Year 1 Computing Knowledge Organiser - Spring 2
Theme: Programming (Programming Animations)

Computing

Key Knowledge and Skills

By the end of this unit children will…
be introduced to on-screen programming through Scratch Jr. Pupils will explore the way a project looks by investigating sprites and backgrounds. They will use programming blocks to use, modify and create programs. Pupils will also be introduced to the early stages of program design by developing their understanding of algorithms.

What is Scratch Jr?
Scratch Jr 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.

The basics of Scratch Jr.
The blue plus button starts a new project.
These are examples of programming blocks. We drag them into the programming area. Clicking the blocks in the area makes the sprite perform on the stage.
Backgrounds are added by clicking this icon.
You can either choose pre-made backgrounds or draw your own background.
Start blocks are yellow. These are used to start or 'run' programs.
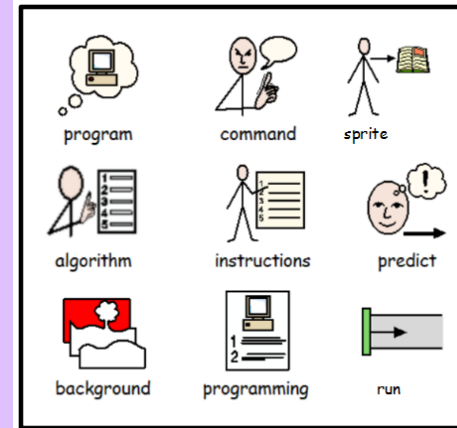End block are red. These show what happens at the end of a program.
Sequencing – a sequence is a pattern or process in which one thing follows another. In Scratch Jr. we can stack blocks together side by side in order to create programs made up of sequences. Our programming codes the sprite to perform the actions.
Sometimes things don't work exactly how we want them to the first time. If the animation does not work correctly the first time, we need to debug it. This means finding and fixing the problems.

Key Vocabulary

program - how the algorithm is run as a code on the computer
command – a single, specific instruction
sprite – the characters to be programmed in Scratch Jr.
algorithm – a precise set of instructions
block – the instructions we can use to program the sprites in Scratch Jr.
predict – say what will happen in the future
background – we can set different scenes for our animations in Scratch Jr.
programming – when we move the blocks into the position based on our algorithm design.
run – the term we use when we start our animation.

Online Safety

Self-Image and Identity
It is lots of fun playing games online, but sometimes there are people online who may do / say things to us in a game that can make us feel sad, embarassed or upset. If someone has made us feel this way, we need to tell a trusted adult (e.g. a parent, grandparent, other family member or teacher).