



# St Paul's School for Girl's, interim curriculum Outline: COMPUTER SCIENCE

Term Year	Term 1a	Term 1b	Term 2a	Term 2b	Term 3a	Term 3b
7	<b>Theory</b> The input process output cycle Input and output devices Data representation - Why does a computer use binary? Binary numbers Adding binary numbers	<b>Programming</b> Bebras computational thinking Introduction to flowcharts <b>Theory</b> E-safety – Who are you talking to? <b>Digital skills</b> Software Understanding the skills to use desktop publishing to make a suitable e-safety infographic	<b>Programming</b> Introduction to Micro:bits Step counter Maths <b>Theory</b> Careers in computing	<b>Digital skills</b> Understanding the presentation skills to develop a suitable presentation on careers in computing.	<b>Digital skills</b> Understand the basics of spreadsheet modelling. Graphs Formatting Data types <b>Theory</b> Data representation - Pixel art	<b>Programming Mini- Project</b> Design and build a micro:bit program incorporating pixel art.
8	<b>Theory</b> Recap of hardware devices Data representation Hexadecimal Black History Month – Celebrating black computer Scientists.	<b>Theory</b> Logic gates and truth tables <b>Programming</b> Bebras computational thinking Python turtle	<b>Programming</b> Micro:bits – traffic lights - Sequence Micro:bits – sound – Crocodile clips	<b>Theory</b> E- safety - Would you leave your front door wide open? Data representation - images Data representation – sound	<b>Theory</b> Protecting your data – encryption methods <b>Programming</b> Sorting algorithms	<b>Programming Mini – project</b> Design and build a micro:bit program incorporating pixel art.
9	<b>Programming</b> Print function Variables, Input Data types Selection and condition Syntax Logic	<b>Programming</b> Bebras computational thinking <b>Theory</b> An introduction to the role of the CPU Components of the CPU Motherboard Heat sink fan RAM <b>Programming</b> Maths in python	<b>Programming</b> Micro:bits – traffic lights - Sequence Micro:bits – sound – Crocodile clips	<b>Theory</b> Storage E-safety - Fake news The ups and downs of social media <b>Digital skills</b> Using photo editing software to create fake news	<b>Digital Skills</b> Spreadsheet functions Conditional formatting	<b>Digital skills Mini project</b> Report writing Automated table of contents Page numbering Footnotes Index

\*\*Due to an increase in curriculum time for Computing this year, the curriculum plan is temporary for 2022-2023. It will be revised for 2023-2024