

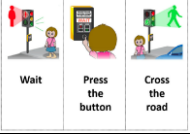
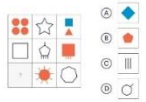
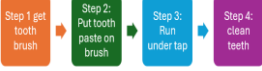
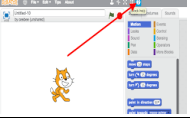
We are Treasure Hunters

Prior Knowledge

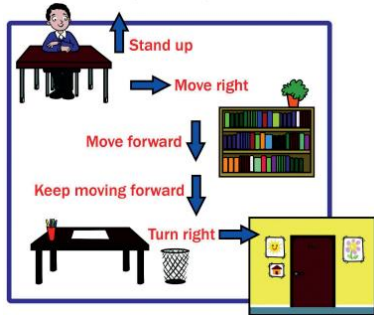
You will have played with Bee-bots in Reception.

You will have been introduced to algorithms in **Unit 1.3 We are TV chefs**.

Key Vocabulary:

algorithm		a sequence precise instructions or steps (sometimes a set of rules) to achieve an objective	logical reasoning		to be able to give a reason for something which others would have to accept as correct
bug		an error or mistake in a program or algorithm, causing the computer or robot to behave in a manner that was not originally intended	output		information produced by a computer – in this case, movements of the robot
computer		a device that accepts input, processes it according to instructions or rules and produces output	program		a sequence of instructions (or sometimes a set of rules) that can be followed by a computer
debug		correct mistakes in a computer program or algorithm	robot		a computer that can move, or that can move part of itself
input		data supplied to a computer, in this case, pressing buttons on the robot			

Key Skills / learning:



Session 1 & 2: you take on the role of a robot, responding to instructions you are given and designing your own set of instructions (**algorithm**)

What is an algorithm?

What is a program?

How can a computer use a program to find treasure?

What are bugs?



Session 4: you follow, create and test sequences of instructions to solve problems with the BeeBot

How do I change a program?



Session 5: you predict what the Blue-Bot will do when given different sequences of instructions

How can I predict where a beebot will be at the end of the program?



Session 3: you explore the BeeBot controls

What are inputs for a beebot?

What are outputs for a beebot?



Sessions 6: you correct mistakes in BeeBot programs

How do I debug a program?



Bee-bot

Key Applications (apps)



Bee-bots

Next Steps

You will build on your programming work in **Unit 2.1:** We are astronauts.

In Key Stage 2 you are introduced to more complex programming ideas, including selection and repetition.