

COMPUTING · Y3–Y6

Creative Computing & Scratch

Knowledge Organiser — Y3–Y6

Key vocabulary

1

Sprite

A character or object in a Scratch project that can move, speak, and respond to events.

Example: A cat, a ball, a spaceship — any character in your project

2

Script

A set of programming blocks attached to a sprite, telling it what to do.

3

Event block

A block that starts a script when something happens — 'When green flag clicked', 'When key pressed', 'When sprite clicked'.

4

Loop

A block that repeats actions. 'Repeat 10' runs 10 times. 'Forever' runs until the program stops.

Example: A character that keeps moving needs a forever loop

5

Conditional

'If... then...' logic. Checks if something is true, then runs the script if it is.

Example: If touching colour red, then stop

6

Variable

A named 'box' that stores a value which can change. Used for scores, health, timers.

Example: Set score to 0; change score by 1 when coin collected



7

Debugging

Finding and fixing errors in your code. A skill that improves with practice.

Example: 'My sprite goes the wrong way' → check the motion block direction value

g a Scratch project

Follow this process for better

- 1. IDEA: What will your project do? (game / story / animation / quiz / art)
- 2. SKETCH: Draw the stage layout — what will the user see?
- 3. SPRITES: List the sprites you need and what each one will do
- 4. EVENTS: What starts each sprite's script? (green flag, key press, message?)
- 5. ALGORITHM: Write the steps in plain English BEFORE writing any code
- 6. CODE: Build one sprite at a time — test as you go
- 7. DEBUG: When something goes wrong, check one block at a time
- 8. SHARE: Add instructions so others can play or use it
- KEY PRINCIPLE: decomposition — break big problems into smaller, manageable parts

