








Computing – Year 1





Autumn 2	Programming A – Moving a robot					
Prior learning 	As this is a Year 1 unit, no prior knowledge is assumed. This unit progresses learners’ knowledge and understanding of giving and following instructions. It moves from giving instructions to each other to giving instructions to a robot by programming it.					
Lesson objective 	To explain what a given command will do	To follow and understand instructions	To combine forwards and backwards commands to make a sequence	To combine four direction commands to make sequences	To plan a simple program	To find more than one solution to a problem
Key vocabulary 	Forwards, backwards, turn, clear, go, commands	Instructions, directions	Forwards, backwards, commands	Left, right, turn, commands	Plan, algorithm, program	Route, plan, program
Creative context 	Show them pictures of robots and ask about robots that they might have seen in their lives.					
Substantive knowledge 	A command (like pressing a button) tells the bee bot to move.	Instructions need to be clear, specific and give directions.	A sequence can be made by combining forwards and backwards movements. The up and down arrows move the beebot forward and backwards.	A sequence can be made by combining forwards, backwards and side-to-side movements. The left and right arrows move the beebot sideways.	A program is a sequence of instructions. The order of commands impact the sequence. Fixing a program is called debugging.	A program is a series of instructions. There is a range of alternate routes to a specific destination and alternate ways to get there.
Disciplinary knowledge 	How to command the beebot to move by pressing the buttons on the top of the bee bot moves them.	How to give effective instructions for other people and bee bots to follow.	How to predict a movement from the command. How to make the beebot move forwards and backwards.	How to predict a movement from a command. How to make the beebot move sideways.	How to use a series of commands to create a program. How to debug their programs	How to use a series of commands to create a program.
Recorded learning 	No recorded learning – photos/quotes to add to the floorbook.	No recorded learning – photos/quotes to add to the floorbook.	No recorded learning – photos/quotes to add to the floorbook.	No recorded learning – photos/quotes to add to the floorbook.	Videos of the movement to add to the floorbook.	Videos of the movement to add to the floorbook.



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<p>Unit outcome</p> 	<p>Over the course of this unit, you will be evidencing the progress the children have made through pictures, quotes or videos in the floor book.</p> <p>At the end of the unit, could you please complete the unit evaluation, either as a self-assessment or teacher assessment. The slide is in the folder; Add the children's names into the boxes that are the best fit.</p>
<p>Future learning</p> 	<p>In year 2, they will be looking at Robot Algorithms - children will use key vocabulary to enact as a sequence and give clear and unambiguous instructions. They will give commands using a range of sequences and use logical reasoning to predict the outcome of a program. They will identify different routes around a mat, create an algorithm to meet an end goal and create a debug a program.</p>