



# LAPTOP CONNECTIONS & KEYBOARD

# Today, we are looking at the physical aspects of a laptop

- Power
- Physical Connectivity
- Ports
- Keyboard
- Touchpad

# Power


- All laptops will be sold with the necessary cables etc to charge
- There are many different designs
- Most modern laptops use USB C type ports
- It is very easy to get replacements



# Power

- It is not a good idea to leave the power plugged in all of the time
- Many laptops allow you to cap the charge at say 60 or 80%, which will be kinder to the battery
  - *This is often via a manufacturers utility program that ships with the laptop*

Power & Performance



**Battery Health Charging**

If you need to use a laptop for a long time make sure to connect the charger to keep the battery fully charged. We recommend you change the battery charging mode to Balance or Maximum lifespan mode to extend the battery life.

- Full capacity mode  
For the days you're going to be on the move and using your laptop regularly, you can set the standard profile to allow for a full 100% charge.
- Balanced mode [Recommended]  
When you use your laptop in meetings or conferences, you can use Balance mode to allow charging up to 80%.
- Maximum lifespan mode  
When you always plug-in your charger, you can set the Maximum lifespan mode to allow charging up to 60% to extend batteries life cycle.

# Ports

- All laptops are not the same. In general, the ports will be decided by:
  - *Size*
  - *Price*



- One thing that will generally be missing now is an Optical Drive (CD / DVD)

# Audio Jack

- Not as common as it was – superseded by Bluetooth wireless
- You may have to use an adapter



# Display Output Ports

- Three are rare on modern laptops– described for completeness
  - *DisplayPort* – to connect a monitor
  - *DVI (Digital Video Interface)* - to connect a monitor
  - *VGA (Video Graphics Array)* – quite often coloured blue



# HDMI

(High Definition Multimedia Output)

- Two sizes, but the ports look the same



# USB

- These are the most common slots used for data transfer
  - *USB 2 or 3*
  - *USB Type C*
    - - these ports can be used for charging on modern laptops, and may replace the charging port
    - This size of port is the compatible with another standard called “Thunderbolt”



# Ethernet

- Connect to the internet using a “Cat5” cable
  - *Faster than wireless, but not so convenient*
  - *Similar slots on the back of your router*



# Card Reader Slots

- Various sizes: most common are
  - *SD Card (24mm)*
  - *MicroSD (12mm)*
- Can be used for additional storage, or for data transfer (e.g. camera)



# Kensington Lock Slot

- For security



# Keyboard

- Smaller than a standard keyboard – some have numerical keypads: depends on the size
- Bottom line – Ctrl, Fn & Alt act like special shift keys; used in conjunction with other keys. Look at “4” on your keyboard



# Keyboard top line on a laptop

- Functions vary by manufacturer – BUT
  - *Mute*
  - *Volume up and Down*
  - *Microphone mute*
  - *Brightness up and down*
  - *Touchpad on/off*
  - *Play/Pause Fast forward/back*
  - *Airplane mode*
  - *Video output*
  - *Sleep*
- May be enacted with or without Fn key (confusing) – look to see which set is more prominent – may also be coloured
- Function keys are not widely used for personal use – they are a throwback to past times
  - *However*

# Common Uses of F1-F12 Keys:

F1: Opens the Help screen for almost any program.

F2: Renames a highlighted icon, file, or folder.

F3: Opens search features in various apps.

F4: Closes the active window when pressed with Alt.

F5: Refreshes or reloads web pages and documents.

F6: Moves the cursor to the address bar in many browsers.

F7: Runs spell check in Microsoft Office programs.

F8: Displays a startup menu or enters safe mode in Windows.

F9: Refreshes documents in Word or sends/receives emails in Outlook.

F10: Activates the menu bar in active applications.

F11: Enters and exits full-screen mode.

F12: Opens "Save As" in Microsoft Office or opens browser developer

# Touchpad

- Some might have physical barriers for click functions – some may not
- You can use “tap” instead of clicking left button
- Double tap for (guess what) – double click
- Use two fingers to represent the scroll wheel on a mouse
- Configurable in Settings

