**Curriculum Overview for Computer Science**

**Year 8**

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| Term 3  Introduction to Python programming.  Substantive Knowledge:  To build on students’ previous programming using BBC MicroBits by introducing them to a text-based programming language, moving them away from the visual elements of the Block-based coding unit.  Prepares students for further use of the programming language in year 9 and at GCSE level in year 10 and 11.  Python programming is used in real world industries especially Data Management and Cyber Security. Teaching the use of the programming language will prepare students for a career in a number of Computer Science roles.  Disciplinary knowledge:   * Print statements * Print statements with concatenation * Debugging of issues in programs * Variables and what they are * Use of variables * Better programming with spaces * Creation of variables with valid names * Input statements to allow the user to be asked a question * Use of IF, ELSE statements to allow two options for a question * Use of IF, ELIF, ELSE statements to allow more than two options for a question | Books | Model reading  Reading out loud  Skim and Scan of source information  Decoding terms  Etymology of key terms |
| Speech | Python  Program  Print  Input  IF  ELSE  ELIF  Indentation  Concatenation  Variable  Value  String |
| Checklist RTL | **Formative assessment**  Knowledge checks  Quiz  Practice questions  **Summative assessment**  End of unit assessment |
| Home | Practice questions  Revision tasks  Research tasks |