

Within all programming units, pupils will have the opportunity to tinker and explore new programming applications and have the opportunity to debug programmes to achieve certain outcomes.

EYFS – All about instructions and Beebots

Using unplugged activities, pupils will learn about the importance of following instructions in order as well as how to fix an instruction. They will then explore how to program a Bee-Bot with simple commands and to fix simple programming errors.



Year 1 – Algorithms and Beebots

Pupils will develop their understanding of an algorithm and explain what inputs and outputs are. They will also develop their understanding of debugging and how to fix a problem in an algorithm. When learning about Beebots, pupils will need to programme the Beebots to reach a set destination.



Year 2 – Algorithms & Debugging and Introduction to Block Coding (Scratch Jnr.)

Pupils will be refining their understanding of algorithms and using and applying the terms decomposition and abstraction.

Within their 2nd Unit, pupils will be introduced to Scratch Jnr. to achieve a range of different programming goals.



Year 3 – Scratch

Pupils will move onto using Scratch and will develop their understanding of the loop function. They will then develop existing algorithms to explore different blocks which they will use to create a story and a game.



Year 4 – Further coding with Scratch

Pupils will build on their understanding of scratch and will be introduced to variables and how to use them to create a quiz.



Year 6 – Intro to Python

Pupils will explore logo and learn the fundamentals of the programming language of Python, they will test, change and explain what their program does. Children will also use loops while recognising that computers choose random numbers and decompose the program into an algorithm.



Year 5 – Music and Microbits

Pupils will be provided with the opportunity to showcase all of their learning in scratch to support them with creating a piece of music.

They will then apply and develop their understanding of block coding to help them programme microbits for different purposes.



Programming