





MEDIUM TERM PLANNING

Subject	Topic/Key Question	Year Group	Term	Time Allocation
Computing	Algorithms (Bee Bots)	2	Spr 2	6 hours
 Software/App – Bee Bots / Blue Bots / Blue Bot app on I pads				
 Vocabulary <ul style="list-style-type: none"> • Instructions • Sequence • Clear • Unambiguous • Program • Bee bot • Forward • Backward • Left • Right • Prediction 		<ul style="list-style-type: none"> • Artwork • Design • Route • Mat • Algorithm • Debugging • Decomposition 		

Lesson Sequence	Time Allocation	Key Question/ WALT	Teaching Activities	Resources
Lesson 1	1 hour	WALT: follow and give clear instructions	<p>Activity 1: You can assess whether learners can follow instructions to create a drawing.</p> <p>Activity 2: You can assess whether learners can think of instructions that can and cannot be enacted by another learner.</p> <p>Activity 3: You can assess whether learners can select appropriate instructions from the class list and issue those instructions clearly for another learner to follow.</p> <p>Activity 4: You can assess whether learners can issue two or three appropriate instructions at a time. You can also assess whether learners enacting instructions only do as instructed and do not act until a "Go" command is given.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 1 in teams folder from teach computing</p>
Lesson 2	1 hour	WALT: use the same instructions to create different algorithms	<p>Activity 1: You can assess whether learners can create four algorithms using only the commands provided.</p> <p>Activity 2: You can assess whether learners can enter their algorithms as programs on the floor robot and record where the robot stops after it has executed each program.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 2 in teams folder from teach computing</p>
Lesson 3	1 hour	WALT predict the outcome of a sequence	<p>Activity 1: You can assess whether learners can move the paper-bot according to the algorithms and identify the outcome of each.</p> <p>Activity 2: You can assess whether learners can enter the algorithms as programs on a floor robot and compare the robot's stopping square to their prediction.</p> <p>Activity 3: You can assess whether learners can follow a randomly produced program and predict what its outcome will be.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 3 in teams folder from teach computing</p>

Lesson 4	1 hour	WALT: create a mat for a programmable device	<p>Activity 1: You can assess whether learners can think of six pictures related to a theme and draw them in suitable squares on a mat.</p> <p>Activity 2: You can assess whether learners can plan and test two algorithms that move the robot between squares that they have selected.</p> <p>Activity 3: You can assess whether learners can add obstacles to their mats in suitable squares.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 4 in teams folder from teach computing</p>
Lesson 5	1 hour	WALT: use an algorithm to create a program	<p>Activity 1: You can assess whether learners can select a 'start' and 'end' square and plan a route between the two.</p> <p>Activity 2: You can assess whether learners can draw an algorithm for the route that they have identified.</p> <p>Activity 3: You can assess whether learners can test their algorithm as a program on the floor robot.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 5 in teams folder from teach computing</p>
Lesson 6	1 hour	WALT: debug parts of a program	<p>Activity 1: You can assess whether learners can identify the bugs in the given algorithms.</p> <p>Activity 2: You can assess whether learners can select two squares on the mat for the robot to visit.</p> <p>Activity 3: You can assess whether learners can design and test two programs that move the robot between two squares on the mat.</p> <p>Activity 4: You can assess whether learners can combine two tested programs into one larger program.</p>	<p>Bee Bots Blue Bots</p> <p>i-pads with Blue bot app Floor mats</p> <p>Resources for lesson 6 in teams folder from teach computing</p>