**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 runningConstant- a value assigned to an identifier that cannot change when the program is runningWatch- <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 ErrorsRun-Time ErrorsLogic 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

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| 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*** |