



Bring Your Own Device

There are a lot of factors to consider when purchasing a computer, and there are many devices that would be appropriate for school use. The following pages are a basic computer tutorial to help with your decisions.

Baseline Requirements for school:

1. *Wireless internet capability*
2. *Battery life of 4+ hours*
3. *Hard drive for installing and running programs*
4. *Ability to run a current web browser - Internet Explorer 10, Google Chrome 38. (very old computers cannot)*

Types of Computers

***Laptops**— Laptops/Notebooks come with a keyboard and a 11" or larger screen size. Usually Microsoft's Windows operating system is pre-installed on the device. These are the devices most people are familiar and are the most capable of all of the devices listed here. There are many programs available to install. Printers are easy to setup and use. Battery life is shorter than that of tablets as notebooks are built with bigger, more powerful hardware. There are also combination laptop/tablets such as HP Yoga which have best of both features, and small, inexpensive laptops such as the Asus EeeBook and HP Stream with less memory but long battery life. \$200—\$2000

***Ultrabook**—Thinner, lighter, longer battery life version of a Windows laptop. Same abilities as laptops. \$600—\$1800.

***Macbooks**— Apple's version of a notebook. They come with Apple's Mac OS pre-installed. There are less 3rd party programs to install on Mac OS than Windows. Printers are easy to setup and use. Battery life is shorter than that of iPads and other tablets as notebooks are built

with bigger, more powerful hardware. Macbooks are typically virus and malware free as there are a lot less malicious programs floating around. \$1000+

***Windows Tablets**—Compact (10-12 inch screen), ultra-portable touchscreen devices which may have a keyboard attachment option. Windows RT models cannot install traditional programs, but have an app store with many programs available. Windows 8.1 Pro models use traditional programs. No DVD drive. Windows tablets usually have USB ports for connecting devices, ipads do not. Windows tablets can be used for classroom if there is a keyboard attached. Apple and Android tablets are not ideal for classroom use.

Chromebooks—Do not have a hard drive or the ability to install programs. They are designed for web based use and require reliable fast internet access for usability. \$200

Other Tablets—iPads, Android tablets, Kindles—great for entertainment, not ideal for secondary classrooms.

** Fit the requirements for school use.*

Considerations

When it comes to purchasing a computer, most of us must balance price with usability and longevity. How can we spend the least amount of money while getting a product that meets our needs and will last for a reasonable amount of time? These answers are different for different families depending on

Size

Screens are measured diagonally. Anything smaller than 10.1 inches will be hard to do class work on, while screens larger than 15" may be difficult to cart around in a backpack. Weight and durability are also considerations in a student laptop.

Battery Life

Very important in a school setting. Laptops will generally have a shorter battery life than tablets because they are running more systems, however, their versatility may make that worth the compromise.

Hard Drive Space

Determines how much data your computer can store. Most files and data are saved on your hard drive. Music, photos and videos take up considerably more space than documents. 250 GB is recommended, 500 GB is plenty for most users. One option is a SSD (solid state drive) which is faster and uses less battery life, but is also more expensive. There are cloud based options such as Dropbox, Skydrive and Google Drive which save your information somewhere else, but you must have internet access to reach your data.

Memory—RAM

Random access memory (RAM) decides how many programs your computer can run well at the same time. Unless you are doing video editing or gaming, 4GB is more than sufficient. While tablets use RAM, you don't get RAM options when choosing a tablet

Processor Speed and Power

Generally, the more cores you have and the higher the speed (measured in gigahertz or GHz), the faster your computer is. Single core computers are outdated and not recommended. Dual cores are sufficient for normal use, but not recommended for longevity. If you are video editing, gaming, or want something that will run well for many years, you may want quad-core or even six-core. Intel processor i3 is barely adequate, i5 or i7

will be faster. AMD processors are generally less expensive. You can check the rating of a processor at <https://www.cpubenchmark.net/>

Ports

Different ports enable you to attach or read various things with your computer. Laptops and ultrabooks generally have many ports, ipads have none.

USB—used to connect keyboards, mice, and printers. USB 3.0 is faster than USB 2.0. *Recommended.*

HDMI—used to connect TV, monitor, or projector for playing videos. *Recommended.*

SD —Used to read camera SD cards. Windows tablets and netbooks may have an SD card port to add space to your hard drive. *Optional.*

VGA – used to connect to a monitor or projector. *Optional.*

Thunderbolt—Apple device port used to connect monitor and transfer data. *Optional.*

DVD drive—used to play CDs and DVDs as well as install programs. *Optional.*

Any device chosen must have wireless connection capability—called WLAN.



Where to Buy

Discount Stores:

Factory Outlets—HP and Dell have outlet stores online, Acer has special offers. These are new and factory refurbished products at closeout prices. Should come with full manufacturer's warranty. Check often for what you want.

TigerDirect.com—often has closeout deals. Check the warranty.

Newegg.com—often has closeout deals. Check the warranty.

Walmart.com—often has older computers for good prices. The advantage is that you can return it to the store if you have issues. TRIP is also available.

Ebay.com—if you know you want a Surface or other name brand computer, you can sometimes find new or refurbished items. I would only recommend if you can get a one year manufacturer's warranty. Be careful—only purchase from sellers with positive feedback and read the fine print!

Erin's Favorites:

Low cost favorites(\$150-\$250): Microsoft Surface RT, Asus EeeBook, HP Stream 11 or 13

Midcost favorites (\$300-\$600): HP, Acer, Asus. Factory refurbished items. There are million models in this category. I have had a bad experience with Lenovo, but others recommend them.

High Cost favorites (\$600+): MacBook Air, Microsoft Surface Pro. Anything for this price tag should be great.

Call me or email me if you have questions regarding a specific device! 825-2492, 920-4054, or eheuker@nmcs.us

Coming soon—Security and Safety for Your Child's Device.

Other:

Cadillac Computer—These guys will give you great service. They offer free data transfer from your old computer, free training, and free tech support for the life of your computer. They have a wide range of new Windows products from \$399 up.

Best Buy—if you want help selecting a laptop, their sales staff tends to be knowledgeable. You may want to check out computers there and then google for the best price. Best Buy also uses TRIP.

Apple.com—if you are buying a Mac, go straight to the source.

Smile.amazon.com—Amazon—give a portion of sales back to charity (you can choose NMCS) as well as using TRIP. Amazon has helpful buying guides and lists as well.

