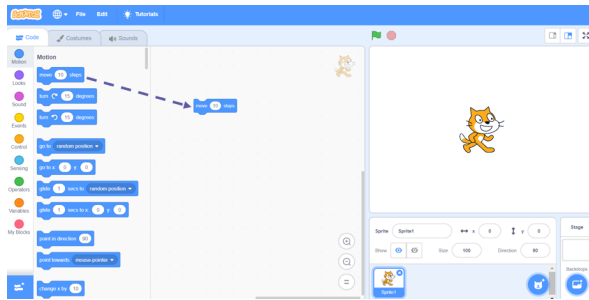


Year 3: Computing – Programming

Programming using blocks

Basic Programming:

Make sure that the feature of the stage that you want to program (e.g. sprite, background) is selected by clicking on it. Drag the block command that you want onto the code area.



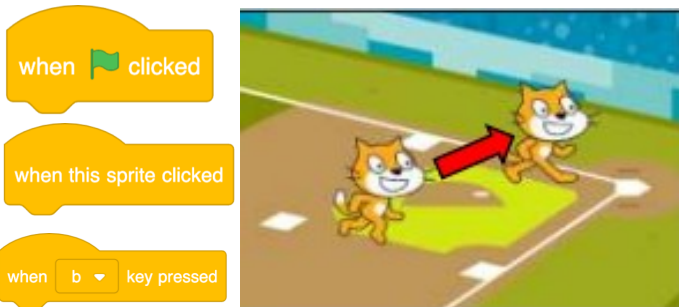
Block Editing:

White areas on blocks can be edited. Click on them and type in the preferred value.

move 10 steps

turn 15 degrees

Running the Code: You can run your animation by performing the action stated in the **event block** (e.g. clicking the event block).



What is Scratch?

Scratch is a website/ app that lets us code our own stories, games and animations. Scratch helps us to learn how to use programming language, whilst also being creative and using problem-solving skills.

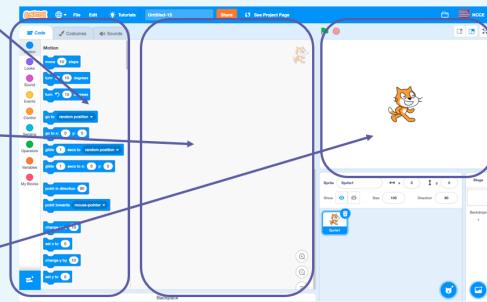
<https://scratch.mit.edu>

This is Scratch

Programming blocks

Programming area

Stage with sprite



Sequencing and Algorithms

-In Scratch, **blocks** can stack vertically on top of one another to create sequences.

-**Event blocks** are used to start sequences. They are orange and have a curved shape at the top.

-Designing an **algorithm** will help you to program the sequence that you require.

-If your animation does not work correctly the first time, remember to **debug** it (find errors and fix them).

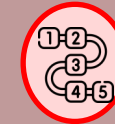
Key Vocabulary



Programming: making a set of instructions for a computer to follow.



Algorithm : a sequence of instructions that are followed to complete a task.



Sequence: a pattern or process in which one thing follows another.



Command: a specific instruction given to a computer program that tells it what to do.



Coding: the language used to give instructions to computers.



Debug: finding errors in a computer program and fixing them.



Sprite: a character on screen in Scratch.