

VOCABULARY

Algorithm: A clear set on instructions followed in a specific order

Blocks: There are different types of action blocks in Scratch that change your sprite (object or character) E.g motion blocks, triggering, looks, sound, control and end

-Control block: Uses timings, e.g. wait, stop, set speed or repeat

-End blocks: Ends the script, directs it to another page or uses forever loop

-Looks blocks: control how a sprite looks or what it says

-Motion Blocks: control a Sprite's movement.

-Sound blocks: control sound

-Triggering blocks: begin a type of code

Code: A set of instructions used for different programs

Commands: A single part of a program. It tells the computer to do one action. A command may be one line or several lines long

Debug: To find and remove errors from computer hardware or software.

Execute: Run a program,press go, start the algorithm or instructions

Loops: part of a command that repeats

Program: a stored set of instructions put into the computer in a language understood by the computer that does some form of thinking and then creates an outcome

Sequence: to place programming instructions in order

Script: A short program that is usually written for one task. Often used to create repetitive tasks to save time

Sprite: An object, image or character in Scratch Jnr that can be controlled using commands

YEAR 3 COMPUTER SCIENCE

MAIN IDEA

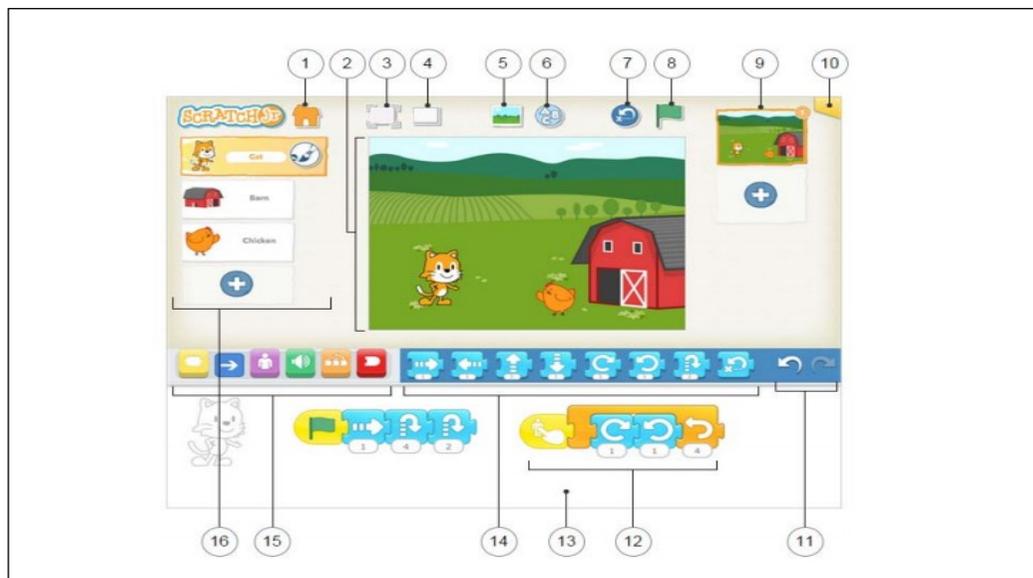
Pupils will design, write and debug programs on Scratch Junior with specific goals. They will use their knowledge of algorithms to manipulate their animation and see the impact of choices

WHAT CAME BEFORE

Year 2—to use knowledge of programming and debugging on 'Scratch Junior' programme

WHAT COMES NEXT

Year 4— To use knowledge of blocks and algorithms to create an Egyptian animation using Scratch



WHAT YOU SHOULD ALREADY KNOW

- Changing the order of an algorithm will change the sequence of an animation
- That a sprite is an object or image in Scratch Junior that can be instructed to do something
- There are a range of blocks that tell the sprite what to do

KEY LEARNING

Pupils will design, write and debug animations using the program Scratch Junior

In this unit, pupils will create an animated cartoon using characters of their choice. They will be able to experiment changing their character's appearance and costume and will use paint tools to create their own characters and backgrounds. Pupils will then create an animation by copying a storyboard into a series of scripted instructions (program) for sprites. By the end of term you will be able to:

- create an algorithm for an animated scene in the form of a storyboard
- write a program in Scratch to create the animation

Pupils will then have the opportunity to transfer these skills into the program Scratch and compare the similarities and differences between blocks and the impact they have on an animation or game.

INVESTIGATE / QUESTIONS

- Is this animation running effectively?
- Which blocks should I use to...?
- How can I change...?