


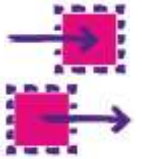



Computer Science Knowledge Organiser – Year 4

Y4	Prior Knowledge	Programming – Repetition / Selection	Computational Thinking
Key knowledge and skills	In Year 3 you learnt: <ul style="list-style-type: none"> How to design and create a program. How to create a sequence of code. How to use repetition in programs. That abstraction is focusing on the important information. That computers in school are connected together in a network (LAN) and why. 	<ul style="list-style-type: none"> I know how to use repetition in programs. I know how to use simple selection in programs. I know how to work with a variety of inputs and outputs. I know how to use logical reasoning to systematically detect and correct errors in programs. 	<ul style="list-style-type: none"> I know how to use abstraction to focus on what's important in my design. I know how to write more precise algorithms for use when programming. I know how to use simple selection and repetition in algorithms. I know how to use logical reasoning to detect and correct errors in programs.
		Computer Networks – The Internet <ul style="list-style-type: none"> I understand that servers on the Internet are located across the planet. I understand the difference between the Internet and WWW. I understand how web pages are viewed across the internet. 	

Computational Thinking		Key Vocabulary		Apps / Programs
 <p>Selection</p>	<p>Selection is when programs that are interactive, responding to inputs and behaving differently each time they run. With burglar alarms, if motion is detected then a siren sounds, else it remains on standby.</p>	Selection	<p>When a computer executes instructions if a particular condition is met or not.</p>	 
 <p>Input / Output</p>	<p>Input is data sent to a computer system from devices such as a keyboard, mouse, microphone or physical sensor. Input devices enable information from the outside world to get into a computer. Output is data or information communicated from a computer system to the outside world via various devices which include monitors, speakers or projectors.</p>	Logical Reasoning	<p>Being able to explain why something happens or predict using facts and knowledge that we know to be true.</p>	
 <p>Logic</p>	<p>Logical reasoning helps us explain why something happens.</p>	Input	<p>Input data is sent to a computer system from devices such as a keyboard, mouse or sensor.</p>	
		Output	<p>Output data is sent from a computer system to the outside world, e.g. displayed on a computer screen.</p>	
		Internet	<p>The global system of interconnected computer networks</p>	
		Router	<p>A device that manages the flow of data between computer networks</p>	
		WWW (World Wide Web)	<p>A service provided via the internet that allows access to web pages and other shared files</p>	

