Year 3 Computing Curriculum – Spring Term

Theme: Sequencing Sounds

Curriculum objectives	Vocabulary				Links across the curriculum
This unit explores the concept of sequencing in programming through Scratch. It begins with an introduction to the programming environment, which will be new to most learners. They will be introduced to a selection of motion, sound, and event blocks which they will use to create their own programs, featuring sequences. The final project is to make a representation of a piano. The unit is paced to focus on all aspects of sequences, and make sure that knowledge is built in a structured manner. Learners also apply stages of program design through this unit.	**Keyword**	Definition	sequences	a pattern or process in which one thing follows another.	**Geography** – Using direction and positional language **PSHE** – taking turns and working as a team **English** – writing instructions -precise language choices **Science** – making predictions
	design	to think up and plan out in the mind	directions	guidance on where to go	
	test	a means of finding out the nature, quality, or value of something	code	How it is done	
	debug	to fix	plan	an action you want to take	
	commands	to order or instruct	program	a plan of what will be done	
	task	What is needed	algorithms	a determined and finite procedure for solving a problem	

Prior Knowledge:	Future Knowledge:
EYFS – To follow two step instructions. Year 1 – Commands for a robot. Year 2 – plan and debug algorithm	Year 3 - Sequencing Sounds Year 4 – Repetition in Sounds to modify a count-controlled. Year 5 - control a simple circuit connected to a computer. Year 6 - To choose how to improve a game by using variables

Lesson Sequence	Key Knowledge	Key Skills
To explore a new programming environment	• Scratch is the programme we will use this term. • Scratch attributes • Commands in Scratch are blocks.	• identify the objects in a Scratch project (sprites, backdrops) • explain that objects in Scratch have attributes (linked to) • recognise that commands in Scratch are represented as blocks
To identify commands have an outcome	• Commands have an outcome.	• identify that each sprite is controlled by the commands I choose • choose a word which describes an on-screen action for my plan • create a program following a design
To explain that a program has a start	• Commands that connect will affect the outcome. • Task - what is needed • Design - what it should do • Code - how it is done • Running the code - what it does	• start a program in different ways • create a sequence of connected commands • explain that the objects in my project will respond exactly to the code
To recognise that a sequence of commands can have an order	• The sequence of commands can have an order. • The order of commands will affect the outcome.	• combine sound commands • order notes into a sequence
To change the appearance of my project	• To know the design choices for your artwork.	• build a sequence of commands • decide the actions for each sprite in a program • make design choices for my artwork
To create a project from a task description	• To name the objects needed in your project.	• identify and name the objects I will need for a project • relate a task description to a design • implement my algorithm as code

Computing themes	Where these are covered:	Links across the Computing curriculum	
Technology around us Autumn 1	• Scratch links to the real world and computer games the children know.	**EYFS**	To listen to instructions
Digital painting Autumn 2	• Understanding the need for coding and algorithms	**1**	Commands for a Robot
		2	Robots and Debugging
Programming A Spring 1	• Programming the Scratch	**4**	Repetition in Sounds – decomposition
		5	Simple circuits
Data /information Spring 2	• Storing the commands and the effect on language on the outcome of your commands.	**6**	Variables in programming
Creating media Summer 1	• Your own designs of Scratch		
Programming B Summer 2	• Using Scratch to implement an algorithm as a code		