

How do Beebots know where to go?

Coding Y1

Key learning

- Move the Beebot in all four directions.
- Choose the order of commands in a sequence.
- Debug a Beebot code.
- Program a Beebot to follow a certain rule
- Program a Beebot to go round certain obstacles.



Empowered Learner:



- Use technology to help me achieve a goal.
- Think of a problem and use technology to solve the problem.

Computer

- Create a program to solve a problem.
- Use a sequence of commands to solve a problem.



Key vocabulary

Algorithm	A set of instructions made up of commands for a computer or robot to follow to complete a task
Bug	An error or fault in a programmer that prevents it from running as expected
Code	The language that we can use to tell a computer what to do
Coding	Creating, designing and building a computer program to accomplish a goal
Command	An instruction for the computer
Debugging	Finding and fixing problems in a computer program or algorithm



Coding - Our Learning Journey

Year 1

- Using simple commands to move and change direction
- Editing characters and backgrounds

Year 2

- Using repeat and forever loops
- Put a range of codes together to make a sequence
- Debugging simple programmes

Year 3

- Use commands, for loops and conditionals
- Use different controls and conditionals including when and if
- Use sensors and code them to work in different ways

Year 4

- Create and edit functions
- Include functions in a game on Scratch
- Use logic for conditional commands, including 'else' command

Year 5

- Use comparison and logical operators in a range of programmes
- Create different variables for speed and proximity sensors in robots
- Code sensors for different purposes

Year 6

- Use variables to keep score in a created game
- Create a game using a range of functions, loops, operators and variables
- Begin to use Python to code Micro:Bits