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| **Core Knowledge Map** | | | |
| Subject: Computer Science | Year: 10 | | Term: 1.0 |
| What are we learning? | | | |
| The types and function of the components that make up a computer system | | | |
| How will I be assessed | | | |
| There will be several workbooks, with feedback and your programming workbook will be assessed | | | |
| Big questions: | | | |
| How do computers work?  How is information stored digitally?  What affects the performance of computer systems? | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| This is an extension of many of the topics covered in Key Stage 3, with some new concepts covered as well. | | Many future topics will expand on the basic principles learned here:  Boolean Algebra  Binary Arithmetic  Networking and more. | |
| Core knowledge: | | Key vocabulary: | |
| The function of the CPU and it’s components  The Fetch, Decode, Execute Cycle  The storage of data  The way that data size is calculated  The way computer system performance is measured  Programming Skills | | CPU, ALU, MAR, MDR, Program Counter  Bus,  Hz, MHz, GHz  FLOPs, GFLOPs, TFLOPs, PFLOPs  Binary  Decimal/Denary  Hexadecimal | |
| Need more help? | | | |
| 1. [SLR1.1 – Systems architecture – Craig 'n' Dave | Students (craigndave.org)](https://student.craigndave.org/videos/slr1-1-systems-architecture) 2. [SLR1.2 – Memory and storage – Craig 'n' Dave | Students (craigndave.org)](https://student.craigndave.org/videos/slr1-2-memory-and-storage) | | | |