Computing- Year 3- Summer Term- Events and Actions

Prior Learning: This unit presses our learning from Key Stage 1 building upon our knowledge of Scratch Junior and use of floor robots.

Theme: Events and actions

Concept: Programming

Hardware: Laptops

Software: Scratch

Words we will know!

Sequence	Algorithm	Outcome	Run	Code

1. Moving a Sprite

We will investigate how characters can be moved using 'events'. We will analyse and improve an existing project, and then apply what we have learned to our own projects. We will then extend our learning to control multiple sprites in the same project

4. Adding features

We will be given the opportunity to use additional Pen blocks. We will predict the functions of new blocks and experiment with them, before designing features to add to our own projects. We will add these features to their projects and test their effectiveness.

2. Maze movement

We will program a sprite to move in four directions: up, down, left, and right. We will begin by choosing a sprite and sizing it to fit in with a given background. We will then create the code to move the sprite in one direction before duplicating and modifying it to move in all four directions. We will consider how our project could be extended to prove that their sprite has successfully navigated a maze.

5. Debugging movement

We explore the process of debugging, specifically looking at how to identify and fix errors in a program. We will review an existing project against a given design and identify bugs within it. We will then correct the errors, gaining independence as we do so. We will also develop our projects by considering which new setup blocks to use.
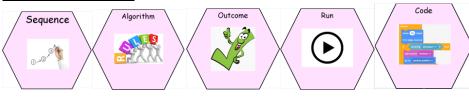
3. Drawing lines

We will be introduced to extension blocks in Scratch using the Pen extension. We will use the pen down block to draw lines, building on the movement we created for our sprite in Lesson 2. We will then decide how to set up our project every time it is run.

6. Making a project

We will design and create our own projects. Using a template, we will complete projects to move a sprite around a maze, with the option to leave a pen trail showing where the sprite has moved.