**Overview:**

Students work individually to understand and establish the specifications for a PC dedicated to a specific task or function. (The specific task or function will be assigned to the student from the list below.) The function and features of various hardware components are researched to develop a general understanding. Specific components and features are then selected based on appropriate need for the assigned task or function. The final product is a brochure that will be shared with other classmates during a tradeshow event.

**Objectives:**

* Use correct terminology to describe computer hardware, speed measurements, and size

measurements

* Describe the functions of the internal components of a computer
* Describe the functions of common computer peripheral devices
* Assess user computing needs and select appropriate hardware components for different

situations

**Getting Started:**

1. You will be required to design a “dream machine” personal computer (PC) for one of the tasks assigned to you from the list below.
2. To get started, develop a general understanding of what will be important features and what will be less important features of our dream machine. Consider the following:
   1. Operating system software
   2. Special application software
   3. Processor & motherboard speed
   4. Main memory speed and size
   5. Secondary storage speed and size
   6. Graphics and display speed and resolution
   7. External devices (e.g. keyboard, pointing devices, joysticks, etc.)
   8. Network connectivity
   9. Power and data backup
   10. Printers, scanners, and similar equipment
   11. Portability and durability
   12. Budget (cost) considerations

Specific Tasks & Functions

1. ***Game Computer***: Dedicated to playing PC games in a home environment
2. **Photo Editing & Organization**: Dedicated to editing and producing photographs and images in a home or professional environment
3. ***Business Office Computer***: Dedicated to producing documents and presentations and communicating with other people in a professional office environment
4. ***Student Home Computer***: Dedicated to completing homework, paying bills, communicating with friends and other similar tasks in a home environment
5. ***Factory Floor Computer***: Dedicated to reading documents, filling in forms, processing orders, etc. in a factory or warehouse environment.
6. ***Media Production and Streaming Computer***: Dedicated to production and distribution of video and/or music media in a semi-professional environment
7. ***Web Surfing Computer***: Dedicated to surfing the web, streaming media, and communicating through on-line services in a home environment

**Level 1: Processor & Memory**

1. Research and summarize the main features and function of a CPU processor chip. Consider the following:
   1. Physical packaging shape and size

Most processors come in a box from amazon or whichever company you buy it from. The processor itself is not that big, it about less than the size of an average hand.

* 1. Processing speed and power

Processing speed is measured in GHz (Gigahertz). Most high end processors have a Max Turbo Frequency of 4.00 GHz, and a normal speed of 3.6 GHz Clock Speed. Also the more cores a processor has the better the performance will be, since “work” is split up among the cores.

* 1. Memory speed and size

Most processors have at least 2mb cache, and a maximum of 8gb ram. Most processors speed is 64bit.

1. Research and summarize the history of how a CPU processor chip has changed over the years. Consider the following:
   1. Typical processor speed, size, model numbers in the early 1990’s
   2. Typical processor speed, size, model numbers in the early 2000’s
   3. Typical processor speed, size, model numbers in the current time

The two main manufacturers are Intel and AMD (Advanced micro devices), both processors manufacturers are almost equally good with slight difference which is AMD processors will be better for tasks like gaming, recording and 3D rendering. CPU speeds are measured in GHz (gigahertz) which is a unit of measurement for AC or EM wave frequencies. In the 1980s, processors were quite slow and were still in the development process, over the years the processors speed have become extremely fast (especially new ones) and now manufacturers are competing to make the fastest and most efficient processor.

1. Research and summarize the main features of motherboards. Consider the following:
   1. Physical packaging shape and size
   2. Speed and size

The Motherboard usually comes in a large rectangular box. “The speed of the bus, measured in megahertz (MHz), refers to how much data can move across the bus simultaneously”. Motherboard speeds can range from 66mhz to 800mhz. Most motherboards are 12 × 10.1 inches in size.

1. Research and summarize the history of how motherboards have changed over the years. Consider the following:
   1. Typical speed, size, model numbers in the early 1990’s
   2. Typical speed, size, model numbers in the early 2000’s
   3. Typical speed, size, model numbers in the current time

There are 4 types of Motherboards. XT motherboards (eXtended technology motherboards) are old model motherboards, in this mother board there are old processor sockets LIF, Ram Slots Dimm and ISA, 12pin power connector and no ports. There are AT motherboards (Advanced technology), in these there are PGA sockets, SD ram slots, 20 pin power connector PCI slots and ISA slots. Baby At motherboards are combinations of XT and AT, these motherboards contain both slot type processor sockets and PGA processor sockets, SD ram slots, DDR ram slots, PCI slots and ISA slots, 12 pin connector and 20 pin connector and ports. ATX motherboards (Advance technology eXtended), these motherboards contain MPGA processor sockets, DDR, AGP and PCI slots, SATA connectors 20 pin and 24 pin power connector and ports. The motherboards have changed significantly since the 1980s, the motherboards have upgraded, most motherboards now use SATA, ISA was fully replaced by PCI and PCIe, the processors we have now are much better in terms of processing power, there are also many more features like secure boot and more. Also now we have more computers using UEFI rather than Bios and motherboard speeds are much faster. In general, our motherboards we have are at least 5x better than what we had before and will continue to get better.

1. Research and summarize the main features and function of RAM memory. Consider the following:
   1. Physical packaging shape and size
   2. Speed and size

A RAM memory comes in a square box that is about the size of your hand. The more memory your ram has the faster it will be, the fastest is usually 16gb as of now. Some RAM memory are 2.5 to 3 inches while some are 4.5 to 5 inches.

1. Research and summarize the history of how RAM memory has changed over the years. Consider the following:
   1. Typical speed, size, model numbers in the early 1990’s
   2. Typical speed, size, model numbers in the early 2000’s
   3. Typical speed, size, model numbers in the current time

RAM (Random access memory) is the virtual space that computers use to manage information and solve problems. The main types of RAM memory you can get today are Flash memory, which was released in 1984 and is used until today. Flash memory retains all data after power has been cut off and is most commonly used in USB’s, printers, memory cards, PDA’s and etc. Static RAM (SRAM), which was released in the 1990s and is still used today. SRAM requires a constant flow of power to function, because of this refreshing is not needed to keep data intact and it also deletes all the data that has been stored once power is cut off. SRAM is used in digital cameras, routers, CPU cache, digital to analog convertors and etc. Dynamic RAM (DRAM), which was released in 1970s and was used up to the mid-90s. DRAM requires reoccurring refreshes of power so it can function, refreshing is needed to keep data intact. Once power is lost all stored data is also lost. DRAM is used in video game consoles, networking hardware, video graphics memory, system memory and etc. Some significant changes for the component included the creation of SDRAM (Synchronous Dynamic RAM) in 1993, which lead to the discovery of pipelining – “the ability to receive (read) a new instruction before the previous instruction has been fully resolved (write)”. This led to higher CPU transfer/performance rates. Another significant change to this component over the years was the creation of the Double Data Rate Synchronous Dynamic RAM (DDR SDRAM), which basically doubled the performance rates of the SDRAM. It can read two and write two instruction every clock cycle which is basically double the SDRAM. Our ram now is 10x better compared to the ram before, it is much faster, more affordable, and much smaller in size.

https://www.lifewire.com/types-of-ram-4150713

1. Research and summarize the main features and function of Hard Disk Drives (HDD). Consider the following:
   1. Physical packaging shape and size
   2. Speed and size

A hard drive comes in a fairly large rectangular box. The hard drive itself is around the size of an average adult hand. The hard drives size in measured in bytes, nowadays most hard drives are 200gb to 2tb in size.

1. Research and summarize the history of how Hard Disk Drives (HDD) have changed over the years. Consider the following:
   1. Typical speed, size, model numbers in the early 1990’s
   2. Typical speed, size, model numbers in the early 2000’s
   3. Typical speed, size, model numbers in the current time

As of now you can get hard disk drives, SATA drives (Serial Advanced Technology Attachment), PATA (Parallel Advanced Technology Attachment), SCSI (Small Computer System Interface) and SSD’s (solid state drives). The fastest and least likely to break down drive is the SSD, since it contains no moving parts, it will be faster and has less of a chance to break down. Before there was 10mb to 1gb sized hard drives, they were not that fast, and were extremely expensive but now overtime hard drives now go from 500gb to 2tb and more, our hard drives are also extremely fast you access data in less than 5 seconds, and they are affordable ranging from $50 to $500 depending on the amount of space and type of hard drive.

1. Explain and justify the processor and memory requirements for your ‘dream machine’ task. Discuss the following:
   1. Minimum and “would be nice” requirements for the CPU chip

The minimum CPU that would be good for media production computers would be a Ryzen 5 2600X CPU. This CPU has 6 cores, a base speed of 3.6ghz and a max clock speed of 4.2ghz. Which will allow you to create media without any lag or freezing. A CPU that would be nice would be Ryzen 7 2700X CPU. It has 8 cores, so it is even faster than the Ryzen 5, the base clock speed is 3.7ghz and the max clock speed is 4.3ghz. The CPU will allow you to create media even faster, your computer will be able to create and render video in seconds, and their will be no interruptions in relation to speed.

* 1. Minimum and “would be nice” requirements for the Motherboard

A minimum motherboard for media production would be Asus sabretooth Z77, it has multiple audio/video ports like HDMI and etc, it supports AMD and NVDIA graphic cards, it has a total of 6 expansion slots, it has 6 SATA ports for hard drives, and it has 6-10 USB ports. These features make it good for media production because these would be the main features you would need to create media. A would-be nice motherboard for media production is the Intel Z390 AORUS Motherboard. This motherboard supports 9th and 8th generation intel processors, it has 4 DIMM sockets that support up to 128gb, it has 4 HDMI ports, It has Realtek ALC1220 codec high definition audio, so you can even hear a bird chirping in the video, It has 7 expansion slots, it has 6 SATA ports, it supports multi graphics technology, it has more than 10 USB ports, thermal cooling and much more. This motherboard is probably one of the best motherboards for media production since it has all the features you would need for media production.

* 1. Minimum and “would be nice” requirements for the RAM memory

You can buy any type of RAM memory, it depends more on the size of the RAM memory. Most media production software’s need 8gb of ram minimum, if you get more ram it is better, so a would-be nice RAM memory is as much memory as you can get. Also getting ram with higher MHz is better.

* 1. Minimum and “would be nice” requirements for the HDD

A minimum HDD for media production would require at least 5400 rpm drive and around 256gb storage. A would-be nice HDD for media production would require 7200 rpm drive and more than 1tb of storage.

**Level 2: Display & Peripherals**

1. Research and summarize the main features and function of Computer Display Monitor. Consider the following:
   1. Physical construction (CRT, LCD, etc)
   2. Display Standards (CGA, VGA, SVGA, XGA, etc.)
   3. Resolution & Colour depth

The main types of monitor technologies are CRT (Cathode ray tubes), in this a stream of intense high energy electrons are used to forms images on a fluorescent screen. CRT monitors are being used less and less because of their weight and repair costs. LCD (Liquid crystal display), in this an optical effect is made by polarizing the light in varied amounts and making it pass through the liquid crystal layer. There are two types of LCD technologies, an active matrix of TFT and a passive matrix. TFT generates better quality and is more secure while passive matrix has a slow response time. These monitors and light and can run off batteries making them great for laptops. LED (Light emitting diodes) technology, this technology is the same as LCD but is flat paneled and uses light emitting diodes for back-lighting to produces images. LED monitors produce images with higher contrast, use less power, compact, and they don’t produce much heat when running. The only problem is they can be expensive. There are also different ways to connect these monitors like using HDMI (High definition multimedia interface) which is used for transmitting uncompressed video data and compressed or uncompressed audio data from device to device, DVI (digital visual interface), it is designed to transmit uncompressed video from device to device, VGA (Video graphics array), which carries analog components RGBHV video signals and VESA DDC data from device to device. In the 1980’s most monitors used CRT monitors, which were heavy, bulky, expensive to repair and the picture quality was not the best. These monitors are now outdated and is only rarely used, most people mainly use LED monitors now since they are lightweight, flat paneled, use less power and produce high quality images. Also, to connect monitors to the pc, VGA, DVI and HDMI are still used, HDMI and VGA are more common than DVI. In terms of display standards, if you are using an analogue then they usually have degrading quality like VGA, but if you use digital like HDMI the quality is not affected at all. Also the resolution and color depth are also better for digital ones while analogue ones have less resolution and less color depth.

1. Research and summarize the main features and function of a Computer Graphics Card. Consider the following:
   1. Physical packaging (e.g. On the motherboard, expansion card, etc.)
   2. Speed and frame rate (2D vs 3D)
   3. Resolution, colour depth, and memory size

Most graphics cards are around 10 inches long but some can be up to 12.5 inches long. The frame rate measures how many complete images the card can display per second. People who need the power of a high-end card which includes gamer and people who do lots of 3D graphic work. “Many motherboards have integrated graphics capabilities and function without a separate graphics card. These motherboards handle 2-D images easily, so they are ideal for productivity and Internet applications.”. The resolutions for most GPU’s now are 1080p, 1440p and 4K, the higher the resolution the better the quality and color depth. The memory of a graphics card is used to draw graphics or pictures, memory sizes range from 1GB to 8GB, the more memory you have the faster the computer draws, and you can also support more higher end software’s and programs.

1. Research and summarize the history of how Computer Display Technology has changed over the years. Consider the following:
   1. Display standards and capabilities in the late 1980’s
   2. Display standards and capabilities in the late 1990’s
   3. Display standards and capabilities in the 2000’s

The main types of monitor technologies are CRT (Cathode ray tubes), in this a stream of intense high energy electrons are used to forms images on a fluorescent screen. CRT monitors are being used less and less because of their weight and repair costs. LCD (Liquid crystal display), in this an optical effect is made by polarizing the light in varied amounts and making it pass through the liquid crystal layer. There are two types of LCD technologies, an active matrix of TFT and a passive matrix. TFT generates better quality and is more secure while passive matrix has a slow response time. These monitors and light and can run off batteries making them great for laptops. LED (Light emitting diodes) technology, this technology is the same as LCD but is flat paneled and uses light emitting diodes for back-lighting to produces images. LED monitors produce images with higher contrast, use less power, compact, and they don’t produce much heat when running. The only problem is they can be expensive. There are also different ways to connect these monitors like using HDMI (High definition multimedia interface) which is used for transmitting uncompressed video data and compressed or uncompressed audio data from device to device, DVI (digital visual interface), it is designed to transmit uncompressed video from device to device, VGA (Video graphics array), which carries analog components RGBHV video signals and VESA DDC data from device to device. In the 1980’s most monitors used CRT monitors, which were heavy, bulky, expensive to repair and the picture quality was not the best. These monitors are now outdated and is only rarely used, most people mainly use LED monitors now since they are lightweight, flat paneled, use less power and produce high quality images.

1. Research and summarize the main features and function of External Storage and Backup. Consider the following:
2. Removable media (e.g. floppy disks, CD/DVD-RW, CompactFlash, etc.)
3. USB media (e.g. Memory Stick, External HDD, etc.)
4. Cloud based storage

Research and summarize the history of how External Storage and Backup has changed over the years. Consider the following:

1. Typical speed, size, model numbers in the early 1990’s
2. Typical speed, size, model numbers in the early 2000’s
3. Typical speed, size, model numbers in the current time

Floppy Disks were developed around the 1960’s and are a “type of disk storage composed of a disk of thin and flexible magnetic storage medium, sealed in a rectangular plastic enclosure lined with fabric that removes dust particles”. They are written and read by a floppy disk drive, they are not used much now. These drives would fit into the rectangular boxes at the front of the pc. Then came the era of using Disks. CD-ROM (Compact disk read only memory) are CD’s that can be read by a computer with an optical drive. DVDs (digital versatile disc) where used to store any kind of digital data and it offers more storage than compact disks. Some DVDs are produced using “molding machines that physically stamp data onto the DVD”, these DVDs can only be read. While blank recordable DVD discs can be recorded once using a DVD recorded and Rewritable DDVDs can be recorded and erased many times. Then the USB was invented. USB flash drives are portable data storage devices that include flash memory. They can be written/erased up to 100,000 times (high end USB’s). They range from 8gb to 2tb’s and are mainly used for storage, data transfer, data backup and etc. They are faster than CD’s and are smaller. Then compact flash memory was invented. Compact flash (CF) are flash memory storage devices and were mainly used in portable electronics like cameras and handheld gaming devices due to their size and incredibly large storage. Many devices up to this day still use these cards and they can store data anywhere from 2mb to 512gb. Then finally Cloud based storage was invented. Cloud storage is basically storage online, where you can store all your data online of the hosting companies servers. The company is responsible for keeping the data available and accessible. Most cloud storages require subscription for more storage. Cloud storages are more commonly used now since you can access your data anywhere. Some examples are google drive, one drive and dropbox.

1. Research and summarize the main features and function of Network Connectivity. Consider the following:
2. Connection technology (e.g. Dial-Up, Ethernet, WiFi, BlueTooth, Fibre, etc.)
3. Upload and download speed
4. Security

Dial up is a form of internet access that used a telephone to create a connection to an ISP (internet service provider). Ethernet is when you connect a wire to your pc and to your modem which then gives internet. Wi-Fi allows you to connect to the internet via a wireless access point. Fibre optics use TIR (Total internal refraction) to transfer signals through light that is trapped and you can connect to it which gives you internet.

1. Research and summarize the history of how Network Connectivity has changed over the years. Consider the following:
2. Typical speed, size, model numbers in the early 1990’s
3. Typical speed, size, model numbers in the early 2000’s
4. Typical speed, size, model numbers in the current time

In the 1990s, most people used ethernet or dial up to get inter access, the internet was very slow, it would take about 5 minutes for a website to open. Then in the 2000s broadband was released, which allow wireless connections as well as LAN, the internet was faster than before, webpages that took more than 5 minutes to open now opened in 30 seconds or less. Now we have fibre optics which is extremely fast since light travels very fast, and our internet is so fast that our webpages open in 0.39 seconds.

1. Research and summarize the main features and function of Printer Technology. Consider the following:
2. Printing Technology (e.g. Dot Matrix, Ink Jet, Laser, etc.)
3. Connection Technology (e.g. Parallel Port, USB, WiFi, Network, etc.
4. How printing has changed over the years

Dot matrix uses a print head that moves back and forth and strikes a ink soaked cloth against paper to print. Ink jet printing is a type of computer printing in which a digital image is created by propelling drops of ink onto paper. Ink jet printers are the most commonly used printers all around the world. Laser printing produces high quality images, images are created by repeatedly passing a laser beam back forth over a negatively charged cylinder called the drum. The drum then collects the electrically charged ink and transfers the image to paper. Parallel ports are a type of interface for connecting peripherals. They send multiple bits of data at once, they do this by having multiple data lines in their cables and port connectors. WI-FI is basically to connect to an internet access point using a Network card, you can print by Wi-Fi, the computer sends a signal through Wi-Fi to the printer making it print the image. First people would print by hand, so draw. Then came Dot matrix printers which were used up to the late 2000’s then people used ink jet printers and still do today. Recently laser printers came out which are even more higher quality, but they are quite expensive.

1. Explain and justify the processor and memory requirements for your ‘dream machine’ task. Discuss the following:
2. Minimum and “would be nice” requirements for the Computer Display

A minimum for computer display would be LED since it has been used for a long time and has high quality images. A would-be nice computer display would be OLED, this has higher quality than a LED screen, it is lighter, uses less energy and offers the best viewing angle.

1. Minimum and “would be nice” requirements for External Storage and Backup

A minimum would be to keep it on a USB, but it would be nice to keep it on a external HDD because it has larger storage and has less chances of getting lost.

1. Minimum and “would be nice” requirements for Network Connectivity

A minimum would be to have Wi-Fi and ethernet. A would be nice for network connectivity is to have fibre optics since it is extremely fast.

1. Minimum and “would be nice” requirements for Printer Technology

A minimum for printer technology would be to have a ink jet printer, since it can print decently fast, the image quality is good and has color printing. A would be nice printer is a laser printer because the quality is extremely high.

**Level 3: Building Your Dream Machine**

1. Identify the minimum requirements for each component of your dream machine as follows::
   1. CPU processor chip speed and type

For the CPU, at least 3.6 ghz and at least 8 cores.

* 1. Motherboard type

For the type of mother, most likely a ATX motherboard.

* 1. RAM memory speed and size

For ram memory, 16gb of ram memory size.

* 1. HDD speed and size

For the HDD, at least 1tb of storage and 7200rpm.

* 1. Display Monitor resolution, type, and size

For display monitor, most likely an LED monitor.

* 1. Graphics card resolution and type

For graphics card, a high end GPU with 4K resolution.

* 1. Audio card type

For the audio card, a Audiophile card.

* 1. Audio Speakers type

Instead of speakers I would use headphones, most likely ones from sony.

* 1. External backup type and size

For external backup, I would use a external hdd that has at least 1tb of storage.

* 1. Network interface requirements

For network requirements, a wifi card.

* 1. Printing Technology

For printing technology, An ink jet printer is fine, since a laser printer is expensive and most work can be done with an ink jet printer.

* 1. Other Peripherals (e.g. mouse, keyboard, joystick, etc.)

A mouse with a good grip, a keyboard that lights up, and maybe a tablet that you can draw on which then outputs to the computer.

1. Prioritize you list of components from question #1 from those that are essential down to those that would be nice.
2. Establish a target budget (cost) for your dream machine.
   1. Justify your cost based on your projected component needs.
   2. Justify your cost based on a realistic assessment of your application and target user

I think that a budget of 2000 dollars is good, since a media production computer usually needs high end technology, and realistically people already spend 500-1000 dollars on regular computers, so 2000$ is somewhat expected for a media production computer.

1. Build your dream machine or locate a ready to buy machine using on-line vendor web sites.
   1. Find at least two sources for your dream machine
   2. Provide a copy of the cost and feature list summary for each source
   3. Explain how the machine from each source matches (or is different) from your ideal configuration.

CPU: AMD Ryzen 7 2700x

At best buy it costs 450$.

At Canada computers it costs 430$

They both have the exact same specs on each source,

Both parts are the exact same on each source. Except Canada computers has a direct replacement plan for extra money, which allows you to replace the CPU if it needs repairing. It has 8 cores, so it is even faster than the Ryzen 5, the base clock speed is 3.7ghz and the max clock speed is 4.3ghz.

Motherboard: Intel Z390 AORUS

At best buy it costs 230$.

At Canada computers it costs 220$.

On Canada computers the motherboard has less features and is priced equally the same, on best buy the motherboard has more features for the almost the same price.This motherboard supports 9th and 8th generation intel processors, it has 4 DIMM sockets that support up to 128gb, it has 4 HDMI ports, It has Realtek ALC1220 codec high definition audio, so you can even hear a bird chirping in the video, It has 7 expansion slots, it has 6 SATA ports, it supports multi graphics technology, it has more than 10 USB ports, thermal cooling and much more.

RAM: G.SKILL Ripjaws X Series 16GB (2x8GB) DDR3 1600MHz CL10 Dual Channel Kit

At best buy the RAM costs 130$.

On amazon it costs 90$

It is better to get it on amazon since it is much cheaper for much less. It has 16GB size, and features over clocking.

HDD: WD 1TB 3.5" 7200RPM SATA Desktop Internal Hard Drive

On best buy it costs 80$.

On new egg it costs 50$.

It is better to buy it on new egg, since they are the same expect on new egg it is much cheaper. It has 1tb of storage and has 7200rpm.

Display monitor: Samsung 28" 4K UHD 60Hz 1ms TN LED Qdot Monitor

On best buy it costs 500$.

On amazon it costs 350$.

Since amazon is cheaper better to get it on amazon. The monitor is 28 inches, it is a LED monitor and is 4K.

GPU: Nvidia GeForce GTX 1070

On best buy it is 280$

On amazon it is 250$

It is better to buy it on amazon since it is much cheaper.

Audio Card: HyperX - Amp Virtual 7.1 Surround Sound USB Sound Card

On amazon it is 30$

On Best buy it is 60$

The sound card is plugged in via usb and can have a headset or speaker connected to it.

Sound speakers: Sony MDRZX110 Over-Ear Headphones

At best buy it costs 36$

At amazon it costs 25$

These headphones are made by Sony, and are over the ear headphones.

External Backup: Seagate Backup Plus Slim 2TB 2.5" USB 3.0 External Portable Hard Drive

On best buy and amazon, it costs 85$

The hard drive has 2tb of storage and is USB 3.0.

Network: The mother board already has a network card built onto it. It has Wi-Fi, ethernet, dial up and etc.

Printing technology: HP Officejet Pro 8710 All-in-One Wireless Duplex Colour Inkjet Printer

At staples it costs 100$

At best buy it costs 150$

Both sources have basically the same information. The printer is a wireless and color printer.

Peripheral device: Professional LED Optical 2400 DPI 7 Button USB 2.4G Wireless mouse

AT best buy it costs 40$

On amazon it costs 30$

Razer Cynosa Chroma Backlit Gaming Keyboard

At best buy it costs 80$

On amazon it costs 60$

Suggested on-line computer sources:

* [www.bestbuy.ca/](http://www.bestbuy.ca/)
* [www.dell.com/en-ca](http://www.dell.com/en-ca)
* [www.staples.ca](http://www.staples.ca)
* [www.tigerdirect.ca/](http://www.tigerdirect.ca/)
* [www.canadacomputers.com](http://www.canadacomputers.com)

**Level 4: Sharing Your Dream Machine**

1. Prepare a brochure documenting your dream machine options and choices.
   1. The target audience is other students in the class
   2. You should explain your target task (e.g. game computer) and how this affects configuration choices.
   3. You should explain your configuration choices in greater detail
   4. Your two purchase options should be explained and compared
2. Share your brochure
   1. By uploading it to your repository
   2. By presenting it during the in-class tradeshow (date TBD)
3. Visit and report on other trade show presentations / brochures
   1. Complete the Passport Template (TBD) as you participate in the in-class tradeshow.

**Task & Function Signup**

|  |  |
| --- | --- |
| **Task** | **Student Name** |
| ***Game Computer*** |  |
| **Photo Editing & Organization** |  |
| ***Business Office Computer*** |  |
| ***Student Home Computer*** |  |
| ***Factory Floor Computer*** |  |
| ***Media Production and Streaming Computer*** |  |
| ***Web Surfing Computer*** |  |
| ***Game Computer*** |  |
| **Photo Editing & Organization** |  |
| ***Business Office Computer*** |  |
| ***Student Home Computer*** |  |
| ***Factory Floor Computer*** |  |
| ***Media Production and Streaming Computer*** |  |
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