**Computer Science** “A Bit a day”

… “Nibble away” at your revision (20 Minute tasks)

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| The 3 main **computing constructs** are…   * + Sequence (always)   + Selection (if)   + Iteration (for/while)   Watch- <https://student.craigndave.org/videos/ocr-gcse-slr2-2-the-use-of-the-three-basic-programming-constructs>  ***Make a Flash card about this*** |
| **Variables and Constants**  Variables- memory location used to temporarily hold data that can change when the program is running  Constant- a value assigned to an identifier that cannot change when the program is running  Watch- <https://student.craigndave.org/videos/ocr-gcse-slr2-2-the-use-of-variables-constants-operators-inputs-outputs-and-assignments>  ***Copy each definition down 5 times or chant it aloud 5 times*** |
| **Programming Errors**  ***Write an algorithm to work out if someone is an adult or a child. Include on purpose 2 of the errors below. Annotate to explain what the error is and why***  Syntax Errors  Run-Time Errors  Logic Errors |
| **Binary Conversion**  Watch- [**https://student.craigndave.org/videos/ocr-gcse-slr2-6-converting-between-denary-and-8-bit-binary**](https://student.craigndave.org/videos/ocr-gcse-slr2-6-converting-between-denary-and-8-bit-binary)  Learn the binary place values   |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | 132 | 64 | 32 | 16 | 8 | 4 | 2 | 1 |   ***Convert the following to decimal:***  1001 0011, 1000 0001, 1111 1111, 1010 1010, 0011 0111  ***Convert the following to binary:***  132, 210, 85, 64, 21 |
| **Character Sets**  Watch- [**https://student.craigndave.org/videos/ocr-gcse-slr2-6-characters**](https://student.craigndave.org/videos/ocr-gcse-slr2-6-characters)  ***Write out definitions of ASCII, Extended ASCII and Unicode*** |