

How do we make robots move?

Coding
Year 1 Term 6



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
Ozobot	A small, programmable robot.
Blockly	The app used to programme Ozobots

Key learning

- Calibrate an Ozobot independently
- Use simple black lines to make an Ozobot follow a path
- Use simple colour codes to make Ozobots speed up, slow down, turn and do some different moves (tornado/zigzag)
- Use colour codes to program Ozobot to change speed
- Program Ozobots to turn in certain directions at junctions and use U-turn codes.



Empowered Learner:



- Use technology to help me achieve a goal.
- Think of an idea to solve a technology problem.

Computational Thinking

- Create
- Use
- steps



Algorithm

Series



Coding - Our Learning Journey

Year 1

- Using simple commands to move and change direction

Year 2

- Using repeat and forever loops
- Put a range of codes

Year 3

- Use commands, for loops and conditionals
- Use different controls and conditionals including when and if

Year 4

- Create and edit functions
- Include functions in a game on Scratch
- Use logic for conditional

Year 5

- Use comparison and logical operators in a range of programmes
- Create different variables for

Year 6

- Use variables to keep score in a created game
- Create a game using a range of functions, loops, operators and variables



