Blue Coat
Church of England Academy

Year: 8	**Subject: Computing/Computer Science**

Overview

In an ever changing, technologically advancing society it is imperative that we equip our students with the desired skills needed for their future life and career. At Blue Coat Academy we aim to prepare our learners for their future by giving them the opportunities to gain knowledge and develop skills that will equip them for an ever changing digital world. Knowledge and understanding of Computing is of increasing importance for children's future both at home and for employment. Our Computing curriculum focuses on a progression of skills in digital literacy, computer science, information technology and online safety to ensure that children become competent in safely using, as well as understanding, technology. These strands are revisited repeatedly through a range of themes during children's time in school to ensure the learning is embedded and skills are successfully developed. Our intention is that Computing also supports children's creativity and cross curricular learning to engage children and enrich their experiences in school.

Computing
Computer Science

Within Year 8 students continue to develop their skills through a range of different projects during the year.

1. The first project that students undertake is a **Computer Hardware** project where they learn the physical parts of a computer system.
2. Once the inside of a computer system is better understood the students move onto a project where they learn **Python and Turtle Programming.**
3. The students are then moved onto developing skills on **spreadsheet software** here at the Academy we use Microsoft Excel. The project explores skills within spreadsheets and this will really grow their understanding and confidence of using this programme.

4. Students will go on and learn **Binary** which is essential to understanding how computers actually work. The binary number system is an alternative to the decimal (10-base) number system that we use every day. Binary numbers are important because using them instead of the decimal system simplifies the design of computers and related technologies.

5. Students will also work on gaining an insight into **developing the WEB** and will learn about HTML, which in a language upon which websites are created. Students will learn about important concepts and syntax and how to apply HTML to text.

6. Finally in Year 8 students will get a chance to be creative and work on a media project which will look at the creation of a **spooky trailer**. This is an opportunity to see what the media route will offer when considering their GCSE choices in Year 9.