

Android Cell Phone Basics

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There is a glossary at the end of this handout that defines and explains acronyms and technical terms, and an index to quickly find how to do a particular task!

Updated: 17 April 2025

Google Accounts

Android is Google's operating system, and as such things will be easier for you if you sign in with a google account. If you already have gmail, then you already have a google account.

Before you get ready to set up your phone, find your gmail address and password. If you are not sure what your password is, you can reset it from the gmail website. (<https://myaccount.google.com>)

Anatomy of an Android Device

Unlike iPhones, which are strictly standardized by Apple, Android phones vary from maker to maker, and version to version. A Samsung Galaxy S24 is going to be different from a Galaxy S9 and just as different from a Motorola Moto or a Google Pixel. This means that you may want to physically hold the different devices to see which is most comfortable as well as look at the operating system.



Android phones should come with a USB-C port, and many come with wireless charging. You will need to check your device to determine what port and charging ability your phone has.

Home Screen

The home screen is what you see once you unlock your device. This home screen is endlessly customizable, but these are some important parts most people have available on their home screens.

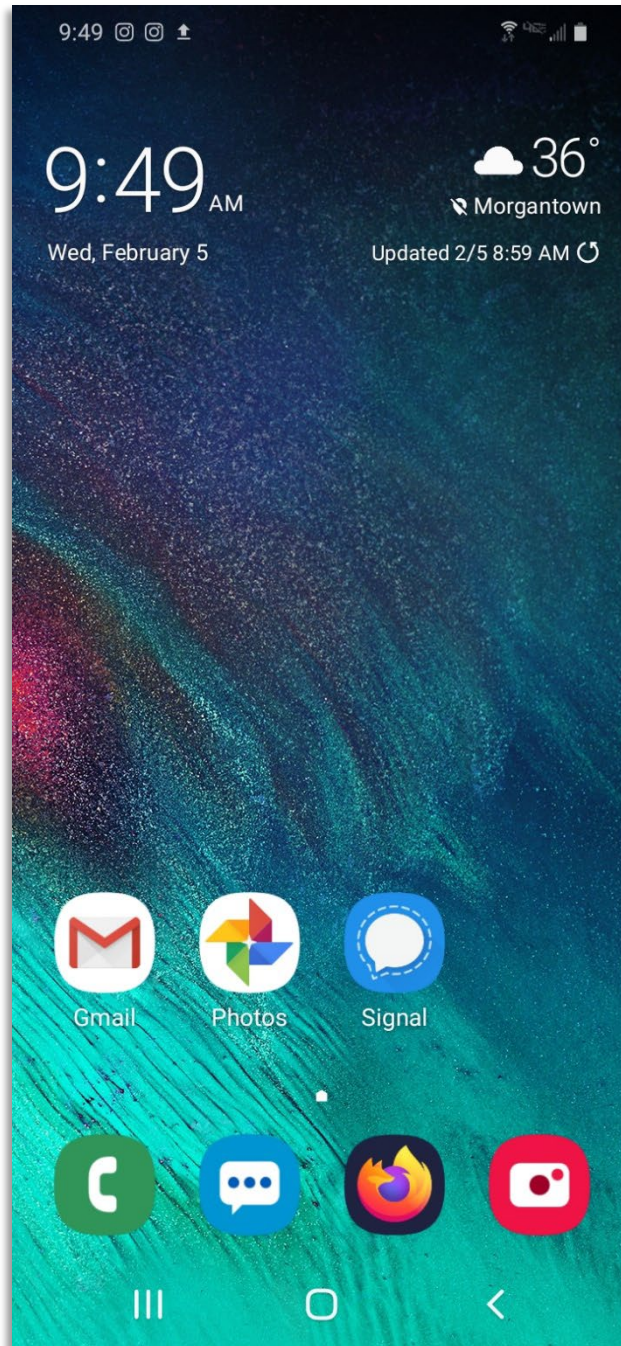
Notifications

Widgets

Shortcuts

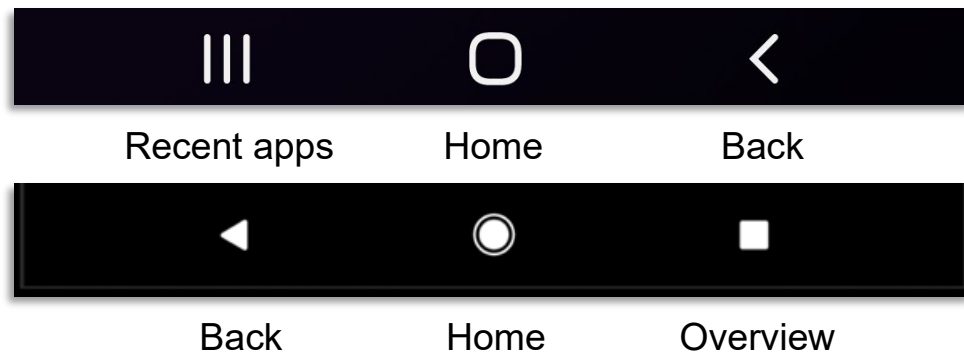
Favorites tray

Navigation bar



Navigation Bar

Android devices will generally have three buttons (usually digital) along the bottom.



The Recent apps / overview button lets you scroll through all currently open apps to quickly jump to a application running in the background. This is also where you go if you want to close all currently running apps.

The middle button is the “Home Button”. On older devices this may be a physical button on your device. Tapping the Home button will always take you back to what you have designated as your main screen. You can organize your device screens so that your most important apps and widgets are available on your primary Home Screen.

The “Back” button is generally a triangle or less than sign. If you aren’t sure of what is going on, retreat from your current position using the Back button. You can usually tap the back button multiple times to return to a previous menu option or setting.

If you don’t see those buttons, swipe up from the bottom of the screen to make them appear.

Status Bar

The status bar appears at the top right of the phone screen. Here you have icons for the status of your data, wireless, and Bluetooth, as well as how full or empty your battery is.

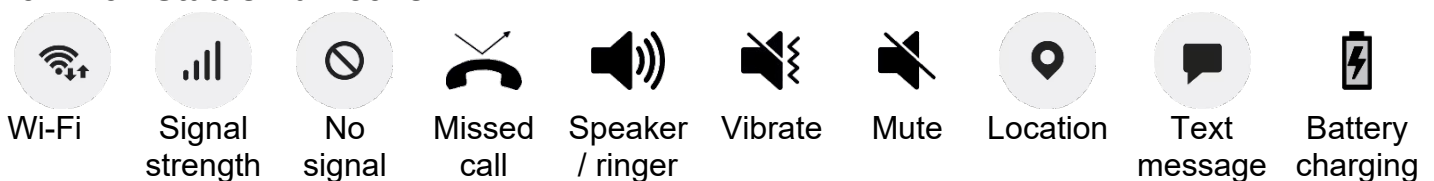


Notifications



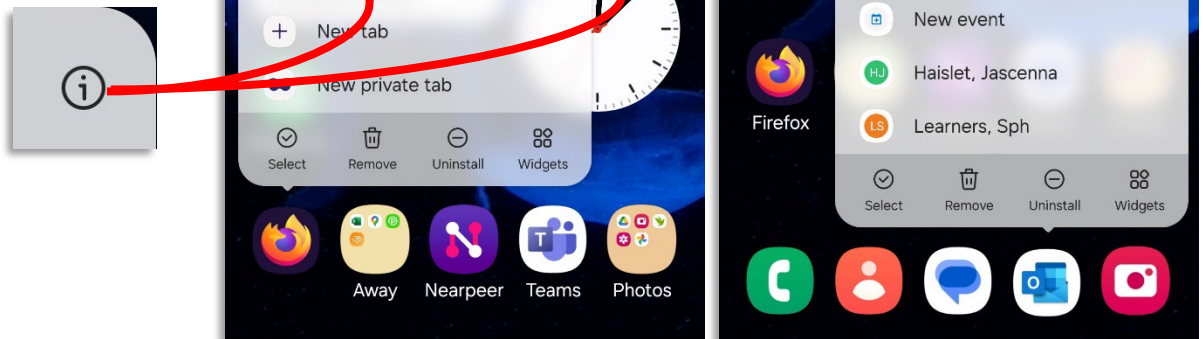
On the left side of the status bar are your notifications: new text messages, missed phone calls, and other notifications plus the current time.

Common Status Bar Icons

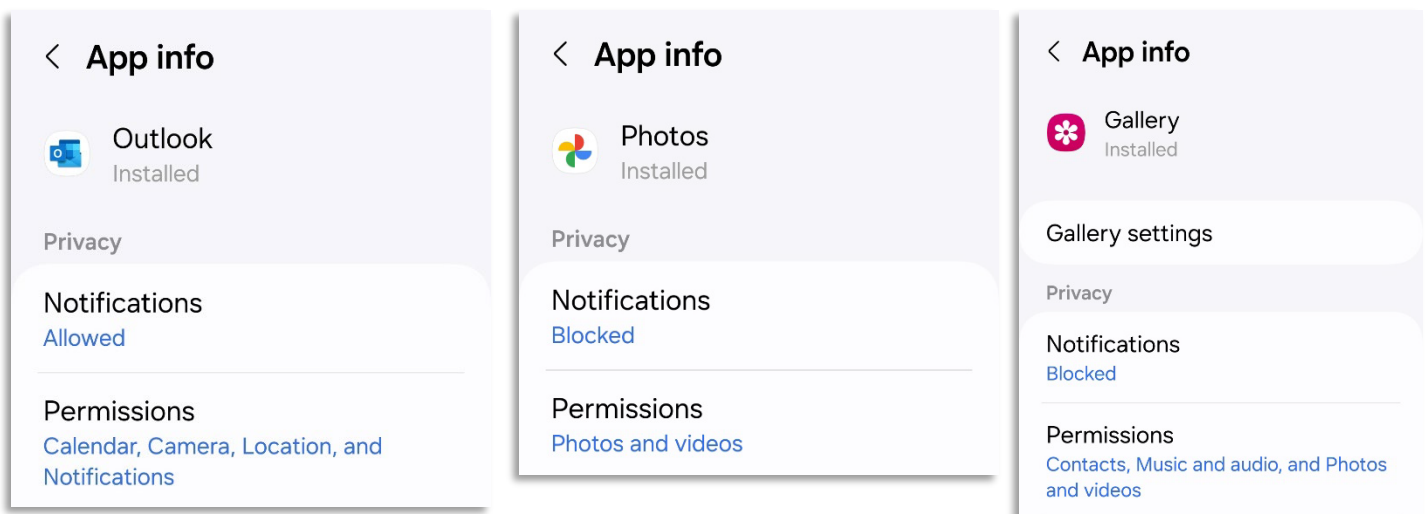


App Notifications

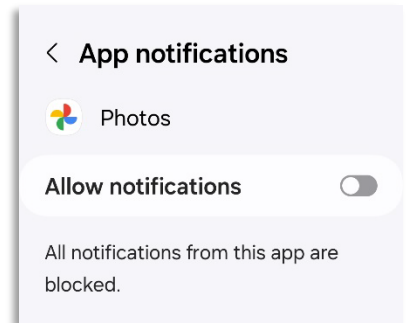
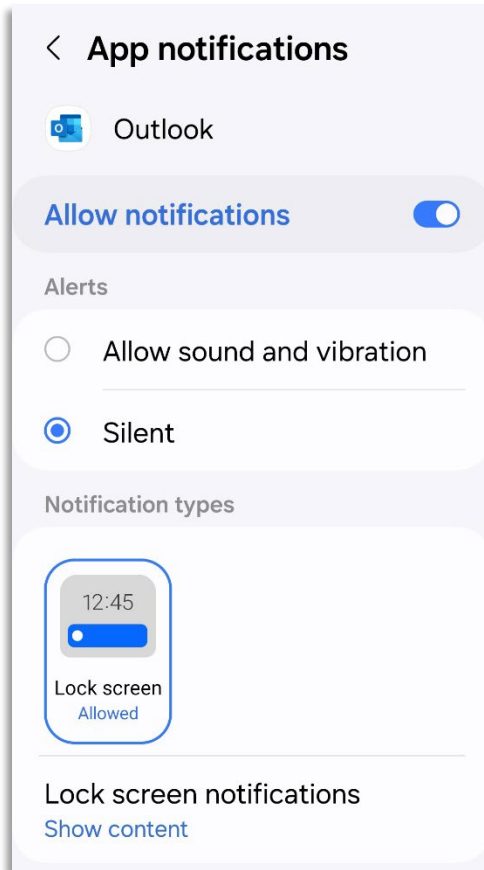
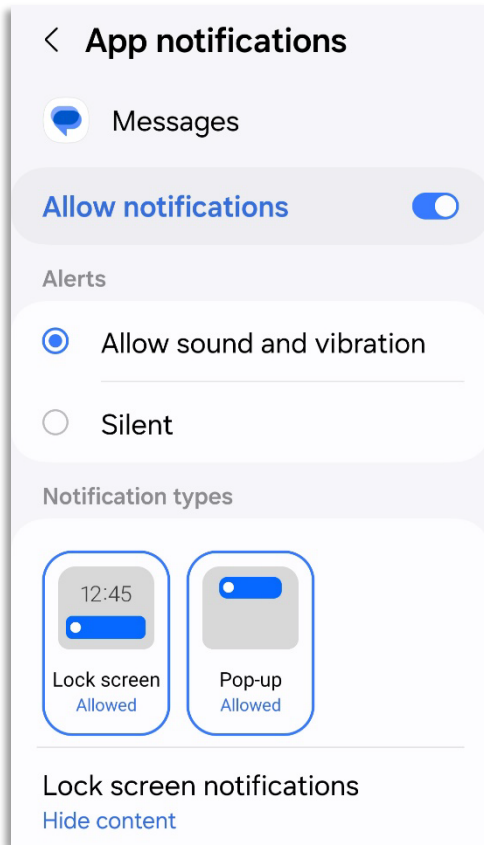
1. Press and hold any icon whose notifications you want to modify.
2. A menu pops up. In the top right corner of the menu tap the *information* icon.



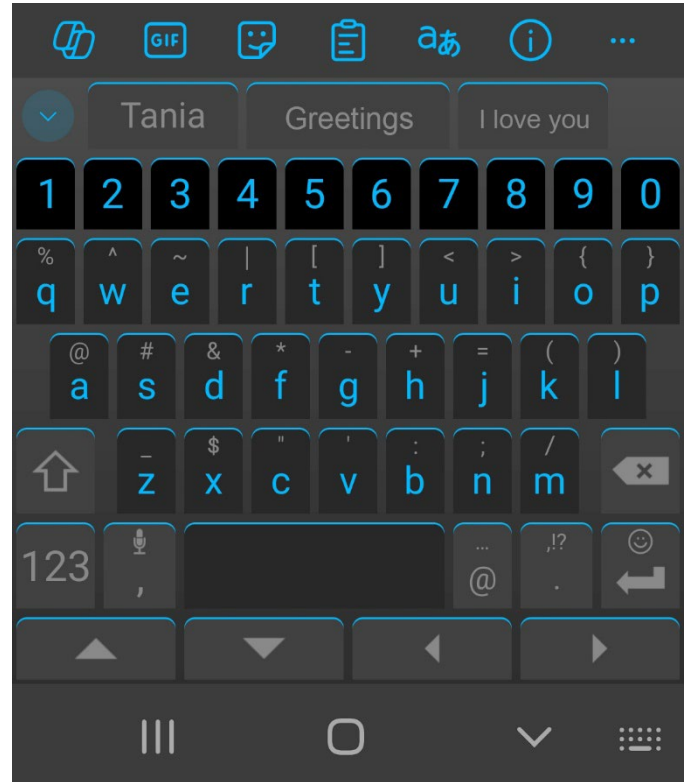
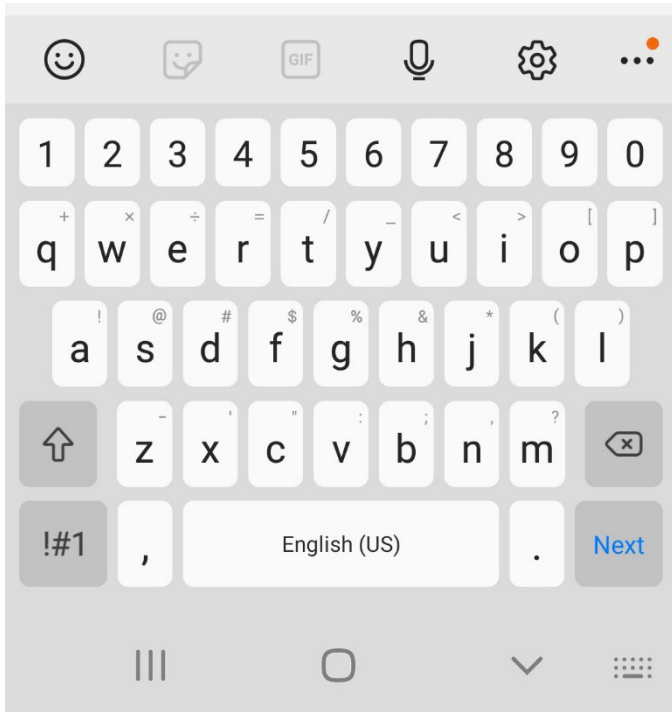
3. Your App settings open (you can also get to this menu by going to Settings > Apps and selecting an app from the list).
4. Scroll down until you see **Notifications**. Tap Notifications.



5. You can toggle off **Show notifications** or if you want some notifications, you can go through the list and select which notifications you would like.



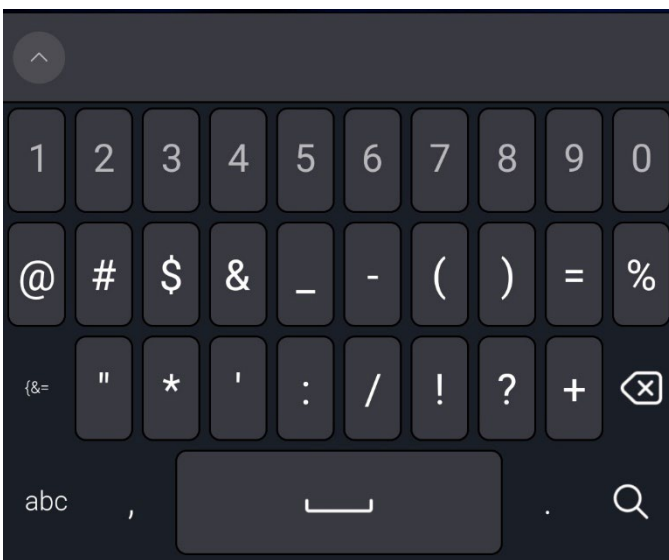
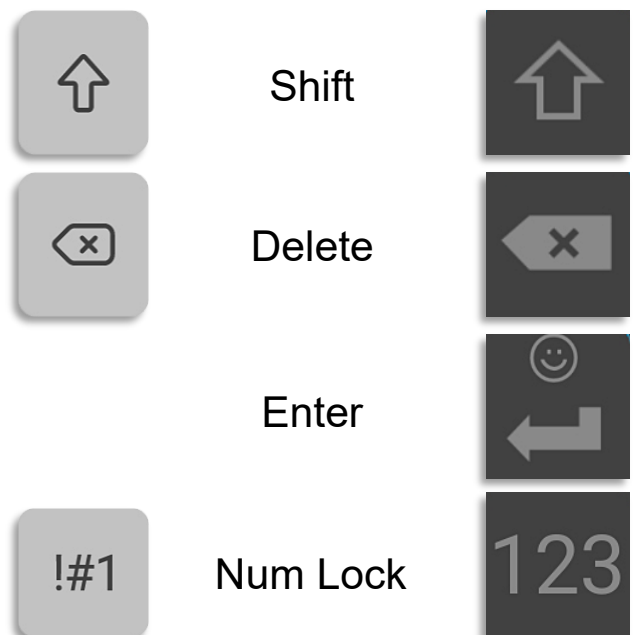
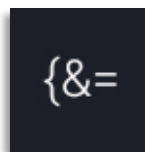
Keyboard



There are several ways to access special characters from your virtual keyboard.

If you tap the Num Lock key, the most common special characters appear on your virtual keyboard.

To see additional special characters, click the special character virtual key,



Common Apps



Phone



Contacts



Messages



Mail



Gallery



Camera



Settings



Maps



Play Store

- Phone** Bring up the dial pad to make phone calls.
- Contacts** Brings up the directory of everyone in your address book.
- Messages** The default text messaging app for your phone.
- Mail** The default email application on your device.
- Gallery** The default location to scroll through the pictures on your device.
- Camera** The camera for your device.
- Maps** Google maps, the default mapping app for android phones
- Play Store** The Android app store where you go to find new or different programs.

Gestures

There are many different gestures you can use to manipulate your device.



Tap



Press & hold



Zoom



Swipe down



Swipe up



Swipe right



Swipe left

Home Screen Gestures

- | | |
|--|-----------------------|
| Swipe down from the top of the screen with one finger | Quick settings |
| Moving two fingers apart or together | Zoom in or out |
| Swipe up from the middle of the screen with one finger | Open App drawer |
| Swipe down from top of app window | Refresh |
| Long press an icon | Move / remove an icon |



Keep in mind that getting a stylus (capacitive pen) can be very helpful in manipulating your device if you feel like you're often hitting the wrong icons or letters.

Settings

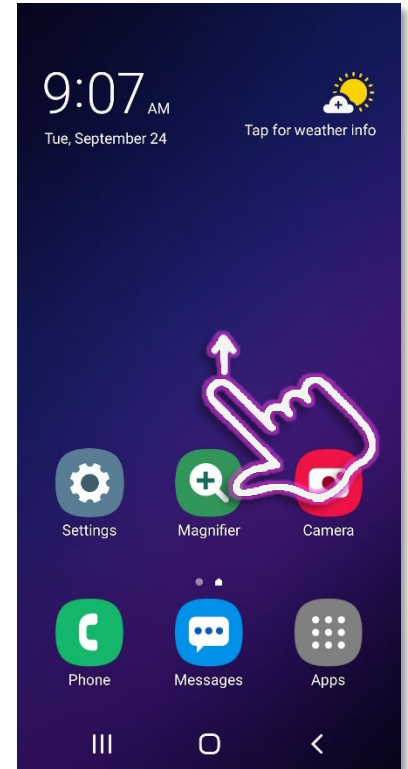
Most of the things you might want to change or personalize will be accessed from Settings. You can access your settings from quick settings, from an icon on your home screen (if you have one there—many people don't) or from your App Drawer. Once you have your settings open, you can either scroll through the various menus or search from the Search / Finder box.

To Access Android Settings

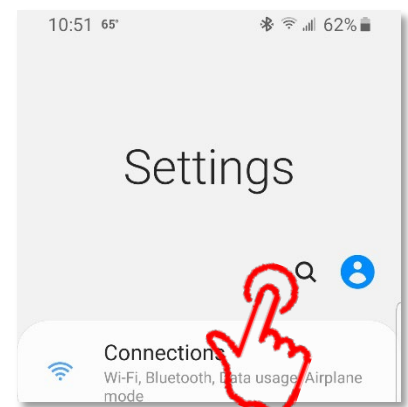
1. Swipe up the screen to open the App Drawer, then select **Settings**.

OR

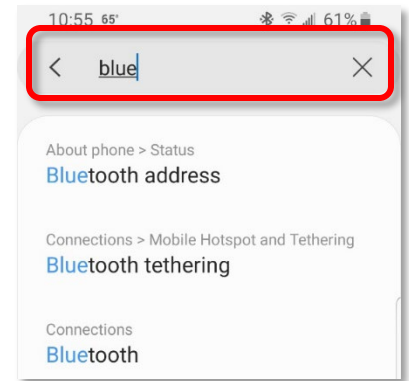
Drag your finger down from the top of the screen to open **Quick settings**.



2. This is where it can get complicated because different versions of the Android OS and different phone models will be organized differently. The easiest way to find a specific setting is to search for it. Look for a **magnifying glass icon**, and then tap it.

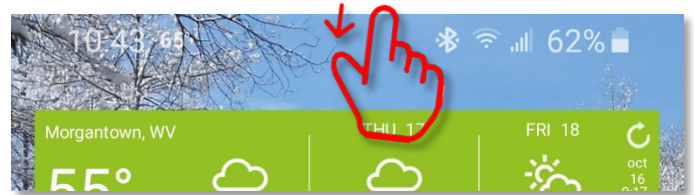


3. In the **Search box**, start to type in the setting you want to modify.
4. A list of matches appears, and filters as you type. Once the setting you need appears, tap it.

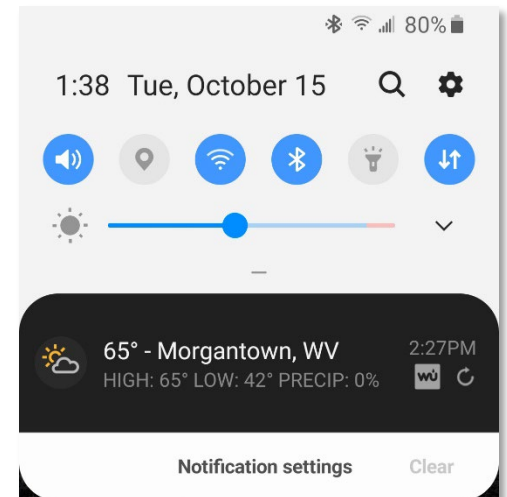


Quick Settings

Quick settings is the area of the phone I go to most frequently. You access it by pulling down from the Status bar at the top of the screen.

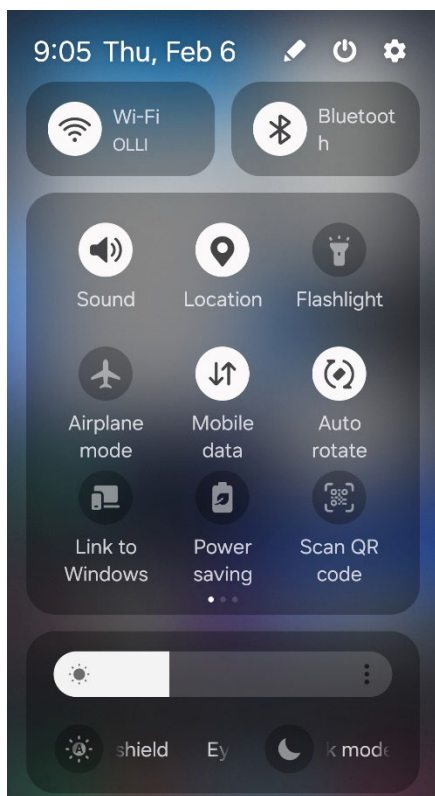


By default, there are toggles there for things like volume and Bluetooth, but you can modify this area to make the toggles you use most available at the top. (For those with limited cell plans, you can put a toggle for mobile data at the top of the list; I always move the flashlight toggle to the top.)



This area is also where you can dismiss the notifications that pile up in the top left corner of your screen. Once you pull down, you can select a notification to view more, or you can clear all the notifications.

Dragging down below the brightness slider will display more Quick Toggles, and is also where you go to edit the order in which your buttons (quick toggles) are displayed.



Wireless

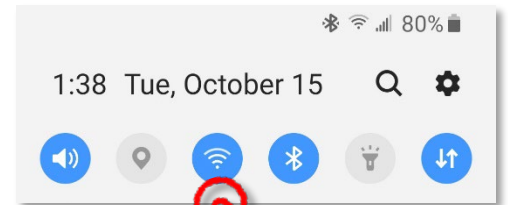
If your device has a limited cellular data plan, you will want to connect your phone to wireless as often as you can.



Although places like coffee shops often have free wireless available for their customers, you should be extremely careful when connecting to open wireless connections—any information you pass over that connection could be visible to anyone who cares to look.

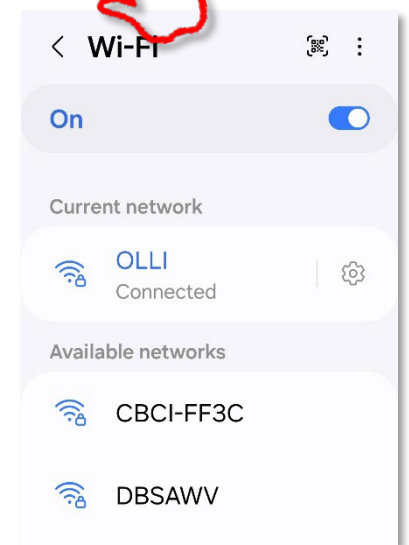
To Turn Wireless Off and On

1. Pull down from the top of the screen to access your Quick Settings. (See page 5).
2. Tap on the Wireless icon to toggle the wireless on or off.



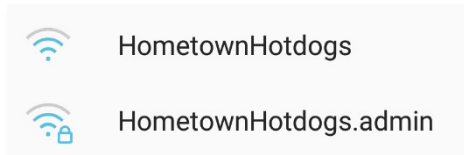
To Select a Wireless Network

1. Open your settings and search for Wi-Fi.
- OR**
- Long press on the wireless icon.
2. A list of available networks will appear.
 3. Tap on the network you want to join.
 4. Enter the password for the network when prompted.



Secured vs Unsecured Wireless Networks

You can tell at a glance whether a wireless network is secured or unsecured by checking for a “lock” on the wireless icon.



You should also be required to enter a password to access a secured wireless network.

Please be aware, however, that you should not send personal information over a public network, even if it is secured.

Airplane Mode

Toggling on Airplane Mode turns off your [mobile data](#), [Bluetooth](#), [wireless](#), if applicable. Once you have turned on Airplane mode, you have the option to selectively turn on wireless or Bluetooth, to use headphones or other linked devices.

Bluetooth

Bluetooth is a wireless technology that allows communication between devices over a short distance.

Some common Bluetooth devices are speakers, headphones, and wireless mice, but Bluetooth can also be used to transfer files between devices.



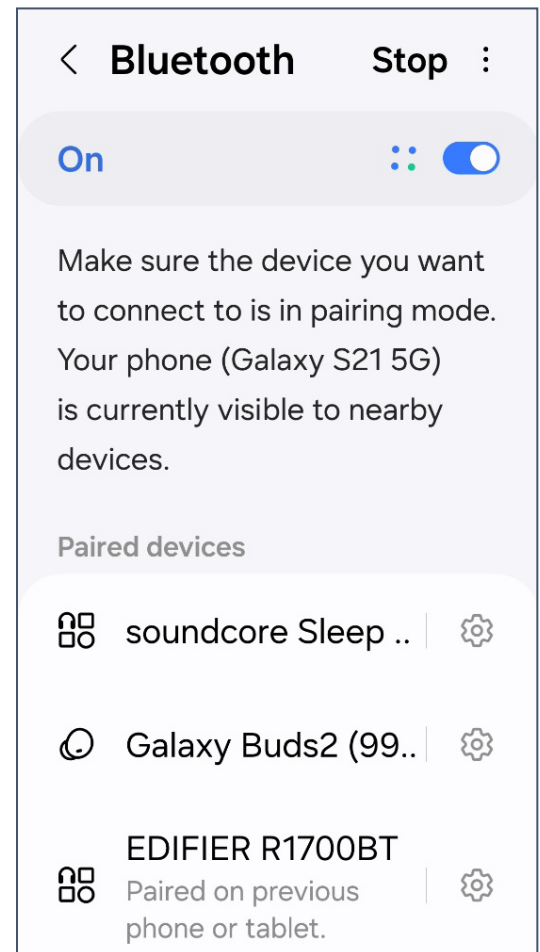
Adding a Bluetooth Device

1. Open your **Settings** and search for **Bluetooth**.

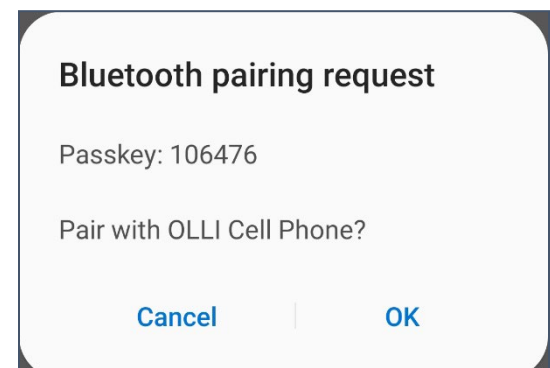
OR

Open your **Quick Settings** and **long press** on the **Bluetooth** icon.

2. A list of available and paired devices is listed at the top. Scroll down to the bottom of the screen for **Available devices**.
3. If the device to which you want to connect is not listed, tap **Scan**.
4. When the device you want to link to appears, tap it.



5. If the devices can pair, you may receive a message for a pairing request. Click **OK**.



Android Version vs Phone Model vs Carrier

Unlike Apple, who mandates that all version of iOS across carriers must look exactly the same, the versions of Android vary by phone model and by cellular provider. You also have the ability to customize your operating system. This makes Android devices marvelous to use, but difficult to support, since no two devices are going to be quite the same.

The information about your device can generally be found in your device settings, under **About phone**. Your device model may also be on the back of your device, but that area is often hidden by a screen protector.

Finding Your Device Information

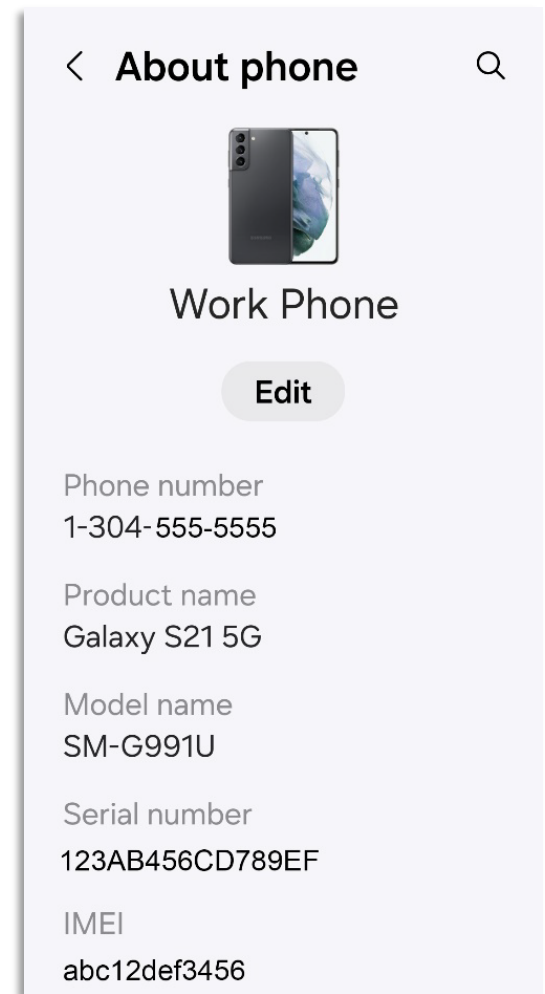
1. Open your **Settings**. (See page 5)
2. Search for **About phone**.

Name – You can give your device any name you want. This is often helpful when connecting via Bluetooth or wireless, since you can easily recognize your device. Tap **Edit** to rename your phone.

Model number – This is the technical model of your device. (The model number SM-G960U is a Samsung Galaxy S9 64GB)

Product name – if you have this option, this is what you would use to search for help.

Everything else here is probably gibberish to you, but if someone asks, this is where you'd find that information.



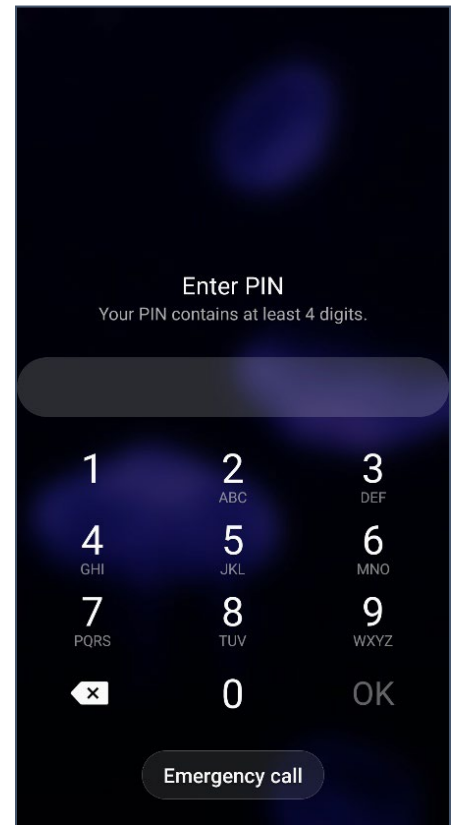
Lock Screens and Security

Your screen should automatically lock when you walk away from your phone. You have the option of setting a Pattern, a PIN, or a Password. I recommend using a PIN (Personal Identification Number) because it's more secure than a pattern, but easier to type than a password. (The keyboard for a PIN is larger.) You can also set up biometrics and use your fingerprint or face or iris to login.

If you choose a PIN (recommended) you must have a minimum of 4 numbers. The more digits in your PIN, the more secure your device.

Your lock screen appears after you wake up your phone. From your lock screen, you have the ability to make an emergency call. (See page 23)

One thing that makes using a lock screen less painful is to change the time before your phone locks.

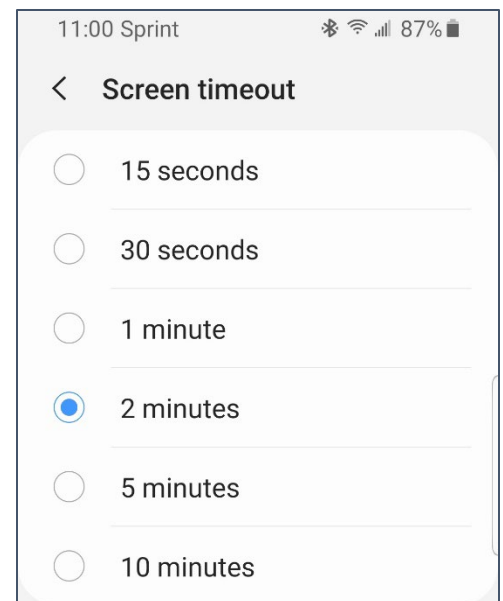


Changing Your Screen Timeout

1. Open your Settings. (See page 5)
2. Search for **Screen timeout**.
3. Select **Screen timeout**.
4. Lengthen the time before your screen timeout occurs.

Turning On Your Lock Screen

1. Open your Settings. (See page 5)
2. Tap **Lock screen**.
3. Tap **Screen lock type**.
4. Select the type of screen lock (I recommend PIN).
5. Set your PIN. I recommend using at least 6 digits.
6. Immediately make note of your PIN in a safe place.



Home Screens

You can have multiple home screens available on your device, or just a single screen—this flexibility allows you to customize your device. On your screens you can have apps, folders, and or widgets (small apps that display content such as the weather or your calendar).

You move from screen to screen by swiping left or right on the home screen.

If you are a minimalist, you may want to remove all the individual icons from your screen, leaving just the few you access regularly. Once you do that, you may have extra home screens, which you can easily remove.

Removing a Home Screen

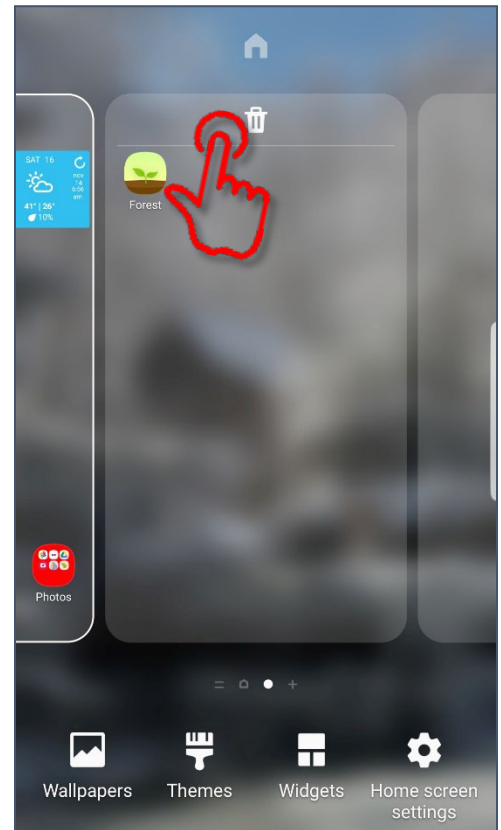
1. Pinch the screen with two or more fingers.
2. The screen changes to display options for modifying the home screen.
3. Use your finger to scroll to the extra screen you want to remove.
4. Tap the trash can icon at the top of the screen.



Conversely, you may want to add an additional home screen, either to organize your app icons or to add a full screen widget (like a monthly calendar).

Adding a Home Screen

1. Pinch the screen with two or more fingers.
2. The screen changes to display options for modifying the home screen.
3. Use your finger to scroll to the far right screen.
4. Tap the plus sign (+) to add an additional home screen.

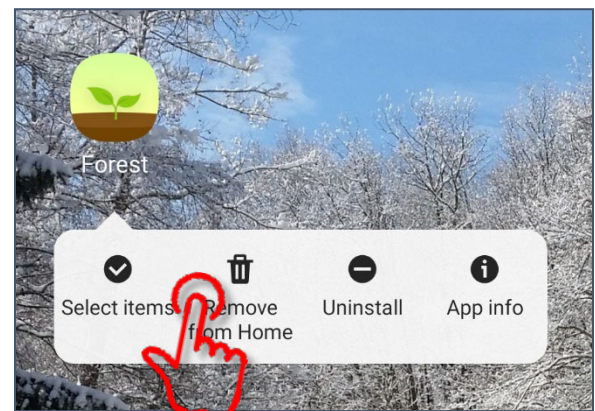


Apps or Folders on the Home Screen

When you install a new app it typically adds an icon to your home screen. This makes the app easier to find, but if you prefer a minimalist home screen, it can often clutter things up.

Removing Apps and Folders from the Home Screen

1. **Tap and hold** the icon you want to remove, until a menu appears.
2. Tap **Remove from Home** to keep the program installed but remove it from your home screen.

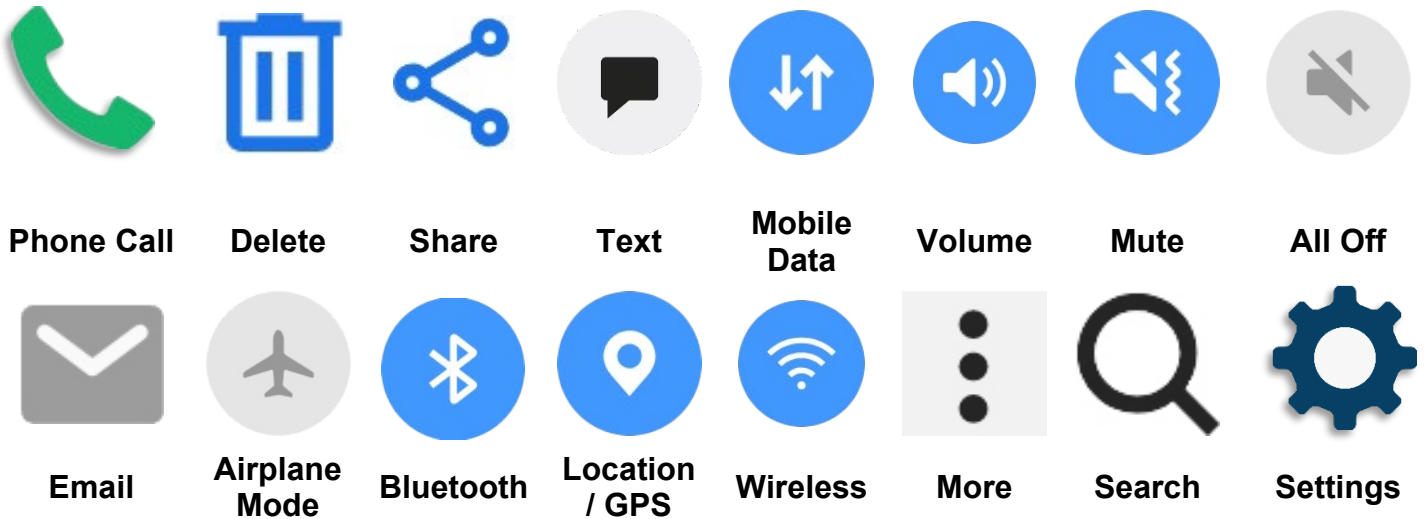


Easy Mode

Your device may have a built in Easy Mode or Simple Mode, which increases text and icon size, reduces clutter, and some other features.

If your phone does not come with an easy mode, there are apps you can download to simplify the User Interface (UI).

Common Icons



Accessibility

There are many different things you can do to make your device easier to use. Many of these options are located in your Settings under **Accessibility**; in this handout we'll look at just a couple of individual settings.



Hearing Enhancements

1. Open your **settings**.
2. Select **Accessibility**.
3. Scroll to **Hearing enhancements**.

Hearing Aid Support

Your audiologist should be able to help you connect your hearing aids to your phone.

Live Caption

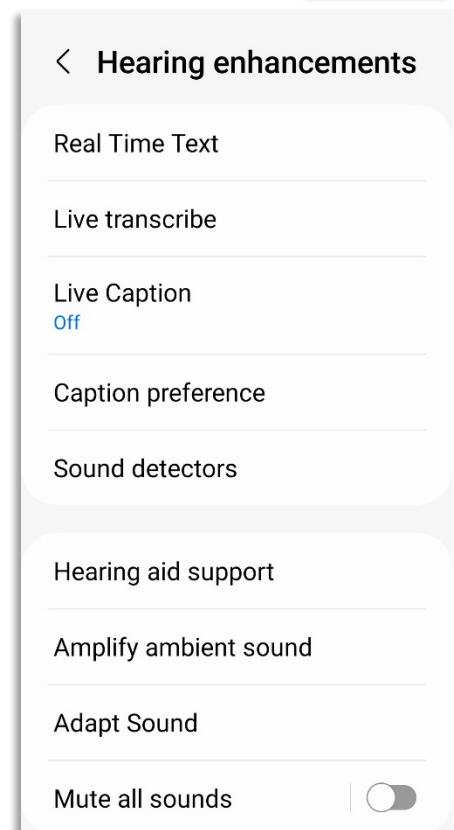
Captions speech that comes from your devices, like videos and podcasts.

Live Transcribe

Captures speech and sound and sends them to your screen as text.

Some Samsung Galaxy phones can be used with some Galaxy ear buds to take advantage of hearing assist features.

You can read more about cell phones with hearing assist features here: <https://olliatwvu.wpcomstaging.com/archives/13566>



Vision Enhancements

1. Open your **settings**.
2. Select **Accessibility**.
3. Scroll to **Vision enhancements**.

Remove animations

Reduces automatic movement in apps and settings.

Magnification

Temporarily zoom your screen.

Magnifier

View real world objects, larger.

Other useful options may be:

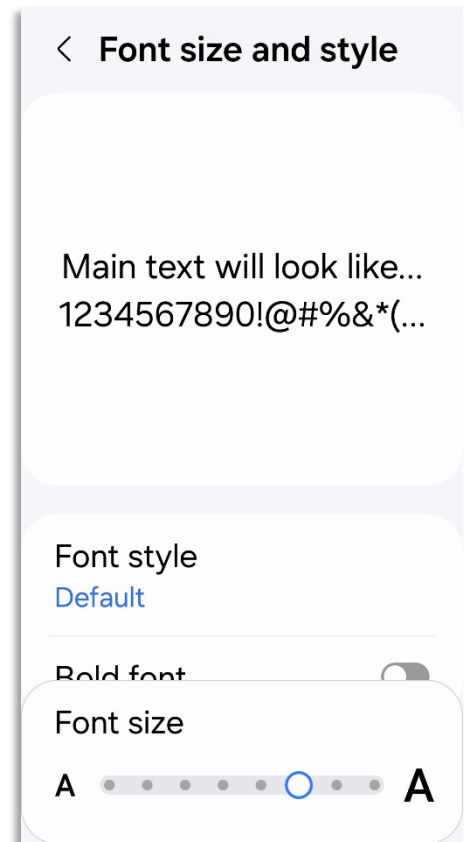
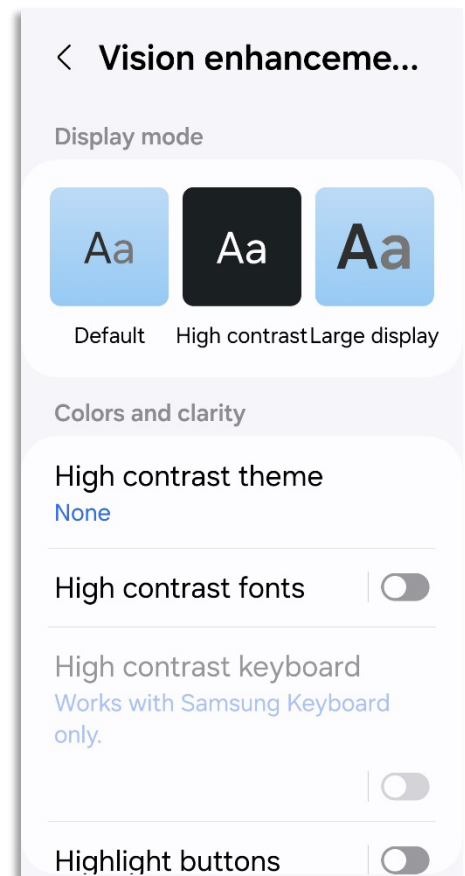
- Larger mouse / touchpad pointer
- High contrast theme
- High contrast fonts

Font Size

One of the easiest things to change on your device is to change the font size. This makes all the text larger.

Changing Font Size

1. Open your **Settings**.
2. Search for **font**.
3. Select **Font size and style**.
4. Use the slider to make the text larger as needed.

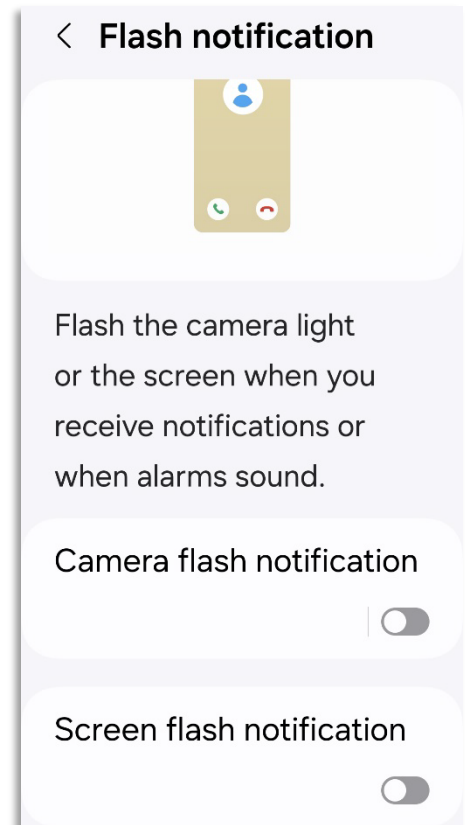


Flash Alerts

Flash alerts cause your camera or screen to flash when you receive a notification.

Toggling Flash Alerts

1. Open your **Settings**. (See page 5)
2. Search for **flash**.
3. Select **Flash notification**.
4. Select Camera flash or Screen flash as desired.



Interaction and Dexterity

Interaction and dexterity provides modifications for those with touch related issues such as tremor and reduced mobility.

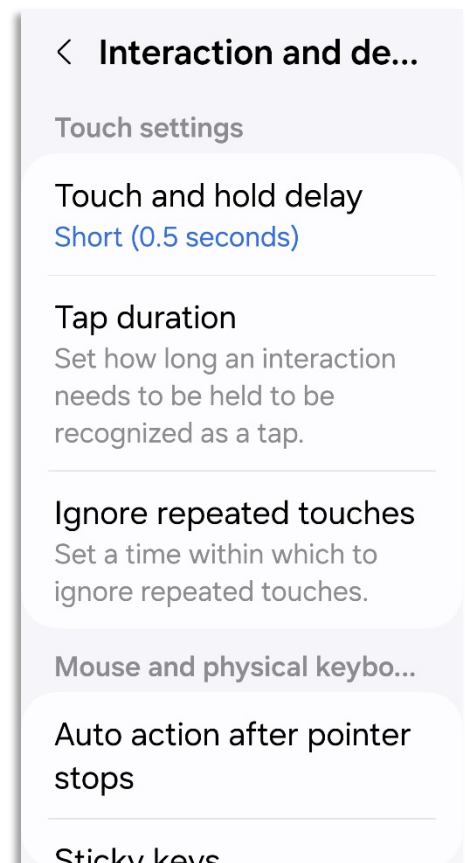
1. Open your **Settings**.
2. Select **Accessibility**.
3. Scroll to **Interaction and dexterity**.

Answering and Ending Calls

Your phone can read caller names aloud, when those names are available.

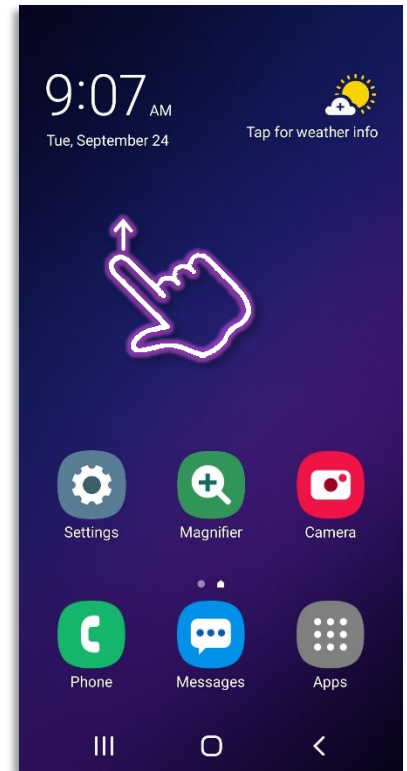
Other useful options:

- Ignore repeated touches
- Touch and hold delay
- Tap duration

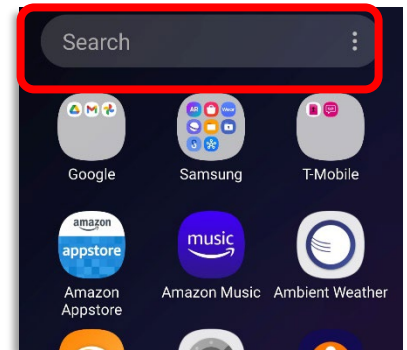


The App Drawer

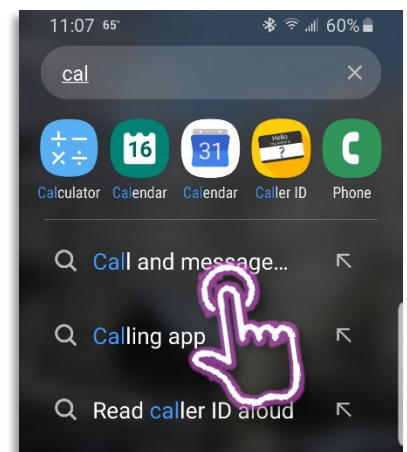
1. Place your finger in an empty area of your screen and swipe UP.



2. Most of your apps should be available from here. You can have many many screens worth of apps, or you can create folders and place individual apps in them. So just as with settings, the easiest way to find an app is to search for it. At the top of the screen, tap in the Finder / Search box. Begin to type in the name of the app for which you are searching.



3. As you type, a list of matching apps and settings appears. Tap one of the icons to open that specific app. Tap the text underneath the icons to open a setting or informational dialog to make sure everything meets your privacy preferences.

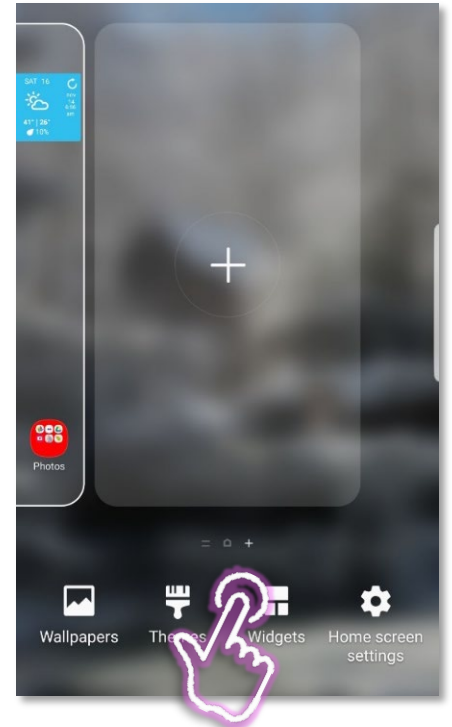


Widgets

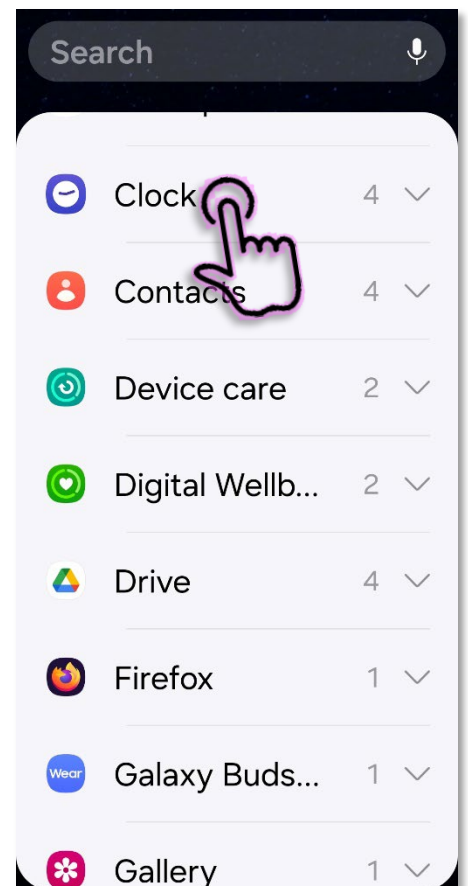
Widgets are quick links to apps you have installed that often display information on your home screen. One of the most common widgets is a weather widget—when open your device, it will display the current temperature and conditions. Other widgets can display the number of steps you've taken, audio controls, or upcoming appointments.

Adding a Widget

1. Scroll to the home screen where you want to place the widget.
2. Pinch the screen with two or more fingers.
3. The screen changes to options for modifying the home screen.
4. Tap the **Widgets** icon towards the bottom of the screen.



5. Swipe with your finger to scroll through the list of available widgets until you find the one you want. Depending upon the app, there may be more than one widget available. You can determine that by looking in the upper right corner of a widget box. If there is a 2 or 3 (etc) there are different widgets for that program from which you can choose.
6. Tap to select the widget you want to use. If there are multiple options, you will be prompted to select the one you want.
7. You can now place the widget precisely where you want on the screen.
8. Depending upon the program, the app may open to allow you to customize the widget.



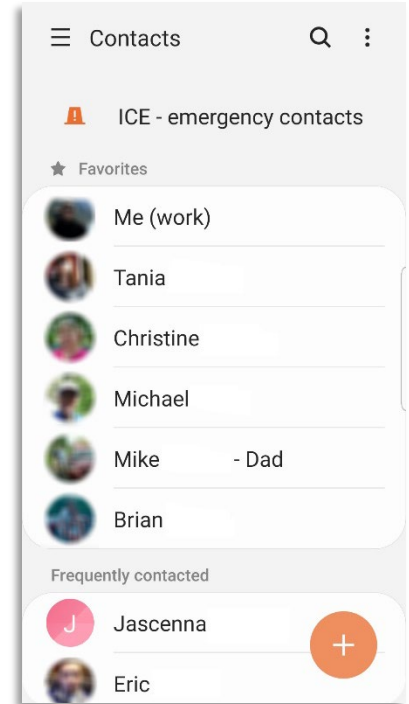
Contacts

Although you have the option to have your contact list exist only on your phone, it is recommended to have your contacts synced to the cloud. This means that not only does your address book follow you from device to device, but also allows you to edit your address book on a computer, rather than having to make changes on your phone.

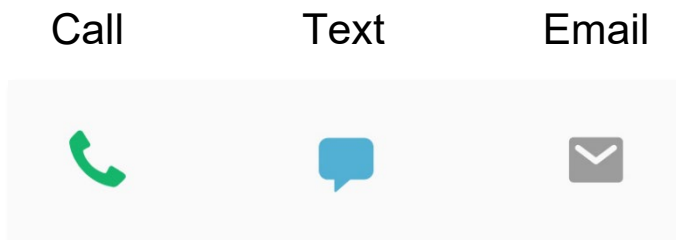


Viewing Contacts

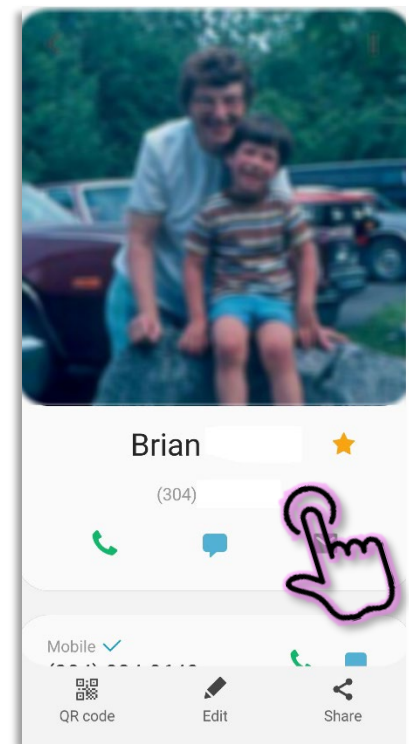
1. Tap the **Contacts** icon.
2. Your address book opens. You can scroll through the list and select a contact.
3. You can add a new contact by tapping the plus sign (+) icon in the lower right corner.



4. The screen changes to display the selected contact. There are three options directly below the contacts name.
5. Tap the star to make contact a **Favorite**.



6. Tap the **Edit** (pencil) icon to modify the information for the selected contact.
7. Scroll down to the address. Tap on the GPS icon beside the address to open that location in Google Maps.

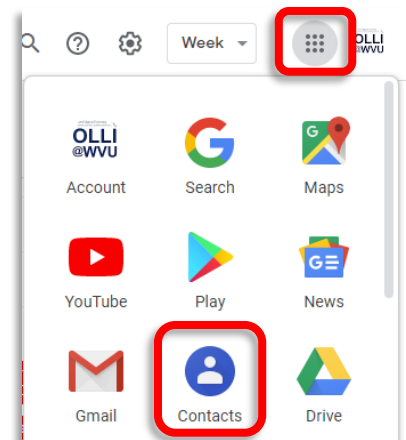
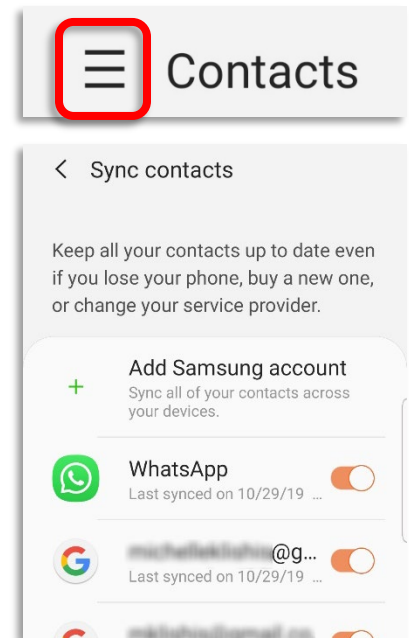


Syncing Contacts

You have the option to sync (or not) the address book attached to any email account on your device.

Selecting what Accounts are Synced

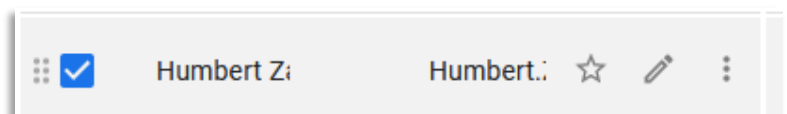
1. Open your **Contacts** (this is not the same as opening the dialer and selecting contacts from there).
2. On the left side of your contacts screen, click the three parallel lines or three dots to view more options.
3. Scroll down until you see **Manage Contacts** and tap.
4. Tap on **Sync contacts**.
5. A list of your email and messaging accounts is displayed. Toggle the accounts to select what is synced.



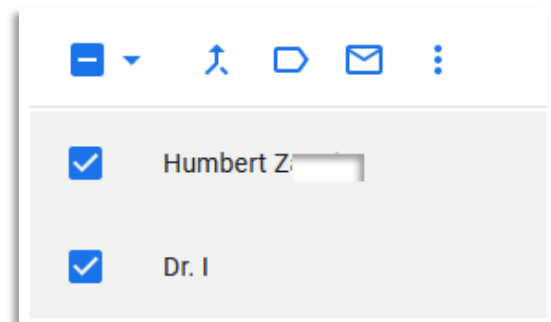
Editing Gmail Contacts on the Web

You can edit your address book from the web as well as from your phone, including setting favorites and ICE contacts.

1. Log into your Gmail account.
2. Tap on the Google apps icon (the square of squares).
3. A menu of icons appears. If you do not see contacts tap **More**.
4. Tap the **Contacts** icon.
5. Your address book opens.
6. When you hold your cursor over a single address, you will see on the far right of the screen an **Edit** option.



7. When you hold your cursor over the icon / picture beside someone's name, a check box appears. You can select multiple contacts using the text box.
8. The icons that appear along the top of the screen when you select multiple contacts allow you to do things like merge duplicate contacts into a single contact or send an email message to all the selected contacts.



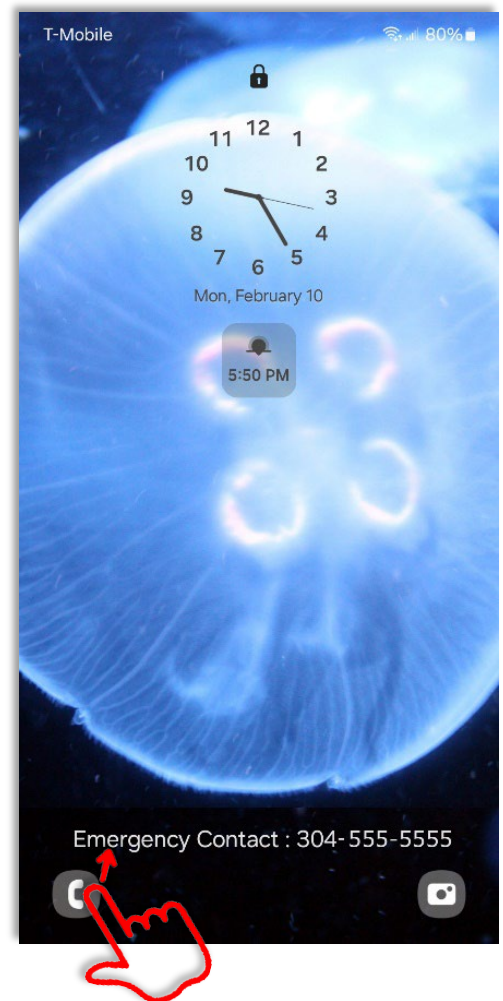
Emergency Calls and Contacts

Emergency calls can be made without having to unlock your phone. Generally, they are made to existing contacts that have been designated as ICE (In Case of Emergency) or Emergency contacts.

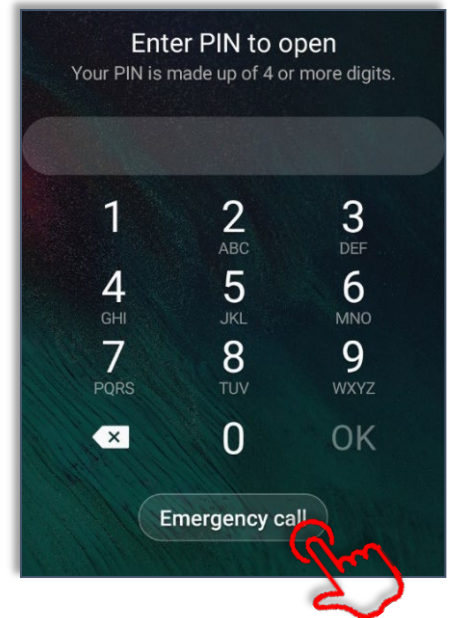


To Make an Emergency Call

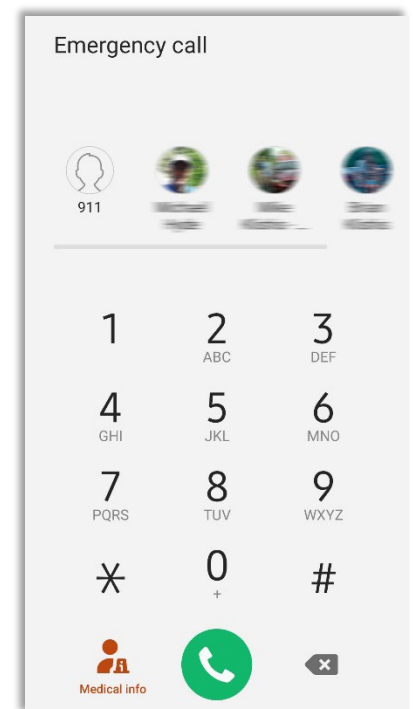
1. Wake up the phone.
2. In the lower left corner, swipe up from the phone icon.



3. Tap **Emergency** or **Emergency Call**.



4. The emergency call screen appears. You can call an emergency contact (if listed) or dial emergency services with the keypad.



Emergency Contacts

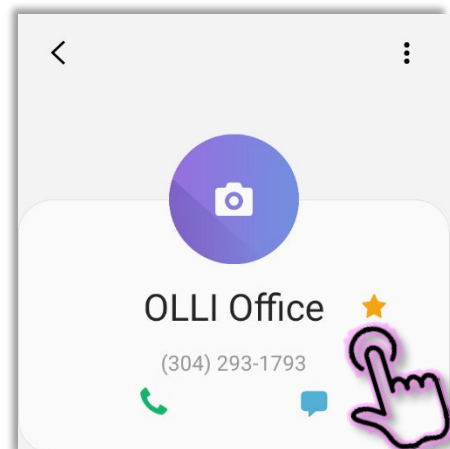
You should have emergency information in your phone—you can choose what information you want to be available, but you should at the very least have one emergency contact listed.



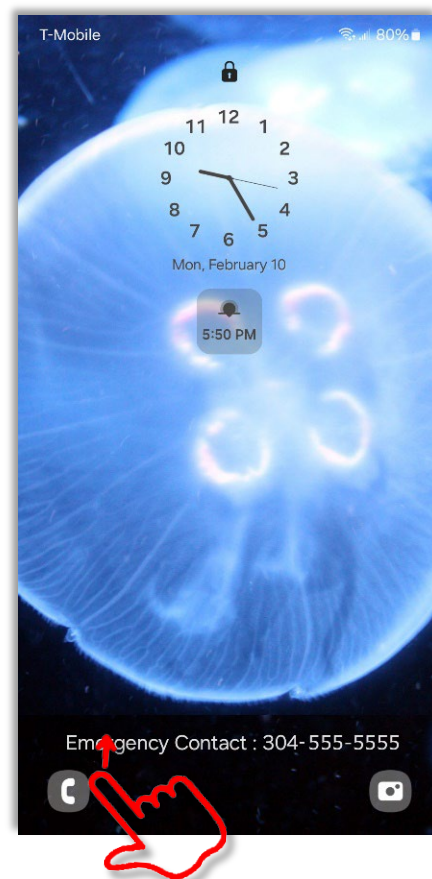
Unfortunately, different versions of the Android OS have different options, so we need to use a complicated way that should work across most devices— even if the screens look different for every phone. Your emergency contacts are available even when your screen is locked.

Setting Your Emergency Contacts

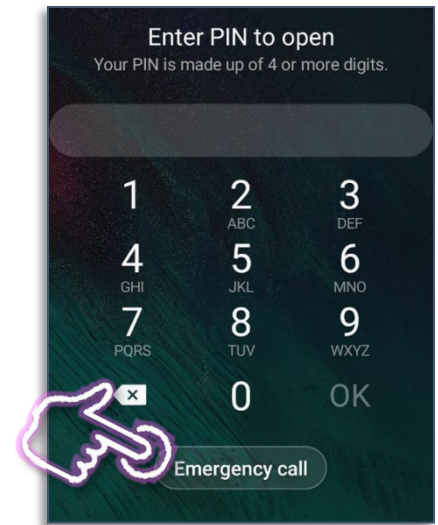
1. Open your **Contacts** (this is not the same as opening the dialer / keypad and selecting contacts from there). (See page 19)
2. Select a contact.
3. Tap the star to make that individual a Favorite.
4. Return to the home screen.
5. Lock your phone (briefly press the power button).



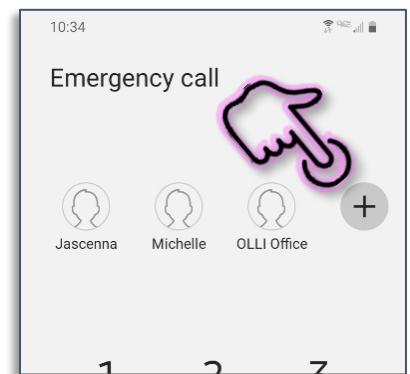
6. Wake up your phone.
7. In the lower left corner of the screen tap and swipe the phone icon.



8. Tap the **Emergency** or **Emergency Call** button.



9. The dialer screen is displayed. Look for a plus sign or button that allows you to add someone to your emergency callers or **ICE** (In Case of Emergency) list.
10. You should get a notice to unlock your phone to set an emergency contact. Tap OK and unlock your phone.
11. Select a frequent or suggested contact from the list.
12. The next time you open the emergency dialer, your contact(s) should be displayed.



Texting

Text messages are brief messages sent from one phone number to another. They are useful because unlike a phone call, they can be asynchronous, are also more likely to go through during an emergency, use less battery, and will be received even if the recipient has their phone turned off when you send the message.



Android phones come with a default messaging app, but many people prefer to purchase and use a third-party app, which allows them greater customization and options.

Text Messages and Phone Data

There are two different types of text messages: SMS and MMS.

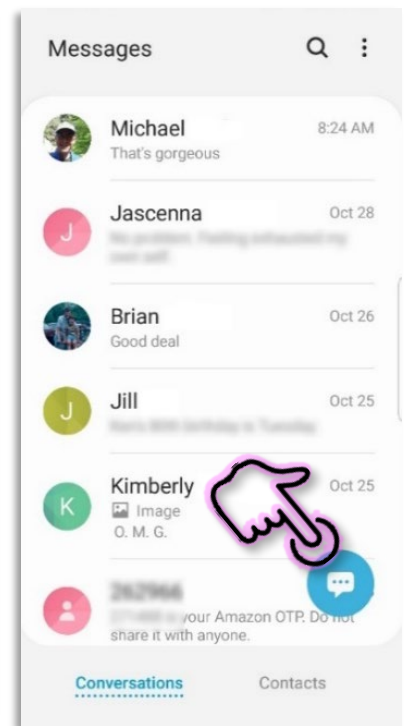
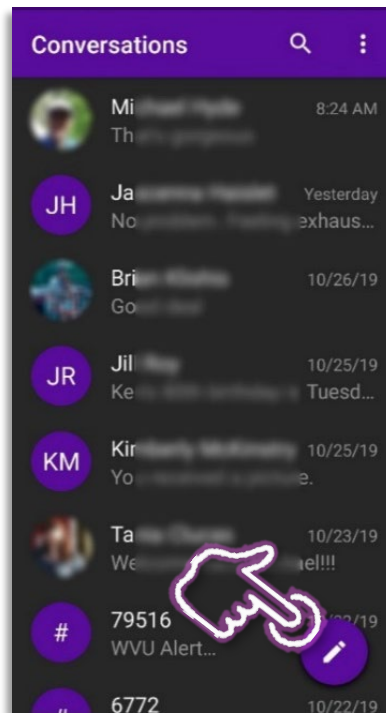
SMS: Short Messaging Service. A brief message that is sent from one phone number to another phone number. SMS does **NOT** use cellular data.

MMS: Multimedia Messaging Service allows you to send messages longer than 180 characters, messages to multiple people, and messages that contain pictures or audio. MMS uses *cellular data*.

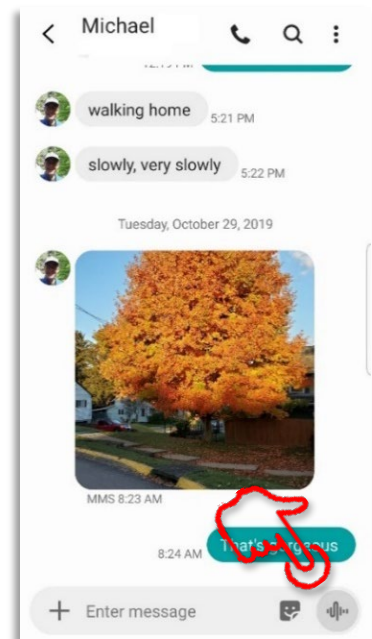
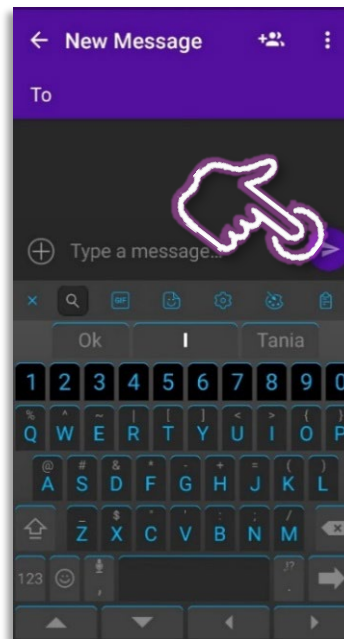
This difference is important because text messages count against your text limit on your cellular plan, while SMS messages use data. If you do not have mobile data turned on, you will not receive SMS messages. Additionally, you cannot send text messages to people who do not have a phone number.

Sending Text Messages

1. Open your texting app. If you are using the default Android app, it should look something like this:
2. If the person to whom you want to send a message is at the top of the list, simply tap the existing conversation and add your message.
3. If you don't see a recent conversation, or you have never texted with the person before, look for the new conversation icon, usually in the lower right corner.



4. When you tap in the box that says “Enter message” or “Type a message” the keyboard appears so you can enter your message.
5. Once you have completed your message, tap the **Send** button at the end of the text box.
6. For a list of common texting acronyms, see page 44.



Alternatives to SMS Texting

Texting allows you only to reach people who have cell phone numbers, and generally plans charge extra for international texting. Many people also have limited texting plans, and the ability to send text messages over WiFi is an important option. There are plenty of alternatives to regular texting from Skype to Whatsapp, you just have to make sure that you and the person you want to chat with are both using the same program.

You can also use Facebook messenger as a messaging app, but for privacy and security reasons it is not recommended. Page 43 has a list of alternatives.

Email

Android systems come with a default Email app. You can also download a different email app (like Gmail or Outlook) to use on your device. All apps will require you to know basic information about your account, such as your username (the part of your email address before the @ sign) and password.



If you use a common email provider, like hotmail or yahoo, the app will automatically fill in any other information needed to retrieve your messages from the server.

Examples:

- **username@gmail.com** Google
- **username@yahoo.com** Yahoo
- **username@hotmail.com** Outlook

You can access multiple email accounts from the Mail program. For example, you can view your mail from Yahoo, Google, and your ISP all in one place.

A big downside of checking email on your phone is that it is cumbersome to reply. Because of this, it is very easy to glance at an email on your phone, and then forget to reply (or pay a bill!) when you are on reading email on your phone.

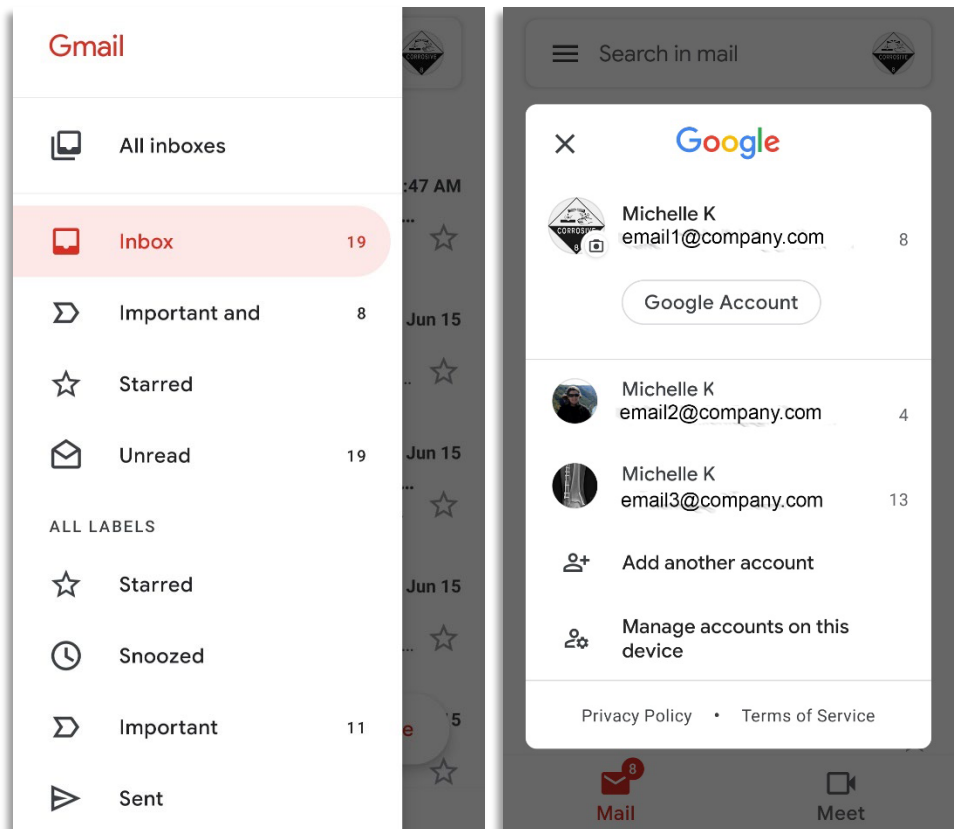
Multiple Email Accounts

Inboxes: look for the options button (in gmail it is three parallel lines in the top left corner).

Select **All inboxes** to view all your mail, or **Inbox** to view one account at a time.

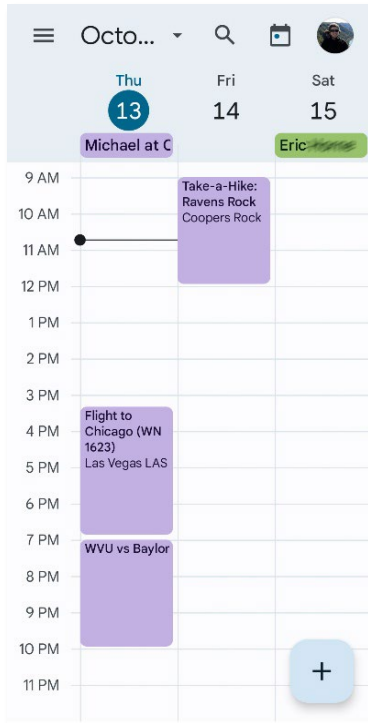
To switch between individual email accounts, tap the user icon in the top right corner.

From the menu that appears, tap the account you want to view.

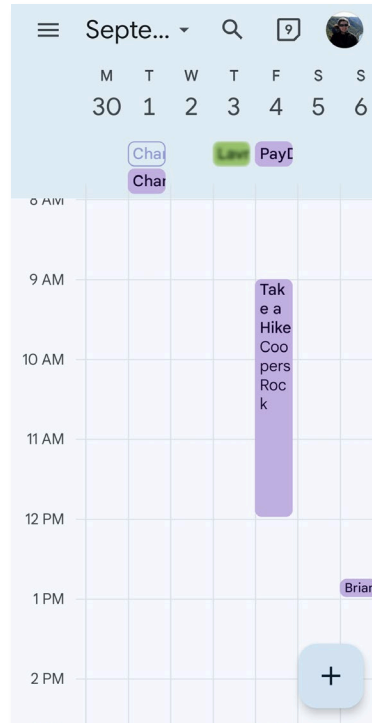


Calendars

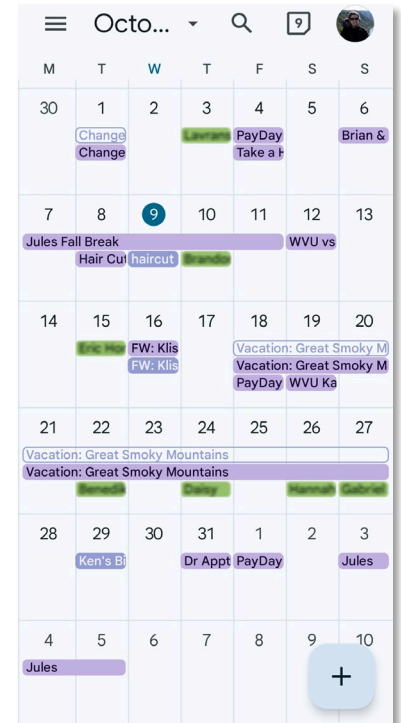
The calendar app is just what it says—a digital calendar. But unlike a paper calendar, a digital calendar can be shared with others, and send you reminders of upcoming events, from birthdays to dentist appointments. I use alerts to remind me a week before a kid has a birthday so I can get them their gift on time, and I have reminders for doctor appointments that pop up thirty minutes prior so I have time to get across town.



Three Day View

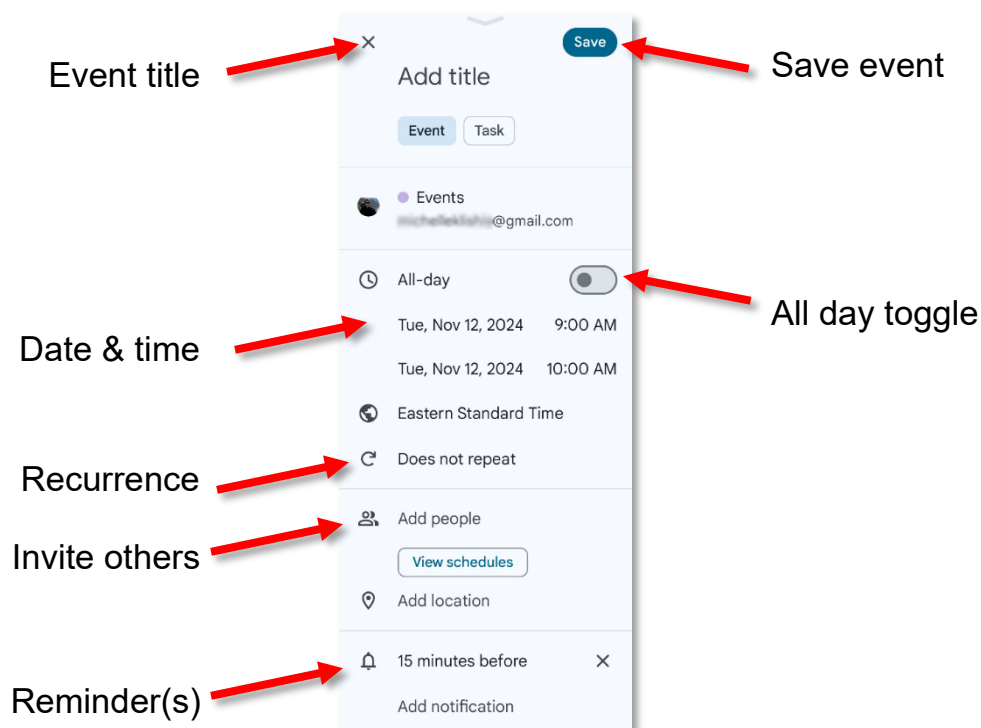


Week View



Month View

Events



Adding an Event

1. Open the calendar.
2. Tap the **New Event** button.
3. Enter the information for the event / appointment then tap the **Save** button.



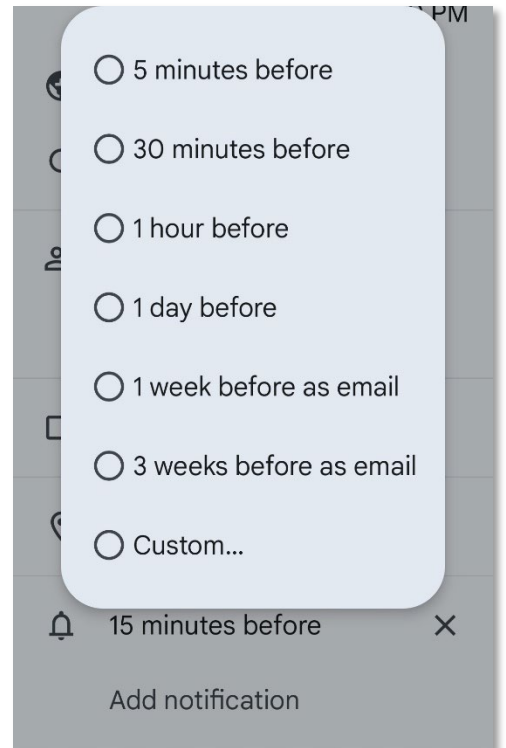
One note about using the calendar on your phone—it is very easy to make a mistake when working on a small screen. I try to double check the dates and times of important appointments when I have access to a larger screen.

Adding a Reminder

For some of us, the main point of having a digital calendar is so we can be reminded of upcoming events. These reminders can be set for minutes, days, or even weeks prior to the event.

Some things you can use calendar reminders for:

- Taking medication at the same time every day (5 minutes before)
 - Upcoming medical appointments (45 minutes before (so you can get across town))
 - Birthdays (two weeks before so you can purchase and mail a card)
1. Create an event / appointment.
 2. Scroll down and tap **Add notification**.
 3. Select the desired time or click **Custom** to set your own time frame.

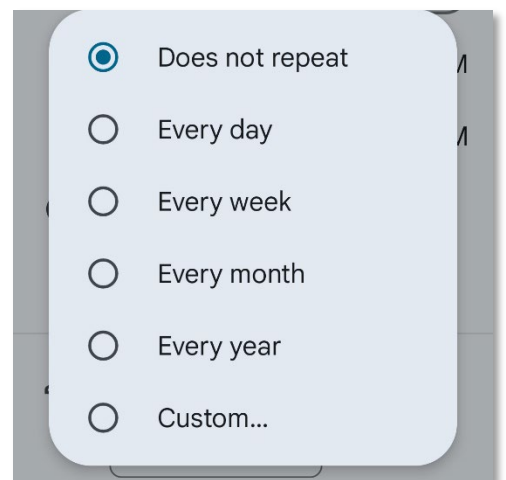


On the google calendar website you can set whether you want an email reminder or a phone notification of your event.

Recurring Events

Recurring events can be anything from birthdays to reminders to change the furnace filter or take a daily medicine.

1. Create an event / appointment.
2. Scroll down and tap **Does not repeat**.
3. Select the desired repeat pattern on select **Custom** and set your own recurrence.



Camera

One of my favorite things about cell phones is that I always have a camera in my pocket. Most newer cell phones have cameras comparable to stand-alone digital cameras, and also have the ability to edit images and immediately share them.

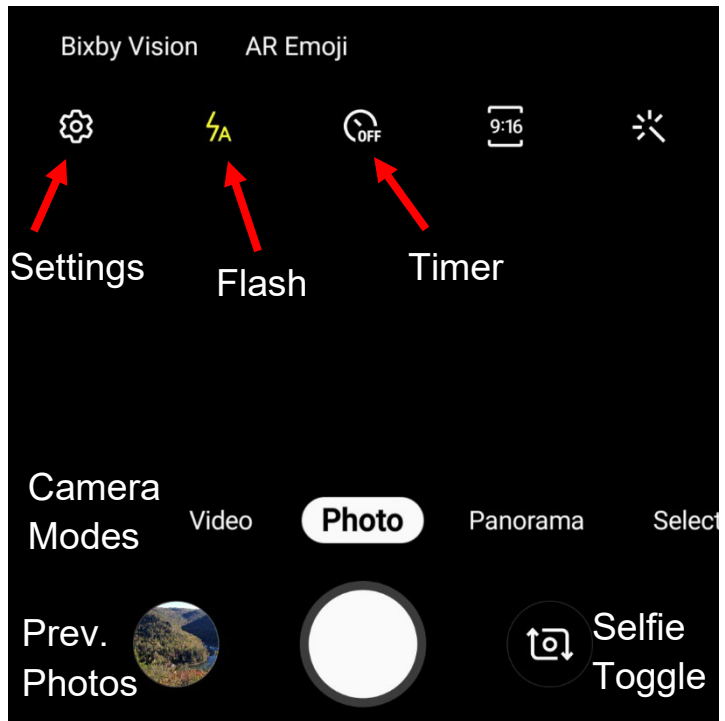


Using Your Cell Phone Camera

1. Using a soft cloth (ie the hem of a t-shirt), briefly wipe off the camera lens.
2. Tap the **Camera** icon.
3. Tap on the screen on the area upon which you want to focus.
4. Tap the white circle icon to take a picture.

Taking a Selfie

1. Using a soft cloth (ie the hem of a t-shirt), briefly wipe off the camera lens.
2. Tap the **Camera** icon.
3. Tap the **Front / Rear Camera Toggle** icon.
4. Holding the device as still as possible, tap the **White Circle** icon to take a picture.



The Android operating system gives you a variety of settings. The more important options are for picture size, save options, location tags, and storage location.

Camera Settings

1. Tap on the **Settings** icon.
2. Scroll through the settings and change the settings as desired.

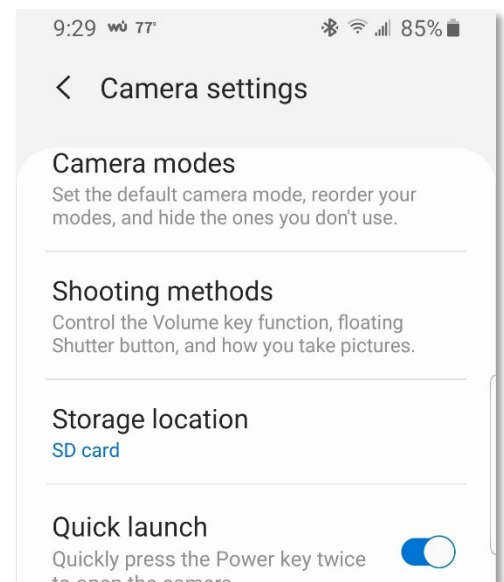


Photo Location Data

Be cautious about attaching location data to your pictures, especially when taking photos of children. You don't want to accidentally tell strangers where they live. If you are on vacation, you don't want people to know you are currently across the country and your home is sitting empty.

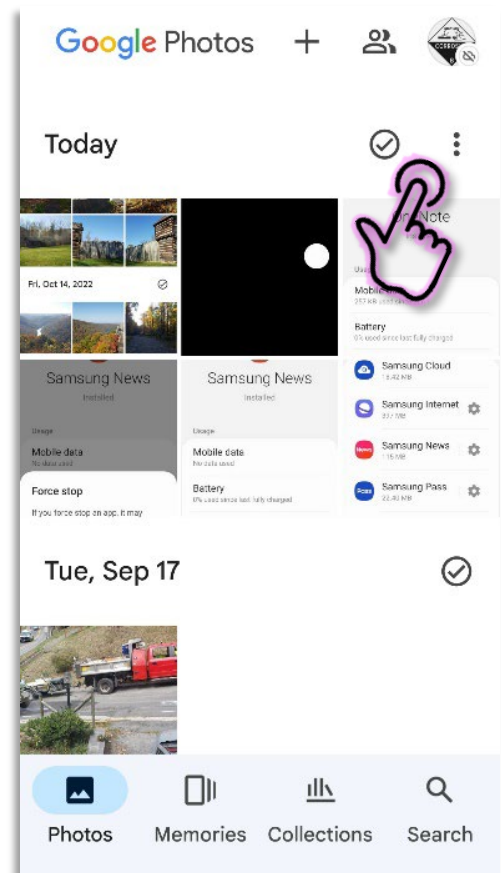
Photos

The default app for viewing your images may depend upon your phone make, however, Google's Photos app is available to all Android devices. and there are other apps to choose from.



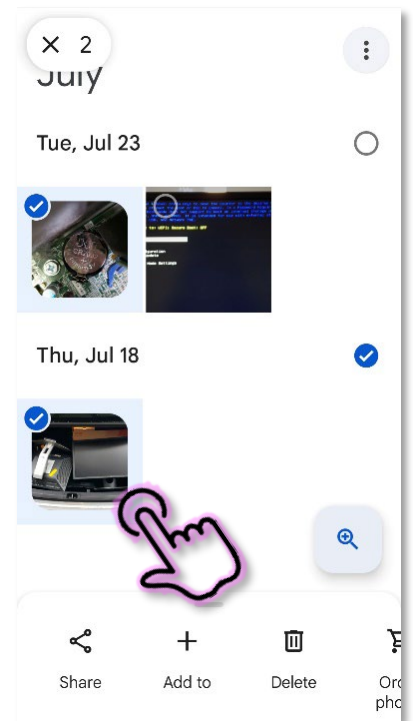
Photo Settings

1. Open your Photo Gallery. We are using Google Photos here.
2. Along the bottom of the screen is where you switch views between photos, collections, and search.
3. Tap the vertical ellipsis to access your settings.
4. Scroll down the menu until you see the gear icon and **Settings**.
 - **Backup and sync:** Allows you to automatically sync all your photos to Google Drive
 - **Free up device storage:** Allows you to automatically delete images that have been saved to your Google account.



Selecting Photos

1. **Tap** a single photo to view that image.
2. **Tap and hold** a single photo to select it.
3. Once one photo has been selected, you can tap other photos to select them as well.
4. You can select all the photos from a selected date by tapping the circle beside the desired date.
5. Different items appear once a photo has been selected. The **trash can icon** allows you to **Delete** the selected items. The **“less-than” icon** (<) allows you to **Share** the selected images. The **“plus”** (+) icon allows you to move the pictures to a folder.

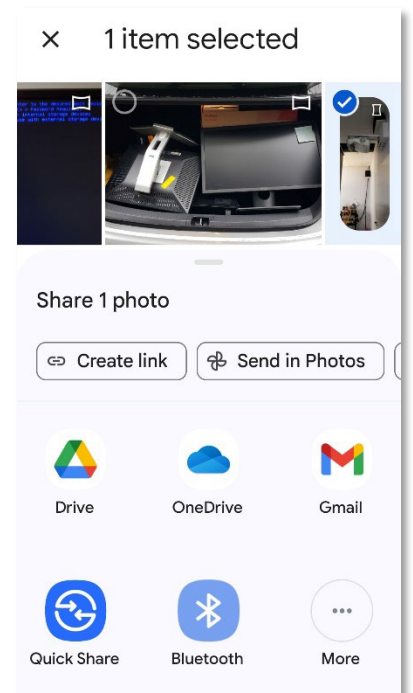


Sharing

Sharing is used to send a file to someone else and also to copy a file to a cloud service.

Sharing Photos

1. Select one or more images.
2. Tap the **Sharing** icon.
3. Along the bottom of the screen, you can scroll to the right to select the app through which you want to share the images. Common apps to use for sharing are email, cloud drives, and texting apps.
4. Once you select the desired app, it will walk you through the process of sharing the picture(s).



SD Cards

Many Android phones have the ability to use micro-[SD cards](#) (micro-Secure Digital Cards). A micro-SD card is a smaller SD card used in lightweight devices like phones. A micro-SD card can allow you to double or even quadruple the amount of memory on your phone. This expanded storage allows you save more files like songs and photos to your device, and can also help extend the life of an older phone with less internal storage.



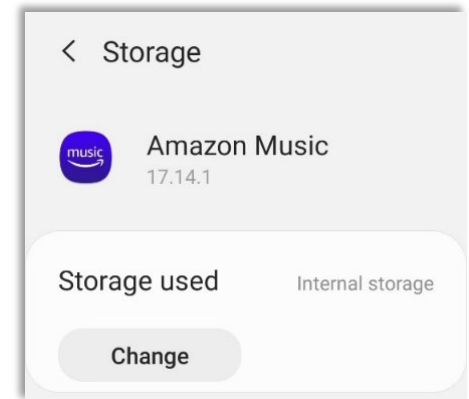
Many—but not all—apps can be transferred to an SD card, as can pictures, music, and books.

Checking for an SD Card

1. Open your **Settings**. (See page 5)
2. Search for **Storage**.
3. Scroll down until you see SD Card.

Transferring Apps to the SD Card

1. Open your **Settings**. (See page 5)
2. Search for and open **Apps**.
3. Scroll through your list of apps until you find an app you want to move to the SD card. Tap that app.
4. The information for that specific app appears. Scroll down and tap on **Storage**.
5. If the app can be moved (some can't) there will be a **Change** button available. If it says Internal storage, tap the Change button. If it says SD card, you're done.
6. In the box that opens, tap **Internal Storage**.
7. Tap **Move** to complete the move.
8. Wait patiently.

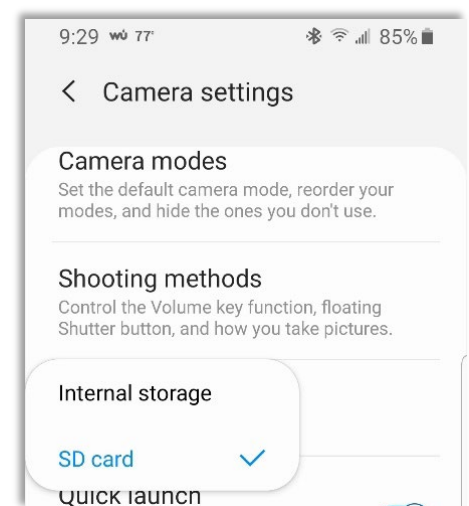


Saving New Pictures to the SD Card

Another way to free up space on your device is to save new pictures to the SD Card (if your device allows one).

Changing the Save Location for New Pictures

1. Open the camera app.
2. Tap for the “gear” or **Settings** icon.
3. Scroll down until you see **Storage location**. If it says Internal Storage, tap on Storage location and select **SD card**.
4. If it already says SD Card, you are good to go!



Apps

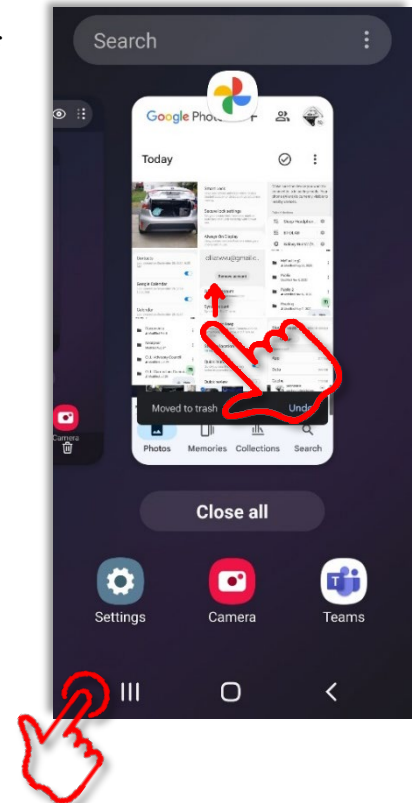
Apps (applications) are programs or software packages that run on your device's operating system. For Android devices, apps are available from the Play Store. You also have the ability to install third party apps from other sources.

Some common types of apps are Email apps, podcast apps, web browser apps, social media apps, and ebook apps.

Closing Apps

1. Tap the Recent Applications Menu button, usually at the lower left of the screen. A list of open apps appears
2. To close an individual app, click the **x** beside the app or swipe right on the app.
3. To close all open apps, if available, tap **Close All**.

To be clear, stopping an app may leave parts of that app still running in the background. To end all processes of that app, you need to force the app to stop.

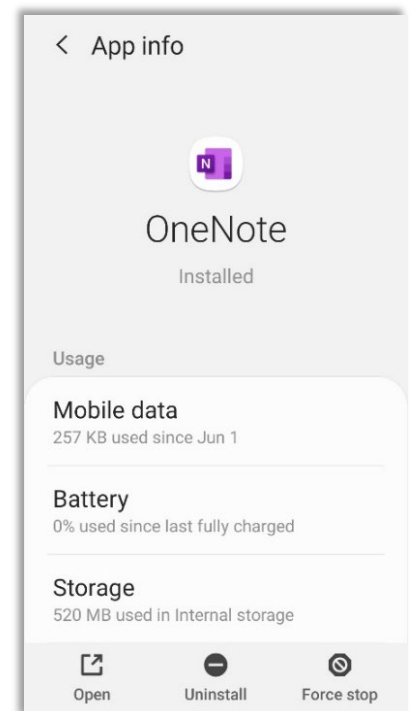


Force Stopping Apps

1. Open Settings.
2. From the list of available settings, choose **Apps** or **Applications**.
3. Scroll through the list to find the specific app you.
4. Towards the top of the screen, tap the **Force Stop** button.
5. The device asks if you are sure you want to do this, tap **Force Stop**.

Uninstalling Apps

1. Open your device settings. (Typically available from the list off all applications or by pulling down from the top of the screen to open the system tray, and tapping the gear icon.)
2. From the list of available settings, choose **Apps** or **Applications**. (Depending upon your phone.)
3. Scroll through the list to find the specific app you want to close and/or keep from running in the background.
4. Towards the top of the screen, tap the **Uninstall** button.
5. In the verification window, click **OK** to uninstall the app.



Google Play Store

The easiest place to search for apps is from the Google Play store.

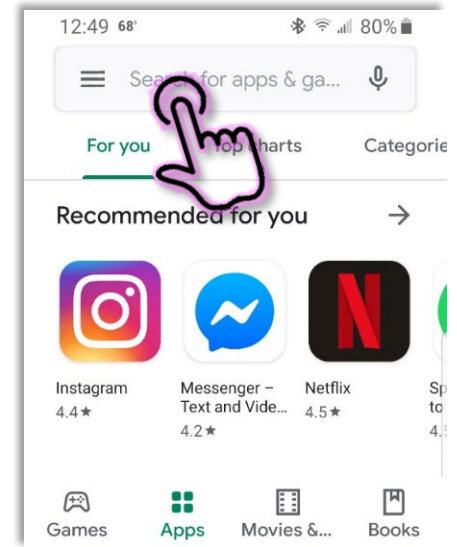


There are free apps and there are paid apps. Unless an app is open source or you are certain how the information is going to be used, I recommend paying for the apps you install on your device. In some cases there aren't paid options, just be aware that free apps may be invading your privacy and or making money off what you do.

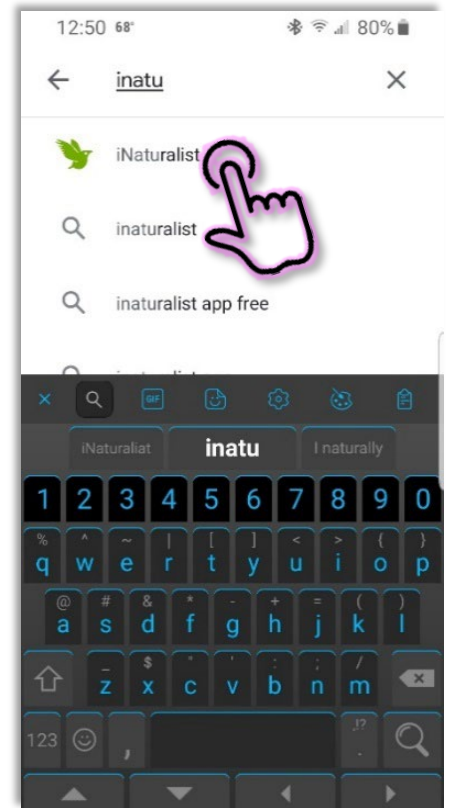
An alternative to the Google Play store is [F-Droid](#), which is free and open source.

Finding and Installing New Apps

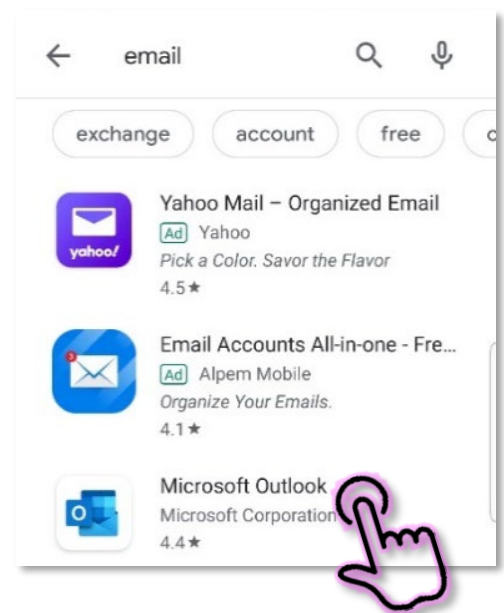
1. Open the App Store.
2. At the top of the page, tap in the box where it says "Search for apps &..."



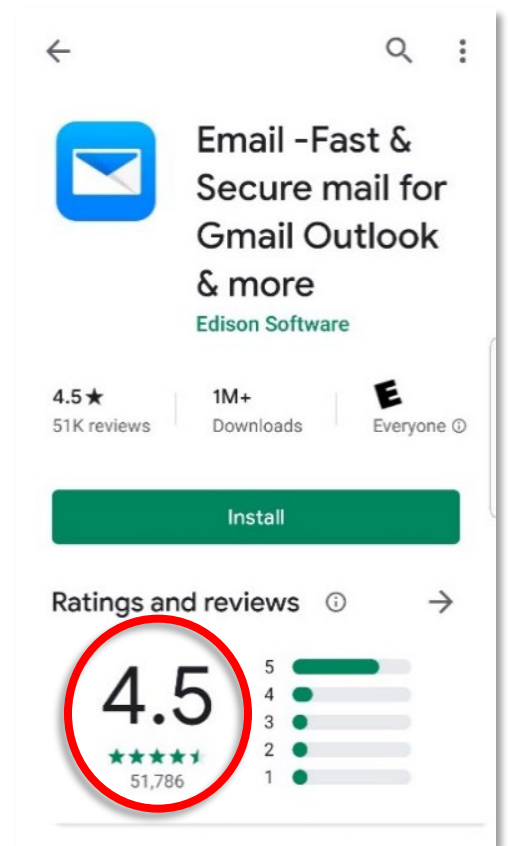
3. Begin to type in the name of the app you are looking for; a list of matching apps. Tap on the app you want.



4. A list of apps matching your search term is displayed. (Note that the first apps listed are often ads.)
5. Tap on an app to learn more about it.



6. Pay attention not just to the rating of the app (4.5 / 5) but also to how many people have reviewed the app. A rating of 4 from 50k people is more useful than a rating of 5 from 2 people.
7. If you decide you want the selected app, tap **Install**.
8. The app will be installed on your device (speed of download and install depends upon your internet connection) and the app should be available on one of your home screens and from the app store.

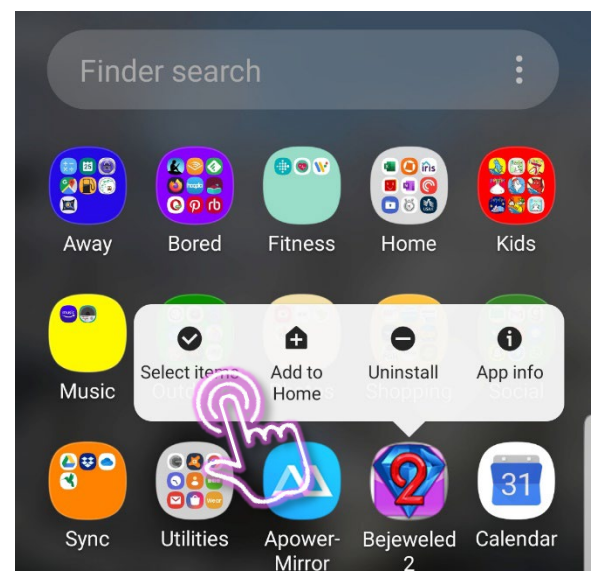


App Folders

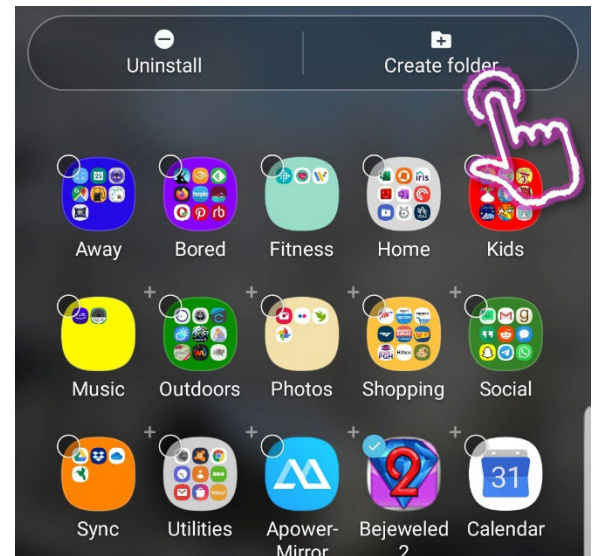
Folders can be used to organize your apps, for example, you can put similar apps in one folder to make them easier to find or to take up less space on the home screen. For some people folders are the best thing ever; for others folders can make it harder to find what you're looking for. There is no judgement as to whether you should or should not use folders: use your device in the way that makes it easiest for you to find things.

Creating a Folder

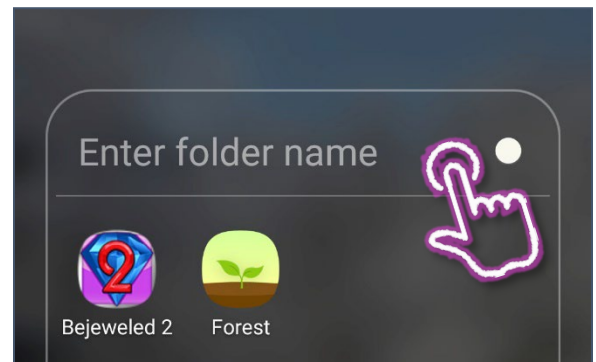
1. From your home screen or app drawer, long press on an icon that should belong in your new folder.
2. Tap **Select items**.



3. Tap a second item.
4. At the top of the screen tap **Create folder**.



5. Tap in the **Enter folder name** area to create a name for the folder.
6. Tap the **white dot** to set the background color for the folder.
7. Tap away from the folder area to complete the steps.



Adding Apps to a Folder

1. Long press on the icon you want to move.
2. While still pressing, drag the icon over the folder.



Music

For many people, cell phones have replaced their portable music players (after all, a cell phone is easier to slip in your pocket than a Walkman or boom box!).

Some phones will come with apps for streaming services (like Spotify or Pandora) pre-installed, but you will probably want to install a music app on your own.

There are multiple ways to get music to your device. You can download purchased music from a cloud service like Amazon Music or Apple Music, or you can rip CDs and transfer those files via a micro SD card or Bluetooth or USB cable. (See page 43)

Podcasts

Podcasts are typically an audio series that can be downloaded by subscribers automatically. Podcasts can be on any topic, from sports to politics to stories to book recommendations.

There are a wide variety of podcast apps available. (See page 43)

Google Drive

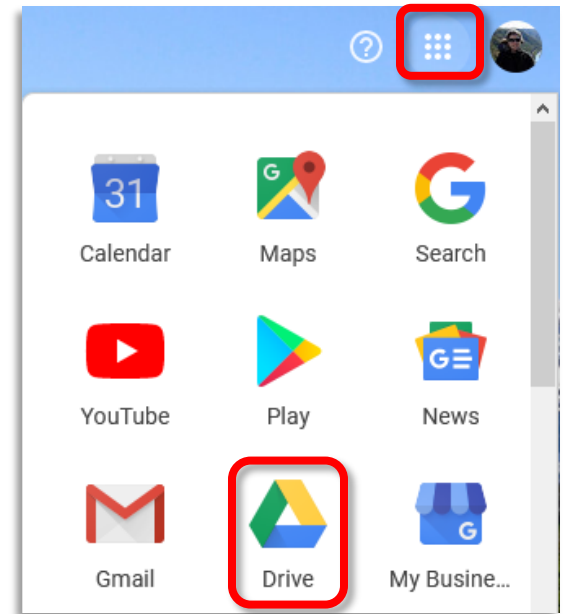
Google Drive (previously called Backup and Sync from Google) is a cloud storage service that allows you to copy files easily from your phone to a computer or other device, and to share them with friends and family.



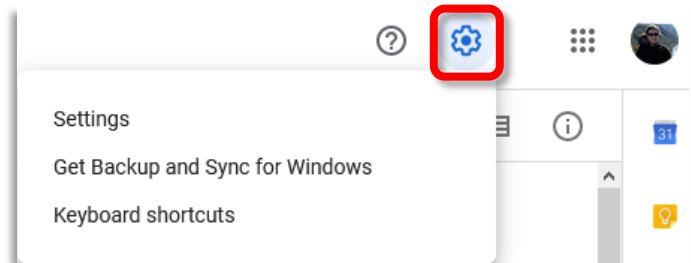
Google Drive can keep you from losing important information (like your address book) if your phone is lost or destroyed. If something is important, you should back-up or sync it to the cloud.

Setting up Google Drive: Downloading

1. Log into your google account. If you already have gmail open, you're already logged in.
2. At the top right corner of the window, click the **Google Apps** icon (the square of squares).
3. Scroll through the drop down menu until you can click on the triangle **Drive** icon.



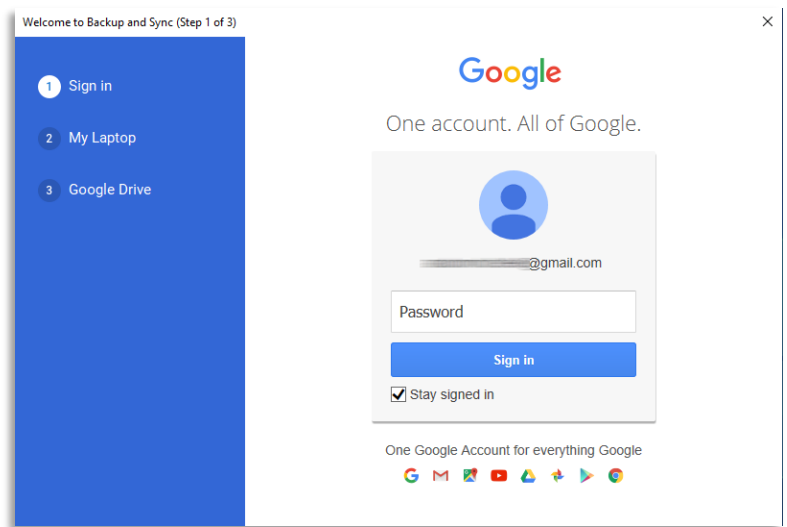
4. A new window displaying your Google Drive files opens.
5. Click on the **Settings** (gear) icon.
6. From the drop-down menu select **Get Google Drive for Windows**.
7. In the **Personal Backup and Sync** area, click **Download**.
8. After reading the Terms of Service, click the **Agree and download** button.
9. Save the file.
10. If you are not prompted to do so, double click on the installer to begin the installation process. (This file is most likely saved to your **Downloads** folder).
11. Once the program has installed, you will be walked through a series of prompts to finish setting up the program.



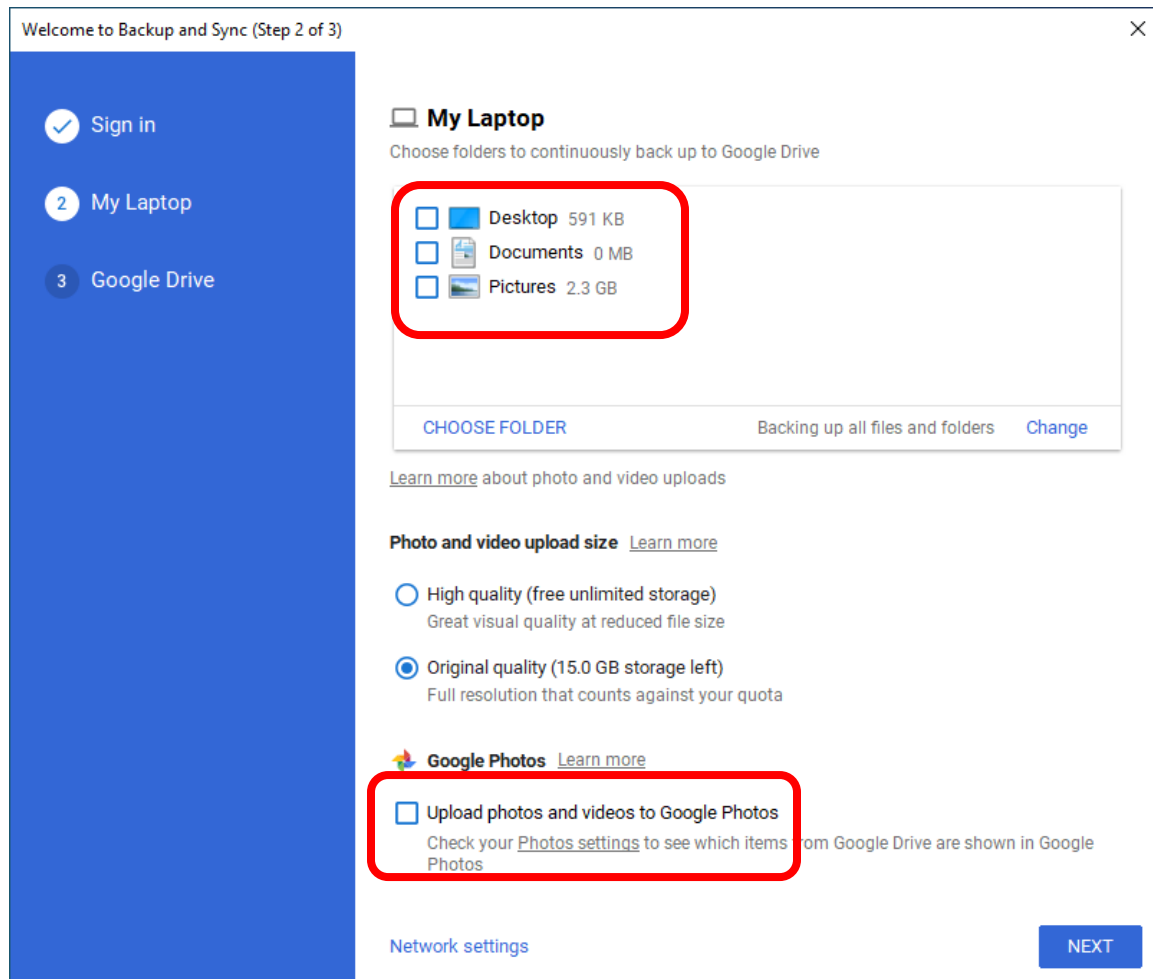
Setting Up Google Drive: Installing

1. Google Drive should automatically launch.
2. In the first window that appears, click **Get Started**.

3. Enter your google user name (the first part of your email address).
4. Click **Sign In**.
5. Enter your password for the account.
6. Click **Sign In**.
7. In step 2 of 3 you are going to set up what files you want to sync. The following are my recommendations—you can choose other options or changes these options at any point in time. At the top of the window, **deselect Desktop, Documents, and Pictures**. The reason for this is because this may quickly fill up your drive AND you may have personal files you do not want to be saved to the cloud in these locations.

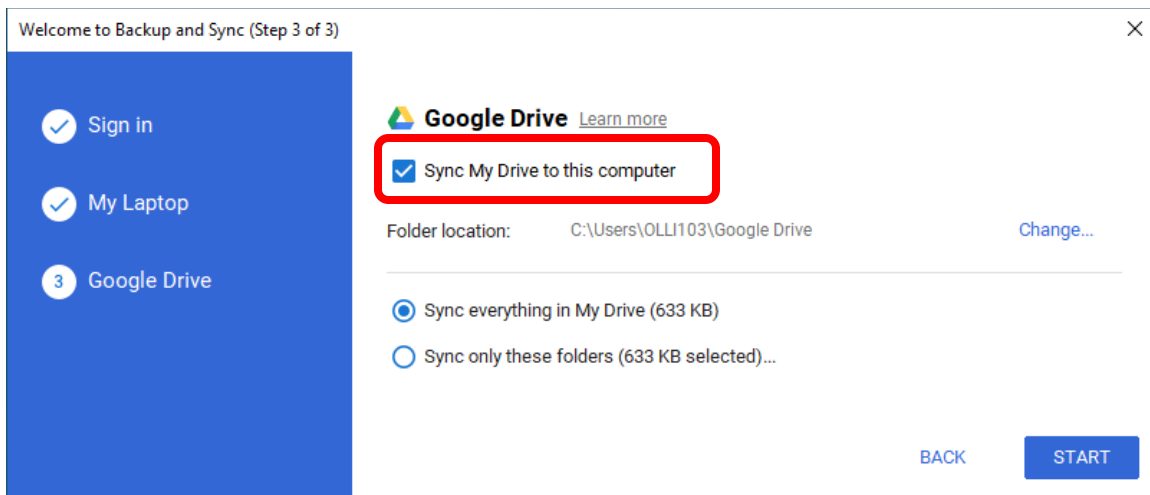


8. Towards the bottom of the screen deselect **Upload photos and videos to Google Photos**. Again, this is both for privacy and to save space.



9. Click **Next**.

10. Leave **Sync My Drive to this computer** ticked.



11. Click **Start**.

Accessing Backup and Sync

1. Open your **Settings**.
2. Scroll down to and tap on **Accounts and backup** or **Accounts**.
3. Tap on **Accounts**.
4. You should see a list of all accounts that have the ability to sync. The easiest sync to set up is to use your existing Google account. Select the account you want to use.
5. Under that account, look for “Sync account”.
6. Toggle the various settings to select what you do—and do not—want to sync.

Smart Lock

Once certain devices have been paired (such as smart watches or headphones) they can be set as Trust Agents that keep your device unlocked while in range.

Setting Up Smart Lock

1. Open **Settings** and search for **Smart Lock**.
2. You will be prompted to enter your passcode.
3. Select **Trusted devices**.
4. Scroll down and select **Add trusted device**.
5. Select a currently connected device.

Resources

Device Navigation

[Android Voice Commands](#) (Google)

[Gesture Navigation](#)

Easy Mode

[Niagara Launcher · Home Screen](#) (App)

[Olauncher. Minimal AF Launcher](#) (App)

[AIO Launcher](#) (App)

[BIG Launcher](#) (App)

[6 Tips to Make Your Android Phone Easier to Use](#) (How-To Geek)

[Simplify and declutter any Android phone](#) (TechRadar)

Emergency Contacts

[How to Add Emergency Contacts and Information to Android](#) (Wiki How)

[How to Add Emergency Info to Your Phone's Lock Screen](#) (PC Mag)

[Set Up Emergency Contacts on Android](#) (First Aid Training Co-Operative)

Texting Apps that Work over WiFi

[Whatsapp](#)

[Telegram](#)

[Snapchat](#)

[Skype](#)

[Signal](#)

Cloud Services

[Box](#) Free / \$120

[Dropbox](#) \$120

[Google Drive](#) Free / \$20

[iCloud](#) Free / \$12

[iDrive](#) Free / \$3

[OneDrive](#) Free / \$20

[ProtonDrive](#) Free / \$48

[SugarSync](#)

[Sync.com](#) Free / \$96

Music Apps

[AIMP](#)

[BlackPlayer Music Player](#) Ads

[foobar2000](#)

[Neutron Music Player](#) \$8.99

[Poweramp](#) \$7.99

[Simple Music Player](#) Ads

[USB Audio Player](#) \$7.99

Podcast Apps

[AntennaPod](#) OpenSource

[Castbox](#) Ads

[Pocket Casts](#) Ads

[Podcast Addict](#) Ads

[Procast](#) Ads

Texting Acronyms

AF: As (naughty word)
AFK: Away from Keyboard
ATM: At The Moment
BTW: By the Way
B/C: Because
BFD: Big *Freaking* Deal
BFF: Best Friends Forever
BRB: Be Right Back
CU: See You
CYT: See You Tomorrow
DGMW: Don't Get Me Wrong
Diss: Disrespect
EOD: End of Discussion
EOM: End of Message
F2F: Face to Face
FAQ: Frequently Asked Questions
(pronounced fak to rhyme with pack)
FFS: For *Freaks* Sake
FREX: For Example
FTW: For the Win
FWIW: For What It's Worth
FYI: For Your Information
GOAT: Greatest of All Time
GR8: Great
HTH: Hope This Helps
HMU: Hit Me Up
IANAL: I Am Not A Lawyer
ICYMI: In Case You Missed It
IDC: I Don't Care
IDK: I Don't Know
IIRC: If I Remember/Recall Correctly
IKR: I Know Right
IMHO: In My Humble Opinion
IMO: In My Opinion
IOW: In Other Words
IRL: In Real Life
IYKYK: If You Know, You Know
JK: Just Kidding
L8R: Later
LMK: Let Me Know
LOL: Laugh(ing) Out Loud
MYOB: Mind Your Own Business
NGL: Not Gonna Lie

noob / noob: Newbie
NNTR: No Need to Reply
NOYB: None of Your Business
NP: No Problem
NRN: No Reply Needed
NSFW: Not Safe for Work
NVM: Never mind
OMG: Oh My God
OMY: On My Way
OOTD: Outfit Of The Day
OTOH: On the Other Hand
OT: Off Topic
OTP: On the Phone
PM: Private Message
RL: Real Life
RN: Right Now
ROTFL: Rolling on the Floor Laughing
RTFM: Read the *Fantastic* Manual
RQ: Real Quick
RU: Are You
SFLR: Sorry for Late Reply
SO: Significant Other
SMH: Shaking My Head
STFU: Shut the *freak* up
TBC: To Be Continued
TBH: To Be Honest
THX: Thanks
TIA: Thanks in Advance
TL;DR: Too Long Didn't Read
TMI: Too Much Information
TTYL: Talk to You Later
TUVM: Thank You Very Much
TYT: Take Your Time
UR: You Are / Your
woot / Woot: Hooray! Yay! Yippee!
Wo: WithOut
W8: Wait
WFM: Works for Me
WRT: With Regard To
WTH: What the *Heck*
WTF: What the (naughty word)
YMMV: Your Mileage May Vary

Be careful with emojis, as many have multiple meanings besides the obvious. Don't send eggplant or peach unless you are *definitely* talking about foods.

Emoticons

(.V.)	Alien
O:-)	Angel
X-(Angry
~:0	Baby
:-D	Big Grin
(*v*)	Bird
:-#	Braces
</3	Broken Heart
=^.^=	Cat
*<:o)	Clown
O.o	Confused
B-)	Cool
:_(Crying
:'(Crying
\:D/	Dancing
_	Dazed
:o3	Dog
#-o	Doh!
:*)	Drunk
//_ ^	Emo
>:)	Evil Grin
<><	Fish
:-()	Frown
:(Frown
:-()	Frowning
=P	Frustrated
:-P	Frustrated
8-)	Glasses

\$_ \$	Greedy
:->	Grin
=)	Happy
:-)	Happy
:)	Happy
#	Hashtag
<3	Heart
{}	Hug
:-	Indifferent
X-p	Joking
:-)*	Kiss
:-*	Kiss
:*	Kiss
(-){(-)	Kissing
XD	Laughing
=D	Laughing Out Loud
):-:	Left-handed Sad Face
(-:	Left-handed Smiley Face
<3	Love
=/	Mad
:-)(-:	Married
@	Mention
<:3)~	Mouse
~,~	Napping
:-B	Nerd
^ _ ^	Overjoyed

<!:0	Partying
:-/	Perplexed
=8)	Pig
=(Sad
:-()	Sad
:(Sad
:S	Sarcastic
:-@	Screaming
=O	Shocked
:-o	Shocked
:-)	Smile
:)	Smile
:-Q	Smoking
:>	Smug
:P	Sticking Tongue Out
:o	Surprised
:-J	Tongue in Cheek
:-&	Tongue Tied
=-O	Uh-oh
:-\	Undecided
:-E	Vampire
=D	Very Happy
;-)	Winking
;))	Winking
-O	Yawn
8-#	Zombie

Technology Glossary

5G

The fifth generation technology standard for cellular networks. It can support up to 10,000 devices per cell and have download rates up to 10 gigabits per second

Add-on

An accessory piece of software designed to increase the capability of the software to which it is appended.

Address Bar

In a web browser or windows explorer, it is a rectangle, usually towards the top of the window, that shows you the current location or address of your web page or file.

Address Book

See [Contacts](#)

Adobe Digital Editions (ADE)

Adobe proprietary format for eBooks.

Alexa

Amazon's virtual assistant.

Algorithm

A set-of rules to be followed in calculations or problem-solving operations. Algorithms are frequently used to manipulate data sets.

Android

Googles mobile operating system, built on open source software.

Anti-Virus

A program that protects you from malicious software. Most anti-virus programs have options for purchasing additional security measures such as firewalls, email scanning, etc.

App

Short for [Application](#).

Apple ID

This is the username and password that you create with Apple to link a specific device to your Apple account. If you have an iPad and an iPhone, you use the same Apple ID with both of those devices.

Apple

Technology company that designs and develops hardware and software.

Application

An application is a piece of software that lets your device do something, like play music or give directions. An application is the same thing is a program.

ARPANET

Advanced Research Projects Agency NETwork. The first true internet, it connected military installations, a handful of universities, and some third-party contractors together.

Autocorrect

Auto correct is when your phone automatically changes what you were typing to what *it thought* you wanted to type.

Autoplay

When you visit a website and music or video starts playing without asking.

AVI

Audio Video Interleave. A multimedia format for audio and video files.

AZW / AZW3

Amazon proprietary eBook format.

Backbone

Long-distance networks that carry data between data centers and consumers

Backup

A copy of computer data that is taken and stored somewhere else, to be used in the event of data loss.

Bandwidth

The amount of data that can be transmitted at one time. It is measured in bits per second

BCC

Blind carbon copy. Covertly send a copy of the message to a third party. The primary recipient cannot see the person was added.

Biometric

Unique physical characteristics that are be used for recognition. The most common types of biometric identifiers are fingerprints, voice, face, iris, and palm/finger veins.

Blockchain

Also Block Chain. A list of records (blocks) linked using cryptography. These records are a cryptographic hash of the previous block, a timestamp, and transaction data. Blockchains are generally used on a peer-to-peer network. Data in one block cannot be altered without changing all other blocks.

Bluetooth

A wireless technology that allows data to be shared over short distances using short-wave UHF radio signal. The name comes from Harald "Bluetooth" Gormsson, king of Denmark and Norway, who united the Scandinavians.

Boolean

A system of logical propositions. Common Boolean operators: AND, OR, NOT, “ “, () . Based on the work of George Boole.

Broadband

A fast, reliable, always-on connection to the internet.

Browser Add-on

See [Browser Extension](#).

Browser Extension

A small software module that is used to customize a web browser.

Browser Hijack

Where a malicious piece of software modifies a web browser's settings without your permission.

Browser

Short for [Web Browser](#).

Brute Force Attack

Where a hacker tries many passwords for passphrases in an attempt to break into an account. The longer the password (or passphrase) the harder it is for someone to succeed with this type of attack.

Byte

A unit of digital information that consists of eight bits. A byte is the number of bits used to encode a single character of text.

Cache

Temporary storage space that allows your computer to quickly bring up information, such as previously viewed web pages.

Cambridge Analytica

A British political consulting firm that used misappropriated digital assets, data mining, and other processes to influence political elections around the world.

Causation

Relation that holds between two temporally simultaneous or successive events when the first event (the cause) brings about the other (the effect). **NOT** the same as [correlation](#).

CC

Carbon copy. Send a copy of the message to someone else. The primary recipient can see this person received the message.

Cellular Data

The connection a cell phone makes to a cell tower that allows you to do things like surf the internet, download emails, and send MMS messages.

Cloud

Storage that is physically somewhere other than where you are. Cloud storage is generally accessible from multiple devices, because those files are stored on a hard drive that belongs to a company that hosts the cloud service. Cloud storage is like a self-storage unit for your electronic files, except you can access your stuff from anywhere.

Cloud Service

A service provided by a third party or company that allows you to provide access to files and applications remotely.

Codec

A device or program that encodes/decodes a data stream, such as an audio file, for storage.

Contacts / Contact List

A collection of screen names and the various data associated with them, such as email addresses and telephone numbers.

Cookie

A piece of data that a website saves on your computer. Cookies were designed to save user information such as preferences or logins but can sometimes be read by third parties. Cookies are also used to collect browsing data long-term.

Correlation

A mutual relationship or connection between two or more things. See also [Causation](#).

Cortana

Microsoft's virtual assistant.

CPU

Central Processing Unit. The bit of a computer or electronic device that processes information.

Cryptocurrency

A digital asset that uses strong cryptography and is designed to work as a form of money. They used decentralized control, or a public financial database to keep track of who owns what.

Cryptography

Greek for “hidden writing”, it is the study of secure communication—creating protocols to keep third parties from reading private messages.

Data Breach

The release of secure or private information. A data breach can be accidental or malicious, such as when an individual hacks into a system to steal information.

Database

An organized collection of information. Complicated databases link information between multiple tables allowing for analysis of the contained information. An address book is a basic database.

Data Center

Room(s) full of servers that store user data and host online apps and content.

Denial of Service Attack (DOS)

A cyber-attack where the malefactor seeks to make a network resource (such as a website) unavailable by flooding the target with requests or visits.

Dial-up

An early way to connect a home computer to the internet. A phone line was used to connect a personal computer to the Internet Service Provider.

Directory

A system that catalogs / organizes computer files.

Displayport

A high-quality audio-visual cable capable of transmitting HD and 4k.

DMCA

Digital Millennium Copyright Act. The 1998 United States copyright law that criminalizes production and dissemination of technology, devices, or services that circumvent measures to control access to copyrighted works (DRM).

DNS

Domain Name System. The phonebook of the Internet.

DNS Hijacking

Where a malefactor redirects visitors from a valid website to a different destination—often one that exists to steal data.

Domain Name

The string of text that identifies a place on the Web. A basic domain name is a word or abbreviation followed by a period followed by the domain extension: wvu.edu

Domain

The sometimes arbitrary grouping that designates what a website does or where it is based. The most common domains are .com .net .edu and .org. The domain is what you should check first when you want to verify the authenticity of a website.

Download

To move data and files from the internet or a server to your computer or mobile device.

DRM

Digital Rights Management. A format that protects electronic media from being illegally copied.

DVD

Digital Video Disc / Digital Versatile Disc. A digital optical disc data storage system.

DSL

Digital Subscriber Line. A fixed connection to the internet that runs through copper phone lines.

DSLR

Digital Single-Lens Reflex

DVI

Digital Video Interface. A video display interface that connects your computer to your monitor.

eBook

An electronic file formatted (for the most part) to be read on a small handheld device, or on a computer screen in an eReader program / app.

eInk

A brand of electronic paper (e-paper) display technology from the E Ink Corporation (1997)

Email Header

The portion of an email message that contains the routing information. The header can be used to help determine if a message is fraudulent.

Email

Email is an electronic letter sent from one email address to another email address. Email addresses always have an @ (at sign) in them. Sending an email on your phone requires the use of cellular data. Each email address is unique, and email addresses are often used as unique identifiers or login credentials by databases.

Emoji

Small images used to represent emotions, ideas, or expressions.

**Emoticons**

Representations of facial expressions using keyboard characters. These are used to portray moods or feelings. For example, a smiling face could be :) or ☺

Encryption

The encoding of data so that only authorized persons or devices can read/view the information. The stronger the encryption, the more unlikely it is that a malfeasant could decode the intercepted data through a brute force attack.

EPUB

Electronic Publication. A digital book format that allows you to read your eBook on any electronic device. EPUB files are reflowable.

eReader

eBook reader that use black and white eInk screens that give a similar reading experience to physical books.

Ethernet

Wired networking technology that allows multiple computers to talk to one another via a protocol (set of rules). Ethernet is used when speed, stability, and security are needed.

EULA

End-User License Agreement. The legal contract between a software vendor and the user of that software. It specifies the rights and restrictions which apply to the use of the software.

External Storage

Devices that store data outside of a computer or other electronic device. They are often removable, such as USB thumb drives.

Facebook

An online media and networking company.

Facial Recognition

Technology capable of identifying or verifying a person from a digital image. Facial recognition can be used to unlock an electronic device.

Fiber Optics

A flexible glass or plastic fiber that can transmit light signals with very little loss of strength

File Extension

Also called a filename extension or file type, is the identifier suffix for a computer file name, and tells you the kind of program needed to open the file. By default, these extensions are hidden, but can still be used in search. If you change a file extension, that file will most often break.

Firewall

A security system that monitors incoming and outgoing network traffic to prevent unauthorized access to a system.

Fixed-layout

Content remains locked in a specific place, when the document is enlarged you often have to scroll around to read the entire thing. A pdf is a fixed-layout document

Folder

See [Directory](#).

Follow

Choose to see another user's posts in their content feed.

Force Stop

A way to completely stop an app that is running in the background. An app that has been closed may still have bits active and collecting data.

GB

Gigabyte. A computer memory unit equal to 1000 megabytes. The prefix giga means 10^9 .

GIF

Graphics Interchange Format. An image format that is often used in logos and animated pictures.

Google

A technology company that specializes in services and products related to the internet.

GPS

Global Positioning System is a piece of hardware that allows a device to contact a satellite to determine the location of the device in latitude and longitude. On most devices, software makes these data points usable to the end user by placing them on a map.

GUI

Graphical User Interface (pronounced gooey). The windows, icons, menus, and pictures that allow you to interact with your computer using your mouse. Windows 10 and Mac OS (Big Sur) are operating system GUIs.

Hard Drive

A data storage devices that stores and retrieves digital data. In your computer, this is where all your programs are installed and files saved.

Hardware

The electronic components of a device; the bits you can touch. A cell phone, a keyboard, and a CPU are all hardware.

HD

High Definition. Generally a higher resolution and quality than standard definition video.

HDMI

High-Definition Multimedia Interface. Audio/video interface for transmitting uncompressed data. Cable that connects your computer to your monitor, or your DVD player to your TV.

HDR

High Dynamic Range. A photographic process where a camera takes multiple pictures at different exposures and combines them into a single image—this allows all areas of your image to be well-exposed, but can also look unreal if used too much.

Heat Map

A heat map is a visual representation of data that allows you to see phenomenon as clusters or over space.

Home Screen

The main screen of a computer or mobile device. Home screens are typically personalized by the user so that no two home screens will look alike.

Hotspot

A type of Wireless Access Point. A device that allows you access the internet from a public place. Hotspots are generally open and unsecured and you should assume any data you submit is visible to people with ill-intent.

Hover text

When you hold your cursor over a hyperlink, the document should display the URL for that link. This allows you to verify links.

http

Hypertext Transfer Protocol is how data is moved between a website and an end user.

https

Hypertext Transfer Protocol (Secure) is an encrypted form of http. This protects against interference or snooping by third parties.

iCloud

Apple's cloud service.

Icon

A graphic representation of a program, file or function.

Information Security

The protection of data and the mitigation of risks, generally on computer networks.

Install

A process that writes the code used to run the program (application) onto the hard drive of your device. Installing a piece of software embeds it into the device and allows it to work.

Internet

A system of inter-connected computer networks.

iOS

Apple's mobile operating system.

iPad

Apple's tablet computer, running iOS.

iPhone

Apple's cellular phone, running iOS.

iPod

Apple's music player. The iPod is general similar to an iPhone, only without cellular service.

ISBN

International Standard Book Number. A numeric commercial book identifier that is unique for every edition and variation of a book.

ISP

Internet Service Provider. Company you pay so you can have internet at home.

iTunes

Apple's music service.

JPG / JPEG

Joint Photographic Experts Group. A [lossy](#) compression format for digital images.

Keylogger

Keystroke logger (also keyboard capture). A piece of hardware or a software program that can record every key struck on the keyboard.

LAN

Local Area Network. A group of computers / devices that share a common communications line.

Last Mile

The service from your local provider to your home.

Latency

The time delay between the sending and receiving computer.

Location Bar

See [address bar](#).

Location Services

Information from GPS, wireless access points, cell towers, and Bluetooth devices that helps your phone know where you are.

Lock Screen

The opening screen or interface of an operating system. A lock screen keeps unauthorized users from accessing the data and information on a device.

Lossless Compression

A form of data encoding that maintains the original quality of the file but at the cost of having a large file size.

Lossy Compression

A form of data encoding used to reduce file size at the cost of data quality.

LTE

Long-Term Evolution, A technology for mobile wireless broadband communication.

Malware

Software is specifically designed to disrupt, damage, or gain unauthorized access to a computer system.

Mbps

Megabits Per Second. The speed of your internet service.

Messenger

An app that allows users to send text messages and images to other users in a system.

Metadata

A data set that give you information about other data. A card catalog contains metadata.

Micro-SD

Micro-Secure Digital Card. Smaller size [SD card](#), used in phones and lightweight devices. Comes with an adapter that allows for the transfer for files from a portable device to a computer.

MMS

Multimedia Messaging Service is a kind of text messaging that allows you to send text messages that contain pictures or audio, as well as messages longer than 160 characters or to multiple people.

MOBI

Mobipocket. The proprietary ebook format for the Amazon Kindle. MOBI files are reflowable.

Mobile Carrier

A wireless service provider that allows users to connect portable devices (such as phones) to the internet through a cellular service.

Mobile Data

Wireless internet access through a cellular data connection.

Modem

Modulator-demodulator. A device that converts data from a digital format to a format for analog transmission.

MP3

Moving Pictures Experts Group Layer-3. A coding format for digital audio.

MP4 / MPEG4

Moving Pictures Experts Group Layer-4. A coding format for digital multi-media, commonly video.

MPEG

Motion Picture Experts Group. A standard for encoding and compressing video.

NDA

Non-Disclosure Agreement. A legally binding contract where parties agree not to share sensitive or confidential information.

Near Field Communication (NFC)

a wireless personal area network (PAN) technology that connects two compatible devices in very close proximity to each other, in order to enable slow but reliable data transfer. It is based on RFID and uses induction coupling to enable communication between two compatible devices that are close.

Network

A group of computers connected for the purpose of sharing resources. A network can be as small as two computers or as vast as the Internet.

News Feed

The main page of Facebook, where you see content posted by users you have chosen to follow. These content can be text or images.

Notification

A message displayed by an electronic device to provide an alert, reminder, or other communication.

Online Chat

Real time communication over the internet through (generally short) text messages.

OS

Operating System. The base upon which software and apps are added. An Apple device generally uses iOS (iPhones) or macOS (laptop computers). PCs typically used the Windows OS, but there are other operating systems, such as Linux that can be installed. Non-Apple cell phones frequently use some form of the Android OS. How your device looks and works is dependent upon the operating system installed.

P2P

[Peer-to-Peer](#)

Passcode

This is the secret code to get into a specific device. If you have an iPhone and an iPad, they can have different passcodes. You can sometimes use a fingerprint instead of a passcode to get into a device.

Password Manager

A program that stores electronic passwords.

Password

The secret code to access a restricted resources. Passwords are usually required to use a minimum of eight characters, and contain special characters, such as numbers or upper case letters.

PayPal

A method of online money transfer and payments.

PDF

Portable Document Format. Once an Adobe proprietary format, now one of the most common formats for sharing digital documents.

Peer-to-Peer

A distributed that shares tasks or work between devices of the same level.

Phishing

A fraudulent attempt to gain personal or sensitive information, by sending an email or creating a website that pretends to be from a real company or person, but is not.

Phreaking

An attack on the telephone system

PIN

Personal Identification Number.

Play Store

Goggle's app store, where users can download or purchase programs to run on their Android devices.

PNG

Portable Network Graphics. A [lossless](#) compression type for digital images.

Podcast

A digital audio file made available on the Internet for downloading to a computer or mobile device, typically available as a series, new installments of which can be received by subscribers automatically.

Post

A message, comment, image, or other item that is placed on the internet, generally on a website.

Predictive Text

An input technology that guesses what you want to type both from what you are currently typing and, if you have allowed the software to learn, from what you have typed in the past. Predictive text makes typing faster and easier if you have good software on the back end.

Privacy

The information that is shared between your device and the external resources to which it is connected, as well as how that information is used, and with whom that information is shared.

Program

A program is a piece of software that lets your device do something like send a text message or video chat. A program is the same thing as an application.

Public Network

An electronic connection where the traffic between devices is visible to anyone.

Reflowable

An ebook format that layout depending upon the output device. MOBI and EPUB are reflowable formats, which means the number of words on the page change, depending upon the page / text size.

Repeater

A device that extends the range of Wi-Fi signal.

Reply All

A response to an electronic message that is returned to ALL recipients of the original message.

Reply

A response to an electronic message.

RFID

Radio Frequency Identification. A wireless, non-contact transfer of data used to identify objects, animals, or humans.

Ripping

Extracting digital content from a container, such as a CD or DVD. Ripping a CD means that the music is copied without loss from the CD to your computer.

ROT-13

One of the most basic forms of encryption; a substitution encryption where characters are rotated 13 places.

Router

A networking device that forwards data between networks.

RTFM

Read The *Fantastic* Manual.

Scraping

Web scraping, web harvesting, web data extraction is extracting data from websites—gathering up information available on a public website.

SD

Standard Definition. The lowest quality rating for digital streaming.

SD Card

Secure Digital Card. Removable memory that is used in devices like cameras, because it can be easily switched out when full. Allows for easy transfer of files from device to computer without a cable.

Search

A computer command that allows you to find specific files on your computer that meet a designated category, such as file type, or date modified.

Search Engine

A software system designed to find information on the web. The results from a search engine can be webpages, files, or images. Generally, behind the scenes a program runs an algorithm that crawls through the web cataloging everything it sees. This catalog is then organized by a different program where pages are associated with various terms.

Security

Protecting electronic systems from theft or damage. This can be protection from physical theft, but often refers to electronic damage, where systems can be disrupted or data stolen.

Server

A device (or program) that allows you to access something not on the device you are physically touching. A mail server stores your email and drops it to your device upon request. A web server allows you to connect to the internet.

Settings

An app that allows you to customize your computer, device, or program.

Siri

Apple's personal assistant.

Smart Device

An electronic device that connects to other devices or the internet through a wireless protocol such as Bluetooth or Wi-Fi.

Smart TV

A television with a network port to allow you to watch streaming services (and other internet content) without having to use an additional device.

SMS

Short Messaging Service. A brief message that is sent from one phone number to another phone number. SMS does not use cellular data.

Snooping

Unauthorized listening in to data transmission.

Snopes

One of the first internet fact-checking resources, Snopes started as a site to debunk urban legends, but expanded into general fact-checking. (<https://www.snopes.com/>)

Social Media

Interactive computer technologies and websites that allow for the sharing of information. Facebook is the most famous social media site, and allows friends to connect automatically, but LinkedIn is another type of social networking site, that focuses on career and job networking.

Software

The programs that run on your computer or phone. Can also be called an application.

Sort

To organize information in a prescribed sequence, such as alphabetically, or oldest to newest.

Spam

Unsolicited electronic messages (especially advertising).

Speed

Download speed is how quickly you can pull down data from the internet. Upload is how quickly you can send data out to the Internet.

Spoofing

When a person or program pretends to be someone else, by falsifying data, to gain access to your account or data.

Spyware

A piece of malicious software that secretly installs itself to gather information about the user or device.

SSD

Solid State Drive. A storage device for your computer that saves data on chips instead of a mechanical platters.

Status Bar

A graphical element, usually at the top or bottom of a device's screen, that displays information about the state of the device. Some settings commonly found on the status bar are sound/volume, time, and battery life.

Streaming Device

An object, such as Roku stick or Fire stick, you purchase that plugs into your existing TV so you watch video through the device on your existing television.

Streaming Service

An online provider of entertainment (music, movies, etc.) that delivers the content via an Internet connection to the subscriber's computer

Switch

A device that connects to a router and provides multiple ports for wired connections.

Sync

See [synchronize](#).

Synchronize

When a file is synced, changes to that file are saved are pushed from one device to all other devices with access to that file, via a remote server.

Tag / Tagging

A keyword or term added to the metadata of a piece of information. In social media, when someone is tagged, they are alerted to a post made by another user.

Taskbar

A graphical user interface (GUI) that is typically along the bottom of your window, and usually shows you what programs are actively running as well as important information about the operating system.

TB

Terabyte. A measure of computer storage equal to 1000 gigabytes or trillion bytes. The prefix tera means 10^{12} .

TCP

Transmission Control Protocol. The main protocol used on the internet that allows computers to send and receive data.

TCP/IP

Transmission Control Protocol/Internet Protocol

Terms of Service

The rules you agree to abide by when you sign up use an online service.

Text Message

A brief message that is sent from one phone number to another phone number via a protocol called SMS. Text messages are generally limited to 160 characters, and messages with more characters than that will be broken down into multiple messages when sent. Text messages are asynchronous: a message sent to someone whose phone is off is delivered when their phone is turned back on. Text messages generally do not require cellular data but do require a cellular connection.

Thumb Drive

[USB Flash Drive](#)

Thunderbolt

Interface reconfigured to be compatible with USB-C that carries data, video (PCIe and DisplayPort), sound, and power over a single cable.

TIFF / TIF

Tag Image File Format. Lossless digital image format that was developed originally for scanners as an alternative to multiple proprietary formats.

Timeline

A display of items in chronological order. Twitter has a timeline; Facebook has a news feed.

TL;DR

Too Long, Didn't Read

TOS

Terms of Service

Trojans

A type of malicious computer virus that presents itself as a useful item, such as a document.

Two-Factor Authentication

This is a way to make both your device and your account more secure. When you log into your Apple ID on a new iPad (or iPhone) for the first time OR you log into iCloud from a computer you have never used before, Apple wants you to verify that YOU are the person attempting to access your account.

TXT

[Text message](#).

Unfollow

To stop seeing a user's posts in your timeline or news feed. On Facebook, you can unfollow someone by still remain friends with them.

Uninstall

The removal of a software program or application from the operating system of a device. Although uninstall removes the visible aspects of a program, there are often bits and pieces of the program left behind.

Unique Identifier

A piece of data that is unique to a record. Telephone numbers and email addresses are often used as unique identifiers, because no two individuals have the same ones. Unique identifiers allow data records to be linked across databases.

Upload

To move files from your computer to a cloud service or network.

URL

Uniform Resource Locator is the address of a space on the web. Every website has a unique address, and that address can often tell you something about the web page you are visiting.

URL Bar

See [address bar](#).

USB

Universal Serial Bus. This is the industry standard for cables that connect devices and their peripherals through a wire. This connection can be used for both communication and power. There are several types of USB connections: USB-A, USB-A 3.0, mini-USB, micro-USB, and the newest standard, USB-C.

USB Flash Drive

Also: USB thumb drive. A small USB data storage device that is removable, rewritable, and can be easily carried in a pocket.

User Data

Any type of data generated by people interacting with software programs. User data includes: Explicit Data, which is given by a user directly such as name, address, email, and phone number; Implicit Data, which is not provided by the user directly but gleaned through analysis of user interactions, such as pages visited, session duration, or type of device; and finally External Data which has been gathered from third parties with whom an organization has a relationship.

Username

Also called account name, login ID, user ID. The credentials you use to access an electronic resources, such as your computer or a website. Every account on a website or device must be unique to that service, so as to keep account information separate.

VGA

Video Graphics Array. A connector that takes video signal from a computer and takes it to the monitor (or projector).

Virtual Personal Assistant

A software program that preforms tasks or services based upon verbal commands. Some of the most well-known services are Siri and Alexa.

Viruses

A piece of malicious software that inserts itself into another software program that it uses to replicate itself. Ransomware is a software virus.

WAV

Waveform Audio File Format. An audio file standard for uncompressed audio.

Web

Also called the World Wide Web, this is an information space on the Internet that is accessible from devices such as computers, cell phones, and tablets, using a URL as the address.

Web Browser

A software program that allows you to access sites on the Internet, or web.

Web Cookie

See Cookie.

Website

a location connected to the Internet that maintains one or more pages on the World Wide Web

Wi-Fi

Short for wireless (the “fi” is an arbitrary syllable added on)

Widget

A graphical element that displays information or provides quick access to certain parts of an app. Mobile devices frequently have a weather widget that is linked to your weather app, and which tells you the current temperature and forecast.

Wireless Access Point

A device that allows your device to access the internet. If a wireless access point (or router) does not have a password, it is unsecure, and you should assume that anyone can see what you are doing on your device.

Wireless Router

A piece of hardware that allows devices to connect to the internet without being plugged into the wall. Your wireless at home should be password protected, so that strangers cannot access all devices in your home using that wireless network.

Wireless

A technology that allows computers to connect to a network and/or the internet without using a physical connection. Wireless is available in an area when a wireless access point (also called a hotspot) has been created and made accessible to devices. Public wireless is less secure and caution should be used (ie, don't make purchases or send private emails over a wireless network). Private wireless networks (such as in your home) should be secured with a password.

WWW

World Wide Web. An information system on the Internet which allows documents to be connected to other documents by hypertext links, enabling the user to search for information by moving from one document to another.

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