

COMPUTING – Year 1 – Spring Term REVISED



SPRING 1 – PROGRAMMING 1 - ALGORITHMS

SPRING 2 – PROGRAMMING 2 – PROGRAMMING BEEBOTS

Prior Learning	
EYFS OBJECTIVES COVERED Y1 MOUSE SKILLS AND ALGORITHMS UNITS COVERED	
Key vocabulary for this unit	
SPRING 1 – PROGRAMMING 1 – ALGORITHMS UNPLUGGED	SPRING 2 – PROGRAMMING 2 – PROGRAMMING BEEBOTS
Algorithm Automatic Bug Chunks Clear Code Debug Decompose Decomposition Device Directions Input Instructions Manageable Motion Order Organise Output Precise Programming	Algorithm Artificial intelligence Bee-Bot Clear Code Debug Demonstration Filming Inputting Instructions Pause Precise Predict Program Tinker Video Video recording

Problem Robot Sensor Sequence Solution Specific Steps Tasks Virtual Assistant	
Learning Sequence	
SPRING 1 Lesson 1: What is an algorithm?	<ul style="list-style-type: none"> • To understand what an algorithm is
Lesson 2: Algorithm pictures	<ul style="list-style-type: none"> • To follow instructions precisely to carry out an action
Lesson 3: Virtual assistants	<ul style="list-style-type: none"> • To understand that computers and devices around us use inputs and outputs
Lesson 4: Step by step	<ul style="list-style-type: none"> • To understand and be able to explain what decomposition is
Lesson 5: Debugging directions	<ul style="list-style-type: none"> • To know how to debug an algorithm
Lesson 5: Rocket launching	<ul style="list-style-type: none"> • To test a design and record data.
SPRING 2 – PROGRAMMING 2 – PROGRAMMING BEEBOTS	<ul style="list-style-type: none"> • To explore a new device.

Lesson 1: Getting to know a Bee-Bot	
Lesson 2: Making a Bee-Bot video	<ul style="list-style-type: none"> • To create a demonstration video.
Lesson 3: Precise instructions	<ul style="list-style-type: none"> • To plan and follow a precise set of instructions.
Lesson 4: Bee-Bot world	<ul style="list-style-type: none"> • To program a device
Lesson 5: Three little pigs	<ul style="list-style-type: none"> • To create a program that tells a story.
Assessment milestones	
<p>SPRING 1</p> <ul style="list-style-type: none"> • To understand that an algorithm is when instructions are put in an exact order. • To understand that decomposition means breaking a problem into manageable chunks and that it is important in computing. • To know that we call errors in an algorithm 'bugs' and fixing these 'debugging'. 	<p>SPRING 2</p> <ul style="list-style-type: none"> • To understand the basic functions of a Bee-Bot. • To know that you can use a camera/tablet to make simple videos. • To know that algorithms move a Bee-Bot accurately to a chosen destination.