

Our School Values- Computing	
Love	by enjoying exploring a range of computer Programs and ICT equipment.
Courage	by trying different strategies when learning how to code and by reporting e-safety concerns.
Unity	by working together on projects.
Inspiration	by encouraging others to have a go at finding new solutions.



## Year 2 Computing Programming



### NC Objective

I understand what algorithms are, how they are implemented as programs on digital devices, and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs.

### Knowledge I already know

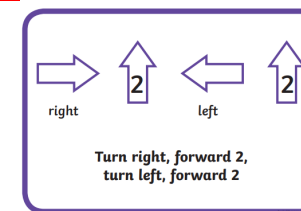
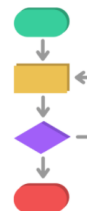
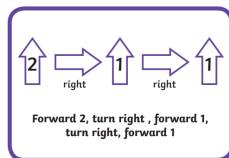
I know what a program is and that following instructions can change the outcome.  
I can press buttons on a robot in the correct order to make my robot do what I want.  
I can begin to use the word 'algorithm'.  
I can begin to predict what will happen for a short sequence of instructions.

### Knowledge I will learn

I know that a series of instructions is an algorithm.  
I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions.  
I can tell you the order I need to do things to make something happen and talk about this as an algorithm.  
I can use programming software to make objects move.  
I can look at my friend's program and tell you what will happen.  
I can watch a program execute and spot where it goes wrong so that I can debug it.

### Key Vocabulary

Word	Definition
Software	A set of instructions run by a computer, often known as programs.
Execute	To perform tasks according to a set of instructions.
Programming	Computer programming is writing a group of instructions for a computer to process/execute. These instructions are typically used to solve a problem. Really, computer programming is thinking like and communicating with a computer, and is most commonly used to make long and repetitive tasks quick and easy.
Algorithms	Step-by-step instructions for solving a problem or completing a task. In computing, programmers write algorithms that instruct the computer how to perform a task.



LL: I can give instructions to my friend (using forward, backward and turn) and physically follow their instructions.

LL: I can tell you the order I need to do things to make something happen and talk about this as an algorithm

LL: I can program a robot or software to do a particular task.

LL: I can look at my friend's program and tell you what will happen.

LL: I can use programming software to make objects move.