Year 2
Programming Animations

Key vocabulary

command	To give an order
sprite	A graphic/image which can be moved on a screen.
sequence	A set order of patterns for something to follow
program	A series of codes that instructs a computer to perform specific tasks
modify	To change or alter something.
debug	To fix the error in code.
algorithm	A process or set of rules followed by a computer.
bug	An error or mistake in a computer code.
blocks	Change, improve or correct.

Apps - ScratchJr

-**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.
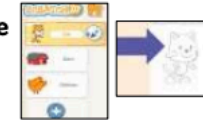
Creating Quizzes

-**Outcomes**: An outcome is something that happens as a result of us doing something. E.g. in cookery, we can mix and cook ingredients to make an outcome of food! In Scratch Jr. a sequence of commands is followed and this results in an outcome.

-**Quizzes in Scratch**: We can create simple quizzes in Scratch jr. where the user can select an answer by clicking on a sprite. An outcome occurs when the sprite is clicked.

-**Adding and Programming Sprites**: We need multiple sprites for the user to select from. To add new sprites, we choose the + option (see right). We can program multiple sprites. The sprite we are programming is the picture in the programming area.
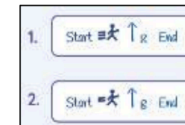
-**Programming Sequences**: Consider what question to ask your users, e.g. Who lives here? Program each sprite with a command sequence, so that they know if they are right or not when clicking on the sprite.

Algorithm 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.