

# HMH Guidance for Customers about Chromebooks and ChromeOS

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## A different kind of laptop

Google is promoting a new operating system called ChromeOS, and some hardware manufacturers have built some new computers called Chromebooks. Chromebooks are attractive for the education market for a variety of reasons: they are inexpensive, they automatically get updated, and they are relatively simple to use. Naturally, our customers would like to know how well HMH-supplied materials work with Chromebooks. The bottom line is, as long as you know what Chromebooks are designed to do and how they compare to other computers in general, you won't run into significant challenges.

One important thing to note is that the Chrome browser, which is available on many operating systems (like Windows or MacOS or iOS), is not the same thing as ChromeOS. ChromeOS uses the Chrome browser, but there is more to it than that. Secondly, ChromeOS is not the same as Android. Android is Google's operating system for mobile devices like tablets and smartphones.

Chromebooks are designed to be **web-focused computers** (cloud-based computing). Unlike conventional laptop or desktop computers or tablets, which allow you to do a lot even if you don't have an internet connection, Chromebooks are meant to be used primarily when online. If you open and start a Chromebook when you are offline, you'll find that there's very little that you can do anymore.

## Cloud computing vs. desktop computing

In conventional desktop or laptop computers, files and software are stored on the computer's hard drive. For example, you can open up a Word document that is in a folder on your hard drive, using Apple's Pages software on a Mac computer. You do not need to be online to do that. On a Chromebook, almost all of the software and documents are stored in the "cloud", on Google-owned servers that you can only access by the Internet. A Chromebook has only very limited storage for documents on the computer itself, and if you're offline, you usually won't have software available that can open it.

Instead, when you open a document in a Chromebook, it converts the file to an online format, stores it on online servers, and opens it with a "**web app**", a web-based version of desktop software. Google Docs is an example of web apps, and Google Drive is where your documents are stored online. This is why you need to be online to use your documents.

If all you're doing is using a web browser to go to websites, then Chromebooks generally work just fine. The Chrome browser is very good and is compatible with most websites, including HMH's.



However, if you are hoping to install software on your Chromebook, such as ExamView or interactive whiteboard software, that won't be possible on your Chromebook.

## Managing Chromebooks

To use a Chromebook, every individual user needs a Google online account. Normally, Google does not allow minors under the age of 13 to register for a Google account. However, if a child has one already created by his or her parents, that can be used. Google has also been proactive in working with elementary schools, using a provision whereby district staff can take the responsibility for registering an account on behalf of a student.

Installing software on the cloud means finding a web app on the Google Play storefront, and "installing" it to your Google account. A piece of that app may actually reside on your Chromebook, but remember that in most cases, you'll need to be online to use it. Google also has a program called Google Apps for Education, and you can work with Google to manage those apps effectively.

## HMH materials and Chromebooks

Many HMH materials are found on our websites and can be viewed in a web browser, whether that is Internet Explorer, Safari, Chrome, or Firefox. Anything that is viewable this way in a web browser should work well in a Chromebook.

Some HMH web materials also contain links to resources that would normally, on a regular laptop or desktop computer, launch software other than the web browser. There may be a link to a PowerPoint presentation file, for example, which you would normally download and open with Microsoft Office software or equivalent. As long as you have Google Docs or some other web app on your Chromebook that can open that file, then you should be fine on the Chromebook.

You may also find links for downloadable software installers on our HMH materials. These will not work on a Chromebook, because ChromeOS doesn't permit that. It is a natural limitation of Chromebooks and not a problem with our materials.

Likewise, CD or DVD materials generally don't work on Chromebooks, as they are not designed to use these offline materials.

Finally, online ebooks will work well on a Chromebook, but offline ebooks like what you would load into your ereader or into an app on your mobile device generally are not supported on Chromebooks.

If you have any issues with HMH materials on Chromebooks, please contact our HMH Technical Support group at 1-800-323-9239 or [techsupport@hnhco.com](mailto:techsupport@hnhco.com).

