



**Computing Topic:** Unit 1.5 Maze Explorers

**Year:** 1 **Term:** Spring 1

## Key Knowledge/Content:

- Understand the functionality of the direction keys.
- Understand how to create and debug a set of instructions (algorithm).
- Use the additional direction keys as part of an algorithm.
- Understand how to change and extend the algorithm list.
- Create a longer algorithm for an activity.
- Set challenges for peers.
- Access peer challenges set by the teacher as 2Dos.

## Links to:

### Prior learning:

Logical decision making  
Sequencing instructions  
Following instructions

### Future learning:

Logical decision processing.  
Forward planning to achieve a solution

## Key vocabulary with definition:

### New vocabulary:

- Algorithm- A precise, step-by-step set of instructions used to solve a problem or achieve an objective.
- Challenge- A task to be completed.
- Command- An action such as left command.
- Delete- Removes something such as an instruction.
- Direction- The path that something travels. For example, a robot moving forwards, backwards or diagonal.
- Instruction- Detailed information about how something should be done or operated.
- Left and Right- A position which relates to something. For example, make the fish move left of the screen.
- Route- A path an object or thing takes to get somewhere.
- Undo- If we make a mistake, we can press the undo button.
- Unit- A unit, such as 'make the turtle move 2 units (squares)'.

## By the end of this unit

**All children can:** Use the direction keys in 2 Go to move forward, backwards, left and right, **create** a simple algorithm and **explain** what an algorithm is.

**Most children can:** Know how to debug their algorithm and **create** simple computer programs.

**Some children can:** demonstrate and explain how to create an algorithm and **challenge** themselves by using the longer algorithm to complete challenges.

## Background understanding for teachers and parents:

This unit will be focused on used the Purple Mash app 2Go. 2Go gives children the opportunity to control an object on a screen using a range of instructions. It can be used as an introduction to programming. Many teachers use 2Go as a follow on from using a floor robot.

## Curriculum Driver (one):

Communication

### Evidence outcome:

Use communication to give simple instructions and commands.