	each start with a different event. (**Save this**).	instrumemt to play chords. (**Save this**).	noise. The apparance of the sprites and backdrops should change too. (**Save this**)	make a piano in scratch (**Save this**).
Outcome for unit	Over the course of this unit, each project they create should be saved so that there is a clear course of learning throughout the unit. At the end of lesson, please complete the unit assessment (slide in the folder) by adding the children's name into a table to determine whether they can do the statement indepdently, with some help or not at all. This could be teacher or self assessment.					
Future learning	Children will complete programming units in every year until year 6, where they will need the knowledge taught in this unit.					