Year 8

Subject Name:	Computer Science and Information Technology

Curriculum Intent Statement

Our intention is to equip pupils to develop their computational thinking skills and creativity to solve a variety of problems. To build an understanding of the workings of digital systems and the importance of online safety and its impact. Our teaching of both Computing and ICT will provide students with the future-proof skills and knowledge of using and creating digital technologies that will prepare and enable them to fully participate in a technology-driven world.

Autumn Term 1

Spreadsheet modelling

- Know spreadsheet use to business and individuals
- Create spreadsheet models
- Use of BIDMAS in formulae
- What-if scenarios
- Cell referencing
- Formatting and macros

Autumn Term 2

Web design and production

- Network clients and servers
- Design principles for webpages to meet requirements
- HTML and CSS in webpage creation
- Use web authoring software
- Java scripting
- Embed suitable static and dynamic content

Spring Term 1

Programming – textual and graphical

- Use numerical operators in programs
- Counter variables
- Create quiz program
- While and For loops
- Arrays

Spring Term 2

Programming – Turtle graphics

- Writing functions to draw shapes
- Creating flowcharts
- Drawing with turtle
- Building turtle robot
- Customise robot

Summer Term 1

Programming with MicroBit

- Introduction to MicroBit
- MicroBit research
- Using code blocks
- Rock, Paper, Scissors
- Python with MicroBi

Summer Term 2

Vector graphics

- Designing and create digital graphics for given audience
- Collect, organise, present digital graphics
- use criteria to evaluate the quality of solutions