

COMPUTING

Student year: **Upper 4 (Yr 9)**

Head of Department: **Mr J Friendship**

SUBJECT OVERVIEW

Programming will be the focus in Upper 4 with students being exposed to multiple programming languages including Python, Java and HTML

- The students will learn about computing through three distinct learning pathways:
- The National Curriculum (with programming emphasis)
 - Computer Training on software they need to extend their learning in all subjects
 - E-Safety (Keeping students safe in the digital environment)

National Curriculum	Computer Training	E-Safety
Understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits.	Advanced Excel Skills including Pivot Tables, Filters, sorting and data handling.	Digital breadcrumbs and finding digital footprints.
Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.	Using Word for reports including styles, indexes and referencing App Creation.	Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting online identity and privacy; recognising inappropriate content, contact and conduct and knowing how to report it.
Create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.	Survey creation and response analysis through Excel. End of year programming project.	