



## Year 7 Computing

### Aims:

- *To begin their journey in becoming computer literate*
- *Express themselves and develop their ideas through, information and communication technology*
- *To ensure pupils understand wider world risks of computing*
- *To start thinking computationally*
- *To explore using Python and learn how to program*

### Content:

Students develop knowledge and understanding of computer technology to become independent and discerning users of IT. Inspired by the driving question “Who creates our image?” students will acquire technical skills linked to pixels, resolution, bitmaps and vectors whilst creating creative imagery.

In term two students explore thinking around “What are the risks facing our world today?” Students will study cyberbullying, security, e-safety, social media, privacy, and fake news, embedding their understanding of keeping safe online whilst becoming an active participant in the digital world. Learners will experiment with many aspects of Computer Science, developing their computational thinking and reflect on the use of computing in the wider world. Students learn how computers and networks function; how to break down complex problems and the impact that Computer Science has on society.

In term three pupils will focus on answering “When do we celebrate?” where student use Python programming in the context of visual design and geometry. It has a strong focus to real world systems in an exciting and challenging manner.

### Curriculum Map

Year	Term	Curriculum	Assessment
7	Term 1	ICT Skills – PC Use & Word Processing ICT Skills – Portfolios Representing Image	Assessed extended learning Week 6 – Mini assessment End of term assessment
	Term 2	Online safety Social media & digital image Online news & information Computational thinking	Assessed extended learning Week 6 – Mini assessment End of term assessment
	Term 3	Python Turtle Python programming	Assessed extended learning Week 6 – Mini assessment Creative portfolio End of term assessment



### Assessment:

Students will be taking part in an initial test to see if an electronic only system of note-taking and tasks works within this school. They will regularly update their electronic work that summarises their learning (e-jotters). At the end of the term the knowledge on their e-jotter will form the basis of their assessment. Students will spend much of their time completing work on the computers, such as creating images and presentations. These will also be used as part of their assessed work.

Students will be given formative feedback from their teacher on their end of term assessments, as well as on their assessed extended learning. With support from their teacher, during lessons learners will be using a mixture of self and peer assessment to reflect on their learning and how to improve further.

### Extended Learning:

Extended learning for computing lessons may include research tasks such as "How do we ensure our safety and privacy online?"

Some tasks may also involve completing and improving upon tasks completed in the lessons, such as improving on a moving image movie.

Extended learning will be set at least once during each half term.

### Connection to the JTFS Approach

Whole School Theme	How does Computing support this?
STRIPE	During each term the students will study computing topics linking into the overriding STRIPE question. At the end of the term the assessment will include a question summarising their learning in computing that helps answer the STRIPE question. During lessons students will be encouraged to reflect on the STRIPE skills they have used and those they could develop further.
STEAM	Computing links into STEAM since the skills students are developing during lessons are essential in careers such as engineering and mathematics. There is also a large section dedicated or closely related to programming creatively and artistic digital skills.
Literacy	Some keywords that will be discussed during computing lessons. These will be identified and highlighted to students. During written work the whole school literacy marking policy will be implemented.
Numeracy	During lessons students will work with number in a variety of forms such as binary and colour depth. The deductive reasoning and logical thinking used during topics such as coding and algorithms link into numerical thinking.
SMSC, British Values and Citizenship	Within the world at risk topic in Term 2, students will spend time considering the impact of computing on our world, including being introduced to ideas such as online safety and security.