How are computer games made?

St. Peter's CE Primary Academy

Y3 Programming

Key learning

•Use Swift Playgrounds to learn about Comma… F… and Conditionals.

• Learn how to add a character and give it com… Hopscotch.

•Start a code in a range of different ways.

•Use simple … move and turn with differ… angles.

•Use con… io… Hopscotch to add a command when a character … to … nething.

•Use controls to add loops.

Other coverage

Digital citizenship

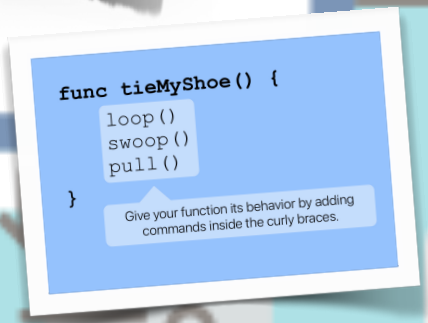
- Online reputation
- Online bullying

Systems and networks

- Data

Key vocabulary

backdrop	The background in Scratch that you can program
conditionals	These tell a computer to run different codes depending on the conditions
coding	Creating, designing and building a computer program to accomplish a goal
command	An instruction for the computer
for loop	Grouping tasks together and giving them a number of times to run together
function	A set of commands that you name and run together to group tasks automatically
repeat forever	To keep doing a set of commands until the code is stopped





Programming – Our Learning Journey

Year 1

- Create and program sprites using movement backgrounds, sounds, speech and debugging.
- Program Ozobots using calibration, lines and colour codes.

Year 2

- Create interactive games and sequences using sprites, loops, messages, timing and prediction.
- Program Ozobots using movement commands, speed, lights, sounds and repeat loops.

Year 3

- Program characters using commands, loops, conditionals movement and sensors.
- Build and code robots using motors, sounds, lights and loops to perform different roles.

Year 4

- Create interactive games using sprites, functions, loops, conditionals and logic.
- Program Micro:bits and Ozobots using inputs, sensors, radio, movement, sounds and lights.

Year 5

- Create advanced Scratch games using operators, logic, variables and functions.
- Design and program autonomous robots using sensors, variables, conditionals and loops to respond to their environment.

Year 6

- Create interactive games using variables, scores, operators, functions and loops.
- Design and program inventions using tilt switches, Micro:bits and Python.