

### **Information**

Hardware and software are vital components of a digital system. They work together to transform data into digital solutions. The hardware is the physical components of the system. Common hardware components include monitor, disk drives, graphics cards (GPU), Central Processing Unit (CPU), memory (RAM), power supply (PSU) and motherboard. Software is broken into 2 categories: operating systems and application software. Operating systems is the system software that connects the hardware and software together and allows it to interact. Common operating systems include Linux, Apple macOS or Microsoft's Windows. Application software (apps) are used by the computer to help perform a task. An example includes a word processing program to create a typed document.

Once the hardware and software are connected, the digital system forms a network. Connected devices share information. Network systems can share drives which allows users to access the same files from any device, one printer will be accessible from multiple devices.

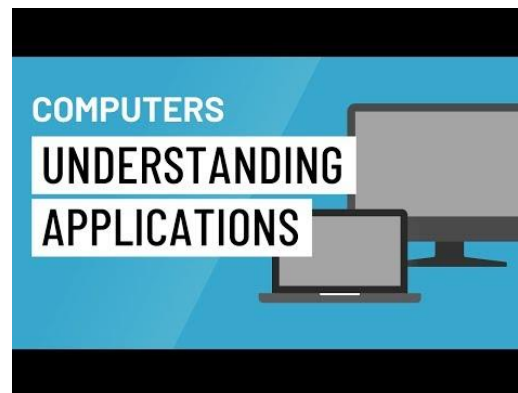
### **Curriculum Expectation**

Students will identify how hardware and software will work together to transfer data on a networked system. They will identify the relationship between hardware and software to influence the movement and accessibility of data on a networked system.

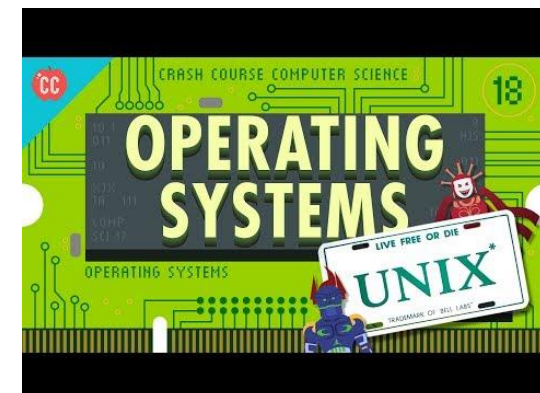
### **Video Resource**

*Click the images to open the videos*

These videos explain the differences between application software and operating systems



Video Source: [GCFLearnFree.org](http://GCFLearnFree.org)



Video Source: [Crash Course](http://Crash Course)

# DATA MOVEMENT

Data interaction in a digital system



## HARDWARE

Physical components that make up the digital systems.

Common components include: monitor, disk drives, graphics cards (GPU), Central Processing Unit (CPU), memory (RAM), power supply (PSU) and motherboard



## SOFTWARE

Operating Systems enables software and hardware to connect.

Application Software programs help complete a task.



Work together to transmit data

