COMPUTER HARDWARE AND SPECIFICATIONS

Central Processing Unit

The **processor** is the driver of the computer. Processors are usually differentiated by speed, measured in gigahertz (GHz). The higher the GHz, the faster the computer will run. You should buy the fastest processor you can afford, but dual or quad-core processors running at speeds of 2 GHz or above will normally be enough for most business functions, eg., word processing, spreadsheets and some multimedia. More CPU cores and higher speeds improve processing throughput and therefore the perceived speed of the computer.

Random access memory (RAM)

The processor uses **memory** to run programs. Generally, the more RAM you have, the better your computer will run when using several programs at once. Your computer should have enough memory to make the most of the processor speed. To use multiple modern software applications effectively, you should have at least 4 gigabytes (GB) of RAM and preferably 8 GB or above for more memory intense software applications, such as design, photography or video editing.

Hard disk

The **hard disk** stores the data you create in your business, as well as the programs you use. A typical office computer will have at least 500GB of hard disk space. Some new laptops and specialist performance computers come with solid state drives (SSD). These drives are silent because they have no moving parts and are five to eight times faster than the standard magnetic hard disk drives used in most desktop computers. Although SSD can offer significant performance advantages, the cost per GB of storage can be two or three times more expensive for the same storage capacity. Even with a price premium for a SSD, given the performance advantage vs the overall cost of a typical desktop or laptop, in most cases including an SSD is the best approach.

Peripherals

The **monitor** is the computer's display screen. Most modern monitors use some form of Liquid Crystal Display (LCD) technology. Monitors are normally measured diagonally in inches - typically 22, 24 or 27 inches. Larger or ultra-wide-screen monitors allow you to compare two documents on-screen. The different LCD technology used depend on cost and if you require true colour reproduction or high screen refresh rates are essential.

The aspect ratio of a monitor is the proportion of image width to height. A common aspect ratio for monitors is 16:9 but other aspect ratios may be required for specialist purposes such as CCTV monitoring or movie editing.

The **keyboard and mouse** usually come as part of a bundle, but you may be able to select wireless devices that make desktops neater.