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| **Core Knowledge Map** | | | |
| Subject: Computer Science | Year: 8 | | Term: 1.5 |
| What are we learning? | | | |
| Programming in a text-based programming language – Python  Creativity with Computers | | | |
| How will I be assessed | | | |
| There will be a checklist of things you have learned for you to fill in. You will create an ‘evidence presentation’ showing the work you have done in Python.  You will create a character sheet outlining a character you design, along with a backstory for them. | | | |
| Big questions: | | | |
| What is a programming language?  Why do we need high level languages and what is machine code?  What are the main concepts of programming?  What can we get computers to do for us? | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| This builds on the introductory programming languages like Kodu and Scratch, to a fully text-based language. | | The text based language is the fundamental building block of computer science, and this introduction will link you to coding practice throughout your Computer Science education | |
| Core knowledge: | | Key vocabulary: | |
| How to open the Python IDE (IDLE)  How to input and output using Python code  How to put commends in the correct order  How to use loops to repeat tasks  How to make choices within your code  Creating characters with digital art  The way games are designed   * Mechanics/Levels/Goals/Multiplayer * Genres   Telling stories through games and animation  E-Sports   * What are E-Sports? * Setting up a tournament | | print()  Sequencing  Iteration  Selection  Variable (and others continued from last half term)  Character sheet  Brush  Perspective  Angle | |
| Need more help? | | | |
| 1. [Welcome to Python.org](https://www.python.org/) 2. [Introduction to Python (w3schools.com)](https://www.w3schools.com/python/python_intro.asp) | | | |