

Key Stage 3 Computing

Aims:

To provide students with the tools they need to survive in an increasingly digital world.

Topics Covered:

- Online Safety
- Structure and Function of Computer Systems
- Physical Computing
- Robotics
- Databases
- Algorithms
- Web development and Digital Image Manipulation
- Maths for Computing (Binary, Boolean Logic, Hexadecimal)
- Programming (Python, HTML, CSS, JavaScript, BASIC)

Teaching Groups:

All students are taught in mixed ability form groups.

Assessment:

Work is continually assessed throughout Key Stage 3 as the topics are very varied in nature there are a range of different assessment methods used. The students' practical work is assessed using peer and teacher assessment. There are set tasks to complete and written tests. At the end of each unit the students receive feedback on their performance and are given the chance to improve their assessment grade based on that feedback.

How Parents and Carers can help:

- Encourage children to use computing in the course of their everyday work – use automation and programming to solve problems.
- Encourage children to consider sequencing and decision making when conducting everyday activities. – What tasks have to be done in a particular order, could they be completed more efficiently or concurrently?
- Encourage children to explore using programming - can they make their own games, create devices that entertain or help them to complete tasks.
- Take time to examine your child's use of the World Wide Web, discuss with them their online safety and encourage them to carefully analyse the information they find. Discuss what fake news is and how it can impact on their perception of world events.