Computer Science Knowledge Organiser – Year 2

Y2	Prior Knowledge	Programming - Algorithms	Computational Thinking
Key knowledge and skills	**In Year 1 you learnt:** • What an algorithm is. • How to create a simple algorithm on a device or using a Beebot. • Sequence is important in your algorithm. • How to find and fix simple bugs in algorithms.	• I understand programs follow precise instructions • I know how to create programs using digital devices E.g. Scratch Jnr on a tablet • I know how to debug programs of increasing complexity • I know how to use logical reasoning to predict the outcome of simple programs	• I know how to write algorithms for everyday tasks. • I know how to use logical reasoning to predict the outcome of algorithms. • I understand decomposition is breaking objects/processes down. • I know how to debug algorithms.

Key Vocabulary				Apps
Algorithm	An algorithm is a sequence of instructions or a set of rules to get something done.	**Programming**	Designing and writing instructions for a computer in a language it understands.	
Logic	Logical reasoning helps us explain why something happens.	**Logical reasoning**	Being able to explain why something happens or predict using facts and knowledge that we know to be true.	
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.	**Decompose/ decomposition**	To break down a task into smaller, more achievable steps	
Debugging	Debugging is about finding out what is wrong in an algorithm or program and fixing it.	**Precise**	Being exact or accurate.	