**YEAR 8 CURRICULUM MAP September 2023-24**

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| **AUTUMN TERM** | **SPRING TERM** | **SUMMER TERM** |
| **HALF TERM 1** | **HALF TERM 2** | **HALF TERM 1** | **HALF TERM 2** | **HALF TERM 1** | **HALF TERM 2** |
| **Networks** This is a theoretical unit covering the basic principles and hardware related to local and wide area networks and network topology. Students will learn about the difference between the World Wide Web and the Internet. They will also explore protocols and provide examples. Client-server, peer-to-peer networks and the concept of cloud computing are all described. This unit will conclude with an investigation into browsers, search engines and websites.  | **Spreadsheets** This unit focuses on spreadsheet skills, building on the skills and knowledge from Year 7. Skills developed include using cell references; the autofill tool; formatting data; creating formulas for add, subtract, divide, and multiply; use of and creation of functions e.g. SUM, COUNTA, AVERAGE, MIN, MAX, and COUNTIF.Also, sorting and filtering data; creating graphs; using conditional formatting | **Online safety** (Internet Safety week February). Topics covered will be determined by Internet Safety Day resources. **Logic Gates and Boolean**This is a smaller unit that looks at Logic gates and how they are used in computers to solve problems. Students will learn the names of logic gates e.g. AND, OR, NOT and fill in truth tables and create logic circuits to show the output of each system. | **Python programming language** – An introduction, covering the principles of sequence, selection and iteration. Students learn how to create variables, input and output information, use if …. Else statements and mathematical functions by using practical examples. | **App builder**This unit links to Business and enterprise. Students will plan and design an App, creating events, Images and sounds. They will understand the basics of APP Builder such as changing the screen and button colours, creating a screen with an image that has an action when clicked. They will also create a basic quiz APP combining skills. | **Data Representation**This unit looks at Bits and Bytes. Students will understand how to convert binary numbers into decimal, add binary numbers and use ASCll characters to crack binary codes. They will understand how colours are represented in Binary. They will also look at how sound is digitised |
| **NETWORKS ASSESSMENT**  | **SPREADSHEET PEER ASSESSMENT** | **LOGIC GATES ASSESSMENT** | **PYTHON PEER ASSESSMENT** | **APP BUILDER ASSESSMENT** | **DATA REPRESENTATION PEER ASSESSMENT.** |