



Common computing devices

Desktop PC ...



- Made up of system unit, keyboard, monitor, mouse
- Relatively cheap but not portable and take up a lot of space
- Are versatile
- You can add extras for speed or storage
- Easier to upgrade
- They are not prone to overheat like the laptop computer when used for longer periods of time
- Desktop PC screens are wider and bigger, makes TV viewing a better experience
 - Any software and programs can be used for home, business, education etc
 - Good for gaming
 - Desktop programs such as Photoshop offer more precision, making it easier to access on a PC or laptop than on a tablet PC

Laptop ...

- Compact, durable, portable, easy to use and switch between programs
 - Built in keyboard, larger screen
 - HDD means good file storage depending on your RAM
 - May need recharging every day
 - Lacks an optical drive
 - Size makes it easy to steal
 - Easy to damage when dropped
- Easy to connect to internet & browse or listen to music or videos
 - A range of software and programs can be used for home, business, education etc



Tablets – type of device & purpose



- Compact, lightweight, portable
- Fewer components inside so longer battery life
- Cheaper than standard laptop
- Can use stylus on screen to draw etc
- But smaller screen, fiddly, cut & paste tedious
- Keyboard on screen difficult to use
- Less storage, less RAM
- Limited functionality compared to laptops and PCs
 - Android tablets give you access to apps from Google Play store
 - Great to browse the internet, read e-books, magazines or watch TV and movies

Mobile hand-held & wearable devices

Smart watch

Fitness Bands

Haematoma detector

GPS device

Phone

Gaming system for kids

Bluetooth key tracker

Vehicle tracking

- These devices are changing daily and you need to search for the latest devices



Network technologies, terminologies and concepts

- What is a network?
Local Area Network, Wireless Local Area Network
 - LANs use cables to create the network
 - WLANs use a wireless access point or wireless router



Network technologies

- What is a Network card?
 - An electronic device in most computers motherboard, that connects a computer to a computer network, usually a Local Area Network (LAN)



- What is a router?
 - A device that connects to the modem and forwards data packets from one router to another until the destination on the internet is reached



3G or 4G ...

- What is 3G/4G?
3rd Generation
4th Generation
(most current 15/11/16)



- 3G technology created the first networks fast enough to make smartphones practical. Before that, they were too slow to allow you to do all the things that make smartphones great, like streaming videos, surfing the web and downloading music.
- 4G has really allowed smartphone technology to spread its wings. That's because it's much, much faster than 3G. So when you want to download a new game or stream a TV show in HD, you can do it without buffering and lags that make the experience not worth the wait.

WiFi

- WiFi is a technology that uses radio waves to provide network connectivity. Make sure your home WiFi is secure.
- The major advantage of WiFi is that it is compatible with almost every operating system, game device, and advanced printer.



- The computer should include a wireless adapter that will translate data sent into a radio signal.
- This same signal will be transmitted, via an antenna, to a decoder known as the router.
- Once decoded, the data will be sent to the Internet through a wired Ethernet connection.



- WiFi enabled door chime
See, hear & speak to people
from your smartphone, tablet or PC

What are Hotspots?

- The term hotspot is used to **define an area where WiFi access is available**. It can either be through a **closed wireless network at home or in public places such as restaurants or airports**.
- In order to access hotspots, your computer should include a **wireless adapter**.
 - If you are using an advanced laptop model, it will probably include a built-in wireless transmitter already.
 - If it doesn't, you can purchase a wireless adapter that will plug into the PCI slot or USB port.
- Once installed, your system should automatically detect the WiFi hotspots and request connection. If not, you should use software to handle this task for you.

End of presentation

- Next steps
- Go back to the workbook
- You will see that there are Study Notes on common computing devices