

BTEC 90 Credit Diploma in IT
Research Task



Hardware: Computer hardware comes in a wide variety of shapes and sizes, and all have very different purposes and features, ranging from essential internal components to optional external devices.

Carry out some research and complete a table similar to the one below, identifying the purpose and performance measures (in terms of size, speed, capacity etc) of each device.

All work should be your own. Include your own images of each device where possible too. Identify all your sources carefully and be specific (not just “Google images”!)

Device (inc. image)	Purpose	Performance
Motherboard		
Processor		
Random Access Memory (RAM)		
Hard Disk Drive: (HDD) (SATA, IDE, EIDE, master, slave)		
Optical Drives: CD-ROM, DVD-ROM, CD/DVD-RW		
Visual Display Unit (Monitor)		
Network Interface Card (NIC)		
Graphics Card		
Sound Card		
Power Supply Unit (PSU)		
Mouse		
Keyboard		
USB		
Firewire		
Flash Drive		
Basic Input-Output System (BIOS)		
Cabling (Coaxial, Optical, Twisted Pair)		
Another device of your choice (1)		
Another device of your choice (2)		
Another device of your choice (3)		

Software: There are two main categories of software - systems software and applications software. Starting with systems software, carry out some research and complete the table below comparing three of the main operating systems available at present. Again, don't forget to acknowledge your sources.

	Ubuntu (Linux)	Microsoft Windows 10	Mac OS Sierra
Price			
Ease of use			
Reliability			
Software			
Cost			
Hardware support			
Security			
Open source			
Support			

Provide a brief explanation of the following features available in all operating systems

Feature/Service	Explanation
Disk Management	
Memory Management	
Hardware/Peripheral Management	
System Security	
Device Driver Management	
Application Management	
Providing a user interface	

Applications Software

Identify five pieces of applications software you use on a regular basis, explaining what you use them for:

Application	Use