

Prior learning: children will have extended their understanding of programming by using programmable hardware and software, exploring conditions, actions and infinite loops

Programming: how can I use technology to accomplish a task?

Key resources

scratch.mit.edu



Laptop



Vocabulary

variable

A changeable value. Could be degree of a turn, amount of steps forward, volume of noise, colour to change to, how many repetitions

programming language

Which way you use to give instructions. Beebots, Logo, Crumble and Scratch all follow their own languages that are different but similar to each other

Algorithm

A list of instructions that a computer follows. Each thing a computer does is completed by following an algorithm that can't be interrupted.

test

Activating the algorithm, then observing the processes to make sure the desired output is reached.

abstraction

Working with the most basic parts of a programme to make it easier

levels of abstraction

Breaking the parts of a programme down to different levels and purposes to work specific things

- Task — what is needed
- Design — what it should do
- Code — how it is done
- Running the code — what it does

debug

Testing and observing a sequence, comparing it to the intended outcome and solving any problems

Did the computer display the correct information? Did the computer make noises when it was supposed to? Did the computer do nothing?