



## Year 1 Programming Animations

### Key vocabulary

command	To give an order
sprite	A graphic/image which can be moved on a screen.
compare	Estimate, measure or note similarities and differences.
programming	The process or activity of writing computer programs.
joining	To link or connect.
predict	Say or guess something.
algorithm	A process or set of rules followed by a computer.
design	A plan or drawing to show the look or function of something.
instructions	A direction or order.

### 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.



### Animations in Scratch Jr.



#### 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.



### 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.

