What should I already know?

I have played with programmable toys and explored what will happen when I press different buttons. I have used some games on the tablets which use commands.

Vocabulary

forwards, backwards	Directions that your robot can move in
turn	To move in a circular way so you are facing a different way
clear	Remove all previous commands from the memory of a robot
go	A command which tells the robot to move
commands	Instructions given to a computer or robot to perform an action
sequence	A set of instructions that are completed one after the other in a specific order
algorithm	A set of ordered instructions which can be turned into a code
route	A path or way between 2 places

1. Can you give commands to a robot?

This is a robot called a Bee-Bot.

Each button gives a command.

Sticky Knowledge A robot has buttons which each give different commands. You press the button to give a command.

2. Can you follow commands like a robot?

Sit

We listened to the command from our teacher and followed the command.

Sticky Knowledge A command is an instruction. This may tell us which direction to go or turn.

3. Can you command a robot to move forwards and backwards in a sequence?
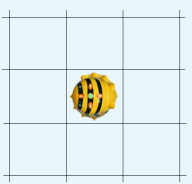
For every ⬆ the robot moves one square.

forwards   backwards

Sticky Knowledge Joining commands together makes a sequence. We can plan were the robot will go.

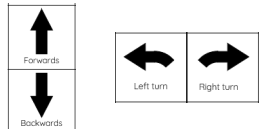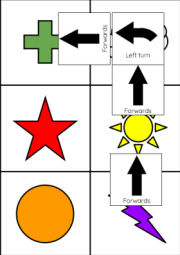### 4. Can you join 4 direction commands to make a sequence?

These buttons turn the robot, but don't make it move to another square.

Sticky Knowledge Using the forwards, backwards and turn buttons in a sequence you can make the robot travel to any square on the grid.

5. Can you plan a simple program using an algorithm?
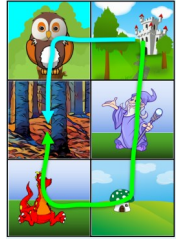
Command cards help us plan a sequence of instructions

Forwards

Backwards

Left turn   Right turn

Sticky Knowledge An algorithm is a set of ordered instructions.

6. How many ways can you solve the problem?

Start:

End:

Which routes could I take?

Sticky Knowledge There are different routes that can yet you to the same place. Each route has a different algorithm.