



# St Mary's CE High School Curriculum Map 2022-23

## IT and Computing Year 7

	Autumn 1a	Autumn 1b	Spring 2a	Spring 2b	Summer 3a	Summer 3b
<b>CONTENT</b>  <i>Declarative / core / powerful Knowledge – 'Know What'</i>	<b>Impact of technology:</b> collaborating online respectfully Identifying how to use online collaboration tools respectfully. An introduction to the computing lab.	<b>Using media: gaining support for a cause</b> Creating a digital product for a real-world cause.	<b>Modelling data: spreadsheets</b> Sorting and filtering data and using formulas and functions in spreadsheet software.	<b>Networks: from semaphores to the internet</b> Recognising networking hardware and explaining how networking components are used for communication.	<b>Computing Components:</b> The function of input and output devices Different types of memory and storage and their use	<b>Programming essentials in Scratch: part I</b> Applying the programming constructs of sequence, selection, and iteration in Scratch
<b>Skills</b>  <i>Procedural Knowledge – 'Know How'</i>	Learn the rules of a computer room Demonstrate what is meant by a secure password Create files effectively Describe cyberbullying Explain the different effects of cyberbullying Learn how to communicate with peers respectfully Learn how to stay safe online	Using the appropriate software to complete a task Be able to identify and apply the features of a word processor Evaluate formatting techniques Select appropriate images for a given context Demonstrate an understanding of licensing issues and be able to credit the original source Be able to identify credible sources and reference them correctly	Be able to identify the key features of spreadsheet software Use basic formulas with cell references for calculations Use the autofill tool to replicate data Use formatting techniques in a spreadsheet Use the functions SUM, COUNTA, MAX, and AVERAGE Create appropriate charts Use a spreadsheet to sort and filter data Use the functions COUNTIF and IF Use conditional formatting Collect & analyse data	Define what a computer network is Define a protocol and provide some examples List network hardware Explain how data is transmitted between computers across networks Explain the difference between bandwidth and latency Define what the internet is Compare the differences to wired and wireless connections Explain how data travels between computers across the internet Explain the difference between the internet and the World Wide Web	Be able to identify the different types of input and output devices and their uses. Be able to identify the different types of storage and its uses.	Create a sequence of instructions for a computer to follow Define what a variable is Explain what selection is and how they can be used within programs Use different operators within your program (>,<=) Define iteration and how it can be used within programming Define what a subroutine is Define what decomposition is Explain why lists are important within programming

[illegible]