In Year 7 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 three main areas: Digital Literacy, ICT and Computer Science.

Year 7 students will be taught how to use computers and online features safely, making them aware of the dangers that can arise and using social media responsibly. Students will also develop their creative digital skills by developing a range of products with a focus on graphic editing and the presentation of information on a digital document.

Unit 7.1 Impact of the Technology

- Creating secure passwords and logging onto the school system, navigating TEAMS (Assignments, One Drive, Class Notebook), accessing learning platforms
- Communicating with emails (creating folders, sending, receivina. attachments)
- Cyberbullying, sexting, grooming, catfishing, how to play online respectfully, digital footprint, oversharing, malware.
- How to identify fake news, online scams

Physical Components

- Input, output and storage devices
- CPU, RAM, ROM memory, embedded systems

Assessment:

End of Unit assessment (Online/Written)

- Section A short knowledge recall questions which interleave previous topics.
- Section B- E-Safety (cyberbullying, sexting, digital footprint, malware), Physical components (CPU. embedded systems, networks, RAM ROM, input, output, storage devices).
- WCF (whole class feedback)

Unit 7.2 Codes and Messages

- How to decrypt and encrypt using pig pen and Caesar Cipher
- Convert denary to binary, binary to denary
- Complete binary addition
- Hexadecimal
- Use sequences of binary digits to represent images and sounds

Unit 7.3 Programming

- How to create flowcharts
- Input data (using input function, use variables to store, use of casting).

Assessment:

Unit 7.2 Codes and Messages

Multiple choice questions.

Unit 7.3 Programming

- End of Unit assessment (Online/Written/practical)
- Section A short knowledge recall questions which interleave previous topics.
- Section B- Practical/written assessment-(programming tasks, datatypes. input/output data, selection, algorithm questions, physical components, binary, hexadecimal).
- WCF (whole class feedback)

Unit 7.3 Programming continued

Sequence, selection and iteration (IF-ELSE, and IF ELIF-ELSE)

Unit 7.4 Graphics

- Photopea/Adobe Infinity
- Removing objects (Magic wand tool, polygonal lasso select tool, fill tool, patch tool, spot healing brush tool, colour splash/pop, attaching text to a path)
- Using layers
- Using text (text overlaid, fonts, colour, text wrapping)
- Purpose of digital graphics

Assessment:

- End of Year assessment (Online/Written/practical)
- **Section A** short knowledge recall questions which interleave previous topics.
- Section B- Practical assessment-(Creating a digital media product for a client)
- WCF (whole class feedback)

Programming:

Useful resources for supporting your child at home:

-Teaching coding made easier (TurningLab) https://www.turinglab.co.uk/

Graphics:

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

App: (FREE) Pixlr Snapseed