Year 3 Programming in Scratch Knowledge Organiser

## ? What are we learning about programming in Scratch?

Scratch is a piece of software that helps us program games, quizzes, drawings and much more. It uses code blocks that are different colours with different uses to piece together like a jigsaw to program an object (sprite) to move and interact. Scratch helps us take a big complex task, such as programming a character to draw a square, and break it up into smaller parts (decompose) to make is easier to understand.

## National Curriculum Content

Design, write and debug programs that accomplish specific goal, including simulating physical systems. Use sequence and repetition in programs; work with various forms of input.

## Key knowledge

- Know that code blocks in Scratch are different colours to help you find the blocks you need.
- Know that code blocks can be used to draw shapes by programming a pen trail and movements.
- Know that a repetition can be used to a make a program simpler.
- Know how to program an input, such as keyboard arrow keys to make a sprite move.
- Know how to find errors in a program and correct them.


## Important Vocabulary

| Sprite | The object that we program, such as character or car to move, draw etc. |
| :---: | :--- |
| Stage | The background or scene where the program takes place. |
| Sequence | Place the code blocks in the correct order (sequence) to make the program work. |
| Debug | Find an error in your code and correct it. |
| Loops or <br> repetition | Using a loop or repetition in your program can make your program simpler by using <br> few blocks. It can also make an object follow an instruction more than once. For <br> example, programming a robot to draw a circle 3 times. |
| Inputs | An example of an input is the keyboard arrow keys, which could be programmed to <br> move a sprite. |

## Quick tips

- Click or tap a sprite to see how it works with your sprite before you use it in your program.
- Click or tap the erase all block (found in the extensions) to clear any drawings you have programmed.


