Autumn I Year I Computing - Bee-bots

Subject specific Vocabulary	Images/Diagrams/Maps		Important Knowledge	
Command One instruction that tells as computer or robot what to do Error A mistake that stops instructions from working correctly Instructions A set of commands that make a computer or robot do a job Program To give a computer or robot a set of instructions to follow	On top of the Bee-Bot buttons light-up eyes	Under the Bee-Bot battery sensor on/off Writing/Provi nrichment oppor Map reading in Geo Maths - positional la	Instructions O O O O O O O O O O O O O O O O O O	Bee-bots can be programmed. A programme is a sequence of instructions. The bee-bot moves wherever it has been programmed to move.

Presentation	Assessment				
	To create clear instructions to give directions.	Explaining that robots only follow exact commands; writing a short, logical set of commands for a partner to follow; following a simple set of commands exactly.	Explaining how a robot's programming will affect its actions; writing longer, more in-depth commands for a partner to follow; following a more complex set of commands with accuracy and ease.		
	To explore instructions through Bee-Bots.	Explaining what each Bee-Bot button does; creating and testing a short set of instructions; identifying and correcting mistakes in a sequence when the Bee-Bot does not behave as expected.	Programming the Bee-Bot to complete more complex challenges designed by themselves.		
	To program a robot using instructions.	Breaking down a maze into steps and planning a route; programming a Bee-Bot using logical instructions; testing the instructions to check for errors; correcting instructions if the Bee-Bot does not complete the task as intended.	Programming longer algorithms that allow the Bee-Bot to complete tasks they have designed independently.		
	To create instructions to solve problems.	Creating a maze that is suitable for a Bee-Bot to move through; checking their maze by programming the Bee-Bot accurately; changing their maze to ensure that it is appropriate.	Creating a complex maze that has more than one solution; explaining how they know a solution will work before checking it; suggesting efficient changes to incorrectly programmed solutions.		
	To identify and correct errors in instructions.	Checking instructions and spotting errors; suggesting changes to commands to correct instructions; testing new instructions to ensure they are correct.	Making changes to instructions with minimal edits and explaining why they work; explaining how they know an algorithm is correct without testing it.		