



Overview

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.

Autumn

Unit 7.1 E-Safety & Computer Basics

- 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, receiving, saving attachments).
- Cyberbullying, sexting, grooming, catfishing, how to play online respectfully, digital footprint, oversharing, malware.
- How to identify fake news, online scams.
- Word processing skills/powerpoint skills.

Assessment:

- **Section A** – short knowledge recall questions from KS2
- **Section B**- written assessment on scenarios.

Spring

Unit 7.2 Understanding Computers

- Input, output and storage devices
- CPU, RAM/ROM Memory
- Embedded Systems
- Data storage and compression:
- Data storage(bit, nibble, byte, kilobyte, megabyte, gigabyte, terabyte)

Unit 7.3 Codes and Messages

- How to decrypt and encrypt using pig pen and Caesar Cipher
- Convert denary to binary, binary to denary
- Complete binary addition

Assessment:

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).
- **WCF (whole class feedback)**

Summer

Unit 7.4 Programming (Scratch)

- How to create flowcharts, use of algorithms, datatypes
- Input data (using input function, use variables to store, use of casting).
- Sequence, selection and iteration (IF-ELSE, and IF ELIF-ELSE)

Unit 7.5 iMedia (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, text (text overlaid, fonts, colour, text wrapping)
- Target Audience, 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