# St Matthew's RC High School

# Key Stage 3 Curriculum Plan 2016/17

# Subject: Computer Science/ICT

| Yr | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer |
|---|---|---|---|---|---|
| 7 | **Digital Literacy**<br><br>*(The fundamentals of being digitally literate)*<br><br>*Having a good file and folder structure*<br><br>*Students will be taught computer skills which allows them to produce letters, presentations, email, newsletter, business cards and poster/flyer* | **Intro to Computer Science**<br><br>*(The fundamentals of computer science, programming and theory)*<br><br>*Define What is a computer – including its basic components Hardware, software,*<br><br>*Identify Different types of computers/systems (e.g. mobiles, TV's, tablets, laptops) – Categorising as general purpose and embedded*<br><br>*Explain what a network is including the internet* | **E-Safety**<br><br>*Understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns* | **Scratch**<br><br>*(Programming of instructions, sequencing of events and algorithms within Scratch)* | **Software**<br><br>Word, creating different documents and using various formatting techniques.<br><br>PowerPoint, Pupils will deliver a presentation to their Peers. |
| 8 | **Further Computer Science**<br><br>*(Computer science fundamentals theory recap, plus a deeper understanding)* | **Graphics**<br><br>Students will create a digital product using specialist graphic editing software. They will combine, text and | **How the Web works**<br><br>Looking at the Looking at the Internet and the | **Web Authoring**<br>Students will make a website using Serif Web. | **Software**<br><br>Excel, making spreadsheets, modelling data.<br><br>PowerPoint, Pupils will deliver a presentation to their Peers. |

| | | images to produce the finished article. | WWW and their differences.<br><br>Looking at Web browsers and Search Engines.<br><br>Domains, IP's and DNS | | |
|---|---|---|---|---|---|
| | *Explain Data Representation as binary Represent text as binary e.g. writing your name as binary, decode secret message*<br>*Network topologies – Ring, star and bus*<br>*Data Storage devices and their uses*<br>*Health & safety when using Computers* | | | | |
| 9 | **Advance Computer Science**<br><br>*(Computer science fundamentals theory recap, plus a deeper understanding)*<br><br>*Explain Data Representation as binary and converting binary into denary.*<br><br>*Understanding the hardware which makes up a computer.* | | **Python**<br><br>*(Python skill building, this is part of the controlled assessment in Y10 and Y11)* | | **Making an App**<br>*(App creation)*<br><br>*Using E-Safety to set the context for the task.* |