Year 2 Sequencing Simple Algorithms and Programs Knowledge Organiser

Key words and prior learning from Year 1 Simple Algorithms and Programs Part 1 AND Create Simple Programs Part 2

Algorithm – a set of instructions written in plain English – NOT computer code, that a programmer writes to create instructions that will carry out a specific task.

Debug – find the mistake.

Program – instructions written in a language that a standard computer or device understands which is not a language a human would ever use to communicate with another human.

Route-based program – uses simple directional commands forwards, backwards, left and right to control movement.

Encode – turn instructions into code for programming.

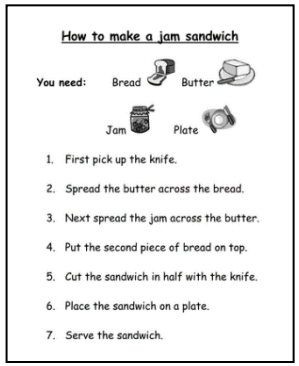
Sequence – a particular order in which related things follow each other.

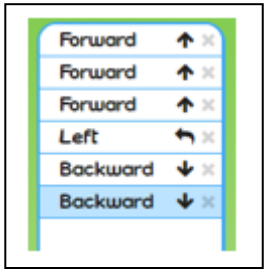
Programmer – a person who writes computer programs.

On-screen turtle – acts as a pen on screen that you use for drawing on a virtual canvas.

Predict – say or estimate what you think will happen or will be the consequence of something.

Logical thinking – use what we know and apply it to what might happen to make sense of it all.





Key Learning	Self-Assessment		
	WT	A	WA
I can give a sequence of commands to complete a specific task			
I can follow a sequence of commands to complete a specific task			
I can predict the movement of the sprite to create a route-based program before I test it out			
I can debug my route-based program during running the program to correct any mistakes			
From given route-based programs I can predict the final outcome before running the program			
I can use given code as a scaffold to modify and make my own			
I can evaluate my algorithms to make judgements on its effectiveness before I create a route-based program to complete a given task			
I can use logical thinking to reverse a route-based program			

New key words we will use in Year 2 Sequencing Simple Algorithms and Programs

Sequence – a particular order in which related things follow each other.

Reverse – do the direct opposite of the stated command.

Who uses skills like these?

- Programmers that update Sat Nav systems
- Programmers that create location services and GPS systems