

What is a Chromebook?

A Guide for HHS Teachers

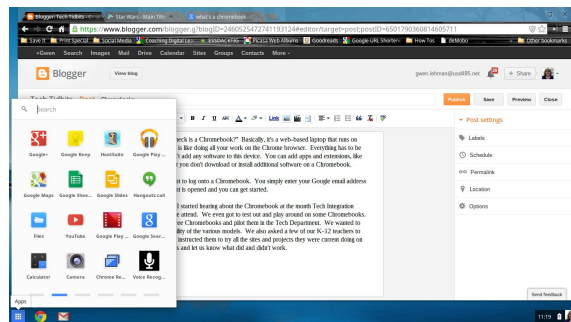
Tom Reeve, Summer 2016

What is a Chromebook?

A **Chromebook** is a type of **laptop computer**. It has a screen, keyboard, and touchpad. However, instead of running Windows or Mac OSX like most other laptops, Chromebooks use an operating system called **ChromeOS**. ChromeOS is a lightweight computer operating system that is based on the Google Chrome web browser.



On your Windows or Mac laptop, you know that, in order to do other things, you run programs, such as Microsoft Word, iTunes, Photoshop, etc. To get to the internet, you run another program (called a web browser) like Internet Explorer, Firefox, Safari, or Chrome. Chromebooks are different. **Chromebooks run only the Google Chrome web browser** - anything you need to do on a Chromebook is within Google Chrome.



This may sound limiting, but in fact it is much more powerful than it sounds. Just by visiting websites or using “Chrome apps” (more on these later), **student can do the following things:**

- Use Gmail and Google Calendar
- Use Google Apps to write documents, work with spreadsheets, create slide presentations
- Film and create videos
- Record and edit audio sound
- Create digital photo- and vector-art
- Collect and graph scientific data
- Visit any internet website (that is allowed through our web filter)
- Watch YouTube or other videos
- Use Google Classroom, Edmodo, Moodle, and other learning management systems
- Open, read, and do basic editing of Microsoft Office documents
- Print documents -- at home or in the HHS library.

Benefits of Using Chromebooks

- **Chromebooks are swappable.** Chromebooks work and store data “in the cloud.” When students work on documents, photos, videos, etc., they don’t store their work on the Chromebook. Instead, they store their work in their Google Drive or other similar places. If a student’s Chromebook is lost or damaged, he or she can log into another and get all of their work and apps back in an instant.
- **Chromebooks can be inexpensive.** Of course, the main reason schools are jumping to Chromebooks is their low cost. These lower-cost machines are possible because Chromebooks run well on lower computing specs.
- **Long battery life.** Because of the lower tech specifications (compared to other types of laptops), Chromebooks can expect to have 8-12 hour battery life, which is obviously ideal for schools.
- **Small and light.** Our chromebooks are small, thin, and light, but have been “ruggedized” to hold up in student hands. This makes them extremely portable.
- **“Pushable” apps.** If there is a Chromebook app that you want every student to use, the HHS Tech Team has the ability to “push” apps to students. This essentially installs the app on every student's’ Chromebook next time they log in. Also, because these apps are web-based, students will not “run out of room for apps” like they do on their smartphones. If there is an app you want them to have, we can make sure they get it!

Disadvantages of Using Chromebooks

Chromebooks aren't perfect. There are a few compromises that must be made when using Chromebooks.

- **No Java.** In the early 2000s, Java was used to create apps that would run on a variety of platforms. However, due to security and licensing issues, Java is rarely used in modern web applications. Unfortunately, if you are using older or non-updated online resources, you might find some compatibility issues. For teachers, this will mostly affect us in some older science and math simulations such as PHET sims or older versions of online textbooks. Many of these have either updated versions or alternatives, but not all.
- **Microsoft Office.** Chromebooks work best with Google Apps. -- we can't install MS Office on student Chromebooks. However, students can *view* MS Office files on their Chromebooks, and there are a number of ways that they can edit Office files as well. If necessary, students can even use the free online version of MS Office. This requires a Microsoft Account, and is not as powerful as the "regular" version, but is probably plenty for students.
- **Power Users.** Some students are power computer users, and like to use laptops to play intensive video games, professional-quality video or photo work, or perform other tasks that require more robust hardware. These students (being teenagers) may sneer at the lower power of Chromebooks, and it may take them some time to adjust emotionally.

How to Prepare for Chromebooks in Your Classroom

Web-connected computer technology will transform how we see education, and its best practices will be developing for many years. Many of us are already using some of these practices, via our BYOD program, and some of our staff are helping to invent new best practices through their own instructional creativity.

However, for teachers in BYOD classrooms, the addition of student Chromebooks should be smooth and painless, if you follow these basic recommendations.



Double-check your online resources in advance.

Most online resources will work fine on Chromebooks. However, you don't want to assume that your favorite online activity will work, and then be surprised by some issue during class. If you plan to use a particular website, video, simulation, or app, be sure to test it out in advance in your own Chrome web browser, or check with your Tech Team.

Use your support.

Because the school now issues Chromebooks to students, we can now help your lessons in case of student tech problems. If a student Chromebook is defective or uncharged, or if the Chromebook was left at home, send the student to the library for a daily loaner.