COMPUTING ALGORITHMS YEAR 2

'TO PREDICT, WRITE, TEST AND AMEND INSTRUCTIONS CAREFULLY.'

What is an algorithm?

I know that an algorithm is a precise set of instructions to achieve an objective or solve a problem. A clear algorithm can help me to create code that does what it is supposed to do.

Programming and Algorithms I know that digital devises all follow algorithms in order for them to work. I can use an algorithm to tell a computer what to do. Everything I can do on a computer can happen because an algorithm has been written for it. Clicking a mouse, opening a Word document or playing a game are all examples of things that have algorithms.

I can write an algorithm for a purpose, using words, symbols and numbers. I can use logical reasoning to predict the outcome. I can test my algorithm and amend (debug) it if I get it wrong.

For example: Getting Dressed:

I can use the language of algorithms.

Key Vocabulary

Algorithm – A precise set of instructions to carry out a task.

Bug – A problem in a program that stops it working the way it was designed.

Coding – is the language that computer software, apps and websites understand.

Command – An instruction in a program.

Debug – Finding and fixing mistakes (bugs) in the instructions/algorithm.

Program – A sequence of instructions written to perform a task.

Chronological Order – The order in which something has happened or is done.

Input – A way of telling the computer what you want it to do.

Output – Information or data that is sent by the computer to an output device such as a display, a printer or speakers.

Solution – A method to solve a problem.

Some commands I might use when writing algorithms

↑ forwards   ↓ backwards   ⬅ left   ➡ right   ↻ clockwise   ↺ anti-clockwise   ↱ right-angled turn