



Custom Computer Design Plan

Why is it better to design and build your own system?

Plan out your computer design by first deciding on the type of system you need. You will need to research and define major components available and reason why you chose your specific selections and then make up a price list using Excel and present with Power Point/or similar

Budget Desktop, Home Office, Gaming, Media Center, WorkStation, Web Server, Audio System, etc...

General Considerations

- Practicality, reliable, compatible
- Quality, name brands
- Noise
- Cooling, amount and type
- Cost
- Speed
- Location –where it will be used
- Power Source and conditioning
- Secondary Memory
- Scalability, future upgrades, options
- Major use –type of machines
- Appearance
- Security
- Sound
- Network

Hardware Specifics:

- CPU platform - memory and speed
- Video controller/platform
- Motherboard
- Case
- RAM
- Monitor (s) – size & number
- Raid considerations
- Power supply
- Power back-up, Power conditioning
- Hard drive(s)
- Sound output
- Expansion cards
- Cooling – air, liquid, combination
- Mouse/keyboard
- Fans

- Usb 2-3
- Lighting
- Heat Sinks
- Card readers, etc.

Software:

- Operating system:
 - 32/64 bit
 - Multi-boot
 - Boot disk
 - Back-up
 - Tools
 - Utilities
 - Partitioning
 - Scratch disks
- Applications:
 - Utilities
 - Security
 - Office
 - Graphics
 - Interest specific
 - Smart phone sync
 - Back-up
 - browsers
 - Desktop
 - Games
- Network:
 - Provider –speed, options
 - Set-up



Computer Technology

Western Technical-Commercial School

Name:

Date:

Support:

You are to present your *design* with pictures of components, related information, and local prices

- Show research resources and links
- Show components and best prices
- Your steps on the build and install steps
- Maintenance and upgrade possibilities
- Intro, references, cost page and summary

Find support web sites that can help with your *design* ideas, purchasing, price comparisons, build, etc. Ex.

<http://www.wikihow.com/Build-a-Computer>

<http://ca.pcpartpicker.com/parts/partlist/>

Points/tasks to cover for Marks:

Communications, Information, and practicality of your *design* will be considered, towards your mark also. Ensure you have covered the following points in your presentation:

1. Computer Info- - Computer type, overview of system, general considerations covered 5
2. Components- all components with images, descriptions, explanations, specs, and price 20
3. Build Process- Steps outlined to take during the build process including safety 5
4. Summary - components, descriptions, price, wattage 5
5. References & Suppliers- List all support links, reviews, and suppliers 5

40 Total