

COMPUTING

YEAR 9

AUTUMN 1

9.1 E-Safety - An introduction to social media platforms and how they can stay safe online. This includes looking at the pros and cons of social media, how users of social media are accountable for their actions and an insight into Sexting and Radicalisation. Learners will also study the consequences of disclosing personal information online.

Prior Learning
Students will have had an introduction to e-safety at KS2 and Y7. Students will extend their knowledge or using technology safely and learn about the risks of sexting, radicalisation and learning about being accountable for their actions when using the internet

AUTUMN 2

9.2 Python Magic - Learners will gain a basic understanding of the Python programming language. Through a series of six lessons learners will be introduced to the basic Python syntax and look at selection, loops, functions, lists and classes. Learners will be given the building blocks to extend their programming skills by adding to existing programs or extending their knowledge of Python.

Prior Learning
Students will have used 2 different programming languages at KS3 including basic python skills in Year 8. This will be the first time they start to design games and programs using python as a larger project..

SPRING 1

9.3 Using media - gaining support for a cause - Learners develop their understanding of information technology and digital literacy skills. They will use the skills learnt across the unit to create a blog post about a real-world cause that they would like to gain support for. Learners will develop software formatting skills and explore concerns surrounding the use of other people's work, including licensing and legal issues.

Prior Learning
Students will have covered basic digital literacy skills in Y7 and embedded them across multiple topics in KS3 Computing.

SPRING 2

9.3 Using media - gaining support for a cause - Learners develop their understanding of information technology and digital literacy skills. They will use the skills learnt across the unit to create a blog post about a real-world cause that they would like to gain support for. Learners will develop software formatting skills and explore concerns surrounding the use of other people's work, including licensing and legal issues.

Prior Learning
Students will have covered basic digital literacy skills in Y7 and embedded them across multiple topics in KS3 Computing.

SUMMER 1

9.4 Cyber Security - The learners on an eye-opening journey of discovery about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks. The learners will start by considering the value of their data to organisations and what they might use it for. They will then look at social engineering techniques used by cybercriminals to try to trick users into giving away their personal data. The unit will look at the more common cybercrimes such as hacking, DDoS attacks, and malware, as well as looking at methods to protect ourselves and our networks against these attacks

Prior Learning
Students will have covered basic internet security, phishing, the need for strong passwords etc in Y7.

SUMMER 2

CAREERS LINKS

Cyber security, ICT teacher, graphic designer, games developer, web programmer, office worker, accountancy.

CHARACTER LINKS

Across the academic year, students are encouraged to develop respect for their own and peers' work (moral virtues), as well as confidence and perseverance to ascertain new skills (performance virtues).

KEY ASSESSMENT DATES

All students at KS3 complete an end of unit assessment for the topic being studied, assessing students' knowledge, skills and understanding. This is typically every 6 weeks across the academic year.

9.6 Spreadsheet Modelling - This unit takes learners from having very little knowledge of spreadsheets to being able to confidently model data with a spreadsheet. The unit uses engaging activities to progress learners from using basic formulas to writing their own COUNTIF statements. This unit will give learners a good set of skills that they can use in computing lessons and in other subject areas

Prior Learning

Students will have had some skills and knowledge on using excel in creating basic spreadsheets using formula and functions in Y8.