

## Year 7 Computing

### Autumn 2: Understanding Computers and the Internet

<b>Hardware</b>	The components kept inside a computer
<b>Peripheral</b>	A device which can add extra functionality to a computer system. Peripherals can either input or output data from the computer.
<b>Software</b>	A set of instructions and its documentations that tells a computer what to do or how to perform a task
<b>Operating system</b>	The low-level software that supports a computer's basic functions, such as scheduling tasks and controlling peripherals. Eg Windows, Mac OS, Linux...
<b>Input</b>	A peripheral device which takes data from the real world and enters it into a computer systems.
<b>Output</b>	A peripheral device which takes data from a computer system and presents it into the real world.
<b>Storage</b>	Devices that store virtually all the data and applications on a computer.
<b>Motherboard</b>	Connects all components in the computer together.
<b>Processor CPU</b>	Performs any calculation and processes instructions given to it.
<b>RAM</b>	Short term storage which stores instructions for the CPU to process.
<b>Hard Drive</b>	Stores information in long term memory.
<b>Fan</b>	Used to cool down the components and prevent them from overheating.
<b>Assistive technology</b>	Any object or system that increases or maintains the capabilities of people with disabilities.
<b>Power Supply Unit (PSU)</b>	Inputs power to the system.

<b>Binary</b>	Counting using base 2 (0s & 1s) – the only language that computers truly understand. 0 means off, 1 means on.
<b>Denary</b>	Counting using base 10 (0-9) – these are our normal numbers that we use every day.

#### Binary Place Values (for 1 byte)

128	64	32	16	8	4	2	1
0	0	0	0	0	0	0	0



VINT CERF



BOB KAHN

#### THE FOUNDING FATHERS OF THE INTERNET

#### Bits to Bytes

<b>Bit</b>	The smallest amount of data (stands for <i>binary digit</i> ) (0 or 1).
<b>Byte (B)</b>	8 bits
<b>Kilobyte (KB)</b>	1024 bytes
<b>Megabyte (MB)</b>	1024 kilobytes
<b>Gigabyte (GB)</b>	1024 megabytes
<b>Terabyte</b>	1024 gigabytes

