Curriculum Vision:

Instilling valuable thinking and programming skills that are extremely attractive in the modern workplace and understand the impacts of digital technology to the individual and to wider society.

The Computing syllabus has been designed to cover the three main areas of Digital Literacy, Computer Science and Information Technology. At KS3, the students will be introduced to the IT Skills they will need to support other subjects across the curriculum, how to code in various programming languages, the use of algorithms, some more complex elements of software packages and an understanding of computer hardware and how it works. Subsequently at KS4 students are taught how to think creatively, innovatively, analytically, logically and critically when solving problems; building on the knowledge, understanding and skills established through the Computer Science elements of the Key Stage 3 programme of study. Students also develop their programming skills using a high-level language.

With Computing becoming more challenging and providing students with valuable practical skills, in order to develop their mind-set, students are encouraged to use algorithms and independently build solutions to solve problems. As technology develops, there is a strong focus on how something is created rather than the final product itself. Most artificial intelligence examples today; from chess-playing computers to self-driving cars rely heavily on deep learning and natural language processing, therefore, understanding how to construct and achieve tasks is vital. Students are also taught the impacts of online activity considering legal, social, cultural and moral aspects to enable them to be resilient and valuable contributors to society.

The big questions:

1. How do we develop our computational thinking?

2. What transferrable skills can be used in the workplace?

3. What impact does technology have on an individual and the wider society?