Moor First School

Garnet

Summer 2

Moor First Computing Knowledge Organiser

NCCE – Programming Animations

Subject Specific Concepts

- Computer Science
- Creators

Overview

Animations in Scratch Jr.

- Programming is when we make a set of instructions for computers to follow.

-Scratch jr. is a program that we can use in order to code our own stories and animations. It involves sprites (characters on the screen).

-We use algorithms (a set of instructions to perform a task) to program the sprite to do different things.

Sequencing

-Sequences: -A sequence is a pattern or process in which one thing follows another. In Scratch Jr. we can stack blocks together side by side in order to create programs made up of sequences.

-Deleting Blocks: Blocks can be removed from programs by dragging them from the programming area back into the blocks palette.

-Repeating Blocks: For something to happen more than once, we can change the number underneath the block.

-Running the Code: Run your animation by tapping the full screen icon, and then the green flag.

The Basics of Scratch Jr.

-What is Scratch Jr? Scratch is a website/ app that lets us code our own stories, games and animations.
-Sprites: Scratch Jr. uses characters called sprites. The main sprite is a cat called Scratch.
-Home: Clicking on the house takes you 'home' to your project screen.

Getting Started

-The + (right) starts a new project.

-These (right) are the **programming blocks.** We drag them into the **programming area** (right). Clicking the block in the area makes the sprite perform on the stage.

-Background: Backgrounds are added by clicking this icon (right).

-Start Blocks: Start blocks are yellow. These are used to start/ run programs.

-End Blocks: End blocks are red. These show what happens at the end of your program.

Algorithms and Programming

-An **algorithm** is a set of instructions for performing a task. Designing an algorithm can help us to make the sprite do the things that we want it to do.

-Programming is when we move the blocks into the position (based on our algorithm design). Our programming codes the sprite to perform the actions.

Debugging

-Sometimes, things don't work exactly how we want them to the first time. This may be a problem with our algorithm, or we could have made a mistake in our programming.

-If the animation does not work correctly the first time, remember to **debug** it. This means finding and fixing the problems.

Important Vocabulary

Programming	Scratch Jr.	Sprite	Home	Command	Block	Stage	Background	Algorithm	App