Year 8 Computing						
Curriculum intent	We believe that students deserve a Computing and ICT curriculum which prepares them for the digital and fast paced world they live in. Covering the three strands of the computing national curriculum, Computer Science, ICT and Digital Literacy, our aim is to give our students the skills and abilities to engage positively with the digital world and take advantage of all the opportunities that come their way both in the UK and in the wider world. Our computing key stage 3 curriculum enables students to use computational thinking and creativity to solve real world problems by developing a wide range of skills in both programming and ICT, using multiple packages selected to spark and foster interest and creativity. Students will learn resilience and that making mistakes is part of learning, giving them the confidence to tackle a variety of independent learning activities. Students will be taught to navigate this new digital world safely and be aware of the dangers that they now face. Students will also begin studying for their IDEA Programme Bronze badge which will help develop their digital, employability and entrepreneurial skills.					
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge	**E- Safety** What are the dangers of the internet to teenagers Why is it important to keep your account settings private? Dangers of online gaming Fake News **Advanced Binary:** Recap of converting binary What is a hexadecimal number? How do computers use Boolean Logic? **Manipulation of digital artefacts** Develop a knowledge of images using a 1bit image representation Use photoshop to create a logo for a music festival		**The Internet and HTML** How the internet works What is a computer network and protocols? HTML and CSS: What tags are used to create a professional Website Search Engines	**Advance Spreadsheets: Music Festival** What are advanced functions such as count if? What are If statements What are look up tables What is spreadsheet modelling **Introduction to Python** What is a variable and how is it used in programming? What is selection and how is it used in programming? What are inputs and outputs.		**Computing Theory** Input, Output and Storage Devices Hardware and Software Storage Devices
Skills	Microsoft Word		Recall of substantive knowledge			Recall of Substantive Knowledge Digital Literacy - PowerPoint

	Cover binary numbers to hexadecimal and vice versa Solving AND,OR,NOT gates Using a variety of tools in photoshop to create a logo	Digital Literacy - PowerPoint Searching the Web effectively using advanced searching techniques. Use of HTML and CSS to create a website	Solving real world problems using advanced spreadsheets skills such as: Count If If Statements Look up tables Spreadsheet modelling Writing code to solve problems using: Variables Selection Lists Conditional loops Inputs and Outputs	
Assessments	MRT x 2 MAT: E-Safety Digital Literacy Assessment MAT: Date Representation Binary Assessment	MRT MAT: HTML Assessment	MRTx 2 MAT: Spreadsheet MAT: Python Assessment: Writing code to solve real life problems	

Curiosity				
	https://kidshelpline.com.au/teens/issues/staying-safe-online - Kids Helpline website for tips and advice - Anytime any reason	https://alejandrorioja.com/how-does-google-make-money/ - How google makes their money https://www.youtube.com/watch?v=XYTwYmOjqQs Evolution of web design The Social Network – Netflix or Amazon Prime https://www.youtube.com/watch?v=hGXZjlDSXyg – The History of computing	https://www.youtube.com/watch?v=wDMo4cFxWg0 - Microsoft video showing best practice for advance modelling spreadsheet	https://www.python.org/about/gettingstarted/ - Python for beginners website https://www.youtube.com/watch?v=rfscVS0vtbw – Python tutorials for beginners

Extra Curricular:

- Coding Club
- Digital Leaders
- Internet Safety Day Logo Competition
- Ideas Programme
- Completion of ideas programme silver badge
- Trip to encourage larger intake for CS – TBC
- Enterprise Challenge Day
- Cadburys world Trip - TBC