

Transfer files

Connect the phone to a computer

1. With the phone and computer turned on, connect the phone and computer with a USB cable.
2. unlock the phone.
3. Change the USB connection type to allow file transfers:
 - a. Swipe down from the top of your Home screen and touch the  **Charging this device via USB** notification.
 - b. To transfer any type of file, touch **File transfer**.
Or, to transfer only photos and videos, touch **PTP**.

Transfer to/from a Windows computer

1. ensure the phone is properly connected to the computer using the steps above.
If you don't unlock the phone and change the USB connection to allow file transfers, you won't see any files on your phone.
2. On your computer, open File Explorer, click the name of your phone and navigate to its internal storage or SD card.
3. If you selected **PTP** when you connected the phone, in File Explorer choose whether to import pictures and videos automatically or manually.
4. Open a second File Explorer window to see your computer folders.
5. Navigate to the folders or files to transfer, then drag and drop them to and from the open phone storage and computer folders.

Transfer to/from a Mac

1. Ensure the phone is properly connected to the computer using the steps above.
If you don't unlock the phone and change the USB connection to allow file transfers, you won't see any files on your phone.
2. On your computer, download the Android File Transfer application from www.android.com/filetransfer and follow the onscreen instructions.

Location of files

Files are stored in these folders on your phone:

- **DCIM:** (Digital Camera Images) photos and videos taken with the Camera app
- **Pictures:** photos you edited and photos from apps other than Camera
- **Download:** files [downloaded](#) from the internet
- **Music:** files for apps that play music
- **Ringtones:** sound files for ringtones
- **Notifications:** sound files for [notifications](#)
- **Alarms:** sound files for [alarms](#)

Fix an issue

If you're having issues, [try these troubleshooting steps](#).

Cast screen or media to TV

Mirror with Chromecast

To mirror your screen on a TV, showing all apps and screens you use on your phone, you must:

- Use a TV with [Chromecast built-in](#).
- Or, plug a Chromecast into your TV's HDMI port. ([Learn how](#).)

To start casting:

1. Make sure your phone and Chromecast or TV with Chromecast are connected to the same [Wi-Fi](#) network.
2. Go to [Settings](#) > **Connected devices** > **Connection preferences** > **Cast**.
Or, from [quick settings](#), touch .
3. Touch the name of the Chromecast or TV to connect.

To stop:

- On the casting notification, touch  > **Disconnect**.
- Or, from quick settings, touch  > **Disconnect**.

Cast an app

You can cast an app if you:

- Have a smart TV that supports mobile apps for viewing or playing media from your phone. See your TV user guide for instructions to connect your phone.
- Have Chromecast or a TV with [Chromecast built-in](#).

Miracast is not supported.

To cast an app:

1. Make sure your phone and smart TV or Chromecast are connected to the same [Wi-Fi](#) network.
2. In a cast-compatible app (like YouTube), touch .

If you don't see  or don't see your TV listed in the casting options, [try these troubleshooting steps](#).

While casting:

- You'll see  in the [status bar](#).
- You can still make and receive calls and use your phone's other features.

To stop casting:

- In the app that's casting, touch  and touch the option to disconnect.

- From the notification, touch .

Cast personal media with Wi-Fi Direct

If your TV supports Wi-Fi Direct, [set up a connection](#) between your phone and TV so that you can view or play media from your phone.

For information about using Wi-Fi Direct after you've connected, see the user guide that came with your TV.

Fix an issue

After each step, see if your issue is fixed.

Check the basics

1. If you're using a [VPN](#), turn off the VPN and try again.
2. Make sure your phone and Chromecast or smart TV are connected to the same [Wi-Fi](#) network.
3. Move your phone to within 15 feet of your Chromecast or smart TV.
4. If you're using Chromecast or a TV with Chromecast built-in, [check for updates](#) to the Home app.

Phone can't find smart TV

First, check the basics. Then:

1. on the TV, open the app and start a video. Then on your phone, open the app and try casting to the TV again.
2. Link the app on your phone to the app on the TV:
 - a. on your phone, open the app, open its settings menu and look for options to watch on TV. (For example, **YouTube** >  > **Settings** > **Watch on TV** > **Link with TV code.**)
 - b. Follow the app's onscreen instructions to complete setup.
3. Reboot your Wi-Fi router.
4. Check your TV for firmware and app updates. See the TV manufacturer's support website for information.
5. Check your TV manufacturer's support website to make sure the app is still supported on your TV model.

Check for app help

If you're having issues casting with one of these apps, check their help centre for troubleshooting information:

- [Netflix](#)
- [Amazon Prime Video](#)
- [YouTube](#)
- [Google TV](#)

Print from your phone

Set up printing

To connect your printer and phone:

1. Before you begin:
 - If your printer is connected to a Wi-Fi network, be sure the phone and your printer are connected to the same network.
 - If your printer supports Wi-Fi Direct, [set up a direct connection](#) between the phone and printer.
2. Go to **Settings** > **Connected devices** > **Connection preferences** > **Printing**.
3. Touch **Default print service** to automatically find your printer.

Once your printer is found, it is ready to print.

If your printer isn't found in Default print service:

1. Touch **Add service**.
2. In Play Store, search for '[printer brand] print service' and install the app for the printer's service plugin.
3. Once installed, return to **Settings** > **Connected devices** > **Connection preferences** > **Printing** and touch the print service plugin name to automatically find your printer.
4. If your printer isn't found automatically, touch  > **Add printer** > .
5. Enter the printer's name and IP address (found in your printer settings on connected computer).

Print

1. Open the item to print, such as:
 - a photo in Photos
 - an email
 - a document in Drive
 - A webpage in Chrome.
2. Touch  or  > **Print**. (If you're using Chrome,  > **Share** > **Print**.)
3. Select printer options if needed.
4. Touch .

About wireless sharing

What you can share

You can share your [photos and videos](#), [contacts](#), [screenshots](#) and [downloaded files](#).

When sharing photos and videos

When deciding how to [share](#) your photos or videos, consider these factors:

- Resolution (high versus low) of the photo or video; high resolution uses more data
- Number of photos to share (one photo or a few or an entire holiday album)
- Whether you want to share on the Internet or from device-to-device
- Length of availability for sharing

Ways to share

Method	Description
Message (MMS)	Good for: • Sharing one photo or a low-resolution video • Sharing with a friend or group • Sharing immediately, as an event is happening Things to consider: • You and your recipients must have mobile data plans to receive multimedia text messages. • Sending high-resolution photos via text message uses more data. • Photos and video remain available until the recipient deletes the message. • High quality videos are too large and cannot be shared in text messages. Learn how
Email	Good for: • Sharing one or a few photos • Sharing with a friend or group Things to consider: • Some email providers limit attachment sizes. For large files, upload the file to a cloud storage and email the link instead of the file. • Email attachments remain available for download until the recipient deletes the email. Learn how
Cloud	Good for: • Sharing high resolution photos, multiple photos, entire albums and videos

- Controlling sharing via links
- Controlling how long you share something (You can easily delete it or turn off sharing privileges.)

Things to consider:

- Many cloud services offer free storage with a basic account.
- Cloud storage services are fairly secure, but not completely free from security breaches, so upload wisely.
- Upload over [Wi-Fi](#) to prevent mobile data charges.

[Learn how](#)

Social app

Good for:

- Sharing publicly, with large groups of friends, followers and subscribers
- Sharing one photo at a time, or many photos, albums or videos
- Controlling how long you share something (You can easily delete it or turn off sharing.)

Things to consider:

- Understand social network privacy and sharing policies before you post.
 - Review updates to social network privacy and sharing policies often.
 - Requires a Wi-Fi or mobile data connection.
-

Bluetooth

Good for:

- Sharing from phone-to-phone or other connected device
- Fast sharing

Things to consider:

- Your phone must be [paired and connected](#) with another device.
-

NFC

Good for:

- Quickly sharing with a nearby phone, tablet, or computer
- No need for pairing devices (Simply [touch](#) them back-to-back.)

Things to consider:

- Devices you share with must have NFC.
- Both your phone and the other device must be on and unlocked.

[Learn how](#)

Change app settings

Set or change default apps

If you have multiple apps that do the same thing, you can pick which app to use by default.

Pick when asked

Sometimes, your phone asks which app to use. For example, your phone might ask which app to use to open a PDF file.

To set a default when asked:

1. Touch the app to use.
2. Pick how often you want to use that app for this action: **Always** or **Just once**.

If you select Always, you won't be asked which app to use anymore. To have your phone ask you again, you can clear the default:

1. Go to [Settings](#) > **Apps & notifications**.
2. Touch **Default apps** > **Opening links**.
Or touch **Advanced** > **Default apps** > **Opening links**.
3. Touch the app you selected as default.
4. Touch **Open supported links** and select **Ask every time**.

Pick any time

You can change some default apps (such as [browser](#) or [messaging](#)) at any time:

1. Go to [Settings](#) > **Apps & notifications**.
2. Touch **Default apps**.
Or, touch **Advanced** > **Default apps**.
3. Touch the default to change.
4. Touch the app to use.

Adjust app permissions

The first time you use an app, and sometimes when you [install](#) or [update](#) it, you are asked to grant the app permission to access certain data and phone features. You can adjust these permissions at any time.

To adjust permissions by feature:

1. Go to [Settings](#) > **Apps & notifications**.
2. Touch **Advanced** > **App permissions**.
3. Touch a feature to see which apps have permission to use it.
4. Turn that permission on or off for each app as needed.

You can also [adjust permissions by app](#).

Adjust special app access

In **Settings > Apps & notifications > Advanced > Special app access**, you can adjust these settings:

- **Usage access:** control which apps have access to data about your app usage (which other apps you're using and how often, your carrier, language settings and other details).
- **Unrestricted data:** Allow certain apps to use background data even when Data Saver is on. [Learn more](#).

You can also control whether apps have access to features such as [Picture-in-picture](#), [Battery optimisation](#) and [Do Not Disturb](#). In general, you shouldn't need to adjust these.

Choose how apps notify you

Turn an app's notifications off

When you receive unwanted notifications from an app, touch & hold the notification, then touch **Stop notifications**.

To review all apps and adjust whether they can send notifications:

1. Swipe down to view your notifications.
2. At the bottom of the list, touch **Manage notifications**.
3. Do one of the following:
 - To stop all notifications from an app, turn it off .
 - To stop certain notifications from an app, touch the app name, then turn notifications on  or off  for each category.

Tip: To prevent notifications from all apps during certain times or calendar events, use [Do Not Disturb](#).

Choose the urgency of app notifications

For each app, you can control how urgently that app's notifications alert you when they arrive. You can choose between having notifications:

- Make sound and pop up on screen
- Make sound
- Show silently
- Show silently and minimise (only show in your notification list)

To change the urgency of an app's notifications:

1. Touch & hold the app icon.
2. Touch  > **Notifications**.
3. Touch the name of a ticked notification category, then touch **Behaviour** and make a selection.

Tip: To adjust several apps at once, go to [Settings](#) > **Apps & notifications** and touch > to see all apps. Then touch **Notifications** for each app and adjust behaviour.

Change notification volume

To adjust the volume level of all notifications:

1. Press a Volume button and on the screen touch .
2. Adjust the  slider.

Change notification sound

Set default notification sound

To change the sound used for notifications from all apps:

1. Go to [Settings](#) > **Sound** > **Advanced** > **Default notification sound**.
2. Do one of the following:
 - To change it, choose a new sound.
 - To turn notification sounds off, select **None**.

Set a notification sound for a specific app

To use a distinctive sound for an app's notifications, instead of the default notification sound:

1. Touch & hold the app icon.
2. Touch  > **Notifications**.
3. Touch the category for enabled notifications, then touch **Advanced** > **Sound** and select a unique ringtone or set it to none.

If you don't see **Sound**, touch **Behaviour** and select an option that includes sound.

If you can't hear a notification

To let an app's notifications be heard when [Do Not Disturb](#) is on:

1. Touch & hold the app icon.
2. Touch  > **Notifications**.
3. Touch the category for enabled notifications, then touch **Advanced** and turn **Override Do Not Disturb** on .

Turn an app's notifications on

If an app isn't sending notifications but you want it to:

1. Go to [Settings](#) > **Apps & notifications** > **Notifications**.
2. Touch **See all from last ### days**.
3. At the top, touch ▼ and select **Turned off**.
4. Turn notifications on  as needed.

Turn notification dots off or on

App icons show dots to alert you about unread notifications. You can turn off the dots for one or all apps.



Turn the dots off for all apps

1. Go to **Settings** > **Apps & notifications** > **Notifications**.
2. Turn **Allow notification dots** on or off .

Turn the dots off for one app

1. Touch & hold the app icon.
2. Touch > **Notifications**.
3. Touch **Advanced**.
4. Turn **Allow notification dot** on or off .

Control lock screen notifications

If you've [set a pattern, PIN or password](#), you can prevent [lock screen notifications](#) from revealing private information.

To adjust notifications for all apps:

1. Go to **Settings** > **Apps & notifications** > **Notifications**.
2. Touch **On lock screen**.
3. Do one of the following:
 - To hide all notifications on your lock screen, select **Don't show notifications at all**. You can still peek at your notifications — swipe down on the lock screen, then enter your pattern, PIN or password if required.
 - To hide sensitive content in notifications from **all** apps, select **Hide sensitive content**. For example, you'll get a lock screen notification for an incoming email or chat, but it won't include message details.
 - To see all notifications on your lock screen, select **Show all notification content**.

To hide sensitive content from specific apps:

1. Set lock screen notifications for all apps to **Show all notification content**.
2. Touch & hold the app icon, then touch > **Notifications**.
3. Types of notifications the app sends appear here. For each enabled notification that you want to hide:
 - a. Touch the name.
 - b. Touch **Advanced** > **On lock screen** > **Hide sensitive content**.

Tip: When you [turn on Lockdown](#), notifications won't show on your lock screen.

Charge phone

How to charge your phone

Your phone is like a small computer, giving you tonnes of information and apps. Depending on what you use, that can take a lot of power. Plan on charging the phone each night so it's ready for the next day.

1. [Connect](#) your phone to the charger that came with your phone, or to a charger that is compatible with your phone.

Other chargers, including laptops, can charge more slowly.

2. Insert the plug into an electrical outlet.

When the phone is off and charging, you'll see the outline of a battery and a percentage. If the battery is completely discharged, this will not appear until the phone has received the minimum voltage required to boot.

When the phone is on and charging, you'll see  in the [status bar](#).

Tips for charging phone

- You can use your phone while charging. To charge faster, don't use your phone while charging.
- If you can't turn the phone on while it's charging, wait until it receives enough voltage before turning it on.
- When the battery gets low, the phone sends a [notification](#).
- Use [Battery Saver mode](#) when the battery is low.
- You can [turn off](#) charging sounds.

Extend battery life

Choose settings that use less battery

To get the most life from your battery:

- **Connections:** turn off [Bluetooth](#) and [GPS](#) when you're not using them.
- **Wi-Fi:** turn on [Wi-Fi](#) when the phone is in a location with Wi-Fi coverage.
- **Screen:** turn down screen brightness and set a shorter [screen timeout](#).
- **Sync:** if you don't need it, turn off [automatic syncing](#) for all accounts. This means you won't receive notifications when updates occur and you'll need to sync manually to get new emails.

Temporarily conserve battery power

Use [Battery Saver](#) mode to keep going on a low battery.

Also, avoid these battery-intensive activities until you can [charge](#):

- Recording or watching videos
- Listening to music
- Taking pictures
- Using Live (animated) [wallpaper](#)

See what's using your battery

To see if a specific app or service is draining your battery:

1. Go to [Settings](#) > **Battery** > **USAGE DETAILS**.
2. Swipe up to view the list of apps and features using power since the last full charge.
3. Touch the app or feature using a lot of power.
4. Under **Manage battery usage**, touch options for reducing the power usage.

Keep adaptive battery and battery optimisation on

To ensure that apps use your battery only when they need to, keep adaptive battery and battery optimisation on.

Check that adaptive battery is on for your phone

When you keep adaptive battery on, infrequently used apps will run less when you're not using them. Your phone will learn how you use apps over time and adjust for best battery life.

1. Go to [Settings](#) > **Battery** > **Adaptive Battery**.
2. Turn **Use Adaptive Battery** on .

Check that battery optimisation is on for each app

If you turn off Battery optimisation for an app, that app can run when you're not using it, even when Adaptive Battery is on. This decreases battery life unnecessarily.

1. Go to [Settings](#) > **Apps & notifications** > **Advanced** > **Special app access**.
2. Touch **Battery optimisation**.
3. If an app is listed as **Not optimised**:
 - a. Touch the app.
 - b. Touch **Optimise** > **Done**.

Tip: Optimise isn't available for some essential services.

Use Battery Saver mode

When Battery Saver is on

Battery Saver helps you keep going on a low battery until the next charge.

To save power, your phone will:

- Wait until you look at an app to refresh its content, such as email or news
- Stop apps from doing things in the background
- Stop using Location services when your screen is off

When the phone is in Battery Saver mode, you'll see  in the status bar.

Turn Battery Saver on or off

Turn it on/off yourself

Open [Quick settings](#) and touch .

Have it turn on automatically

To turn on when your battery is below a specified level:

1. Open quick settings, then touch & hold .
 2. Touch **Battery Saver** > **Turn on automatically**.
 3. Move the slider to adjust the percentage when Battery Saver switches on.
-

Show battery percentage in status bar

To show the percentage of battery power remaining in the status bar:

1. Go to [Settings](#) > **Battery**.
Or, open quick settings, then touch and hold .
2. Turn **Battery percentage** on .

About storage options

Phone internal storage

You can store photos, videos, music and applications on your phone. Files you [downloaded](#) from the Internet and attachments you save from [email](#) or text messages are stored there, too.

You can [free up space](#) when needed.

SD card storage

You can store media files on an SD card. Just [insert](#) the card and [move](#) your files from phone storage to the SD card.

Benefits include:

- Immediate access to your files
- No mobile data or Internet connection required to access files
- More control over privacy

Cloud storage

Clouds are great for storing files you want to share and access from other devices, such as [photos](#), [videos](#) and [music](#).

Benefits include:

- Access your files from any device with an Internet connection
- File synchronisation - no need to keep track of multiple versions in multiple storage locations
- Backups of photos and videos available if phone is lost or damaged

Cloud storage providers typically offer free storage that can be expanded with a paid subscription once you reach the free-storage limit. Or you can manage your free storage by removing files you no longer need to make space for new ones.

Apps such as Drive and Photos let you easily [back up media](#) to cloud storage.

Manage phone storage

Free up space by scanning

To scan your phone for old and unused items to remove, like downloads and unused apps:

1. [Open](#) the **Files** app.
2. Touch **Clean**.

You'll see suggestions for categories of items to check and free up space.

3. Touch the suggestions and follow on-screen instructions to uninstall, move, or delete items.

If you don't see suggestions to free up space, check that suggestions are on:

1. [Open](#) the **Files** app.
2. Touch  > **Settings**.
3. Touch **Notifications** and turn on  ones you want to receive.

Free up space manually

To free up space:

1. [Open](#) the **Files** app.
2. Touch **Browse**.
3. Touch a category (apps, images, videos etc.) to view that type of item.
4. Do any of the following:
 - To uninstall apps, touch the app's name, then touch **Uninstall**.
 - To clear an app's cache, touch the app's name, then touch **Storage & cache** > **Clear cache**.
 - To clear your data for an app, touch the app's name, then touch **Storage & cache** > **Clear storage**.
 - To delete media or other files, touch & hold to select one or more items, then touch .

Schedule automatic removal of photos and videos

If you [automatically back up](#) your photos and videos, you can automatically remove copies from your phone's internal storage after 30, 60 or 90 days.

1. Go to [Settings](#) > **Storage**.
2. If you have installed an SD card, touch **Internal shared storage**.
3. Touch **Storage manager** and turn it on .
4. Touch **Remove photos & videos** and select a duration.

If you store photos or videos on your SD card, this does not delete them.

Manage SD card

Move photos, videos, music to SD card

To free up internal storage on your phone:

1. Make sure you've [inserted and set up your SD card](#).
2. [Open](#) the **Files** app and touch **Clean**.
Or, go to [Settings](#) > **Storage** > **Internal shared storage** > **FREE UP SPACE**.
3. If there are media files to move, touch the option to free up space.
4. Select items to move.
5. Touch  > **Move to** > **SD card**.

Tip: You can set the camera to store all new photos and videos on the SD card.

Move apps to SD card

You cannot store apps on the SD card because it is portable storage. If needed, you can [free up space](#) on your phone.

Eject SD card

Drag the SD card notification down, and touch **Eject**.

If you don't see the notification:

1. Go to [Settings](#) > **Storage**.
2. Next to your SD card name, touch .

It's now safe to [remove the card](#) from the phone.

To insert the card into another device (computer, projector etc.) that uses different card dimensions, you may need the adapter that came with your card. See device manufacturer's instructions for the type of adapter required and insertion instructions.

Erase SD card

1. Go to [Settings](#) > **Storage**.
2. Select your SD card.
3. Touch  > **Storage settings** > **Format**.
4. Follow onscreen instructions to format the card.

Find downloaded files

You can download files and store them on your phone, including:

- Photos, videos and documents you save from emails or texts
- Books, movies or other content that you buy from Play Store and save for offline viewing
- Other files or images you download from the web

When the file has finished downloading, you'll see  in the [status bar](#). Touch the [notification](#) to open the file in the appropriate app.

To view, edit or delete downloads:

1. [Open](#) the **Files** app.
2. Touch **Browse** > **Downloads**.

3. Do any of the following:

- To open or play a file, touch it. You can only edit some types of files.
- To sort files by name, date modified, or size,  > **Sort by**.
- To share a file, touch and hold it, then touch .
- To delete a file, touch and hold it, then touch .

Tip: To access downloads from a computer, connect your phone with a [USB cable](#), then open the phone's internal storage and look for files in the Downloads folder.

Recover recently deleted files

You can try to recover recently deleted photos, videos or texts. But do so as soon as possible. The more you use the phone, the more likely the file will be overwritten with new data.

1. Search for 'file recovery' in Play Store and [install](#) one of the apps.
2. Use the app to scan your phone.
3. If you can't recover recently deleted items, try connecting your phone to your computer with a USB cable and using a desktop program for file recovery.

Tip: [Back up your photos to the cloud](#) so you won't lose them if you delete them from your phone.

Upload music to cloud

You can store songs from your library in the cloud, for free, with Google Play Music (not available in all countries). Then you can instantly listen to your tunes wherever you are.

You can upload music from your:

- iTunes library
- Windows Media Player library
- My Music folder or any folder on your computer

To upload your music:

1. On your computer, visit music.youtube.com
2. Click on your profile picture > **Upload music**.

To learn more, [read Google's help](#).

After you've uploaded your music, you can listen to it:

- On your computer by visiting music.youtube.com
- On your phone with the [Play Music](#) app

Upload photos and videos

Back up automatically

1. Open the  **Photos** app.
2. Touch your profile icon  > **Turn on backup**.

You can [change back up settings](#) any time.

Adjust back up settings

To adjust settings for your automatic backups:

1. Open the  **Photos** app.
2. Touch your profile icon  > **Photos settings** > **Backup**.
3. Adjust settings as needed:
 - To choose high quality or original size for uploads, touch **Backup quality**.
 - To back up items in your Download, Screenshots and third-party app folders, touch **Back up device folders**.
 - To back up items over your mobile network, touch **Mobile data usage**, then adjust options for photos, videos and roaming.

Back up manually

1. Open the  **Photos** app.
2. Open the photo or video.
3. On the photo or video, touch . (Swipe up if you don't see .)

View your backed up photos and videos

From your phone, open the  **Photos** app.

From your computer, sign in to photos.google.com.

Manage your storage

1. Open the  **Photos** app.
2. Touch your profile icon  > **Photos settings** > **Backup**.
3. Touch **Manage storage**.
4. View how many GB of storage you have used and approximately how much time your remaining storage will last. If you're running low, follow the onscreen instructions to get more storage.

5. To review and delete recommended photos:
 - a. Under **Review and delete**, touch a category (such as large photos and videos, blurry photos or screenshots).
 - b. Touch & hold an item to delete, then touch others to include them.
 - c. Touch .

More help

To learn more, [read Google's help](#).

Scan documents and make copies

Scan document to Drive

You can scan important documents with your phone and save them as PDFs on Google Drive.

1. [Open](#) the **Drive** app.
2. Touch  > .
3. Align your phone over the document to scan and touch .
4. Touch .
5. Optionally:
 - Touch  to crop.
 - Touch  to select image enhancement options.
 - Touch  to rotate the image.
 - Touch  to reset the scanner (deletes current unsaved scan).
 - Touch  to rename, and adjust image and PDF settings.
6. When you've finished scanning, touch **Next**.
7. Change the document title and folder on Drive, if desired, then touch **Save**.

In Drive, open the file and touch  to share or [print](#) the scan.

Scan and save to folders from your home screen

Add Drive Scan widgets to your home screen to scan and save to new or selected folders. Each widget saves to a single folder on Drive. So, [add multiple widgets](#), one for each folder you need (receipts, billing statements, recipes, etc.).

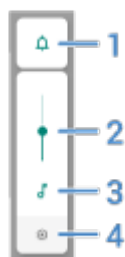
Adjust volumes

Use Volume buttons

In-call audio. When you're on a call, the [Volume buttons](#) control the volume of the other person.

Media. When you're not on a call, the Volume buttons control media volume during or before playback.

Phone ringtone, notification sounds and alarms. To adjust these volumes, press a Volume button and then use this shortcut on your Home screen:



1. Touch to toggle the phone ringtone and notification sounds between on , silent  and vibration only .
2. Slide to adjust media volume.
3. Touch to mute media volume.
4. Touch to access all volume controls (call, ring/notification, alarm, media).

Silence with Power and Volume buttons

To silence a ringing phone, press either the **Power** button or the **Volume down** button.

To switch to vibrate at any time, press and hold the **power + Volume up** buttons until you feel a vibration and see .

If you want to customise Power and Volume up so that this silences the phone instead of switching to vibrate:

1. Go to [Settings](#) > **System** > **Gestures**.
2. Touch **Prevent ringing** > **Press power & volume up buttons together** > **Mute**.

Tip: Use Do Not Disturb to silence all calls, messages, events and reminders. Turn it on [from quick settings](#) or schedule it to turn on automatically [during certain times](#) or [during calendar events](#).

Pick up to silence

You can simply pick up your phone to silence incoming calls and alarms and to turn vibration on.

To enable this gesture:

1. Open the **Moto** app.
2. Touch  > **Moto Actions**.

3. Touch **Pick up to silence** and turn it on .
 4. If you want this gesture to silence calls but not alarms (or vice versa), touch **Settings** and turn the appropriate option off .
-

Set ringtones

Change default call ringtone

1. Go to **Settings** > **Sound**.
2. Touch **Advanced** > **Phone ringtone**.
3. Do one of the following:
 - Select a ringtone from the list.
 - To use a song as the ringtone, touch **Add ringtone** at the bottom of the list. Then touch  > **Audio** and select the song [stored on your phone](#).
 - For silence, touch **None** at the top of the list.

Vibrate phone for calls

To extend battery life, turn vibrate off.

You can set the phone to vibrate when it rings for calls.

1. Go to **Settings** > **Sound**.
2. Turn **Also vibrate for calls** on  or off .

Set call ringtone for a contact

You can choose a unique ringtone for calls from specific people so you'll know instantly who's calling.

1. [Open](#) the  **Contacts** app.
2. Touch the contact's name.
3. Touch  > **Set ringtone**.
4. Do one of the following:
 - Select a ringtone from the list.
 - To use a song as the ringtone, touch **Add ringtone** at the bottom of the list. Then touch  to browse and select the song [stored on your phone](#). Touch  to show internal storage.
 - For silence, touch **None** at the top of the list.

Set ringtone for app notifications

You can set a default sound for notifications from apps including messaging and email. You can also set a unique ringtone for notifications from specific apps. [Learn how](#).

Tip: To change your [alarm sound](#), open the Clock app and touch . Then touch .

Get more ringtones

Although your phone comes with lots of ringtones, you can get more:

- Search for 'ringtones' in [Play Store](#) and install an app that provides ringtones.
- Search for 'ringtone maker' in [Play Store](#) and install an app that lets you create custom ringtones. Open the app and use it to select entire songs or portions of songs.
- If you have songs that are .mp3 files stored on your computer, [connect](#) your phone and computer with a USB cable, then copy the song to your phone.

Fix an issue

If you're not hearing your ringtones:

- Look for  in your [status bar](#), which means you're in [Do Not Disturb](#) mode. [Open Quick settings](#) and turn  Do Not Disturb off.
- Check that your [ringtone volume](#) is set to .

Enhance sound

Automatically adjust sound

Your phone automatically identifies the type of media you're playing and how you're listening (phone's speaker, headphones or other connected audio device), and adjusts sound for that experience. You don't have to do anything. Moto Audio is always on, unless you [turn it off](#).

Select sound profiles

You can select a preset sound profile for your loudspeaker, headphones or other connected device and your phone will remember the next time you connect it.

1. Go to [Settings](#) > **Sound** > **Moto Audio**.
2. Choose how to adjust sound:
 - To automatically adjust based on the media playing, select **Smart audio**.
 - To use a preset sound profile, select **Music** or **Film**.
 - To use a custom sound profile where you can adjust a graphic equaliser, select **Custom**.

3. To adjust options for a selected profile or set up the Custom profile, touch , then:
 - Choose an equaliser preset to enhance treble, bass or vocals. For the Custom profile, you can refine an equaliser preset, or to adjust the graphic equaliser, touch **Manual** and move the sliders.
 - To get a surround sound experience, turn **Surround virtualiser** on.
 - To keep the same volume level when you switch between audio sources, turn **Volume leveller** on.
 - To learn more about these settings, touch  > **Help**.
 - To revert to original profile settings, touch  > **Reset**.

Note: If you don't want to save settings, touch  > **Saved audio settings** and turn **Remember this device** off .

Turn Moto Audio off

To turn Moto Audio off for the loudspeaker and any connected device:

1. Go to **Settings** > **Sound** > **Moto Audio**.
2. Touch  > **About**.
3. Tap the image on the screen three times.
The **On** toggle appears.
4. Turn it off .

Silence calls and notifications

When you're busy, use Do Not Disturb to mute ringtones for incoming calls, stop vibration and block notifications.

Quickly turn Do Not Disturb on or off

Turn the feature on

1. **Open Quick settings** and touch .

You'll see  in the status bar when Do Not Disturb is on.
2. To change how long it stays on, in quick settings, touch and hold , touch **Duration**, and then choose one:
 - To keep it on indefinitely, touch **Until you turn off**.
 - To select a duration, touch **For 1 hour**, then touch + or - to adjust the time.
 - To choose each time you turn Do Not Disturb on, touch **Ask every time**.

Turn the feature off

Open Quick settings and touch .

If this feature is turning itself on again, but you don't want it to:

- Make sure you're not silencing [on a schedule](#) or [during calendar events](#).
- If you're using [Bedtime mode](#), touch **Settings > Digital Wellbeing & parental controls > Bedtime mode > Customise** and turn **Do Not Disturb for Bedtime mode** off .

Set down to start

You can turn on Do Not Disturb by placing your phone face down on a surface. To enable this gesture:

1. Open the **Moto** app.
2. Touch  > **Moto Actions**.
3. Touch **Flip for Do Not Disturb** and turn it on .

Set overall behaviour

Sound and vibration

When Do Not Disturb is on, sound and vibration are muted. Alarms and media aren't muted by default, but you can mute them too.

To adjust the settings for alarms, media and touch sounds:

1. Go to [Settings](#) > **Sound** > **Do Not Disturb**.
2. Touch **Sound & vibration**.
3. For each category, select whether sound and vibration is muted  or not .

Notifications

When Do Not Disturb is on, you won't see or hear notifications by default. You can change settings to:

- Allow visual notifications but no sound
- Allow the screen to turn on or wake up, or prevent this
- Show or hide notification dots, status bar icons and pop-up notifications
- Show or hide notifications in the notification list

To change how Do Not Disturb handles notifications:

1. Go to [Settings](#) > **Sound** > **Do Not Disturb**.
2. Touch **Notifications**.
3. Do one of the following:
 - To block sound from notifications but still see them on your screen, select **No sound**.
 - To block all visual notifications, select **No visuals or sound from notifications**.
 - To block or allow selected visual notifications, select **Custom** and turn features on or off.

If Do Not Disturb is off and you expect notifications from an app but aren't getting any, check your [settings for the app's notifications](#).

Allow exceptions

When Do Not Disturb is on, incoming calls, messages and calendar events or reminders are muted. You can allow exceptions.

Calls

1. Go to **Settings** > **Sound** > **Do Not Disturb**.
2. Touch **Calls** > **Allow calls**.
3. Choose whether to allow calls from:
 - Anyone
 - Contacts only
 - **Starred** (favourite) contacts only
 - None
4. To let calls through from repeat callers (the same person calling a second time within 15 minutes), turn **Allow repeat callers** on .

Text messages

1. Go to **Settings** > **Sound** > **Do Not Disturb**.
2. Touch **Messages, events & reminders** > **Allow messages**.
3. Choose whether to allow messages from:
 - Anyone
 - Contacts only
 - **Starred** (favourite) contacts only
 - None

Calendar events and reminders

1. Go to **Settings** > **Sound** > **Do Not Disturb**.
2. Touch **Messages, events & reminders** and turn them on .

Silence during calendar events

Your phone can automatically switch into and out of Do Not Disturb mode for all scheduled events in calendars that you specify.

1. **Open Quick settings**, then press and hold .
2. Touch **Turn on automatically**.
3. Do one of the following:
 - To use an existing one, turn it on.
 - To create a new one, touch **Add rule**. Touch **Event rule**, then enter a name and touch **OK**.
4. Adjust options to select the calendar to use and your reply status.

To stop your phone from automatically silencing based on your calendar:

1. Go to **Settings** > **Sound**.
2. Touch **Do Not Disturb** > **Turn on automatically**.
3. Select the rule and turn it off or touch  to delete it.

Silence on schedule

You can create a schedule for when your phone should automatically switch into and out of Do Not Disturb mode.

1. **Open Quick settings**, then press and hold .
2. Touch **Turn on automatically**.
3. Adjust settings:
 - To use an existing schedule, touch its name, like **Sleeping**. To adjust times or settings, touch .
 - To create a new one, touch **Add rule**. Touch **Time**, then enter a name and touch **OK**. Specify its days, start and end times, and level of silence.

To stop your phone from silencing on schedule:

1. Go to **Settings** > **Sound**.
2. Touch **Do Not Disturb** > **Turn on automatically**.
3. Select the rule and turn it off or touch  to delete it.

Stop phone from speaking

Silence replies to voice commands

Some **voice commands** (such as 'What's up?' and 'What is the current weather?') cause Google Assistant to speak in response.

To quickly silence a voice command response, touch .

To have your phone show responses to Voice Commands on screen and not speak them:

1. **Open** the **Google** app.
2. Touch your profile icon  > **Settings**.
3. Touch **Voice** and turn off speech output.

Turn off screen reader

If your phone describes everything that you touch on screen, speaking your notifications and reading messages aloud, you might have turned on a screen reader. This accessibility feature helps people with visual impairments.

To turn it off:

1. Press and hold both Volume Up and Down buttons for three seconds. If TalkBack was reading the screen, this pauses readout so that you can update settings more easily.
2. Go to **Settings** > **Accessibility**.

3. Turn off all screen readers, such as TalkBack or Select to Speak.
-

Silence 'Hello Moto' during power up

If you don't want your phone to say 'Hello Moto' when it powers up:

1. Go to [Settings](#) > **Sound** > **Advanced**.
2. Turn **Power on sounds** off .

You cannot adjust the volume level for this sound.

Turn off charging sounds

If you don't want your phone to make a sound when it comes in contact with a charger:

1. Go to [Settings](#) > **Sound** > **Advanced**.
 2. Turn off **Charging sounds**.
-

Turn touch sounds on/off

1. Go to [Settings](#) > **Sound** > **Advanced**.
2. Do any of the following:
 - to hear a tone when you dial a number, turn on **Dial pad tones**.
 - to hear a click when you lock or unlock the screen, turn on **Screen locking sounds**.
 - to hear a click when you touch something on the screen, turn on **Touch sounds**.
 - to feel a vibration when you type on the keyboard, turn on **Touch vibration**.

If you don't want any of these sounds, just turn them off .

Hear other notification sounds

You can [assign a ringtone](#) for notifications from specific apps.

You can also control sounds that notify you of other events:

1. Go to [Settings](#) > **Sound** > **Advanced**.
2. To hear a confirmation tone and feel a vibration when you successfully connect your phone to a charger, turn **Charging sounds** on .

If you don't want any of these sounds, just turn them off .

Adjust screen brightness

To set your screen's brightness, open [quick settings](#) and slide .

Your phone automatically adjusts your screen to the light around you, with Adaptive brightness. When the feature is on, you can still fine tune the brightness in quick settings. To turn this feature off:

1. Go to [Settings](#) > **Display**.
 2. Turn **Adaptive brightness** off.
-

Use Device theme

The background of [quick settings](#) and your list of all apps is either light or dark, based on the [wallpaper](#) you selected. To change this:

1. Go to **Settings** > **Display**.
2. Touch **Advanced** > **Device theme**.
3. Choose **Light** or **Dark**.

You can also change the background colour for:

- Your keyboard ([Learn how.](#))
 - Individual apps, such as Messages and Phone (Open the app, touch  or  and look for light/dark settings.)
-

Adjust colours at night

If you selected a [colour mode](#), it will resume outside of night hours.

Automatically change the screen to amber

Your phone can automatically filter out blue light and adjust screen colours to warmer tones at night, making it easier to view and read in dim light. You might even fall asleep more easily.

1. Go to [Settings](#) > **Display** > **Night light**.
2. Touch **Schedule**, then:
 - To start and stop at specified times, touch **Turns on at custom time** and enter times.
 - To filter from dusk to dawn, touch **Turns on from sunset to sunrise**.

To adjust filter intensity, [open Quick settings](#), press and hold , then use the slider to change the intensity of the amber filter.

Turn it off

To temporarily switch back to regular colours from amber, [open Quick settings](#) and turn off  Night light.

To stop automatically changing to amber, select **Settings** > **Display** > **Night light** > **Schedule** > **None**.

Automatically change screen to greyscale

To help you wind down at night, your phone can change to greyscale (black and white).

1. Go to [Settings](#) > **Digital Wellbeing & parental controls** > **Bedtime mode**.
2. Touch **Bedtime routine**, then set your schedule.
3. Touch **Customise** > **Screen options at bedtime**.
4. Turn **Greyscale** on .

Turn it off

To temporarily switch back to regular colours from grayscale, [open Quick settings](#) and touch .

To stop automatically changing to greyscale at night, go to **Settings** > **Digital Wellbeing & parental controls** > **Bedtime mode** > **Customise** > **Screen options at bedtime** and turn **Greyscale** off .

Choose colour mode

You can change the intensity of colour on your screen for a realistic or enhanced look.

1. Go to [Settings](#) > **Display**.
2. Touch **Advanced** > **Colours**.
3. Choose one:
 - To see the most accurate colours, touch **Natural**.
 - To see accurate colours with more vividness, touch **Boosted**.
 - To see the most vivid colours, touch **Saturated**.

Tips:

- If colours don't appear as you expect, [troubleshoot the issue](#).
- If you're colour blind, use [colour correction](#) instead.

Change screen timeout

Change when your screen turns off

1. Go to [Settings](#) > **Display** > **Advanced**.
2. Touch **Sleep** and select the time of inactivity before your phone sleeps.

Tip: Set a shorter time to [extend battery life](#).

Stay on until you look away

Use Attentive display to keep the screen on when you're looking at it and turn it off when you look away:

- Your screen won't dim or sleep when you're looking at it.
- Your screen will go to sleep quicker when it can't see you, saving battery.

In certain lighting conditions, your phone may have difficulty detecting when you've looked away.

To turn Attentive display on:

1. [Open](#) the **Moto** app.
2. Touch  > **Moto Display**.
3. Touch **Attentive display** and turn it on.

If you don't want to use Attentive display, then turn it off .

Stop automatic rotation

Prevent screen from rotating

[Open Quick settings](#) and turn  Auto-rotate off.

In this mode, you can manually rotate the current app. Touch  by the navigation buttons.



Allow screen to rotate

To allow rotation for all apps, [open Quick settings](#) and turn  Auto-rotate on.

You can also adjust this in **Settings > Display > Advanced > Auto-rotate screen**

Tip: If your home screen isn't rotating but Auto-rotate is on, check your home screen settings. Touch and hold a blank spot on your home screen, then touch **Home settings > Allow Home screen rotation**.

Change font and display size

You can make the text or other items on your screen smaller or larger for your comfort and convenience.

1. Go to [Settings](#) > **Display** > **Advanced**.
2. Do any of the following:
 - To adjust the size of text on the screen, touch **Font size**, then drag the slider to the size you want.
 - To adjust the size of icons and other screen elements, touch **Display size**, then drag the slider to the size you want.

If you need more help seeing the screen, [turn on accessibility features](#), like magnification to zoom in and out or a screen reader to hear audio descriptions of what you touch on the screen.

Visual assistance

Adjust colours if you are colour blind

- 1. Go to [Settings](#) > **Accessibility**.
- 2. Touch **Colour correction** and turn **Use colour correction** on .
- 3. Choose an option.

How you see colours	Option to choose	
It's difficult to tell violet from blue. Yellow and green appear redder.	Deuteranomaly (red-green)	
Colours aren't bright. Red, orange and yellow appear greener.	Red-green (Red weak, protanomaly)	Protanomaly (red-green)
It's difficult to tell yellow and red from pink. Blue appears greener.	Tritanomaly (blue-yellow)	

Colour correction is an experimental feature and might not work correctly everywhere on your phone. If colours don't appear as you expect, [troubleshoot the issue](#).

Magnify the screen

You can magnify the screen by triple tapping it or by touching  by the [navigation buttons](#).

Set it up

To set up the way to start (zoom in) and stop (zoom out) magnification:

- 1. Go to [Settings](#) > **Accessibility** > **Magnification**.
- 2. Select an option and turn it on 
 - To touch the screen three times, choose **Magnify with triple tap**.
 - To add  to the    buttons, choose **Magnify with button**.

Use magnification

To zoom in/out:

- 1. Start magnification using the method you selected: triple tap, or touch .
- 2. Touch the area of the screen to magnify, then:
 - Drag two or more fingers to scroll.
 - Pinch two or more fingers to adjust zoom.

To zoom temporarily:

1. Touch .
2. Touch and hold anywhere on the screen, then:
 - Drag to move around the screen.
 - Lift your finger to zoom out.

You can't zoom in on the keyboard or the    buttons.

Tip: You can also adjust [font and display size](#).

Use TalkBack to read screens

Hear descriptions of everything you touch.

Enable TalkBack

1. Go to [Settings](#) > **Accessibility**.
2. Touch **TalkBack** and turn **Use service** on .
3. Touch **Settings** and set the options you want.

When TalkBack is on

- Touch an item. Your phone speaks the name.
- Start typing. Your phone speaks each number or letter.
- Drag status bar down. Your phone speaks all of the notifications.
- Open a message, file or book. Your phone reads the text out loud.

Change readout volume

- Press a Volume button to open volume settings, then use the  slider to adjust the level.
- Or, during voice readout, repeatedly press one of the Volume buttons.

Stop readout

To pause or resume readout, press and hold both the Volume Up and Down buttons at the same time for three seconds, until you hear confirmation that TalkBack is on or off. You can change the associated accessibility feature with this [shortcut](#).

Or, turn TalkBack off:

1. go to [Settings](#) > **Accessibility**.
2. Touch **TalkBack** and turn **Use service** off .

More assistance

You can also:

- [Use voice commands](#)
- [Dictate text](#) instead of typing

- [Set your phone to make confirmation sounds](#) after you touch or unlock the screen
 - [Assign a ringtone for notifications from specific apps](#)
-

Hearing assistance

Turn on video captions

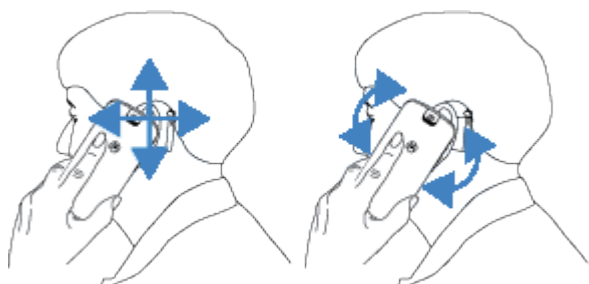
1. Go to [Settings](#) > **Accessibility**.
2. Touch **Captions** and turn **Use captions** on .
3. Specify options (language, text size and style) for closed captioning.

Use hearing aids

To improve compatibility with hearing aids and reduce sound feedback:

1. Touch .
2. Touch  > **Settings** > **Accessibility**.
3. Turn **Hearing aids** on .

During a call, hold the phone to your ear, then rotate or move it to get the best position for speaking and listening.



Set up TTY device

Not all carriers support this feature.

For text-based communication, you can use [text messaging](#) and [email](#).

If you prefer to connect to a TTY device:

1. Touch .
2. Touch  > **Settings** > **Accessibility** > **TTY mode**.
3. Select a mode:
 - **TTY full**: type and read text on your TTY device.
 - **TTY HCO**: type text on your TTY and listen to voice replies on your phone.
 - **TTY VCO**: speak into your phone and read text replies on your TTY.
4. Connect your phone and TTY with the audio cord that came with your TTY.

Dexterity assistance

Use external switch or keyboard

If you're unable to use a touchscreen, Switch Access lets you control the phone using external switches or keyboard keys to select items, scroll, enter text and more.

To use Switch Access, you must have one of the following:

- **An external switch.** USB or Bluetooth switch devices send keystroke signals to your phone.
- **An external keyboard.** Standard USB or Bluetooth keyboards can work as switch devices by assigning one or more keys to actions.

Set up Switch Access

1. Go to [Settings](#) > **Accessibility**.
2. Touch **Switch Access**.
3. Turn **Use service** on .
4. Follow the onscreen instructions to select:
 - Number of switches
 - Scanning options
 - Switch assignments

To adjust options for Switch Access later, go to **Settings** > **Accessibility** > **Switch Access** > **Settings**.

Use Switch Access

1. Connect the external device to your phone by [pairing with Bluetooth](#) or using USB. See the manufacturer's instructions for details.
2. Press the assigned switch or key to scan and highlight items on the screen or to select highlighted items.

Use accessibility shortcuts

Use accessibility menu

Get quick access to an accessibility menu that gives you better control of your phone.

To add the icon:

1. Go to [Settings](#) > **Accessibility**.
2. Touch **Accessibility Menu**.
3. Turn **Use service** on .

Tip: To increase the size of the buttons on this menu, touch **Settings**, then turn **Large buttons** on



1. Use two fingers to swipe up from the bottom of the screen.

If you've set other [accessibility tools](#) to use this gesture, swipe up with two fingers and hold to switch between tools.

2. Choose an option from the menu.

To use the menu:

1. At the bottom of the screen, touch .

If you've set other [accessibility tools](#) to use this icon, touch & hold it to switch between tools.

2. Choose an option from the menu.

Press Volume buttons for accessibility services

You can press the Volume buttons to turn an accessibility feature of your choice ([TalkBack](#), [Switch Access](#)) on or off.

Enable the shortcut

1. Go to [Settings](#) > **Accessibility**.
2. Touch **Volume key shortcut**.
3. Turn **Use service** on .
4. To change the accessibility feature associated with the shortcut, touch **Shortcut service**.
5. To use the Volume buttons from the lock screen, turn **Allow from lock screen** on .

Use the shortcut

Press and hold the Volume up and down buttons at the same time for three seconds.

You'll hear confirmation that the feature has been turned on or off.

About security

Screen lock options

To keep your phone secure, use a screen lock when it goes to sleep:

- [Set up a pattern, PIN or password](#) to unlock your phone.
- Add a Smart Lock to unlock automatically when connected to a [trusted device](#), when you're at a [trusted place](#) (such as home or work), with [facial recognition](#), or until you [set your phone down](#).
- You can access notifications and quick settings, start a call and open the camera from the [lock screen](#).
- You can [make emergency calls](#) on a locked phone. A locked phone still rings; you don't need to unlock it to answer.
- If you forgot your pattern, PIN or password, [follow these steps](#).

You can customise the lock screen by [adding your contact info](#). You can also [control which notifications appear on your lock screen](#).

Fingerprint sensor

Quickly and easily verify your identity using the [fingerprint sensor](#) on your phone, instead of entering a password, PIN or pattern to unlock the phone, make online and in-store purchases, and sign into banking and financial apps.

You can [add and remove fingerprints](#).

Fingerprints:

- Are created from features of your fingertip, converted to a mathematical representation and then encrypted and stored only on the phone. No fingerprint images are ever stored.
- Are never shared with Google or Motorola.
- Are never shared with other apps. Your phone only shares the verification, not the fingerprint.

Note: A fingerprint screen lock may be less secure than a strong pattern or PIN lock. It is possible to unlock the phone using a physical copy of a matching fingerprint.

Additional security options

- [Protect your phone](#) in case it's lost or stolen. Use Find My Device.
- [Connect to a virtual private network](#) if you need to access files on a secure network.
- [Add a SIM lock](#) to prevent others from using your mobile plan and accessing account information if your phone is stolen.
- [Prevent viruses](#) and other attacks on your data and privacy with Google Play Protect.

Protect against harmful apps

Scan phone for harmful apps

Play Protect helps keep your phone secure by automatically scanning your apps, including sideloaded apps, to check for potentially harmful apps (malware).

If Play Protect finds a potentially harmful app, it stops the app from running and warns you so that you can uninstall it.

To see the results or to rescan:

1. [Open](#) the **Play Store** app.
2. Touch your profile icon  > **Play Protect**.
3. Review the results of the latest scan or touch **Scan**.

Play Protect is on by default.

To learn more, [read Google's help](#).

If your phone seems slow

If you've scanned your phone to confirm there aren't any potentially harmful apps but your phone seems slow, [troubleshoot the issue](#).

Make sure your phone can be found

Make sure your phone can be found. Find My Device allows you to remotely locate, lock and erase your phone.

If you ever need to find your phone, your phone will need to:

- Be turned on
- Be [signed in](#) to a Google account
- Be connected to mobile data or Wi-Fi
- Have [location services turned on](#). If location services are off, you can lock or erase the phone, but cannot locate it.
- Have Find My Device turned on

To check that Find My Device is on for your phone:

1. Go to [Settings](#) > **Security & location**.
2. Touch **Find My Device** and turn it on .

To confirm that you can find your phone, go to android.com/find on your phone or from a computer.

If you have lost your phone, consider calling your carrier to suspend your account. If your phone doesn't have a SIM lock and it's stolen, someone could use your SIM card.

Set a screen lock

You can set up a screen lock to secure your phone. Each time you turn on your phone or [turn on the screen](#), you'll be asked to unlock it.

Set or change screen lock

1. Go to [Settings](#) > **Security & location**.
2. Touch **Screen lock** and select the [type of lock](#) you want.

Some lock options aren't available if you added a [VPN](#) or a work (corporate) email account to your phone.

Tip: After you set up a pattern, PIN or password, you can [set up fingerprint security](#) to unlock your phone with the fingerprint sensor.

Screen lock types

No lock:

- **None:** this gives no protection, but you can quickly access your Home screen.
- **Swipe:** swipe  up. This prevents accidental dialling but doesn't secure the phone.

Lock:

- **Pattern:** Draw a pattern on a grid.
- **PIN:** enter a four to sixteen digit numeric code. Longer PINs are more secure.
- **Password:** enter four to sixteen letters, digits or symbols for the password. A long, strong password is the most secure option.

When you're using any of the 3 locks, you can also [unlock with your fingerprint](#) and set your phone to [automatically unlock](#) in certain conditions.

Unlock your screen automatically

If you're using a PIN, password or pattern, you can:

- Stay unlocked when [connected to a device](#), such as your car audio system.
- Stay unlocked at a [specific location](#).
- Stay unlocked when [holding or carrying](#) your phone.
- Unlock with [your face](#).
- Unlock with [your voice](#).

Tips:

- You can swipe up from anywhere on the screen when unlocking. You don't need to touch the  icon.
- Some of these options aren't available if you added a [VPN](#) or a work (corporate) email account to your phone.

Remove screen lock

1. Go to [Settings](#) > **Security & location**.
2. Touch **Screen lock**.
3. Enter your current PIN, password or pattern to confirm your identity.
4. Select **None** or **Swipe**.

Set advanced lock options

Use these options to control when your phone locks and whether your code is visible when you unlock. You can also [control what content is included on your lock screen](#).

Set time before locking

Unless kept [unlocked automatically](#), your phone locks the screen five seconds after the screen turns off. To increase or decrease the amount of time before automatically locking the screen:

1. Go to [Settings](#) > **Security & location**.
2. Next to **Screen lock**, touch .
3. Touch **Automatically lock**, then select a duration.

Stop Power button from instantly locking

You can manually lock your phone by pressing the Power button. If you want the Power button to turn off the screen but not lock it:

1. Go to [Settings](#) > **Security & location**.
2. Next to **Screen lock**, touch .
3. Touch **Power button locks instantly** off .

After the screen turns off, your phone will still lock after the time set for [the automatic lock](#).

Hide your pattern

You can hide your PIN or pattern to prevent others from viewing it when you unlock your screen.

To hide patterns (if you're using a [pattern screen lock](#)):

1. Go to [Settings](#) > **Security & location**.
2. Next to **Screen lock**, touch .

3. Turn **Make pattern visible** off .

Hide passwords

To control whether characters briefly display when you enter a password to unlock your phone or log in to websites and apps:

1. Go to [Settings](#) > **Security & location** > **Advanced**.
2. Turn **Show passwords** off .

Unlock with trusted devices

Set up trusted devices

You can keep your phone unlocked when it is connected to a trusted device, like your Bluetooth watch or car.

1. Make sure you have:
 - [Set a screen lock](#) on the phone.
 - [Turned on Bluetooth](#) on the phone.
 - Paired your phone with the device.
2. Go to [Settings](#).
3. Touch **Security & location** > **Smart Lock**.

If you don't see Smart Lock, try the following:

 - Update Google Play services. In the Google Search widget on your Home screen, search for 'Google Play services', then touch the app to open it in Google Play.
 - Go to **Settings** > **Security & location** > **Advanced** > **Trust agents** and enable **Smart Lock**.
4. Unlock your phone, then touch **Trusted devices** > **ADD TRUSTED DEVICE**.
5. Touch a device to select it from the list of connected devices.

Tip: If your device isn't in the list, make sure you are [paired](#) with it.

When the phone is connected to the device, the phone automatically unlocks.

Remove trusted devices

1. Go to [Settings](#).
2. Touch **Security & location** > **Smart Lock**.
3. Unlock your phone, then touch **Trusted devices**.
4. Touch the device name and confirm that you want to remove it.

Manually lock phone

If you need to make sure the phone stays locked even when you're connected to a trusted device, you can manually lock the phone.

On the lock screen, touch . The phone stays locked until the next time you manually unlock it.

Unlock with your face

Before using face matching

Keep in mind that:

- Looking at your phone can unlock it, even when you don't intend to.
- Your phone can be unlocked by someone who looks a lot like you.
- Your phone can be unlocked by someone else if it's held up to your face while your eyes are open. Keep your phone in a safe place. To prepare for unsafe situations, you can [turn on lockdown](#).

Set up face matching

1. Make sure you have set a [screen lock](#) on the phone.
2. Go to [Settings](#) > **Security & location** > **Face unlock**.
3. Unlock your phone.
4. Follow the onscreen instructions. Be sure to frame your entire face with the outline.

Face matching data is stored securely on the phone.

Whenever you turn on or wake the phone, it will search for your face and unlock when it recognises you.

Unlock your phone

1. Show your face to the lock screen.

 appears when the phone is looking for your face. When it recognises you, it unlocks and displays .

2. Swipe  up.

If it doesn't recognise you, it stays locked and displays one of these icons.

Icon	How to unlock
	Use your password, PIN or pattern
	Use the fingerprint sensor

Turn off face matching

1. Go to [Settings](#) > **Security & location** > **Face unlock**.
2. Unlock your phone.
3. Touch **Delete face data**.

The phone will no longer recognise your face and the data is deleted. To turn it on again, set up face matching again.

Fix an issue

If you're having trouble getting the phone to recognise your face:

1. Go to [Settings](#) > **Security & location** > **Face unlock**.
 2. Unlock your phone, then touch **Redo face scan**.
 3. Make sure that you are in a well lit environment. Avoid low light, strong light and backlit environments to ensure that the face image is clear.
 4. Follow the onscreen instructions.
-

Unlock at trusted places

Set up trusted places

To avoid repeatedly unlocking your phone when you are at familiar and trusted locations (like home or work), use a Smart Lock. You can still manually lock the phone in trusted places when needed.

1. Make sure you have:
 - [Set a screen lock](#) on the phone.
 - [Turned on location services](#).
 - Enter your Home and Work locations in Maps if desired. To learn how, [read Google's help](#).

2. Go to [Settings](#).
3. Touch **Security & location** > **Smart Lock**.

If you don't see Smart Lock, try the following:

- Update Google Play services. In the Google Search widget on your Home screen, search for 'Google Play services', then touch the app to open it.
 - Go to **Settings** > **Security & location** > **Advanced** > **Trust agents** and enable **Smart Lock**.
4. Unlock your phone, then touch **Trusted places**.
 5. Set up your places:
 - If you added Home or Work locations in Maps, touch the location name and turn it on if desired.
 - To add a location, touch **Add trusted place**. Verify your current location to add it, or touch , type the address to add and touch **Select this location**.

Manually lock phone

To lock your phone when you're in a trusted place, on the lock screen, touch . The phone stays locked until the next time you manually unlock it.

Remove trusted places

1. Go to [Settings](#).
 2. Touch **Security & location** > **Smart Lock**.
 3. Unlock your phone, then touch **Trusted places**.
 4. Remove the location from your trusted places:
 - for your Home or Work locations in Maps, touch the location name to toggle it off. To remove the address entirely, you must remove it in Maps.
 - for custom places you have added, touch the location name, then touch .
-

Keep phone unlocked while it's on you

You can keep your phone unlocked while you're holding it in your hand or carrying it in your pocket or handbag. Just unlock it once, and it stays unlocked until you set it down (or manually lock it).

1. Make sure you have [set a screen lock](#).
 2. Go to [Settings](#).
 3. Touch **Security & location** > **Smart Lock**.

If you don't see Smart Lock, try the following:

 - Update Google Play services. In the Google Search widget on your Home screen, search for 'Google Play services', then touch the app to open it.
 - Go to **Settings** > **Security & location** > **Advanced** > **Trust agents** and enable **Smart Lock**.
 4. Unlock your phone, then touch **On-body detection**.
 5. Turn it on.
-

Unlock with voice commands

Set up voice authentication

If you use 'Ok, Google' for [voice commands](#), you can use Smart Lock to unlock your phone when it recognises your voice.

1. Make sure you have set a [screen lock](#).
2. Go to [Settings](#).

3. Touch **Security & location** > **Smart Lock**.

If you don't see Smart Lock, try the following:

- Update Google Play services. In the Google Search widget on your Home screen, search for 'Google Play services', then touch the app to open it.
- Go to **Settings** > **Security & location** > **Advanced** > **Trust agents** and enable **Smart Lock**.

4. Unlock your phone, then touch **Voice Match**.

5. Turn **Access with Voice Match** on . If you haven't already set up the 'OK, Google' launch phrase, follow the onscreen instructions to record your voice.

6. Make sure that **Lock screen personal results** is on .

Unlock your phone

1. At the [lock screen](#), say 'OK, Google'.

Your phone will unlock and be ready for commands.

2. [Speak a command](#) to perform a task.

If the phone does not recognise your voice, then unlock it with your password, PIN or pattern.

Turn off voice authentication

1. Go to [Settings](#).

2. Touch **Security & location** > **Smart Lock**.

3. Unlock your phone, then touch **Access with Voice Match**.

4. Turn **Lock screen personal results** off .

Use fingerprint security

Set up fingerprint security

Use the [fingerprint sensor](#) to unlock your phone, make fast and secure online and in-store purchases and sign into bank and finance apps.

1. Go to [Settings](#) > **Security & location**.

2. Touch **Fingerprint**, then unlock your phone.

3. Follow the onscreen instructions to scan your fingerprint using [the sensor](#) on the back of your phone.

Fingerprints are [stored securely](#) on the phone.

Add more fingerprints

Keep in mind that:

- If multiple users [share the phone](#), users should add their fingerprints from within their [user profile](#), instead of adding multiple fingerprints to your owner profile.

- Anyone whose fingerprints are added to a user profile can unlock the phone and authorise purchases with the associated [Google account](#) or apps.

Add a fingerprint for each finger you want to use with the sensor:

1. Go to [Settings](#) > **Security & location**.
2. Touch **Fingerprint** and enter your pattern, PIN or password to verify your identity.
3. Touch **Add fingerprint**.
4. Use the fingerprint sensor to scan another fingerprint.
5. Rename each fingerprint. Touch the current name, type a name and touch **OK**.

Remove a fingerprint

1. Go to [Settings](#) > **Security & location**.
2. Touch **Fingerprint** and enter your pattern, PIN or password to verify your identity.
3. Touch  next to the fingerprint.

Use a fingerprint to unlock your phone

To wake and unlock your screen, or any time you see  on the screen, touch the sensor to verify your identity.

Tip: You can temporarily tighten security by turning off fingerprint unlocking and lock screen notifications with [Lockdown mode](#).

Use fingerprint to sign in to apps

To use the fingerprint sensor with third-party apps:

- Be sure the app supports fingerprint recognition.
- [Install](#) the app and open its settings to adjust options, like enabling fingerprint unlock.
- Consult the app's help info for more instructions.

Why am I still asked for a PIN/pattern?

For maximum security, you still need to enter your pattern, PIN, or password:

- Every time you power up your phone
- When more than 72 hours have passed since you last unlocked the phone
- When you go to **Settings** > **Security & location** > **Fingerprint**
- When the sensor can't read the fingerprint

Fix an issue

Issue: sometimes the sensor can't read your fingerprints.

Each finger has a unique print. If you've added only one fingerprint, add more for other fingers you want to use with the sensor.

The sensor may have trouble reading fingerprints if your finger is:

- wet
- oily
- dirty
- Injured

If a registered fingerprint isn't working as expected, [remove](#) and re-add the fingerprint. If your finger is injured, add fingerprints for your other fingers and use them until healed.

Issue: Fingerprint option disappeared from Security & location menu.

After each troubleshooting step, check to see if your issue is fixed.

1. Turn your phone off and then on again.
2. [Check if a software update is available](#) for your phone.
3. Check for app updates.

[Open](#) the **Play Store** app, then touch your profile icon  > **Manage apps and device**.

4. [Use safe mode](#) to see if apps you installed are causing the issue and uninstall as needed.

If the sensor works correctly in safe mode, a 3rd party app is probably causing the issue. These apps can cause issues: lock screen apps, app locks that use the fingerprint sensor, RAM boosters and RAM cleaners.

5. [Reset the phone](#).

Change lock screen features

Use these options to control what content and features appear on your [lock screen](#).

You can also [control when your screen locks](#).

Limit lock screen notifications

If you've [set a pattern, PIN or password](#), you can control which notifications show on your [lock screen](#).

1. Go to [Settings](#) > **Security & location**.
2. Touch **Lock screen preferences** > **Lock screen**.
3. Select whether or not to show notifications.

If you show notifications but hide sensitive content, then you'll receive notifications for incoming emails or chats, but they won't include message details.

Add message to lock screen

To add your name or a short message to your [lock screen](#) for anyone who finds your phone:

1. Go to [Settings](#) > **Security & location**.
2. Touch **Lock screen preferences** > **Lock screen message**.

3. Type the text to display and touch **Save**.

Tip: Don't put your mobile number as contact info on your lock screen unless you can access your voicemail from another device.

Quickly tighten lock screen security

Unlocking with the [fingerprint sensor](#) and setting up [automatic unlocking](#) make it easier to keep your phone secure and minimise when you need to enter your PIN, pattern or password. But sometimes you need to trade convenience for more security. You can temporarily tighten locks and prevent lock screen notifications.

To set it up:

1. Go to [Settings](#) > **Security & location** > **Lock screen preferences**.
2. Turn **Show lockdown option** on .

To use it:

1. Press and hold the power button.
2. Touch **Lockdown**.

Your fingerprint sensor and automatic unlock settings are disabled and notifications won't be displayed on your lock screen.

3. To exit Lockdown, unlock your phone with your PIN, pattern or password.

Use location services

About location information

You can let your phone use GPS, Wi-Fi networks, mobile networks and sensors to estimate your location. Apps that have your permission can use this information to deliver location-based services, such as the ability to check in, view commute traffic, find nearby restaurants or tag your photos with the location where you took them.

Turn location on or off

To control what location information your phone can use:

1. Go to [Settings](#) > **Security & location** > **Location**.
2. Turn it  on or  off to give or remove permission to use your location information.

When it's off, your phone can't find your precise location or share it with any apps. However, turning this off disables many useful features and apps.

Tip: To add a Location tile to Quick settings, [open Quick settings](#). Touch . Then drag the Location tile to where you want it.

Review apps using your location

To see which apps have recently accessed your location:

1. Go to [Settings](#) > **Security & location** > **Location**.
2. Under Recent location requests, review the list of apps that recently received your location.
3. To prevent an app from accessing your location:
 - a. Touch **App-level permissions**.
 - b. Turn **Location** off .

Review services using your location

1. Go to [Settings](#) > **Security & location** > **Location** > **Advanced**.
2. Touch a service to open its settings:
 - **Earthquake alerts:** sends you an alert about nearby earthquakes with a magnitude 4.5 or more. (Not available in all countries.)
 - **Emergency Location Service:** [Sends your location to emergency responders](#) when you call or text an emergency number.
 - **Google Location Accuracy:** improves location accuracy for [Maps](#) and [Find My Device](#).
 - **Google Location History:** clear saved location details and turn location history on or off.
 - **Google Location Sharing:** view who's sharing your location, change sharing duration, and stop sharing.

Fix an issue

Issue: location isn't working

After each step, check to see if the issue is fixed.

1. [Turn location off](#) and then on again.
2. [Turn aeroplane mode on](#), wait 15-20 seconds, then turn it off again.
3. If you're using a case, remove it and check if GPS is working. The case might be obstructing the sensor.
4. [Check if Battery Saver is on](#). To save power, when Battery Saver is on, your phone disables location services.
5. Turn your phone off and then on again.
6. [Check for updates](#) to the Maps app. After updating the app, restart your phone.
7. [Clear the cache and data](#) for the Maps app.
8. [Use safe mode](#) to see if apps you installed are causing the issue and uninstall as needed.

If location works correctly in safe mode, a third-party app is probably causing the issue. A lot of apps use your phone's location. If these apps end up with corrupted files, it can affect your phone's location too.

Issue: location isn't accurate

Turn accuracy on:

1. Go to **Settings** > **Security & location** > **Location**.
2. Touch **Advanced** > **Google Location Accuracy**.
3. Turn **Improve location accuracy** on .

When this setting is on, your phone uses GPS, Wi-Fi, mobile networks and sensors to get the most accurate location.

When it's off, your phone uses only GPS to find location, which can be slower and less accurate.

Let your phone scan for nearby Wi-Fi networks or Bluetooth devices:

1. Go to **Settings** > **Security & location**.
2. Touch **Location** > **Advanced** > **Scanning**.
3. Turn **Wi-Fi scanning** and **Bluetooth scanning** on .

Pin your screen

Turn on pinning

Use pinning to keep the current app in view until you unpin it. For example, you can pin a game and your child cannot navigate anywhere else on your phone.

You can set up a pattern, PIN or password required to unpin.

1. Go to **Settings** > **Security & location** > **Advanced** > **Screen pinning**.
2. Turn pinning on.
3. By default, you must always enter your pattern, PIN or password when unpinning a screen. If you don't want this security before accessing your other phone screens, turn this option off.

Pin and unpin a screen

To pin a screen:

1. Make sure you've **turned on** screen pinning.
2. Open an app and go to the screen you want to pin.
3. Touch .
4. Touch the icon of whatever you want to pin.
5. Touch .

To unpin it:

1. Touch & hold  and  at the same time.
2. If you required a pattern, PIN or password when you **turned on pinning**, enter it to unlock the phone.

Lock SIM card

Set up SIM lock

This feature is not available in all countries.

Your SIM card came with a default PIN from your carrier. You can use it to set up an optional SIM card lock, which prevents others from using your mobile plan and accessing account information if your phone is stolen.

If you add a SIM lock, you will be prompted to enter the PIN each time you swap SIM cards or restart the phone.

1. Make sure you have the PIN your carrier provided with the SIM card. If you don't have it, contact your carrier.
2. Go to [Settings](#) > **Security & location** > **Advanced** > **SIM card lock**.
3. If your phone has dual SIM cards, touch the SIM to lock it.
4. Turn **Lock SIM card** on .
5. Enter your carrier-provided PIN and follow the onscreen instructions.

Unlock SIM card

When prompted, enter the PIN used to set up the SIM lock.

Caution: If you enter an incorrect PIN multiple times, the SIM will be disabled.

If you accidentally disabled the SIM

If you enter an incorrect PIN multiple times, the SIM will be disabled.

Contact your carrier for a PIN unlock key (PUK) to re-enable the SIM.

Add or remove accounts

Add Google account

When you set up your phone, you were prompted to add a Google account. If you skipped this, be sure to set one up now so you can download apps from Play Store, get a customised information feed and take full advantage of the Calendar, Gmail and other apps included with [your Google account](#).

To add a Google account:

1. Go to [Settings](#).
2. Touch **Accounts > Add account**.
3. Touch **Google** and follow the on-screen instructions to add an existing account or to create a new one.
4. Once the account is added, [Calendar](#), [Contacts](#) and other account features and apps are updated with information from that account. You can review and change what [syncs](#) with your phone for that account.

Tip: Keep your apps [up-to-date](#). To see if newer versions of the apps associated with your Google account are available, open the Play Store app and touch your profile icon  > **Manage apps and device**.

Add email or app account

Accounts are automatically added when you:

- Set up [corporate email](#)
- Set up [personal email](#) for non-Gmail addresses
- Install apps that require a username/password to log in, such as messaging, shopping or streaming content

To review these accounts or add another:

1. Go to [Settings](#).
2. Touch **Accounts > Add account**.
3. Touch the type of account to add and follow the onscreen instructions.

If you don't see the type of account you want to add, [install](#) the related app from Play Store, then sign in to your account through the app.

4. Once the account is added, account-related features and apps are updated with information from that account. To review and change what [syncs](#) with your phone, touch the account type, then account name.

Remove account

If you remove an account, information you [synced](#) will be removed from your phone, but it is not deleted from your account.

To remove an account:

1. Go to [Settings > Accounts](#).

2. Touch the account name.
3. Touch **Remove account**.

Tip: If you have trouble removing a Corporate account, go to **Settings > Security & location > Advanced > Device admin apps** and turn off the app for the account, then try to remove it again.

Change name and info in your Google account

You can update, add, and remove basic info for your Google account:

1. Go to **Settings > Google > Manage your Google Account**.
2. Touch **Personal info**.
3. Update information as needed. Add or change your profile picture, edit your name and birthday. [Learn more](#).

Forgot your Google password or want to change it? Learn how to [reset your password](#).

Other questions about your account? [Read Google's help](#).

Sync apps with your Google account

About syncing

What sync does

When your phone syncs, your Google apps refresh their data and you get notifications about updates.

Which apps sync

By default, [apps made by Google](#) sync automatically. You can turn auto-sync off and back on for individual apps.

Whether other apps (not made by Google) can sync varies by app.

If you turn off auto-sync

Turning off auto-sync doesn't remove the app or your data. It only stops the app from automatically refreshing your data.

To receive emails, calendar reminders or other notifications from Google apps, you'll need to sync manually.

See which apps auto-sync

See which Google apps auto-sync

1. Go to **Settings > Accounts**.
2. Touch the account name.
3. Touch **Account sync**.
4. Review the list of your Google apps and when they last synced.

Check other apps

To see if your other apps can auto-sync:

1. Go to [Settings](#) > **Accounts**.
2. Review the list of accounts:
 - If the app isn't listed, then it can't auto-sync.
 - If it is listed, touch its name to see any sync options you can adjust.

Turn off auto-sync

Turn off for certain Google apps

1. Go to [Settings](#) > **Accounts**.
2. If you have multiple accounts on your phone, touch the one you want.
3. Touch **Account sync**.
4. Turn off the apps you don't want to auto-sync.

For example, sync your Calendar and Gmail but don't sync Drive.

Turn off for your Google account

1. Go to [Settings](#) > **Accounts**.
2. Turn **Automatically sync data** off .

To collect messages, email, calendar or other app updates, you'll need to sync the accounts manually.

Tip: Turning off auto-sync can help save [battery life](#). To start auto-sync after your battery recharges, turn it back on .

Sync manually

1. Go to [Settings](#) > **Accounts**.
2. Touch the account name.
3. Touch **Account sync** >  > **Sync now**.

Fix an issue

Select an issue to see troubleshooting steps:

- [Account sync issues](#)
- [Forgot password for Google account](#)
- [Problems with Facebook, WhatsApp, other apps](#)

Control what info Google collects

Google collects information from you to provide personalised services and tailored content, as outlined in the [Google Privacy Policy](#).

You can review, delete and control the information Google collects about you. Learn more from Google about:

- [Viewing and controlling](#) what information is collected (search, YouTube, recordings of your voice commands, location).
- [Deleting](#) your search history and other activity.
- [Reviewing](#) your location history.
- Any [other questions](#) about your account.

Record your IMEI number

The IMEI (International Mobile Equipment Identity) number is the unique code that identifies your phone. You'll need it if you contact support regarding a warranty and it's important to have if your phone is stolen.

Service providers can use the IMEI to block a stolen phone from mobile networks, and many police departments keep a record of stolen phones using this number.

You may never need your IMEI number, but it's a good idea to record it, just in case.

To find the IMEI number:

1. Go to **Settings** > **System** > **About phone**.
2. See **IMEI** for your number.
3. Record and save the number where you can easily access it.

You can also find your IMEI number by dialling ***#06#** in the Phone app. On some phones, the MEID HEX number is your IMEI number.

If your phone doesn't turn on, check the box that it came in or the receipt for the IMEI number.

Find legal and product information

To view the electronic regulatory label for your phone, go to **Settings** > **System** > **Regulatory information**.

For safety, environmental, warranty and other legal information, go to **Settings** > **System** > **Legal information**.

Printed legal information may also be provided with your phone.

To find your phone's model or serial number, go to **Settings** > **System** > **About phone** > **Model & hardware** > **Model Number (SKU)**.

Customise the keyboard

Quickly access keyboard settings

When you're typing, touch & hold the comma key and drag it to  to customise your Gboard settings.

Change how the keyboard looks

To change the background colour of your keyboard:

1. Go to **Settings** > **System** > **Languages and input** > **Virtual keyboard**.
2. Touch **Gboard** > **Theme**.
3. Select a colour to use as the background.
4. Touch **Apply**.

To adjust the keyboard's height for more comfortable typing:

1. Go to **Settings** > **System** > **Languages and input** > **Virtual keyboard**.
2. Touch **Gboard** > **Preferences** > **Keyboard height**.
3. Select the height you want.

Adjust keyboard sounds

To control whether your keyboard makes sounds:

1. Go to **Settings** > **System** > **Languages and input** > **Virtual keyboard**.
2. Touch **Gboard** > **Preferences**.
3. To hear sounds when you type, turn **Sound on keypress** on .
4. To adjust how loud the sounds are, touch **Volume on keypress**.

Adjust keyboard vibration

The [onscreen keyboard](#) vibrates when you touch a key. Turn off vibration feedback if you prefer not to use it or want to improve battery life.

To adjust keyboard vibrations:

1. Go to **Settings** > **System** > **Languages and input** > **Virtual keyboard**.
2. Touch **Gboard** > **Preferences**.
3. Do any of the following:
 - Turn **Haptic feedback on keypress** off or on.
 - If on, touch **Vibration strength on keypress** and move the slider.

Disable glide typing

With [glide typing](#), you drag your finger over the letters in a word. If you want to turn this off and only use multi-touch typing:

1. Go to **Settings > System > Languages and input > Virtual keyboard**.
2. Touch **Gboard > Glide typing**.
3. Turn **Enable glide typing** off .

Limit or turn off suggestions

1. Go to **Settings > System > Languages and input > Virtual keyboard**.
2. Touch **Gboard > Text correction**.
3. Adjust settings:
 - If you don't want predictions based on your previous word, turn **Next-word suggestions** off . You will only see [suggestions](#) for the current word you're typing.
 - If you don't want ANY suggestions, turn **Show suggestion strip** off .
 - You can also turn off (or on) offensive word blocking and suggestions for emoji, stickers and information from Contacts.

Turn off auto-correction

1. Go to **Settings > System > Languages and input > Virtual keyboard**.
2. Touch **Gboard > Text correction**.
3. If you don't want words corrected while you type, turn **Auto-correction** off .

Use multiple languages

Change display language

You selected the language for your phone during setup. To change it:

1. Go to [Settings](#) > **System > Languages and input > Languages**.
2. Touch & hold the language you want and drag it to the first position in the list.
3. If you don't see the language you want, touch  to add it, then drag it to the first position.

All languages added to the list will appear on [the keyboard's spacebar](#).

To remove a language, go to **Settings > System > Languages and input > Languages**, then touch  > **Remove**. Select the language and touch .

Add language to keyboard

If you want a keyboard for a language that isn't a display language:

1. Go to **Settings** > **System** > **Languages and input** > **Virtual keyboard**.
2. Touch **Gboard** > **Languages**.
3. Touch **ADD KEYBOARD**.
4. Select the language.
5. Touch **Done**.

Then, [switch between languages](#) on the keyboard by touching .

Customise power button gesture

You can customise the Power button so that pressing it twice either opens [Google Assistant](#) or opens your camera.

1. Go to **Settings** > **System** > **Gestures**.
2. Touch **Double-press power key** and select what you want the gesture to do.

Back up phone

Back up to Google

You can automatically back up the following items to your [Google account](#):

- Apps and app data
- Call history
- Contacts
- Phone settings (including Wi-Fi passwords and permissions)
- Photos and videos (synced to [your Google Photos library](#), not to Google Drive)
- SMS text messages (if using  Messages)

Tip: Back up over [Wi-Fi](#) to prevent mobile data charges.

Not all apps back up data automatically. Check with the app developer.

To automatically back up to Google Drive:

1. Go to **Settings** > **System**.
2. Touch **Backup**.
3. Check that **Back up to Google Drive** is on . If needed, turn it on.
4. If you have multiple Google accounts, touch **Account** to select an account.
5. Follow the onscreen instructions.

To back up other files that aren't automatically backed up, such as attachments or downloads:

1. [Open](#) the  Drive app.

2. Touch .
3. Touch **Upload**, then choose the files or folder to upload.

Manage your back up in Drive

On your phone:

1. [Open](#) the  Drive app.
2. Touch  > **Backups**.

To learn about managing phone backups from a computer, [read Google's help](#).

Restore backed up data

When you [add your Google account to a phone](#), photos, contacts, settings and app data that you previously backed up to that account are restored onto the phone.

Share your phone

Ways to share your phone

- **Add users.** If you share your phone with family or friends, or within a business, you can set up a separate user space for each user.
- **Lend to people as guests.** This is a more temporary space that you or the guest can delete when you have finished.
- **Pin the screen.** This lets you keep one specific app or screen in view. For example, you can pin a game and your child cannot navigate anywhere else on your phone.

About owners, users, and guests

The owner can:

- Determine whether users and guests can make phone calls and send text messages, which also allows them to see the phone's call history and text history.
- Reset, update, and uninstall any apps.
- Delete user and guests, removing any associated accounts and data from the phone.

Users and guests can:

- Set up [Google accounts](#) and other types of accounts.
- Set up a [screen lock](#).
- Customise the home screen and settings for their spaces.
- Add and delete apps for their spaces, and update any apps they use, regardless of who installed them.

Important: to prevent others from switching to your owner profile and accessing your information, set a [screen lock](#) before you share your phone with users or guests.

When sharing your phone with users and guests, some apps are only available to the owner, not to other users and guests.

Switch users

Only the owner can switch to the guest profile for loaning the phone and can switch between user profiles.

To switch user profiles or see which is currently active, [open Quick settings](#). At the top of the screen, you'll see one of these icons after you've [set up a user](#) or [added a guest](#).

Icon	Meaning
	Owner (If you set up your profile in Contacts and included a picture, you'll see it and your name instead.)



Guest



Added user

Add, modify and remove users

Add a user

You must be the device owner to add users.

1. to prevent others from switching to your owner profile and accessing your information, set a [screen lock](#) before you share your phone.
2. Go to [Settings](#) > **System** > **Advanced** > **Multiple users**. If needed, turn it on

Tip: To add users from Quick settings on your lock screen without unlocking the phone, go to **Settings** > **System** > **Advanced** > **Multiple users** and turn **Add users from lock screen** on .

3. Touch **Add user** > **OK**.
4. Give the phone to the new user to set up the profile.

Restrict calls and messages

From your [owner](#) profile, you control whether users can call and send texts with your phone:

1. Go to [Settings](#) > **System** > **Advanced** > **Multiple users**.
Or from quick settings, touch > **More settings**.
2. Next to the user name, touch .
3. To prevent the user from making calls or sending messages, switch off **Turn on phone calls & SMS**.

Remove a user

You can remove yourself as a user. You must be the device owner to remove other users.

1. Go to [Settings](#) > **System** > **Advanced** > **Multiple users**.
Or from quick settings, touch > **More settings**.
2. Do one of the following:
 - To remove yourself as a user, touch .
 - To remove other users if you are the device owner, next to the user name, touch .
3. Touch **Remove user**.

Add or delete guest

Lend to guest

Create a temporary profile for [sharing](#) your phone with someone.

1. Go to [Settings](#) > **System** > **Advanced** > **Multiple users**.
2. If you want to prevent the guest from making calls, touch  and switch **Turn on phone calls** off.
3. Touch **Guest**.
4. If you've lent your phone to a guest previously, touch **Start again** to clear the last guest settings, or touch **Yes, continue** to keep last guest settings.

End guest session

1. Go to [Settings](#) > **System** > **Advanced** > **Multiple users**. Or from Quick settings, touch .
2. Touch **Remove guest** > **Remove**.

All data from and apps installed during this session are deleted.

The phone is slow or unstable

If a **certain app is slow**, try these [app-specific troubleshooting steps](#).

If your phone is slow **when viewing online content**, it could be an issue with your connection. If you're on Wi-Fi, use a different Wi-Fi network, switch to mobile data or contact your Internet service provider. If you're using a mobile connection, switch to Wi-Fi.

If **all apps are slow**, it's probably an issue with your phone, not an app on your phone. Try these troubleshooting steps. After each step, check to see if the issue has been fixed:

1. turn your phone off and then on again.
 - Press and hold the Power button, then touch **Power off**.
 - If your phone is frozen, reboot it by pressing and holding the Power button for 7–10 seconds.
 2. Check for system updates.

Go to [Settings](#) > **System** > **Advanced** > **System updates**.
 3. Check for app updates.

Open the Play Store app and touch your profile icon  > **Manage apps and device**.
 4. [Check available storage](#) and clear space if needed.
-

Phone feels warm or hot

Overview

It's normal for your phone to feel warm, or even hot, depending on how you're using it.

If your phone ever becomes too hot, it will ask you to turn it off so it can cool down. Some phones will stay on but limit the phone's capabilities until it cools down.

If your phone is too hot to touch, use a different phone, tablet or computer to contact [Motorola support](#).

Reasons your phone may get warm

Doing one or more of the following activities may cause your phone to get warm:

- Playing videos, games or other media apps
- Using GPS navigation
- Tethering your phone or using it as a Wi-Fi hotspot
- Using your phone while it's [charging](#)
- Downloading or uploading a lot of data

Ways to prevent your phone from heating up

- Pause resource-intensive features or apps until your phone cools down.

- Use the charger that came with your phone, or a charger that is compatible with your phone.
- Keep your phone away from direct heat or excessive sunlight.
- Don't keep your phone in enclosed or poorly ventilated areas where heat can easily build up.
- [Lower your phone's display brightness.](#)

If you're not using or charging it

Sometimes a process can get stuck in the background. If your phone is hot but you're not using or charging it, turn your phone off and on again. This will stop the previously stuck process and resolve the issue.

Phone won't turn on

If your phone isn't starting, has a black or blank screen or turns on but immediately turns off, try these steps to fix the issue.

1. Press and hold the Power button for 5-7 seconds or up to 30 seconds.

This restarts (reboots) your phone.

2. [Charge the phone.](#)

If your phone has a [sign-of-life indicator](#), look for a white light near the top front of the phone. This indicates that the phone is charging but the battery is too low to power the screen.

If you're having problems charging, [try these troubleshooting steps.](#)

3. If you don't see a battery icon after you plug your phone in to charge, the issue could be with your screen. Check if your phone rings by calling it from another phone. If it rings, the issue is with your screen and you can [try these troubleshooting steps.](#)
 4. Perform an external phone reset. [Learn how.](#)
 5. If you have a Windows PC, [download](#) to your PC and try reinstalling the phone's system software.
-

Phone restarts or crashes

If your phone randomly reboots, restarts or shuts down without restarting, try the following.

1. Restart your phone:
 - a. Hold down the Power button for about 30 seconds.
 - b. If this doesn't work, charge your phone for at least 5 minutes. Then, while connected to the charger, restart by holding down the power button for 30 seconds.
2. Troubleshoot your phone:
 - a. [Check if a software update is available](#) for your phone.
 - b. [Check available storage](#) and [clear space](#) if needed.

You may see issues if your phone's internal storage is almost full. To free up space, remove unnecessary files and clear cached data.

3. Troubleshoot your apps:
 - a. [Check for app updates](#).
 - b. [Use safe mode](#) to see if apps you installed are causing the issue and uninstall as needed.
If your problem doesn't go away in safe mode, restart your phone and continue to the next section.
 4. Reset to factory settings:
To remove any processes on your phone that may be causing the issue, you can [reset your phone](#) to factory settings.
A factory data reset will remove all data from your phone.
 5. If you have a Windows PC, [download](#) to your PC and try reinstalling the phone's system software.
-

Screen is frozen or won't respond

Tip: If your screen goes black when the phone rings so you can't answer the call, [clear data](#) for the Phone app.

If your phone freezes, stops responding or is stuck on a blank or white screen, try the following:

1. Restart your phone. Hold down the Power button for about 30 seconds.
2. If this doesn't work, charge your phone for at least 5 minutes. Then, while connected to the charger, restart by holding down the power button for 30 seconds.

If your phone freezes again, check for a larger issue:

1. Restart your phone to unfreeze it.
2. [Check if a software update is available](#) for your phone.
3. [Check available storage](#) and [clear space](#) if needed.

You may see issues if your phone's internal storage is almost full. To free up space, remove unnecessary files and clear cached data.

4. [Check for app updates](#).

If you can't unfreeze the phone, [reset your phone](#) to factory settings to remove any processes that may be causing the issue.

A factory data reset will remove all data from your phone.

Screen displays wrong colours

Everything is greyscale, black and white

Go to **Settings > Digital Wellbeing & parental controls > Bedtime mode > Customise > Screen options at bedtime** and turn **Greyscale** off .

Everything is negative, reversed colours

Go to **Settings > Accessibility > Colour inversion** and turn it off .

Tones, hues are different or missing

- If the screen shows warmer tones than usual, check [quick settings](#). If  **Night light** is on, turn it off.
- If certain colours appear diminished or their hues are different, go to [Settings](#) > **Accessibility** > **Colour correction** and turn **Use colour correction** off .

Background turned dark/light

Go to [Settings](#) > **Display** > **Advanced** > **Device theme** and choose **Light** or **Dark**.

SD card issues

Phone doesn't recognise new SD card

If your phone isn't recognising a new card that you [inserted](#), try these steps. After each step, check to see if the issue is fixed.

1. Turn your phone off and then on again.
2. Inspect card for damage or alignment issues:
 - a. Turn your phone off and [remove](#) the card. Inspect for damage. If not damaged, reinsert the card.
 - b. Be sure the card sits completely in its slot and that the tray slides easily into the phone.
 - c. Turn the phone on.
3. Check that the card is mounted:
 - a. Go to [Settings](#) > **Storage**.
 - b. If you see **Ejected** under the card name, touch the name, then touch **MOUNT**.
 - c. Turn your phone off and then on again.
4. Check that the card's type and capacity is [compatible with your phone](#). If not, use a different SD card that meets the requirements.
5. Insert a different SD card to confirm that the issue is with the original card and not with your phone.

Phone cannot format SD card

Try the following:

- Check that the card's type and capacity is [compatible with your phone](#). If not, use a different SD card that meets the requirements.
- Try formatting the card using an SD card reader and an SD card formatter app on a Windows computer.

Phone stopped reading SD card

After each step, check to see if the issue is fixed:

1. Turn your phone off and then on again.

2. Inspect card for damage or alignment issues:
 - a. Turn your phone off and [remove](#) the card. Inspect for damage. If not damaged, reinsert the card.
 - b. Be sure the card sits completely in its slot and that the tray slides easily into the phone.
 - c. Turn the phone on.
3. Check that the card is mounted:
 - a. Go to [Settings](#) > **Storage**.
 - b. If you see **Ejected** under the card name, touch the name, then touch **MOUNT**.
 - c. Turn your phone off and then on again.
4. If the card is formatted as portable storage, use another device to check if the card is readable:
 - a. Insert card into another device.
 - b. If that device can read the card and files are present, back up files to your computer.

This won't work for cards formatted as internal storage.
5. Check for errors with a USB SD card reader connected to a Windows computer:
 - a. Insert the card into a USB card reader.
 - b. Open My Computer, right-click on the SD card and select **Properties** > **Service** > **Check disk for errors**. Depending on the size of your card and usage, this process could take up to an hour.
6. Reformat card using an SD card reader and an SD card formatter app on a Windows computer. Formatting the card erases all data on the card. Before you reformat, if you can access your SD card files from your PC, copy them to your computer. Then, use the SD card formatter app to format your card to FAT32.
7. Try a new SD card.

Apps can't view files on SD card

If none of your apps can view files on the card:

1. Install a different file manager app from Play Store. Use that app to check whether files are visible on the card.
2. Check whether files are visible using a Windows computer:
 - a. Turn your phone off and [remove](#) the card.
 - b. Put the card in the computer's SD card slot or a connected USB SD card reader.

If a specific app can't view files on the card:

1. Open the app from which files are missing.
2. In the app's settings, set the storage location to be the SD card, not internal or phone memory.

Computer can't view files on SD card

After each troubleshooting step, check to see if your issue is fixed:

1. Use a USB cable that is capable of data transfer and isn't for charging only.
2. Be sure you have [set the USB connection type](#) to allow file transfer.

Troubleshoot issues with calls

Select the statement that best describes your issue:

- [Can't make calls](#)
 - [Can't answer calls](#)
 - [Phone doesn't ring](#)
 - [Don't get calls/texts](#)
 - [People can't hear me](#)
 - [Other issues during calls](#)
-

Can't make calls

After each troubleshooting step, check to see if your issue is fixed.

icon is missing

If  has disappeared from your home screen, you just need to [add a shortcut](#) for the Phone app.

SIM card not recognised

If you see  or  in the [status bar](#) or a message that the SIM is not recognised:

1. Turn your phone off and then on again.

Press and hold the Power button, then touch **Power off**. Then turn it on to establish a new connection with the network.
2. Do one of the following:
 - If your phone allows one SIM card, turn your phone off, then [remove](#) and reinsert the SIM.
 - If your phone allows dual SIMs, disable the SIM, then enable it again. Go to [Settings](#) > **Network & Internet** > **SIM cards**. Turn the SIM off . Then turn it on .

If one of the two SIMs is working, [remove the SIM](#) that is not recognised and try it in the other SIM slot. If it doesn't work in the other SIM slot, then the issue is with the SIM card and you need a replacement from your carrier.
3. Contact your carrier to make sure your account is set up properly.
4. Ask your carrier to replace the SIM card.
5. Perform an external phone [reset](#).

No signal

1. If you usually have a signal  but the [status bar](#) shows  in your current location, move to another area where you can receive a signal, such as outside. If you're uncertain whether your carrier provides service in that location, check the coverage map on your carrier's website.

2. If [aeroplane mode](#) is on, turn it off.
3. Turn your phone off and then on again.
4. [Check for app updates](#).
5. [Check if a software update is available](#) for your phone.
6. Check that the **Preferred network type** is set to **Global**. ([Settings](#) > **Network & Internet** > **Mobile network** > **Advanced** > **Preferred network type**.) If you're experiencing service issues when it is set on **Global**, try a different setting. Not all carriers support this feature.
7. [Remove your SIM card](#) and reinsert.
8. [Use safe mode](#) to see if apps you installed are causing the issue and uninstall as needed.
9. [Reset the phone](#).

Have signal, but can't make calls

1. Turn your phone off and then on again.
Press and hold the Power button, then touch **Power off**. Then turn it on to establish a new connection with the network.
2. [Clear the cache](#) for the Phone app.
3. [Use safe mode](#) to see if apps that you installed are causing the issue and uninstall as needed.
4. [Check if a software update is available](#) for your phone.
5. [Reset the phone](#).

Consistently busy signal

Outbound calls

1. If you hear a fast busy signal when you call a number, all cellular circuits may be in use, preventing the call from going through. Try calling again later.
2. If you hear a fast busy signal every time you call the same number, your number may be blocked by an app. Try calling from a different number.

Incoming calls

If you have a signal and can make calls but callers tell you they consistently get a busy signal when calling you, check that you haven't [blocked their numbers](#).

Can't answer or the phone doesn't ring

After each troubleshooting step, check to see if your issue is fixed.

Phone doesn't ring or ring loud enough

1. [Check your volume setting](#).

2. Look for  in your [status bar](#). If you see it:
 - [Open Quick settings](#) and touch  to turn Do Not Disturb off. Your phone will ring for incoming calls.
 - Make sure your phone is set to [screen calls](#) at the appropriate times.
3. Check that your [ringtone](#) is not set to **None**.
4. Is your phone connected with a [Bluetooth device](#)? If so, all audio is routed to the Bluetooth device.
5. If you're using a ringtone that you installed, try using a ringtone that came with the phone.
6. Use [Safe mode](#) to see if apps you installed are causing the issue and uninstall as needed. Begin with application types like launchers, task killers, or anti-virus apps.

Can't answer ringing phone

1. Check that notifications are enabled for the Phone app.
Touch & hold , then touch  > **Notifications** and make sure they are on .
2. [Clear the data](#) for the Phone app.
Touch & hold , then touch  > **Storage** > **Clear storage**.

Consistently busy signal

Outbound calls

1. If you hear a fast busy signal when you call a number, all cellular circuits may be in use, preventing the call from going through. Try calling again later.
2. If you hear a fast busy signal every time you call the same number, your number may be blocked by an app. Try calling from a different number.

Incoming calls

If you have a signal and can make calls but callers tell you they consistently get a busy signal when calling you, check that you haven't [blocked their numbers](#).

Don't get calls/texts

1. If [aeroplane mode](#) is on, turn it off.
2. Turn your phone off and then on again.
3. [Check for updates to your phone and messaging app](#).
4. [Check if a software update is available](#) for your phone.

Calls go to voicemail

Check your **Do Not Disturb** settings:

1. Look for  in your [status bar](#). If you see it, then your phone is sending calls to voicemail so you're not interrupted. To have your phone ring for incoming calls, open quick settings and touch  to [turn off Do Not Disturb](#).
2. [Check your schedules for Do Not Disturb and delete any that you don't want](#).

3. If you're using [Bedtime mode](#) but don't want to send calls to voicemail when you're sleeping, touch **Settings > Digital Wellbeing & parental controls > Bedtime mode > Customise** and turn **Do Not Disturb for Bedtime mode** off .

Issues during calls

After each troubleshooting step, check to see if your issue is fixed.

Screen goes black

1. If you are using a case, cover or screen protector, remove it and see if it was causing the issue.
2. Check your [proximity sensor](#).
Make a call and place the phone on a table (don't use speaker mode), then hold your hand over the proximity sensor to see if you can turn the screen off and on.
3. [Use safe mode](#) to see if apps that you installed are causing the issue and uninstall as needed.

Calls are dropping

1. Check your signal strength:
 - Weak signal from your mobile provider is a common cause of dropped calls. In the [status bar](#), see how many bars your network connection has. If you see only one or two bars, change locations to improve your signal strength, particularly if you are indoors.
2. Turn your phone off and then on again.
Press and hold the Power button, then touch **Power off**. Then turn it on to establish a new connection with the network.
3. During a call, check that the [proximity sensor](#) works by covering it to confirm that it turns off your screen, preventing accidental touches during calls. You can also download an app to automatically lock your screen during calls; search for 'call screen lock' on Play Store.
4. [Use safe mode](#) to see if apps that you installed are causing the issue and uninstall as needed.
5. [Check if a software update is available](#) for your phone.
6. [Reset the phone](#).

People can't hear me on calls

1. Check that nothing is covering the [microphone](#):
 - If you are using a case, cover or screen protector, remove it and see if it was causing the issue.
 - Check that the protective film that was shipped with the phone has been removed.
2. Check to see if your phone is using Voice privacy. (This feature is not available on all models.) Turn it off to see if sound quality improves:
 - a. Touch .
 - b. Touch  > **Settings > Calls**.
 - c. Turn off **Voice privacy**.

3. If the issue occurs while using the speakerphone or a Bluetooth headset, check your signal strength.
In the [status bar](#), see how many bars your network connection has. If you see only one or two bars, change locations to improve your signal strength, particularly if you are indoors.
4. Turn your phone off and then on again.
Press and hold the Power button, then touch **Power off**. Then turn it on to establish a new connection with the network.
5. [Check if a software update is available](#) for your phone.
6. Turn off Voice Match.
 - a. Open the Google app.
 - b. Touch your profile icon  > **Settings** > **Assistant** > **Hey Google & Voice Match**.
 - c. Turn **Hey Google** off .

Saying 'OK, Google' won't work from all screens but you can touch the search widget first, then say 'OK, Google'.
7. [Use safe mode](#) to see if apps that you installed are causing the issue and uninstall as needed.
8. [Reset the phone](#).

People can't hear me on apps like Meet or WhatsApp

1. [Force stop the app](#). This completely shuts down the app, including any background services that may be causing your issue.
2. [check for updates to the app](#).
3. Turn your phone off and then on again.
4. [Clear the app's cache](#).

Poor sound quality on calls

Start by checking your [volume](#) setting. You can only adjust the call volume with the volume buttons while you're on a call.

Wired headset

1. Make sure the headset is inserted completely into the [headset jack](#).
2. If you are using a case or cover, remove it and re-insert the headset to see if it was interfering.
3. Try a different headset to determine if the issue is with the original headset.

Earpiece

1. Check that nothing is covering the [microphone](#):
 - If you are using a case, cover or screen protector, remove it and see if it was causing the issue.
 - If the phone was delivered with a protective plastic film, remove the film.
2. While in a call, try using the speakerphone or a wired headset to see if the sound quality improves. If it doesn't, the issue is probably network signal strength instead of hardware.

3. Turn your phone off and then on again.

Press and hold the Power button, then touch **Power off**. Then turn it on to establish a new connection with the network.

4. [Use safe mode](#) to see if apps that you installed are causing the issue and uninstall as needed.
5. [Check if a software update is available](#) for your phone.
6. [Reset the phone](#).

Bluetooth device

Check the battery level of the Bluetooth device and phone, and charge if necessary. [Paired Bluetooth devices](#) may disconnect or create noise when the phone or Bluetooth battery are low.

Charging issues

Try these troubleshooting steps. After each step, check to see if your issue is fixed.

1. Make sure that the [USB plug](#) fits securely into the phone.
2. If the battery is completely depleted, connect the charger and wait about 10 minutes until it has enough voltage to charge, then press the Power button.
3. If you're charging by connecting to a wall outlet:
 - If the outlet is controlled with a switch, check that it is turned on.
 - Use the charger that came with the phone, or a charger that is compatible with your phone.
 - Remove any cases to see if they are impeding the charger/port connection.
 - Inspect the charger for damage to the wire or plug. If you see damage, try charging by connecting to your computer with a USB cable.
 - Check the outlet for damage or loose parts. If you see damage, try another outlet.
4. If you're charging by connecting to your computer, check the USB connection:
 - a. Swipe the [status bar](#) down.
 - b. On the USB notification, touch , then touch the notification.
 - c. Touch **No data transfer**.
5. Reboot the phone by holding the Power button for 7–10 seconds.
6. [Reset the phone](#).

Phone gets hot while charging

The TurboPower charger, which provides efficient, rapid charging can cause the battery to heat up, which is normal. If the battery reaches 111 degrees (F), the charging rate slows down. Once the battery cools down, the charger begins rapid charging again.

TurboPower charging not working

When the battery is below 78%, the TurboPower charger charges rapidly. When the battery is at 78% or higher, it charges at regular speed.

If your battery is below 78% and isn't charging rapidly, disconnect your phone from the charger and plug it back in again.

Battery drains too fast

Battery life varies

The way you use your phone can really affect how long you can go before recharging your battery. Navigating, playing games, browsing the web, making calls and texting all require energy. So your battery life may vary day to day, depending on what you're doing.

If your battery is draining faster than expected

If your battery life seems shorter than usual, a quick and easy step is to reboot your phone, especially if you haven't turned it off in over a week.

1. Press and hold the power button.
2. Touch **Restart**.
3. Plug your phone in and charge it normally.

Tip: You can adjust settings to [extend your battery life](#).

Bluetooth issues

Bluetooth turning on automatically

After each step, check to see if your issue is fixed:

1. When Bluetooth is off, your phone can still scan and automatically connect to a previously paired device. To prevent this, [turn off Bluetooth scanning](#).
2. Some third-party apps that control Bluetooth devices (smart watches, fitness and vehicle monitors etc.) automatically turn Bluetooth on. If they do, this can prevent you from turning Bluetooth off.

To check if a third-party app that you installed is automatically turning Bluetooth on, use [safe mode](#) to identify the problematic app, then uninstall it.

Can't pair

After each step, check to see if your issue is fixed:

1. First, [check the basics](#).
2. Make sure that the phone and Bluetooth device are in discovery mode.
3. Refresh the available devices list:
 - a. Go to [Settings](#) > **Connected devices**.
 - b. Touch **Pair new device**.
4. Check if a [software update](#) is available for your phone.
5. If you're having trouble pairing with your car, see the car manufacturer's instructions for your model.
6. [Reset](#) the phone's connections, then power cycle the phone.

Can't reconnect previously paired device

Unpair the Bluetooth device, then pair it again:

1. Go to [Settings](#) > **Connected devices** > **Previously connected devices**.
2. Next to the paired device, touch  > **FORGET**.
3. [Pair the device](#) again.

Can't hear music

After each step, check to see if your issue is fixed:

1. First, [check the basics](#).
2. Check that the volume is up on your phone, car or Bluetooth device.
3. Check that other devices paired with your phone aren't playing the music.

4. Check that **Media audio** is on:
 - a. Go to **Settings** > **Connected devices**.
 - b. Next to the paired device, touch .
 - c. Make sure **Media audio** is ticked.
5. If the problem is with a car, check the car's instructions.

Can't make or hear on calls

After each step, check to see if your issue is fixed:

1. Check that other devices paired with your phone aren't receiving your calls.
2. Check that **Phone audio** is on:
 - a. Go to **Settings** > **Connected devices**.
 - b. Next to the paired device, touch .
 - c. Make sure **Phone audio** is ticked.
3. If the problem is with a car, check the car's instructions.

Connection drops

After each step, check to see if your issue is fixed:

1. Check battery level on your phone and on the Bluetooth device and charge if needed. Bluetooth devices may disconnect or create noise when the phone or Bluetooth battery is low.
2. Adjust positioning:
 - Make sure you are wearing or positioning the device appropriately.
 - Keep metal objects such as keys or coins away from the phone and device to avoid interference.
3. Clear data for this system app:
 - a. Go to **Settings** > **Apps & notifications**, then touch **>**.
 - b. Touch  > **Show system**.
 - c. Touch **Bluetooth** > **Storage** > **Clear storage**.

Paired device can't see contacts

Check that contact sharing is on:

1. Go to **Settings** > **Connected devices**.
2. Next to the paired device, touch .
3. Make sure **Contact sharing** is on.
4. Check and adjust sharing settings on the paired device or in the device's app.

Fix it: check the basics

After each step, see if your issue is fixed:

1. Check battery level on your phone and Bluetooth device, and charge if either is low.
2. Keep the phone and Bluetooth device within 30 feet of each other, and closer for better performance.
3. On your phone, turn Bluetooth off and then on again.
4. Turn off the Bluetooth device to disconnect it, then turn it back on to automatically [reconnect](#) with the phone.
5. Power cycle both your phone and the Bluetooth device.

If that doesn't fix it, follow the steps for specific problems in the sections above.

Wi-Fi issues

After each troubleshooting step, check to see if the issue is fixed.

Can't connect to a network

1. When you [enter the password](#) to connect:
 - Get the password from the Wi-Fi router and make sure you enter it correctly on your phone.
 - If the **CONNECT** button is greyed out, the password you entered isn't long enough. Confirm the router's password and re-enter it on your phone.
2. Check if a [software update](#) is available for your phone.
3. Check that the Wi-Fi router firmware is up to date.
4. [Reset the phone's network connections](#).
5. [Reset the phone](#).

Connection drops

After each troubleshooting step, check to see if the issue is fixed.

1. Turn off [Wi-Fi scanning](#).
2. [Remove the network connection](#). Then set up the Wi-Fi connection again.
3. Check if a [software update](#) is available for your phone.
4. Restart your wireless router by unplugging it from the power outlet for about 30 seconds and then plugging it back in. Once the wireless router is running again, try to reconnect.
5. On a computer, log into your router and try adjusting one or more of these router settings:
 - If the router has multiple bands, disable the lower band.
 - Change the encryption/security setting of the SSID from WPA-password to WPA-PSK.
 - Don't use automatic channel selection. Instead, assign a fixed channel, such as Channel 6.
6. [Reset the phone's connections](#).

Hotspot problems

If you can't turn your hotspot on, check that:

- [mobile data is on.](#)
- [Data Saver is turned off.](#)

If you can't connect a computer or tablet to your phone's Wi-Fi [hotspot](#):

1. The mobile network for your phone may not be in range. Check the signal icon in your status bar to ensure you have strong connection. If not, [try these troubleshooting steps](#).
2. Re-enter the password on the device to match the [hotspot password](#) set up on your phone. Make sure that the encryption type and security settings match on the device and your phone.
3. Disconnect and then reconnect:
 - a. Turn off the connection from your device.
 - b. Turn off the phone's hotspot.
 - c. Restart your device.
 - d. Wait for 1 minute, then turn on and [enable](#) the hotspot on your phone.
 - e. Reconnect the device.

If you've connected a computer or tablet but can't access certain websites:

1. Power cycle your computer or tablet.
 2. Make sure the browser version is up to date.
-

Can't transfer files or connect to computer

If you're having problems using a [USB connection](#) to connect your phone to your computer, try these troubleshooting steps.

Check your computer

Windows computer

1. Check your computer's settings to make sure that Windows automatically detects new hardware.
2. Restart your computer.

Mac computer

- Check that your computer is running Mac OS X 10.5 and up.
- Check that your computer has [Android File Transfer](#) installed and open it.
- Restart your computer.

Check your phone

1. Check if a [software update](#) is available for your phone.
2. Hold down your phone's power button for 5-7 seconds, or up to 30 seconds.

Check your USB connection

1. Try a different USB cable. Not all USB cables can transfer files.

2. To test the USB port on your phone, connect your phone to a different computer.
3. To test the USB port on your computer, connect a different device to your computer.

Forgot the unlock code

If you have forgotten your PIN, pattern or password for unlocking your screen, you need to erase your phone, set it up again and set a [new screen lock](#).

1. Make sure that you know your Gmail address and password, which you'll need when setting up the phone. If you've forgotten them, use Google's [website](#) to retrieve them.
 2. Perform an [external reset](#) of your phone.
-

Can't sign in to Google

If you've forgotten the Gmail address and password for your Google account:

1. Visit [Google's website](#) to reset the password.
 2. On a computer, log in to Gmail and confirm that the new password works.
 3. Wait 24 hours after changing your password before resetting your device. For security, you can't use an account to set up a phone after reset if that password changed within 24 hours.
-

Account sync issues

If your account is having problems syncing, you may see a message or an  icon.

In most cases, these issues are temporary and your account will sync again after a few minutes. If you keep having sync issues, try the solutions below.

Sync account manually

1. Go to [Settings](#) > **Accounts**.
2. Touch the account to sync.
3. Touch **Account sync**.

If your phone syncs, your issue is fixed. If not, try the troubleshooting solutions below.

Basic troubleshooting

After each troubleshooting step, try manually syncing to test if sync works.

1. Check that auto-sync is on.
 - a. Go to [Settings](#) > **Accounts**.
 - b. Touch the account.

 by the account name means that some or all of the account's information is configured to auto-sync.

 by the account name means that the account will not auto-sync.

2. Make sure your Internet connection works.

For sync to work, you need an Internet connection. To test if your connection is working, open a browser and load a website. If the website doesn't load, get help connecting to [Wi-Fi](#) or to [mobile data](#).

3. Check if you have account issues.

For sync to work, you must be able to sign in to your Google account. Make sure that you can sign in to your account in other ways and on another device. For example, try checking your Gmail with your computer's browser.

- If you can sign in, the issue is with your phone. Move on to the next solution.
- If you can't sign in, [your account may have an issue](#).

4. Check if a [software update](#) is available for your phone.

Advanced troubleshooting

After each troubleshooting step, try manually syncing to test if sync works.

1. [Remove and re-add](#) your account.
2. Clear the cache and data for the Contacts app.
 - a. If you've saved any contacts since you last synced, back them up. Open the **Contacts** app, then touch  > . Then export to a VCF file and email the file to yourself.
 - b. Clear the [cache and data](#) for the Contacts app.
 - c. Download the VCF file that you emailed to yourself, then import those contacts (**Contacts** app >  > ).

App or widget issues

App or widget missing from Home screen

If a widget disappeared from your [home screen](#), then [add the widget](#) by touching and holding an empty spot on your home screen.

If an app disappeared from your home screen, the shortcut for opening the app was removed and you just need to [add a shortcut](#).

If an app disappeared from your list of all apps, you need to [reinstall](#) it.

App crashes, won't open or isn't working

After each step, check to see if the issue is fixed:

1. Turn your phone off and then on again.
Press and hold the Power button, then touch **Power off**.
2. Check that you have not disabled permissions for the app. If any permissions are turned off, [turn them on](#) and try using the app again.
3. [Update the app](#).
4. [Force stop the app](#). This completely shuts down the app, including any background services that may be causing your issue.
5. [Clear the app's cache](#). This frees up space by removing temporary files.
6. [Clear the app's data](#). This erases all data saved in this app.
7. Contact the app's developer.
 - a. [Open](#) the Play Store app.
 - b. Touch your profile icon  > **Manage apps and device**.
 - c. Touch the app and swipe down to see contact information.
8. If all else fails, [delete the app](#).

Tip: To figure out which third-party app is causing performance problems, [use safe mode](#).

App disabled in safe mode

If apps are disabled because you're in [safe mode](#), you can't use them until you exit safe mode.

To exit safe mode, turn your phone off and then on again.

If you can't update apps

If you see apps waiting to update that are stuck in 'Pending' status, update the  Chrome app first.

1. On the 'Pending downloads' screen, cancel all downloads.
2. Swipe to  **Chrome** and touch **Update**.

3. After Chrome has updated, touch .
Apps will now update normally.

Problems with app you installed

After each step, check to see if the issue is fixed:

1. Check for [updates](#) to the app.
 2. If you can open the app, touch  or  > **Help** and look for troubleshooting information.
 3. [Clear the app's cache](#).
 4. Go to the developer's website for support.
 - a. [Open](#) the Play Store app.
 - b. Touch your profile icon  > **Manage apps and device**.
 - c. Touch the app and swipe down to see a link to the website.
-

Camera issues

Photo looks blurry

Wipe the lens clean with a soft, dry cloth and take the photo again.

If new photos still look blurry:

- Increase resolution (photo size) in the Camera app. A smaller photo size results in lower image quality.
- Avoid zooming when taking a photo. Pixelation always occurs when you zoom a digital photo. If you use zoom during the shot itself, pixelation will be more evident.
- If you're indoors and taking a panoramic photo, switch to regular mode. Panorama works best for outdoor shots; the algorithm that stitches the images together isn't optimized for indoor, up-close shots.

Accidentally deleted photos

You can try to [recover](#) recently deleted photos.

If recovered, make sure that you [back up your photos](#) to the cloud.

Can't delete photo

If a photo or video you have deleted comes back, check if it's on your SD card. To delete it, use the Files app. (If you don't have this app, [download](#) a file manager app and use it to delete the photo from your card.)

Or, [remove](#) your card from the phone and use a computer to delete photos from the card.

WhatsApp camera issues

If you installed WhatsApp and have problems taking photos or videos with it:

1. Check for [updates](#) to the app.

2. [Clear the app's cache](#).
3. If the problem continues, open WhatsApp, touch  > **Settings** > **Help** and search for information about your issue.

Error: Please restart camera

After each troubleshooting step, check to see if the issue has been fixed:

1. Turn your phone off and then on again.
2. Clear the [cache](#) for the Camera app.
3. Check for [updates](#) to your Camera app.
4. Use [safe mode](#) to see if installed apps are causing the issue and uninstall as needed.
If the camera works correctly in safe mode, a third-party app is probably causing the issue.
5. If you're storing photos/videos on your SD card, [remove](#) the card and see if you can take photos without getting the error. If so, replace the SD card with a new card. Make sure the new card is certified A1 and has a fast write speed.

Error: Camera busy

This error can occur if you use the camera in one app and then switch to another app that requires permission to access the camera.

After each troubleshooting step, check to see if the issue is fixed:

1. Turn your phone off and then on again.
2. Check which apps have [permission](#) to access the camera.
[Settings](#) > **Apps & notifications** > **Advanced** > **App permissions** > **Camera**
Review the list of the apps on your phone that request camera access and remove access for apps that look suspicious or that you don't use.
3. Clear the [cache and data](#) for the Camera app.

Error: Bin is full

If you're getting messages about Deleted items being full:

1. [Open](#) the **Photos** app.
2. Touch **Library** > **Bin**.
3. Touch  > **Empty bin**.
4. Touch **Delete permanently** to confirm the deletion.

Messaging issues

If you're having issues [sending or receiving messages](#), try the following:

1. check for [updates to your messaging app](#).
2. Check if a [software update](#) is available for your phone.

3. Turn your phone off and then on again.
4. If the issue persists, follow the steps below for specific issues. After each troubleshooting step, check to see if your issue is fixed.

Red ! on text message

If you see , your text message was not sent.

1. Check your signal strength.

Weak signal from your cellular provider is a common cause of unsent messages. In the [status bar](#), see how many bars your network connection has. If you see only one or two bars, change locations to improve your signal strength, particularly if you are indoors.

2. open the conversation and [resend the message](#).

Can't hear notifications

1. check that [message notifications are turned on](#).
2. Look for  in your [status bar](#). If you see it:
 - [Open quick settings](#) and touch  to turn Do Not Disturb off.
 - Make sure your phone is set to [screen calls at the appropriate times](#).
3. If you're using a 3rd party launcher, [switch back to the Moto launcher](#). If this fixes the issue, then find an alternative launcher to use.

Can't send or receive messages

1. Change your preferred network to **Global**. (Not all carriers support this feature.)
2. If you recently switched from iPhone and are having trouble sending messages to or receiving them from an iPhone, your phone number may still be associated with iMessage. You need to [deregister your account](#).
3. Contact your carrier.

Can't send or receive pictures or videos

Check that:

- [mobile data is turned on](#).
- Your data plan supports MMS (multimedia messages).

Messages app stopped

1. Check that you have not disabled permissions for the Messages app. If any permissions are turned off, [turn them on](#) and try using the app again.
2. [Force stop the app](#). This completely shuts down the app, including any background services that may be causing your issue.
3. Uninstall any recent app updates.

Touch & hold , then touch  **App info** >  > **Uninstall updates**.

4. [Clear the app's cache](#). This frees up space by removing temporary files.
5. [Reset the phone](#).

Keyboard not working

If your keyboard has problems, such as a missing spacebar:

1. [check for updates](#) to your keyboard app.
2. Turn your phone off and then on again.
3. [clear the cache](#) for the keyboard app.

Problems with Facebook, WhatsApp and other apps

If you're having problems with messaging apps that you installed:

1. [check for updates to the app](#).
2. If you can open the app, touch  or  > **Help** and look for troubleshooting information.
3. Turn your phone off and then on again.
4. [Clear the app's cache](#).

Gmail issues

For help with Gmail, read [Google's troubleshooting information](#).

Play Store issues

For help with Play Store, read [Google's troubleshooting information](#).

Update Android software

For best performance, keep your phone updated with the latest available Android software.

Check Android version number

To check what version of Android your phone is running:

1. Go to [Settings](#) > **System** > **About phone** > **Android version**.
2. The number displayed is your phone's Android version.

Install Android software updates

Your phone notifies you if an Android software update is available.

To manually check for updates, go to [Settings](#) > **System** > **Advanced** > **System updates**.

If an upgrade is available, follow the onscreen instructions to install it.

Tips:

- To save data charges, use a [Wi-Fi connection](#) to download software updates.
- For safety reasons, your phone may download security updates (not OS upgrades) automatically over your mobile network if Wi-Fi is not available within a few days after you receive a notification that a security update is available. In this case, data charges may apply depending on the carrier.

You can't downgrade to a previous software version after installing an update.

Check if and when updates are available

Types of updates:

- **Security updates** contain fixes and improvements from Google for your current version of the Android operating system. Motorola provides these updates to most phones on a regular basis.
- **Android OS updates** are new versions of the Android operating system. Motorola provides OS updates from Google to eligible phones as soon as possible.

To see if an OS update will be available for your phone, or if your phone is still eligible for security updates, see the [software update website](#) for your country. Our support agents get their Android update information from here too. If the website doesn't have a update release date for your phone, then we don't know the release date yet.

For Android OS updates, due to the number of phone models, regions and distribution channels, we may have hundreds of software versions to test before we can release an update to your phone. Because we depend on carriers and other key partners for certifications, independent testing and requests for changes, which takes more time, phone owners may not all receive updates at the same time, even if they're in the same region.

Reset Wi-Fi, mobile data and Bluetooth

When to use this reset

- Wi-Fi doesn't work. Wi-Fi network name isn't shown on your phone.
- Cellular/mobile data: No signal and  in the status bar. You can't make/receive calls, or calls frequently drop.
- Bluetooth doesn't work or disconnects automatically.
- VPN doesn't work as expected.

What gets deleted/removed when you reset

- All Wi-Fi devices and passwords set up on your phone
- All mobile settings, like preferred mobile network
- All paired Bluetooth devices set up to connect with your phone, like ear buds, car audio, speakers
- All VPN configurations set up on your phone

You cannot choose individual connections to reset; they will all reset.

Reset

If you're having problems with connections, review this information first:

- [Wi-Fi](#)
- [Bluetooth](#)
- [Mobile data](#)
- [Hotspot](#) (internet sharing)

Then, if you're still experiencing problems, try resetting all network settings:

1. Go to [Settings](#) > **System** > **Advanced** > **Reset options**.
2. Touch **Network settings reset** > **RESET SETTINGS**.
3. If you're using dual SIMs, select the SIM to reset for mobile data settings.
4. Touch **RESET SETTINGS**.
5. Try to reconnect to Wi-Fi, mobile data and Bluetooth, or try to share your internet connection again.

Reset phone

What a reset does

Resetting your phone erases all data and restores it to out-of-the-box condition. This data will be erased from the phone:

- [Google account](#)
- Media (music, photos, videos)
- System settings and data
- App settings and data (including text messages)
- Downloaded apps

Before you reset

1. Back up your data.

If your phone works and you can unlock it:

- If you aren't automatically saving your photos and videos to your Google Photos library, [back them up now](#) or copy them [to a computer](#).
- [Back up files and folders to Drive](#).
- Make sure that any changes you made to contacts or calendar are [synced](#) to an account.

2. Make sure you have your security information:

- The username for a Google account on your phone. (**Settings > Accounts**)
- The password for that Google account. If you've forgotten the password, you can [reset](#) it. Wait 24 hours before resetting the phone if you reset your password.
- If you set a screen lock, make sure you know the PIN, pattern or password.

To restore your data after resetting, you'll need to enter security information. This shows that you or someone you trust did the reset and helps prevent others from using your phone without permission.

3. If you're going to give your phone to someone else, disable Factory Reset Protection (FRP):

- a. [Remove the screen lock](#).
- b. [Remove your Google accounts](#) from the phone.

FRP is security measure that keeps your data safe if your phone is lost or stolen, and that requires logging into the phone with the owner's account to reset the phone. Removing your account and screen lock before the reset lets the person you're giving it to set it up with their own information.

Reset phone from Settings

To erase all data and reset your phone:

1. Go to **Settings > System**.
2. Touch **Advanced > Reset options > Erase all data (factory reset)**.

Reset phone if you can't open Settings

If you can't open Settings, do an external reset.

1. Charge your battery 30% or more.
2. Turn off the phone.
3. Press and hold the Volume down button and the Power button at the same time until the phone turns on.
4. Press the Volume Down button until you see Recovery mode.
5. Press the Power button to restart in Recovery mode.
6. Use the Volume buttons to scroll to **Wipe data/factory reset**, then press the Power button to select it.
7. Use Volume buttons to scroll to **Yes**, then press the Power button to select it.

Allow several seconds for the reset to complete.

- 8. Use Volume buttons to scroll to **Reboot system now**, then press the Power button to select it.
Allow several minutes for the reboot to complete. If the phone doesn't finish rebooting, press and hold the Power button until the screen turns dark, then release it to power up normally.
- 9. If you reset your phone because you suspect a third-party app is causing problems, when you set up the phone again, make sure that you don't copy all apps. [Restore](#) one app at a time and use the phone for a while. If the phone has no issues, install the next app and retest.

See more help

Issue	Where to get help
Billing or mobile network issues	Contact your carrier.
Learn to use an app	Open the app and touch  or  > Help .
Phone issue	Visit mobilesupport.lenovo.com for solutions, user forums, live contact options.