

# Chromebooks

**What are they, and what can they do?**

# Example Chromebook Laptop



## Manufacturers Include:

**Acer**

**ASUS**

**Dell**

**Google**

**HP**

**Lenovo**

**Samsung**

**...and more**

# Example Chromebook 2-in-1 Laptop



## Manufacturers Include:

Acer

ASUS

Dell

Google

HP

Lenovo

Samsung

Can be used as a laptop or a tablet

# Example Chromebox Desktop



## Manufacturers include:

**Acer**

**ASUS**

**HP**

**Lenovo**

# Example External Monitor



## Manufacturers include:

Acer

ASUS

Benq

Dell

HP

Samsung

Sceptor

Viewsonic

...and more

# Example Chromebase All-in-One



Manufacturers include:

**Acer**

**ASUS**

**HP**

# Chrome OS Tablet



**Lenovo Chrome OS Tablet – 10.1” screen.**

**Not as popular as 2-in-1  
Chromebook laptops.**

**Most people just like to  
have a keyboard.**

Source for much of the following material:

[Android Authority Article: What is a Chromebook and what can it do?](https://www.androidauthority.com/what-is-a-chromebook-873948)

**<https://www.androidauthority.com/what-is-a-chromebook-873948>**



## What is a Chromebook?



**Note: Windows and Mac apps will not run on a Chromebook – unless the app author creates a version for each.**

**Chromebooks are portable computers running the Chrome Operating System (known as Chrome OS) that is designed to run workflows such as:**

- a) a web browser;**
- b) a Chrome OS App;**
- c) a “Progressive Web App” or PWA;**
- d) a Google Play Store Android app; or**
- e) a Linux app.**

**Most Chromebooks (but not all) are relatively low power devices designed to have long battery life.**

**Chrome OS has plenty of apps to choose from, but it’s not meant for heavy workloads like rendering full length feature films.**

**For really complicated workflows that need specific apps, a Chromebook may not be the best fit.**

# Why should I even consider a Chromebook?

- **Almost always the best choice for people who are not computer professionals.**
- **Usually lower cost than Windows and Mac computers**
- **Much easier to use than Windows and Mac computers**
- **Chrome OS is a new system (~ 2011) built to be nearly unhackable**
- **Runs both Chrome OS and Android apps (huge app catalog)**
- **Much easier to maintain than other systems**
- **No need for anti-virus / anti-malware**
- **Fast boot times, ~8 to 10 seconds**
- **No more blue screen of death (think Windows)**

## What's the difference between a Chromebook and a laptop?



**Hardware wise, not much. Most common Chromebooks are LAPTOPS. They just commonly have lower power components to maximize battery life.**

**Most Chrome OS users don't need a lot of CPU power and internal storage capacity (use online storage and external disk drives if needed.)**

**You also get an SD card slot with some of the "better" Chrome OS devices.**

## What is Chrome OS?



Unlike Windows, there is no charge for Chrome OS.  
Unlike Windows, no “bloatware” comes on Chrome OS.  
Chrome OS looks the same no matter who builds the device.

Chrome OS (Operating System) is the SOFTWARE that provides features users need to do things. Chrome OS is to Chromebooks what Mac OS is to Apple Macs, iOS is to iPhones and Windows is to PC's.

It used to be that Chromebooks could only run the Chrome web browser. BUT THAT'S NOT TRUE ANYMORE! Chrome OS has evolved in recent years to be a very powerful operating system - while retaining its easy to use and maintain attributes.

Chrome OS is a derivative of the open source Linux system. Linux runs 96.3% of the world's top 1 million servers.

## Can you run Windows on a Chromebook?



**Basically... No. Reason: There are hardware components in Chromebooks that verify the integrity of the Chrome OS BEFORE it boots up. Many things need to be circumnavigated to disable this checking. This pre-boot verification is what makes Chrome OS almost unhackable.**

**It is very possible to do a “Remote Desktop Connection” from a Chrome OS device to a Windows PC. But that’s different than actually running the Windows OS on Chromebook hardware.**

## Chromebook advantages

- **They're great for light to medium workloads.**
  - Chromebooks do well with activities done in a web browser (Chrome, FireFox ...)
  - Activities such as online classes, Zoom meetings, word processing, spreadsheets and social media are all done well with a Chromebook.
  - Online workloads with services like Google Docs, Microsoft Office 365, Google Drive, etc. can all be done using Chromebooks.
  - Many software titles now have equivalent online services/websites.
- **Chromebooks generally have a better battery life than similarly-priced Windows and Mac laptops.**
- **They're cheaper** – often a lot cheaper than Windows laptops that come with the same processor and similar specifications. This is a major reason why Chromebooks have been adopted by the education community (this along with the Google Admin Console.)
- **They boot up fast - often just 8 to 10 seconds after a full shutdown.**

## Chromebook disadvantages

- **Not the best for high frame rate gaming**
- **Not always the best option for creative professionals such as professional photographers and videographers who spend their entire work day editing photos and videos.**
- **May not be able to drive more than 2 external monitors.**
- **Many “lower cost” Chrome OS devices are low power/feature computers.**

(there are Chrome OS options equal in power to higher end Mac, PC and Linux laptops)

## How much does a Chromebook cost?



**Anywhere from \$150 to \$1,800 depending on features and capabilities.**



## Who makes Chromebooks?



- Acer
- ASUS
- Dell
- Google
- HP
- Lenovo
- Samsung

...basically all the major manufacturers except Apple

## Which Chromebook to buy?

- Depends on your budget and what you want it to do.
- Best Chromebook overall — [Acer Chromebook Spin 713](#)
- Best convertible 2-in-1 Chromebook — [Asus Chromebook Flip C436](#)
- Ideal Chromebook for power users — [Google Pixelbook Go](#)
- Best budget Chromebook — [Lenovo Flex 5 13-inch](#)
- For students — [Samsung Chromebook 4](#) or [Acer Chromebook Spin 514](#)
- Best Chromebook tablet — [Lenovo IdeaPad Duet 5 Chromebook](#)
- Best-looking Chromebook — [Samsung Galaxy Chromebook 2](#)
  
- Suggestion: Go to Best Buy, see what Chromebooks look like, then go to Amazon and Costco websites to comparison shop. Costco's advantage is they double mfg's warranty.

## **Be aware of Chromebook's "Auto Update Expiration" Date**

- When seriously shopping for a Chrome OS device, check for the "Auto Update Expiration" date.
- This is the date after which Google will no longer provide updates for that Chromebook.
- Some "cheap" Chrome OS devices may only have two years or even less left before they will no longer receive updates.
- If you're looking at a physical Chrome OS device, go to Settings → About Chrome OS → Additional Details to see the "Update Schedule" end date.
- Before purchasing a Chrome OS device online, go to this website <https://support.google.com/chrome/a/answer/6220366?hl=en> to see when the device you're considering will cease getting updates.
- A good range is 5 to 8 years of support from the time you purchase.

# What about Google Docs? Any Good?

- **Definitely good. >90% Microsoft Office functionality, for free.**
  - **Microsoft Office features missing in Docs includes Visual Basic macros, etc.**
- **For Microsoft Office you must pay \$7/month or \$70/year.**
- **Google Docs includes Word Processing, Spreadsheet & Presentations**
- **Google runs their entire corporation on Google Docs**
- **Google Docs can Import & Export from/to Microsoft Office, Open Office and Rich Text files.**
- **Docs can export to PDF, text, web page, and EPUB (publishing) formats.**
- **After just a few uses you'll get used to the Google Docs menu structure. Concepts are all the same.**
- **Google Docs is integrated with Google Drive.**

# Questions and Discussion

# How do I set up a brand new Chromebook?

[How to set up a brand new Chromebook](#) (fresh out of the box)

<https://www.youtube.com/watch?v=6HkB9kp2XPg>