BYOD Recommended Device Specifications
& Possible Purchasing Options

We receive questions from families about what might be a "good device" to purchase for their student(s). Although it is not a requirement for students/families to purchase devices for students to bring to school, listed below are recommended specifications for Chromebooks, as well as Windows and Mac laptops, that families should consider if they wish to purchase a device for their student to use with the district's **BYOD Program**.

Since 2013 P-CCS has issued Chromebooks to students and trained staff on their use with students. In part because of student and staff familiarity and in part because Chromebooks are often less expensive than other device options, the district encourages their strong consideration when and if choosing a personal learning device for students. If a Chromebook is not preferred, we strongly recommend and have an expectation that students install and use the Google Chrome browser.

NOTE: BYOD devices must be 5.0 Ghz Wi-Fi compatible. Older 2.4Ghz devices will not work on P-CCS Networks

- **Check with the seller or device support website to confirm specifications.**
- **BYOD Devices will not be able to print on any school campus.**

Recommended Chromebook Specifications

P-CCS recommends the following specifications for any family wishing to provide a Chromebook as their child's BYOD device. Students using devices that do not meet the recommended Chromebook specifications below may be asked to complete a non-digital version of an assignment due to compatibility with the software used as part of the assignment.

Device Type	Processor	Available Memory	Drive Size	Screen Size
Chromebook	2 GHz (or greater)	4 GB RAM (or greater)	16GB (or greater)	11.6" (or greater)

Screen – Many display resolutions on most 11 inch or larger Chromebooks will

be 1,920 by 1,080 pixels, otherwise known as 1080p, but a few cheaper or smaller Chromebooks may be lower resolution, and the very highest-end models may be higher-resolution. For most midsize Chromebooks with screens from 13 to 15 inches, 1080p is a suitable option. Our student Chromebooks are 11.6" inches.

While touchscreens are not necessary, touchscreens and 2-in-1 models that can be converted to tablet modes often add to ease of use especially for younger children and allow you to use touch-optimized apps, though will also add to the price. Most of the Chromebooks issued to students are touchscreen.

Processor (CPU) – A low-end processor like an Intel Celeron or a Pentium processor will serve you well if the primary use of the Chromebook is to browse with a tab or two open. Chromebooks based on Intel Core CPUs like the Core i3 and the Core i5 will be more versatile for robust multitasking and streaming, though can be more expensive.

Storage – Most files on a Chromebook will be stored in the cloud/Google Drive, so Chromebooks include only a small hard drive, usually 16GB – 64GB, on which to save your local creations if needed. This should be sufficient for student needs. If you think more space on the device is needed, look for an SD card slot to add expanded storage.

Connectivity – Most Chromebook connections are wireless, so you will use the machine almost exclusively attached to Wi-Fi. Also, look for a USB port or two if you will want to attach a mouse or other peripheral.

ChromeOS Updates – Every Chromebook has an expiration date on which Google stops supporting the device. Choose the Chromebook with the latest end of life date with the specifications you need. See Chromebook End of Life Considerations below.

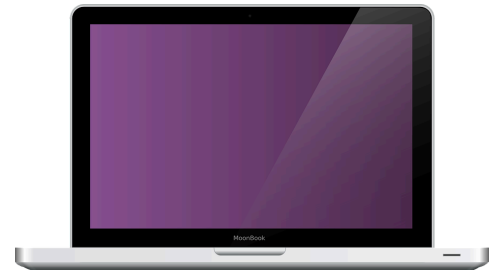| Auto Update Expiration Date |
|---|
| Additionally, families will want to consider a Chromebook's Auto Update Expiration Date. This date indicates the final date that a Chromebook will be able to update to the latest Chrome operating system (OS). The device will still be usable after this point, however, it will no longer receive updates from Google. For more information and to check your device's Auto Update Expiration Date, view Google's Auto Update Policy Page. **P-CCS recommends that any newly purchased Chromebooks have an Auto Update Expiration Date at least 4 years in the future.** |

Possible Chromebook Purchasing Options

P-CCS does not recommend any specific Chromebook device. Families should consider the specifications provided above when making new Chromebook purchases. P-CCS encourages families to look at purchasing options from online and local retailers. Other retailers may have a greater variety of brands and selections. Regardless of where you shop, please keep in mind the Recommended Chromebook Specifications when purchasing a device for your student.

Recommended Windows or Mac Laptop Specifications

While P-CCS strongly encourages consideration of Chromebooks if a family chooses to purchase a personal learning device for their student, families may prefer to purchase a Windows or Mac laptop. The district recommends the following specifications for any family wishing to provide a Windows or Mac laptop as their child's BYOD device. Students utilizing devices that do not meet the recommended Windows or Mac laptop specifications below may be asked to complete a non-digital version of an assignment due to compatibility with the software used as part of the assignment.

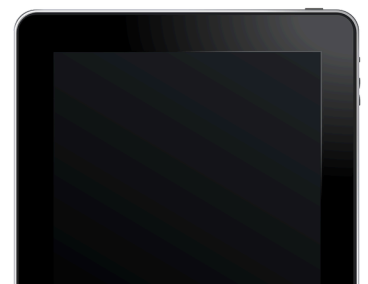| Device Type	Processor	Available Memory	Drive Size	Screen Size
Windows or Mac Laptop	Intel 11th generation product family or greater (or AMD equivalent)	8 GB RAM (or greater)	256GB (or greater)	11.6" (or greater)

Hard Drive Type
There are two types of hard drives, spinning hard disk drives (HDDs) and solid state drives (SSDs). HDDs have higher storage capacity, but are much slower that SSDs. While SSDs are faster, they may cost more than HDDs, depending on the size of the drive. **P-CCS recommends that any newly purchased Windows or Mac laptop have a solid state drive (SSD) with at least 120GB of storage.**

Possible Windows or Mac Laptop Purchasing Options

P-CCS does not recommend any specific Windows or Mac laptop. Families should consider the specifications provided above when making new Windows or Mac laptop purchases. Regardless of where you shop, please keep in mind the Recommended Windows or Mac Laptop Specifications when purchasing a device for your student.

Tablet Devices Are Not Recommended for 2-12 Grade Students

Due to a variety of web-based software applications used in classrooms, such as Google's G Suite, tablet devices are not recommended as a personal learning

device for students, except for students in lower elementary (K-1). Specifically, tablets cannot run add-ons and extensions that are often used in the classroom environment, again excepting in lower elementary classrooms. **Furthermore, Google's G Suite is not as fully featured on tablet devices and may impede productivity with G Suite's limited feature set in the mobile device environment.** Students utilizing tablet devices that are not able to access digital learning materials may be asked to complete a non-digital version of an assignment.

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