Cheapskate Tech

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Fall 2020 – Session 4 of 6

seniortechadvisor.com

What We'll Cover in 6 Weeks

- ~~Overview, plus Shopping tips~~

- ~~Devices and Apps~~

- ~~Internet of Things (IoT) and Entertainment~~

- Chromebooks (Chrome OS)

- Linux

- Black Friday Deals (Nov. 27)

Chromebook Buying Guide (source)

Why are we talking about Chromebooks?

- Lower cost

- Simplicity

- More specifically:
  - Lightweight OS
  - Long battery life
  - Optimized for Google 'apps'
  - Fast boot times
  - Browser-based
  - Thin and light

Let's Revisit ==Platforms and Operating Systems==

- Common platform 'form-factors'
  - Desktop – traditional 'tower' down to small form-factor (==Chromebox==/==Chromebit==)
  - Laptop/notebook – incl. ==Chromebooks and 'convertibles'==
  - Tablet – incl. 'phablets' and 'convertibles' (==Chome OS tablet==, ex. Lenovo Duet)
  - Smartphone – incl. 'phablets'

- Operating system choices
  - Desktop & Laptop – Microsoft Windows, Apple OSx, Linux, Chrome OS, Android
    - [Video](#) (Apple bashing Microsoft - first 2 minutes)
    - And some recent retaliation: Meet [Mackenzie "Mac" Book](#) and [Funny Ads](#)
  - Tablet & Smartphone – Apple iOS, Chrome OS, Google Android

Chrome OS ([source](#))

Chrome OS is an [operating system](#) designed by [Google](#) that is based on the [Linux kernel](#) and uses the [Google Chrome](#) web browser as its principal [user interface](#). As a result, Chrome OS primarily supports [web applications](#).

Google announced Chrome OS on July 7, 2009, describing it as an operating system in which both applications and user data reside in the [cloud](#).

And why do we care? Lower cost, less complex, good functionality, good portability & battery life, nice keyboard, larger screen size than tablets.

Android ([source])

- **Android** is a [mobile operating system] developed by [Google]. It is based on a modified version of the [Linux kernel] and other [open source] software, and is designed primarily for [touchscreen] mobile devices such as [smartphones] and [tablets], and runs as a companion operating system on Chromebooks.

- Unlike ChromeOS, Android apps install locally and require periodic updating. They can also be run 'offline' (not connected to the Internet).

Giving up Windows or Mac – for a Chromebook

[Five-stages](#) of Chromebook acceptance:

1. **[Denial](#)** – Chromebook might be enough computer for you, but me? No way.

2. **[Anger](#)** – They can have my .exe files when they pry them from my cold, dead fingers!

3. **[Bargaining](#)** – Maybe I'm being too harsh. Office works surprisingly well on a Chromebook. I guess you have to pick your fights.

4. **[Depression](#)** – Can I ever show my face in my local coffee shop again? I don't want to be the only person there without a backlit fruit logo on my laptop…

5. **[Acceptance](#)** – If you're looking to spend around $500 on a new laptop, the question is no longer, "Can you get away with using a Chromebook?" but instead, "Why aren't you already using a Chromebook?"

Best Chromebooks under $299 ([source](#))

Lenovo Duet 10.1" Chromebook Touchscreen Helio P60t 4GB 128GB eMMC Chrome OS

★★★★★ (0.0) Write a review

$289.99   At Walmart, Best Buy has it for $229

Only 2 left!
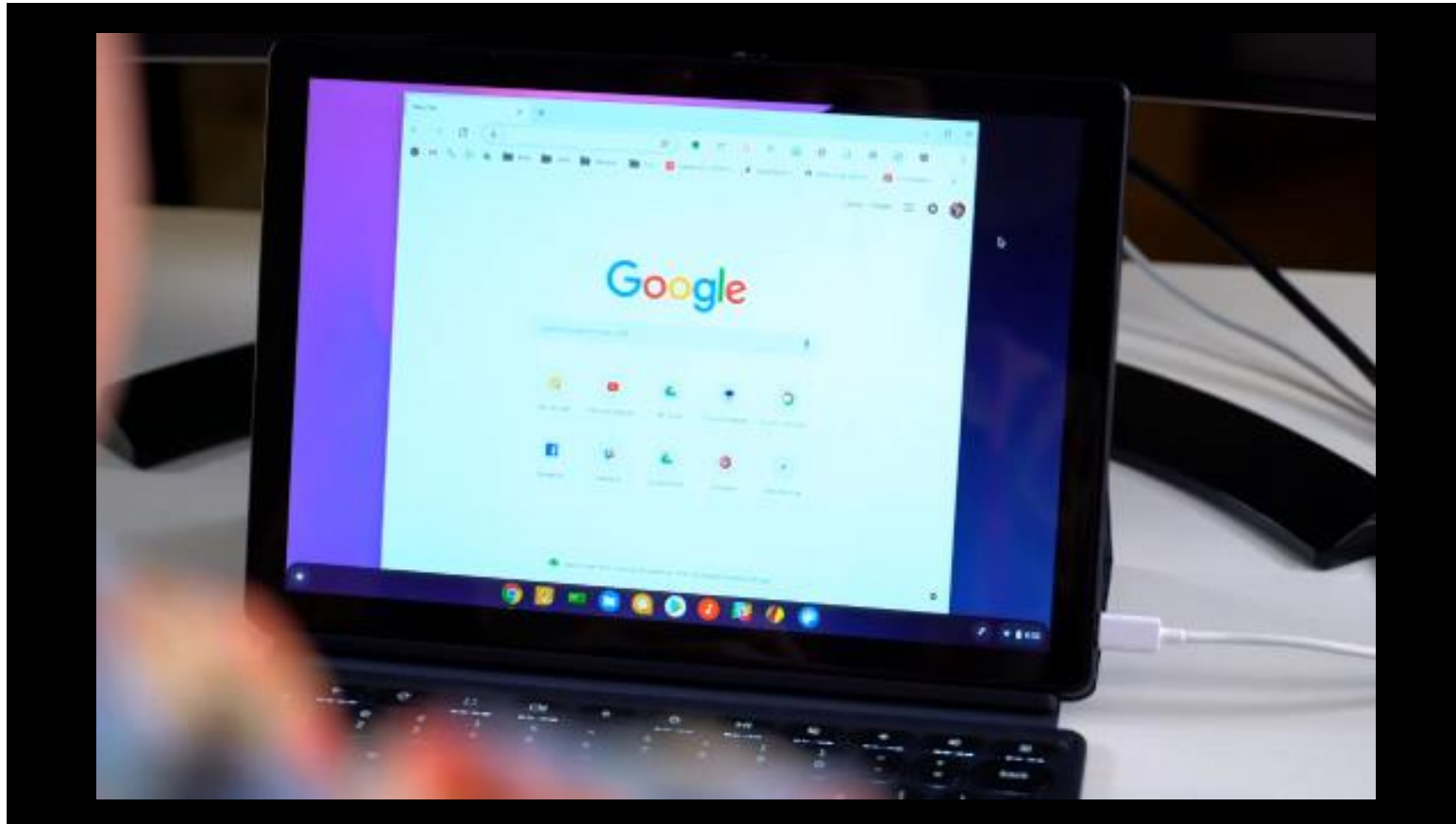
Lenovo Chromebook Duet - 10.1" - 64GB - With Keyboard

Model: ZA6F0031US   Walmart # 582384699

★★★★⯪ (4.6) 224 ratings   139 comments

$249.00

I Bought a [Duet](#) (and a [USB-C adapter](#) – why?)

10 Tips for Using a Chromebook ([source](#))

What's a Chromebox? ([source](#))

What's a Chromebit ([source](#))

ASUS
CHROMEBIT CS10

What's Chromecast (and why do I care?)

Apps vs Extensions

[How to Use the Google Chrome Web Store Running Android Apps on Chrome OS](#)
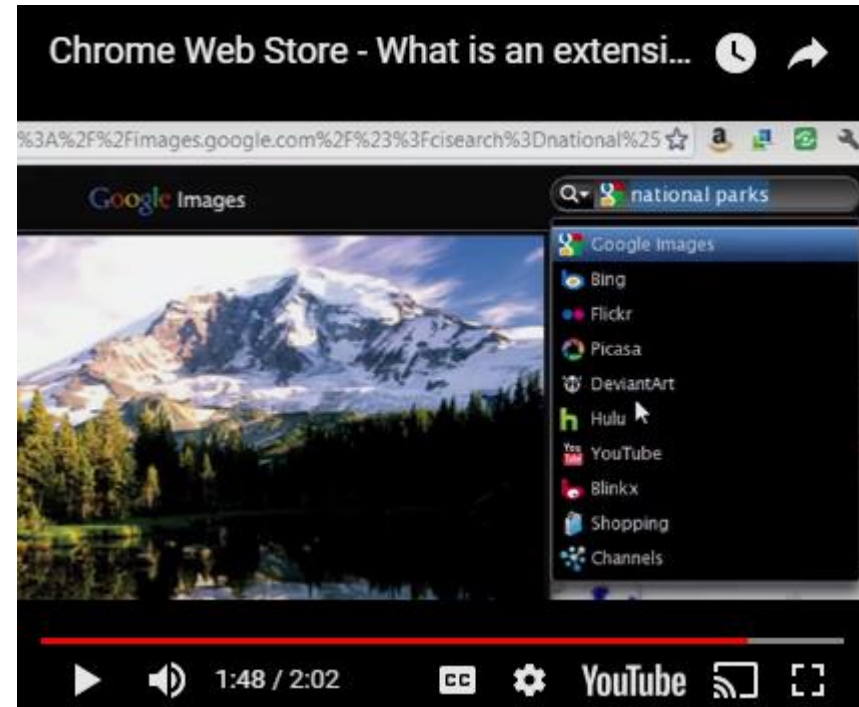
[10 Awesome Chrome Extensions You Need to Know About!](#)

Chromebook Apps

- [Web Store](#) / [Play Store](#)
- Documents – Google[1], Microsoft, LibreOffice/OpenOffice
- E-mail (Gmail, Comcast, AOL)
- Calendar (Google, Outlook.com)
- Maps (Google, of course)
- Photos (Pixlr, Photoshop[2])
- Music (Pandora, Spotify, TuneIn)

- Calculator (many)
- Video Chat (Skype[3], Hangouts)
- Movies (Netflix, Hulu)
- Books (Kindle, AI)
- Magazines (RBdigital/Overdrive)
- Weather
- News
- Sports

[1]Off-line supported [2]Android only [3]Android for full functionality

Chromebook Extensions

- Ad Blocker – AdBlock Plus

- Wallpaper – Google Wallpaper Art

- Office – Microsoft Office Online (Outlook.com)

- Password Manager – RoboForm

- Trackers – Ghostery

- Secure Browsing – Disconnect.me

Top 10 'free' apps for tablets and smartphones

- **Color Note – notepad**
- **Google Mail (Gmail) – e-mail**
- **CamScanner – document scanner**
- **Google Maps – GPS navigation**
- **Google Hangouts – Google chat and phone**
- **Total Commander – file manager**
- **Today Weather – weather**
- **Pandora – music**
- **WhatsApp – worldwide chat and voice communication**
- **SwiftKey – alternate keyboard**

- **See also:**
  - The 100 Best Android Apps for 2020
  - 15 best Android apps available right now!
  - Best Android Apps 2020

Top 10 'free' apps for Chromebooks

- **(Microsoft) Office Online – cloud based Office apps**
- **Pocket – content syncing service**
- **Overdrive and RB Digital – eBook and audio book reader**
- **Evernote – cloud note-taking**
- **Roboform – (free version) password manager**
- **Kindle Cloud Reader – eBook reader**
- **Weather.com – weather**
- **Pandora – music**
- **Polarr – photo editor**
- **VLC for Chrome OS – media player**

- **See also : Best Chrome Apps**

Linux ([source](#))

- **Linux** is an [operating system](#) within the [free and open-source software](#) development and distribution model. Linux was first released in 1991 by [Linus Torvalds](#) as a [free operating system](#) for [personal computers](#) based on the [Intel x86](#) architecture, but has since been [ported](#) to more [platforms](#) than any other operating system. Because of the dominance of [Android](#) on [smartphones](#), Linux has the [largest](#) [installed base](#) of all general-purpose operating systems, including Chrome OS.

- Running Linux on a modern Chromebook requires more resources than are needed to run ChromeOS and Android apps. My recommendation is 4gb of RAM and 64gb of internal storage minimum to run Linux. Faster processors are nice, but in my experience are not really necessary.

- And we care because? Linux is 'free' and runs on most older hardware that no longer supports Windows (bloatware). With the low cost of building a Linux system comes somewhat higher complexity and a steeper learning curve.

Places to buy

- Newegg
- Amazon
- TigerDirect
- eBay
- Walmart

Links

- **[Chromebook vs. Tablet: Which Should You Buy?](#)**
- **[Chromebooks vs. Windows 10 Laptops: What Should You Buy?](#)**
- **[Should I Buy a Chromebook? Buying Guide and Advice](#)**
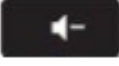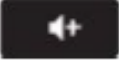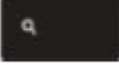- **[Best Chromebooks 2020](#)**

New news: Did you know Chromebooks stop getting system updates? Find [the details here](#).

Keyboard quiz (what's missing?)
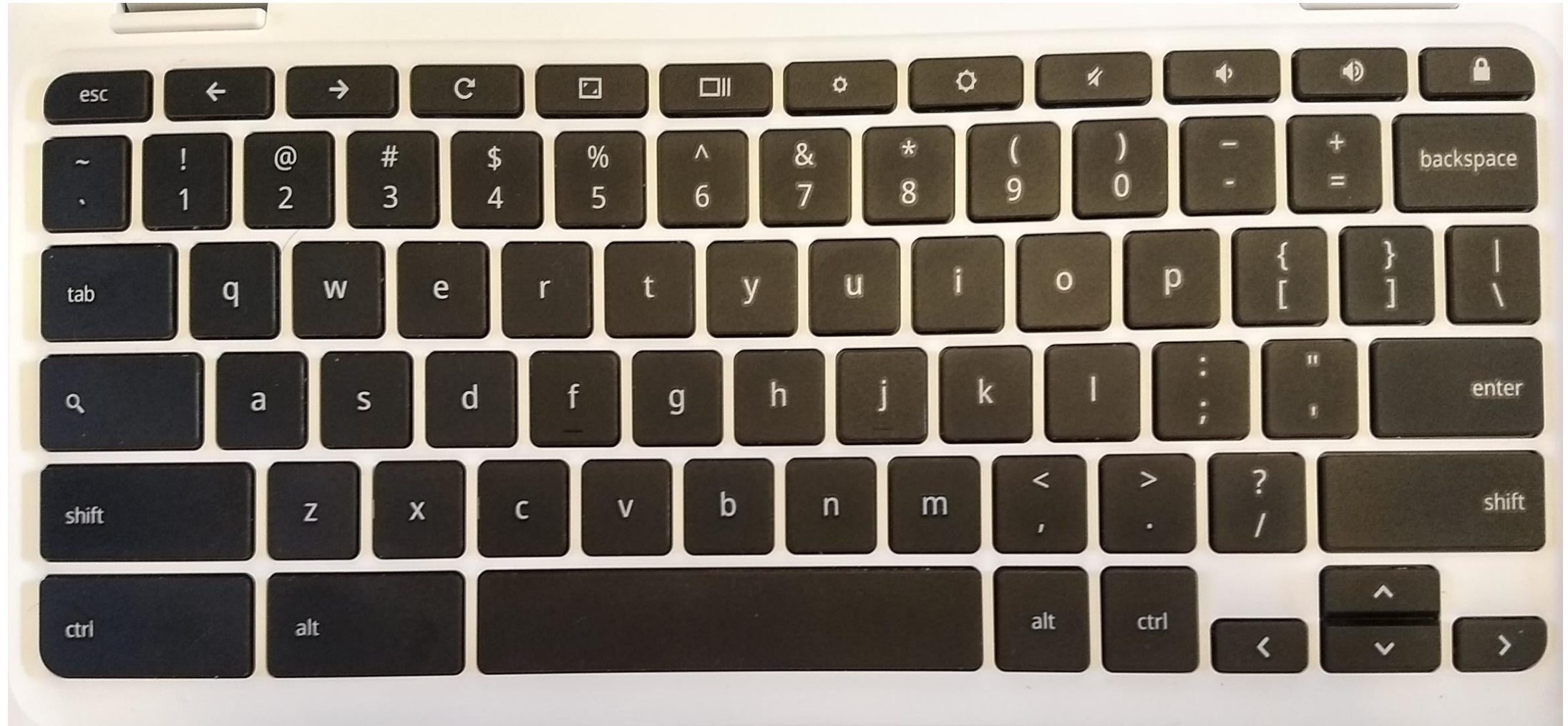
Keyboard

*Chromebook keyboard features*

←	Go to the previous page in your browsing history
→	Go to the next page in your browsing history
C	Reload/Refresh your current page
▱	Open your page in full-screen (immersive) mode. In immersive mode you will still be able to access the omnibar and tabs when you move your pointer to the top of the screen.
▱▯	Switch to your next window with the Window key
☼	Decrease screen brightness
☀	Increase screen brightness
◀×	Mute
◀−	Decrease the volume
◀+	Increase the volume
⊙	Search the web from the address bar. Note: This key is located on the side, where you'd normally find the Caps Lock key.

Touchpad
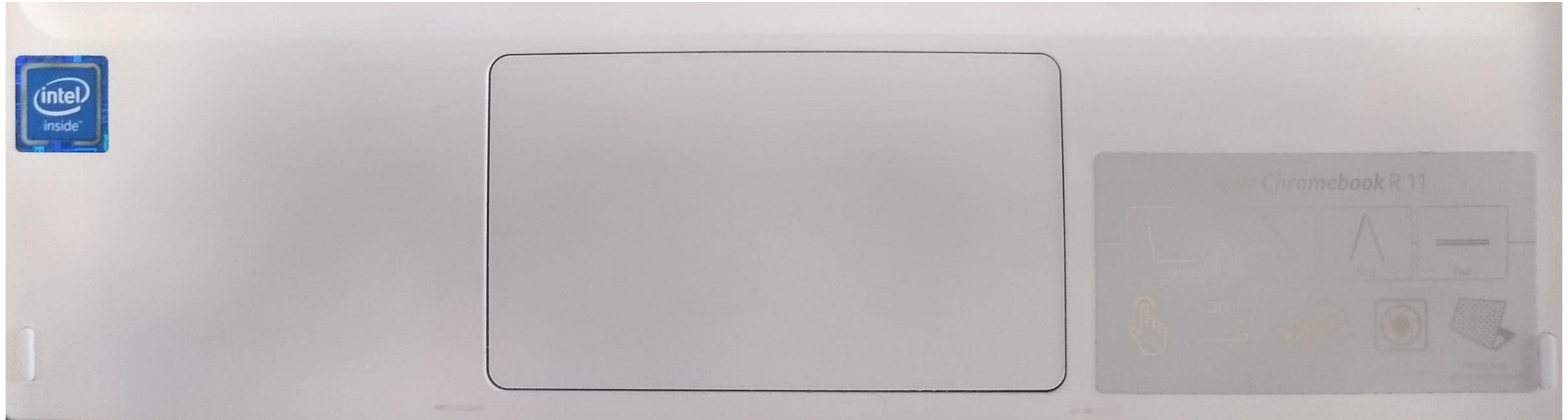
Use the touchpad to move the pointer and select items on the screen. Tap-to-click is enabled by default on your Chromebook and allows you to tap instead of clicking down on the touchpad.
You can adjust how your touchpad works by going to Settings from the Chrome menu or Status area.

Touchpad

1. To move the pointer, move your finger across the touchpad.
2. To click, press down on the lower half of the touchpad.
3. To right click, click the touchpad with two fingers (or Alt-click).
4. To scroll, place two fingers on the touchpad and move them up and down to scroll vertically, left and right to scroll horizontally.
5. To swipe, quickly move two fingers left or right to go backward or forward on web pages or while using apps.
6. To drag and drop, click the item you want to move with one finger. With a second finger, move the item. Release both fingers to drop the item at its new location.

Or just use a wired or wireless mouse

Shortcuts

Popular shortcuts

- **Take a screenshot**: Press **Ctrl +** ▫️ (or **Ctrl + F5**)

- **Take a partial screenshot**: Press **Ctrl + Shift +** ▫️ (or **Ctrl + Shift + F5**), then click and drag

- **Turn Caps Lock on or off**: Press **Alt + Search**

- **Lock your screen**: Press **Search + L**

- **Sign out of your Google Account**: Press **Ctrl + Shift + q** (twice)

- **See all keyboard shortcuts**: Press **Ctrl + Alt + ?**

Go here for a full list of shortcuts:
https://support.google.com/chromebook/answer/183101?hl=en

What is a Chromebook?

- [Android App Support](#) (5:15)

- [R11 Review](#) (new)

- [PcMag R11 Review](#) (new)

- And another – [R11 Review](#) (new)

Acer R11 Convertible 2-in-1 Chromebook, 11.6in HD Touchscreen, Intel Quad-Core N3150 1.6Ghz, 4GB Memory, 32GB SSD, Bluetooth, Webcam, Chrome OS (Renewed)

★★★★☆ ⌄ 233

$208⁰⁰

FREE Shipping
Only 13 left in stock - order soon.

The Cloud

What is the cloud?

The cloud refers to software and services that run on the Internet instead of on your computer. Apple iCloud, Dropbox, Netflix, Google Drive, Microsoft Office 365, Adobe Creative Cloud, Gmail – these are all examples of cloud services, and there are many, many more.

Where is the cloud?

The **cloud** consists of large groups of remote servers that are networked to provide centralized data storage, and online access to computer services or resources. Most of us participate in what's called a "public cloud". These cloud services are rendered over a network that is open for public use. Public cloud service providers like Amazon AWS, Microsoft and Google own and operate the infrastructure at their data center(s) and access is generally via the Internet.

Models to consider

- Start with this:
  - https://www.youtube.com/watch?v=Azzmbm17u-A (R11)
  - Review of the R11

  - Acer Chromebook R 11 Convertible, 11.6-Inch HD Touch, Intel Celeron N3150, 4GB DDR3L, 32GB, Chrome, CB5-132T-C1LK

  - http://www.dell.com/en-us/work/search?q=dell%2Bchromebook%2B13&~ck=mn
    - ASUS Chromebook Flip C302, **C100PA**/**C100PA-DS03**, **C213**
    - Dell Chromebook 3189
    - Lenovo Chromebook **N22**, N23, **N42**
    - Acer Chromebook R13, **R11** **(CB5-132T, C738T)**

    - http://www.androidpolice.com/2017/08/23/chromebooks-asus-lenovo-dell-get-play-store-chrome-os-stable/

- Minimum specs: 4GB DDR3L, 32GB
  - When it comes to RAM, Chromebooks come with either 2GB or 4GB. While models with 4GB are more expensive, we've found that difference to be worth it for multi-tasking.
  - For Storage, spring for a 32GB model now if you're buying with Android apps in mind. 64GB if you're thinking of running Linux. Keep in mind that (most) Chromebooks have an SD storage slot which allows you to add 128GB or more of storage to the system.

Buy Refurbished

On-line Chromebook training

- Set up Your Chromebook [LEARN HOW](#)

- Customize the Shelf [LEARN HOW](#)

- Sign In or Add Users to a Chromebook [LEARN HOW](#)

- Edit Drive Documents Offline [LEARN HOW](#)

- Using Gmail Offline [LEARN HOW](#)

- Finding and Assigning GPfE Content [LEARN HOW](#)

- Uninstall Apps from Student Devices [LEARN HOW](#)

- Navigate the Chromebook Help Center [LEARN HOW](#)

Set up Your Chromebook [LEARN HOW](#)

1. **Turn it on**

2. **Follow the on-screen instructions**
   - Sign in with your Google Account. This account will be [set as the owner](#).

3. **Choose your profile picture**

4. **You're done!**

Customize the Shelf [LEARN HOW](LEARN%20HOW)

- Add an app
  - Click the Launcher ◯❯ **All Apps**
  - Find the app you want to add.
  - Right-click the app icon
  - Pin to Shelf
- Change the order of the apps
  - Click and hold, drag, and release
- Remove an app
  - Right-click the app you want to remove
  - Click **Unpin**

Customize the Shelf [LEARN HOW](#)

- Pin a webpage to your desktop
  - Open the webpage in Chrome
  - Click More ⋮ > **More tools**
  - Click **Create Shortcut, Create**
- Move or hide the row of apps
  - Right-click the shelf
  - Point to **Shelf position**
  - Choose where you'd like the shelf to go: on the bottom of the screen (default), or on the left or right side

Sign In or Add Users to a Chromebook [LEARN HOW](#)

- Add a person to your Chromebook
  - If you're signed in to your Chromebook, sign out
  - On the bottom, click **Add person**
  - Enter the Google Account email address and password, then click **Next**
  - Follow the steps that appear

Edit Drive Documents Offline [LEARN HOW](#)

- Work on Google Drive files offline on your Chromebook
    - Step 1: Make Google Drive available offline
        - Connect to the Internet
        - Open the [Google Docs Offline extension](#)
        - Click **Add to Chrome**. ("Added to Chrome" means the extension is already added)
        - Go to [drive.google.com/drive/settings](#)
        - In the "Offline" area, check the box (it takes a few minutes for the offline access to turn on)
    - Step 2: Work on a file offline (when you're not connected to the internet)
        - Click the Launcher ◯ ❯ **All Apps**
        - Click Google Drive
        - Find the file you'd like to work on, and double-click it to open
        - Work on your file - any changes will sync to Google Drive the next time your Chromebook connects to the Internet

Edit Drive Documents Offline LEARN HOW

- Make specific files available (for offline use)
  - Follow Step 1 (previous slide) to make Google Drive available offline
  - Click the Launcher ⬭› **All Apps**
  - Click Google Docs 📄, Google Sheets 📊, or Google Slides 🟨
  - On the file you want to use offline, click **More**
  - Click **Available offline** – move the slider to make the file available offline
- Stop seeing files offline
  - Go to drive.google.com/drive/settings
  - In the "Offline" area, uncheck the box

Using Gmail Offline [LEARN HOW](#)

How to Set Up Offline Gmail on Your Chromebook

- **Open Gmail**.
- Click the Gear icon in the upper right corner.
- Select Settings.
- Select **Offline** from the list of tabs.
- Select **Enable Offline Mail**.
- Select the appropriate options and **Save Changes**

Navigate the Chromebook Help Center [LEARN HOW](#)

- **Get started with Chromebooks**
  - [Considering a Chromebook?](#)
  - [New to Chromebooks](#)
  - [Tour of your Chromebook](#)
  - [Sign in](#)
- **Connect your Chromebook**
  - [Connect your Chromebook to Wi-Fi](#)
  - [Connect to other networks](#)
  - [Connect to other devices](#)
  - [Fix connection problems](#)

Navigate the Chromebook Help Center [LEARN HOW](#)

- **Manage your apps**
  - [Add apps and extensions](#)
  - [Files and downloads](#)
  - [Web browsing](#)
- **Personalize your Chromebook**
  - [Appearance and language](#)
  - [Users and sync](#)
  - [About managed devices](#)
  - [Operating system and browser](#)
  - [Advanced settings](#)
  - [Privacy](#)
  - [Accessibility](#)

Navigate the Chromebook Help Center [LEARN HOW](#)

- **Photos**
  - [Take a photo with your Chromebook](#)
  - [Open and edit photos](#)
  - [Back up photos from your camera or phone](#)
- **Printing**
  - [Set up your printer](#)
  - [Print with Google Cloud Print](#)
- **Device support**
  - [Fix Chromebook problems](#)
  - [Get help from your Chromebook manufacturer](#)