**Year 8 Computer Science curriculum map**

**Beths Grammar School**

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| Beths Grammar School - Home**Term** | **INTENT** | **IMPLEMENTATION** | **IMPACT** |
| **Substantive Knowledge**  This is the specific, factual content for the topic, which should be connected into a careful sequence of learning. | **Disciplinary Knowledge (Skills)**  This is the action taken within a particular topic in order to gain substantive knowledge. | **Assessment opportunities**  What assessments will be used to measure student progress?  Evidence of how well students have learned the intended content. |
| **Autumn Term**  **1A**  **Year 8** | **Intent BUILD A PC**  Why is this taught now? | Pupils are given a budget of £2000 to research components suitable for a gaming PC. They must produce a detailed report with their findings and money spent using a range of software applications. | Assessment of work produced.  Classwork  Homework |
| A fun way to introduce pupils to components of a computer. A topic taught at GCSE/A Level |
| **Autumn Term**  **1B**  **Year 8** | **Intent DATABASES**  Why is this taught now? | Pupils learn about the storage of data using a range of Databases (SQL or MS Access) and how to manipulate them (searching and sorting) using a variety of criteria. | Summative and formative assessment.  Homework |
| Pupils must be familiar with a range of data storage, data manipulation and search/sort methods. |
| **Spring Term**  **2A**  **Year 8** | **Intent PYTHON PROGRAMMING**  Why is this taught now? | Pupils are introduced to Python programming. They learn basic output of string messages, using variables to store data, simple instructions using concatenation.  Program constructs including sequence, selection and Iteration are all practised during Y8 coding lessons. | Summative and formative assessment.  Classwork  Homework |
| Pupils enjoy programming in general and are introduced to the basics to build on skills and develop confidence with solving computational problems. Also begins to prepare them for GCSE level programming skills. |
| **Spring Term**  **2B**  **Year 8** | **Intent HTML/CSS/JAVASCRIPT**  Why is this taught now? | Introduction to coding using scripting languages in order to create simple but creative and interative webpages. Pupils also learn about adding consistent styles (CSS) and defining layouts. | Assessment through work produced.  Peer assessment  Classwork  Homework |
| Developing simple webpages offers pupils the opportunity to learn how webpages are developed but also introduces them to a topic taught at GCSE/A Level |
| **Summer Term**  **3A**  **Year 8** | **Intent BBC MICROBIT?**  Why is this taught now? | Popular, fun and creative coding activities challenging pupils to design solutions to real-world problems using the MicroBit. Pupils get the opportunity to experiment with block coding and gradually build their skills to coding the MicroBit in Python. | Assessment through work produced.  Classwork  Homework |
| To inspire pupils with creative, fun and engaging coding activities and challenges. |
| **Summer Term**  **3B**  **Year 8** | **Intent GRAPHICS PROJECT**  Why is this taught now? | Currently under review |  |
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