Subject: ICT/Computing

Year 8

OVERVIEW

In Year 8 students develop a range of skills that allow them to get a better understanding of different sectors of computing and ICT. 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 Blockly + Microbits (block code) to Python (text-based code) in Year 8. Students with further develop their graphic skills and understanding of iMedia theories.

ICT

ICT and Creative iMedia Graphic Design

Developing planning and vector editing skills to create a logo.

- Internet safety
- Understanding a Client Brief and target audience
- Research and planning techniques
  - Mood board
  - mind map
  - visual elements
  - visualisation diagram
  - Annotation
- Vector editing skill
- Exporting
- Evaluation

Assessment:

Practical assessment of project work and outcome

Computer Science

Computer Science and Programming

Computational thinking and programming text-based coding.

- Introduction to text-based coding (Python)
- Outputs and error handling
- Inputs and testing
- Decomposition Developing complex algorithms (problem solving)
- Understanding the terms, selection and how they apply to programming.
- Python Turtle
  - Explain/debug how variables are used in programs
  - Using Loops to create programs

Assessment:

Practical assessment of a variety of tools used to create a product for a client.

Useful resources for supporting your child at home:

Programming:

Teaching coding made easier(TurningLab)

code combat https://codecombat.com/

Microbit Projects | micro:bit (microbit.org)

Learn Python https://www.learnpython.org/

Graphics:

Sue Farrimond Tutorials (google.com), snapseed App

Inkscape https://inkscape.org/ Free vector editing tool