






Computer Science Knowledge Organiser – Year 6

Y6	Prior Knowledge	Programming – Selection / Variables	Computational Thinking
Key knowledge and skills	In Year 5 you learnt: <ul style="list-style-type: none"> How to use selection in programs. How to work with variables. How to define and call a function you have written. (Swift) How to evaluate your work and identify errors. How to use search technologies effectively and how pages are ranked in a search engine. How web spiders index the web for search engines. 	<ul style="list-style-type: none"> I know how to use a range of sequence, selection and repetition commands to implement my design I know how to identify the need for, and work with, variables. I know how to create procedures/functions to hide complexity in programs. I know how to critically evaluate my work and suggest improvements. 	<ul style="list-style-type: none"> I know how to decompose a design or code to focus on specific parts. I know how to use abstraction to hide complexity in my design or code. I know how to recognise and make use of patterns in my design and code. I know how to critically evaluate my work and suggest improvements.
		Computer Networks – HTML	
		<ul style="list-style-type: none"> I understand what HTML is and recognize HTML tags. I know a range of HTML tags and can remix a web page. I know how to create a webpage using HTML. 	

Computational Thinking		Key Vocabulary		Apps/Programs
 Variable	A variable is a simple way of storing one piece of information somewhere in the computer's memory whilst a program is running. A variable can be numerical, textual or perhaps an indicator of true/false.	Pattern	Spotting and using similarities to make predictions, create rules and solve other problems.	 
		Procedure/function	A named set of commands that can be called (run) multiple times throughout a program.	
 Decomposition	Decomposition is the process of breaking down a task into smaller, more-manageable parts. With decomposition, a task can be tackled by several people working together as a team.	String (Swift coding)	A name for stored data which is text. Strings can be combined to form new words and sentences.	
		For loop (Swift coding)	A block of code that is repeated a specific amount of times.	
 Patterns	If computer scientists see a pattern across an algorithm, they'll look to create a single module of repeatable code, sometimes called a function or procedure. Computer scientists want to solve problems quickly and efficiently. The recognition of patterns in input plays an essential role in machine learning.	Command	A single instruction that can be used in a program to control a computer	
		HTML (HyperText Markup Language)	The computer language used to write web pages.	