**N5 CS Website**

|  |  |
| --- | --- |
| **Computer Systems (CS)** | |
| Data representation  **Logan Chalmers**  **Calvin Earnshaw** | Describe and exemplify the use of binary to represent positive integers.  Describe floating point representation of positive real numbers using the terms mantissa and exponent.  Convert from binary to denary and vice-versa.  Describe extended ASCII code (8-bit) used to represent characters.  Describe the vector graphics method of graphic representation for common objects:   rectangle   ellipse   line   polygon  with attributes:   co-ordinates   fill colour   line colour  Describe the bit-mapped method of graphics representation. |
| Computer structure  **Charlie Davidson** | Describe the purpose of the basic computer architecture components and how they are linked together:   processor (registers, ALU, control unit)   memory locations with unique addresses   buses (data and address)  Explain the need for interpreters and compilers to translate high-level program code to binary (machine code instructions). |
| Environmental impact  **Katelyn Ingram** | Describe the energy use of computer systems, the implications on the environment and how these could be reduced through:   settings on monitors   power down settings   leaving computers on stand-by |
| Security precautions  **Katelyn Ingram** | Describe the role of firewalls.  Describe the use made of encryption in electronic communications. |