



YEAR 7

This is the first topic for Year 7 which is all about the history of computing. This topic promotes the idea that by understanding our digital heritage we can better understand our digital future.

Pupils will cover the following:

- The Dawn of Computing – Ada Lovelace and Charles Babbage
- WWII (Enigma and the codebreakers) – Alan Turing and Joan Clarke
- Post-war – technological developments
- The Space Race – Dorothy Vaughan, Margaret Hamilton and Katherine Johnson.
- Modern era – John Von Neumann Architecture.

YEAR 8

This unit is the first programming unit for Year 8. The aim of this unit is to build learners' confidence and knowledge of the key programming constructs. Importantly, this unit does not assume any previous programming experience, but it does offer learners the opportunity to expand on their knowledge throughout the unit.

This unit focuses on the development of the following key techniques:

- Sequencing
- Variables
- Selection
- Operators
- Count-controlled iteration

Programming is writing computer code in order to solve a problem. Programs consist of a series of instructions to tell a computer exactly what to do and how to do it.

All of the examples and activities for this unit will use Scratch which is the software used to construct algorithms to program a character to make movements.



YEAR 9

The first topic in Year 9 is all about Cybersecurity. This popular topic is all about understanding online threats and what we as individuals and organisations can do to protect ourselves from these common online threats. By the end of the unit students will:

- Understand the threats that are present online
- Define the key framework of Cybersecurity
- Know the various types of protection used to prevent different security attacks
- Be able to complete simple programmes that enable a user to protect themselves online
- Explain the different security failures that could lead to a Cybersecurity attack

