

COMPUTING

Student year: **Upper 3 (Yr 7)**

Head of Department: **Mr J Friendship**

SUBJECT OVERVIEW

The focus of computing at the Maynard School is changing. The students that arrive at Year 7 are digital natives who have already acquired through their daily lives numerous computing skills. However, these tend to be as a user, rather than as a developer and programming skills will feature across the curriculum. This will allow students to continue their qualifications in Computer Science.

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

Design, use and evaluate computational abstraction

Cloud-based saving of files and the use of iLearn 365

Cyberbullying – How to avoid it and how to get help

Understand several key algorithms that reflect computational thinking

Setting up and using school email on personal devices

Digital Footprints – from tracking to sexting

Use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; Using Java Blocks and Python

Publisher – creating posters and presentation materials for cross-curriculum lessons

‘With friends like these’ – Self-esteem, understanding and resisting peer pressure and its impact on students online.

Understand simple Boolean logic and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers

Presentation software – so students can efficiently present their ideas in lessons

Good Internet research – understanding bias in their own views and those of others – Critical thinking skills

Photoshop Essentials