OVERVIEW

In Year 9 students develop a range of skills that allow them to get a better understanding of different sectors of computing. Students will begin to develop their skills in 3 main areas: Digital Literacy, ICT and Computer Science. The students build upon previous skills learnt to develop and enhance their knowledge and understanding. For example, developing Scratch (block code) to Python (text-based code) in Year 8 and further developing this in Year 9. Students will further develop their graphic skills and understanding of iMedia theories which will support their understanding of the relationship between the media product, audience and purpose.

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Unit 9.1 Python Programming

- Remembering Python programming fundamentals such as if statements, lists, data types and variables
- Using Loops to create programs
- Creating complex 2d Lists to store data
- Programming with random numbers
- Create a mini project with good programming habits such as comments, correct names of functions and the use of white space

Assessment:

Create a mini project to create a game on Python.

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Unit 9.2 iMedia

- Explain the different ways to license creative work and how creators can protect their work.
- Adjust and edit graphics to meet the needs of a particular audience.
- Create graphics to meet a client's design specification.

Assessment:

Create a graphic that follows a client's design specification.

Sum

Unit 9.3 Cyber Security

- Understanding the term ethical and how it applies to the use of computer systems
- Investigating hacking and ethical hacking
- How data breaches and theft occur
- How the use of cybersecurity can prevent data theft and breaches

Assessment:

Creating a guide to show people how they can protect themselves from the different types of cyber crime.

Useful resources for supporting your child at home:

Forms of attack - System security - OCR - GCSE Computer Science Revision - OCR - BBC Bitesize

Sue Farrimond Tutorials - Creating Media Products (google.com)

Python Tutorial (w3schools.com)