At a glance
a quick look

First look
Let’s get started! We’ll guide you through startup and tell you a bit about your phone’s features.
And when you’re ready, customize your phone to match your style with Motorola Shells (sold separately and not available in all countries).
Note: Software updates happen frequently, so your phone may look a little different.

Tips & tricks
• Start: Ready to start? See “Start”.
• Top topics: Just want a quick list of what your phone can do? See “Top topics”.
• Help: All your questions about your new phone answered right on your phone. Tap Apps 📷 → 🚚 Help. Want even more? See “Get help & more”.
Note: Certain apps and features may not be available in all countries.

SAR
This product meets the applicable national or international RF exposure guidance (SAR guideline) when used normally against your head or, when worn or carried, at a distance of 1.5 cm from the body. The SAR guideline includes a considerable safety margin designed to assure the safety of all persons, regardless of age and health.

Caution: Before using your phone, please read the safety, regulatory and legal information at www.motorola.com/mymotog.
### Top topics
Check out what your phone can do.

<table>
<thead>
<tr>
<th>Feature</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find these fast: Wi-Fi, airplane mode, flashlight, and more.</td>
<td>“Quick settings”</td>
</tr>
<tr>
<td>Choose new wallpaper, sounds, and more.</td>
<td>“Redecorate your home screen”</td>
</tr>
<tr>
<td>Probably more megapixels than your average camera.</td>
<td>“Take photos”</td>
</tr>
<tr>
<td>On some phones, you can watch high definition TV.</td>
<td>“Quick Start: Digital HDTV”</td>
</tr>
<tr>
<td>Go on the internet.</td>
<td>“Browse”</td>
</tr>
<tr>
<td>Browse, shop, and download apps.</td>
<td>“Download apps”</td>
</tr>
<tr>
<td>Keep your info safe. Lock your screen and more.</td>
<td>“Protect”</td>
</tr>
<tr>
<td>Never get lost again.</td>
<td>“Locate &amp; navigate”</td>
</tr>
<tr>
<td>Save data charges. Use Wi-Fi.</td>
<td>“Wi-Fi networks”</td>
</tr>
<tr>
<td>Stuck? Confused?</td>
<td>“Help &amp; more”</td>
</tr>
</tbody>
</table>
Remove the back cover
Your phone is water resistant, but it depends on you putting the cover on properly. If you need to remove the cover to insert cards, be sure to replace it properly to ensure water resistance.

Caution: Don’t use tools to remove the cover—doing so may damage your phone.

Water resistance note: This device is IPX7 water resistant—not waterproof. Avoid prolonged exposure to water. Do not submerge in more than three feet of water or for longer than 30 minutes.
Put in the cards & power on

**Note:** In some countries, you can use a second SIM card.

Put in the SIM and optional microSD cards.

**Caution:** Make sure you use the correct size SIM cards, don’t cut the SIM card, and don’t use adapters with your SIM cards.

**Power on.**

Press and hold Power until the screen lights up.

**Note:** The memory card (microSD) won’t go in as far as the SIM.

---

Dual SIM phone settings

With a dual SIM phone, you can use one or two SIM cards. If there’s only one SIM in the phone, it’s ready to use. With two cards inserted, you can use either or both.

To set up your phone to use two SIM cards, insert both cards, turn on your phone, and follow the prompts. To finish dual SIM setup, drag down the status bar at the top of the home screen and tap Welcome to your dual SIM.

**Tip:** With two SIM cards, you see  at the top of your home screen.
Dual SIM with intelligent calling
Your phone learns your usage patterns to choose the best SIM for an outgoing call. Your phone automatically prompts you in the status bar to enable this feature. Or, you can enable it anytime by touching Apps > Settings > SIM cards > Call settings > Phone account settings > Make calls with.
Tip: To make the screen sleep or wake up, press the Power button. To turn your phone on or off, press and hold it.

Battery life
Your phone is like a small computer that processes tons of information and apps at lightning fast speed. Depending on what you use, that can take a lot of power.

To see what’s using up battery power, tap Apps > Settings > Battery.
To turn on Battery saver, tap Apps > Settings > Battery, then tap Menu > Battery saver.

Tips & tricks
To save even more battery life between charges, you could reduce:

- Wi-Fi and Bluetooth® use: Tap Apps > Settings, then tap Wi-Fi or Bluetooth to turn them off when you don’t need them.
- GPS use: Tap Apps > Settings > Location > Mode > Battery saving to turn off GPS tracking.
- Display brightness: Tap Apps > Settings > Display > Brightness level (slide dimmer setting left). Make sure Adaptive brightness is also turned on.
- Display timeout delay: Tap Apps > Settings > Display > Sleep (shorter setting).
- Widgets that stream information to your home screen, like news or weather.
- Unused online accounts that you registered: Tap Apps > Settings > Accounts. Tap the account you want to remove. Tap it again, then tap Menu > Remove account.
- Recording or watching videos, listening to music, or taking pictures.

Warning: Don’t try to remove or replace the battery yourself—doing so may damage the battery and could cause burning and injury. If your phone becomes unresponsive, try a reboot—press and hold the Power button until the screen goes dark, and your phone restarts.
Sign in
If you use Gmail™, you already have a Google™ account—if not, you can create an account now. Signing into your Google account lets you use Google apps, see your contacts, appointments, photos, and more.
Just select your language and follow the screen prompts to get started.

Tips & tricks
• **Wi-Fi network**: For faster internet access or to conserve data use, swipe the status bar down with two fingers, tap 📡, and then tap Wi-Fi. There’s more in “Wi-Fi networks”.
• **Accounts**: To add, edit, or delete accounts, tap Apps 📦 > Settings > Accounts, then tap + Add account. To set up email accounts, see “Email”.
For help with your Google account, visit [www.google.com/accounts](http://www.google.com/accounts).
• **Contacts**: To get your contacts from your old phone, you have options. If your old phone was also Android™ and you used the Android Backup and Restore feature, your contacts automatically appear on your new phone. Otherwise, use the Motorola Migrate app in “Old phone to new phone”.
Or, visit [www.motorola.com/transfercontacts](http://www.motorola.com/transfercontacts).

Note: This phone supports apps and services that may use a lot of data, so make sure your data plan meets your needs. Contact your service provider for details.
Old phone to new phone

Copying your personal stuff from your old Bluetooth-enabled phone to your new phone is easy.

**Note:** If your old phone is an Android™ phone, download the Motorola Migrate app on Google Play™ on your old phone before you get started.

**Find it:** On your new phone, tap Apps > Migrate

### Tips & tricks
- While you’re migrating, you can keep using your phone.
- Signing into your Google account copies your apps if they are backed up to the cloud.
- For iPhones, you can migrate contacts and calendar events only from the iCloud.
- For phones that support copying music, not all music can be copied. (If you want to know more, you can search online to learn about digital rights management or DRM-protected files.)
- Older phones that are not Android or iPhone must have Bluetooth™ capability.
Quick start: Home screen & apps

The home screen is what you see when you first turn on your phone. From here, you can explore apps and more.

- **Search:** Type text in the Google Search box at the top of your home screen, or tap to search by voice.
- **Open app list:** To see your apps, tap Apps 📱.

Tips & tricks

- **Widgets:** To put widgets like a clock, interactive calendar, and more on your home screen, touch and hold an empty spot on the home screen, then tap WIDGETS.
- **Pages:** To add a page, drag an app to the right side of the screen until you see a white bar. You can add multiple pages. To show other pages of shortcuts and widgets, swipe the home screen left.
- **Google Now™:** Touch and hold Home ️, then flick up to the Google icon 🔍. After setup, you can access it by swiping right from the home screen.
- **Settings:** To quickly open settings, swipe the status bar down with two fingers and tap .
- **Apps:** To uninstall apps, tap Apps 📱, touch and hold an app, then drag it to Uninstall. (You can’t uninstall some apps).

To remove an app from a home screen page, touch and hold the app, then drag it to Remove. The app isn’t removed from your phone, just the home screen.
- **Customization:** For more about changing your home screen, see “Redecorate your home screen”.
Help & more
Watch a tutorial, Read a how-to. Talk to someone. Find out anything about your phone.
Find it: Apps ☰ +  Help

Search
At the top of the home screen, tap the Google Search box for a text search or tap to search by voice.
When you type, suggestions appear below the search field:
• To search for a suggestion, tap it.
• To search for text in the search field, tap on the keyboard.

Tip: To close the keyboard, tap .

Status & notifications
At the top of the screen, icons on the left notify you about new messages or events. If you don’t know what an icon means, swipe the status bar down for details.
Tip: Getting too many notifications? Touch and hold a notification to see which app is sending them to you. Then you can turn them off.
Tip: To quickly change common settings, swipe the status bar down with two fingers. For more, see “Quick settings”.
Tip: To clear just one, flick it to the left or right.
Home screen & apps

Icons at the top right of your screen tell you about phone status:

<table>
<thead>
<tr>
<th>Icon</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network strength</td>
<td>🌐 No sound</td>
</tr>
<tr>
<td>Wi-Fi in range/connected</td>
<td>📡 Vibrate</td>
</tr>
<tr>
<td>Bluetooth® on</td>
<td>🎧 Priority</td>
</tr>
<tr>
<td>Airplane mode</td>
<td>🎧 Alarm set</td>
</tr>
<tr>
<td>Battery charging/full</td>
<td>⚠ Warning</td>
</tr>
</tbody>
</table>

Note: Apps you download on Google Play™ might show other icons in the status bar to alert you to specific events.

Volume

Press the side volume button up or down to select a volume from high to vibrate 📣.

Also, tap one of these options for more settings:

- **All**: Receive all notifications and alarms.
- **Priority**: Tap 🎧 to select which interruptions to receive. You will always hear alarms. Set when you want to be in this mode, or choose indefinitely.
- **None**: Turn off all sounds and alarms. Override sound settings from other apps. Set how long to stay in this mode, or choose indefinitely.

Discover your Moto apps

Moto apps can simplify life and help you out. Just follow the prompts to find out more.

Find it: Apps 📢 > 📢 Moto

- **Assist**: Set your phone’s behavior based on what you’re doing. For example, keep alarms quiet at night while you’re sleeping.
- **Actions**: Learn how to open your camera with two twists of your wrist using Quick Capture. See “Photos & videos” for more details.
- **Display**: See messages, calls, and other notifications—even if your phone is asleep.
Note: Your phone may not have all features.

**Home screen & apps**

- **Find:** To search for apps, tap 🕵️.
- **Download:** To download an app you found, tap it to see details, then tap **INSTALL**, or the price.
- **Share:** To share an app you found on Google Play, tap it to see details and then tap ✅.
- **Reinstall:** To show or reinstall apps you downloaded from Google Play, tap 📲 → **My apps**.
- **Use a computer:** To find and manage apps from any computer, go to [http://play.google.com](http://play.google.com) using your Google account and password. There, you can browse apps on the big screen, manage your apps across multiple devices (like a phone and tablet), and even set new apps to download to your devices.
- **Enjoy music, movies, books, and more:** You can also use Google Play to download music, movies, books, and more. See “Play Music”, “Play Games”, and “Play Books”.
- **Get help:** To get help and more, tap 📖.

**Apps from the web**

You can get apps from other online app stores using your browser.

**Tip:** Choose your apps and updates carefully, as some may impact your phone’s performance—see “Choose carefully”.

**Note:** When installing an app, make sure you read the alerts that tell you what information the app will access. If you don’t want the app to access this information, cancel the installation.

---

**Download apps**

**Google Play™**

Get music, movies, books, apps, games, and more.

**Find it:** Apps 📱 → 📲 → **Play Store**

---

Tip: Want to hide sensitive or private notifications? Tap Apps 📱 → Moto → **Display** and set which apps can show notifications and how much to display.
To let your phone install apps that are not on Google Play, tap Apps > Settings > Security and check Unknown sources.

For information about downloading files from your browser, see “Downloads”.

Choose carefully

Here are a few tips:

• To help prevent spyware, phishing, or viruses, use apps from trusted sites, like Google Play.
• In Google Play, check the app’s ratings and comments before installing.
• If you doubt the safety of an app, don’t install it.
• Apps use up memory, data, battery, and processing power—some more than others. If you’re not happy with how much memory, data, battery or processing power it’s using, uninstall it.
• Monitor children’s access to apps to help prevent exposure to inappropriate content.
• Certain apps may not provide completely accurate information. Take care, especially when it comes to personal health.

Take care of your apps

Find it: Apps 📱, then swipe left to scroll through apps

To close the apps screen, tap Home 🌐 or Back ◀️

• Uninstall apps: Tap Apps 📱 > Settings > Apps. Swipe left to ALL, tap an app, then tap Disable or Uninstall in the top right (if available).

Disable removes the app from your menu—to Enable it, reopen this window and tap Enable (disabled apps are at the bottom of the list).

If an app locks up your phone as soon as you turn it on, restart in Safe Mode: Turn off your phone, then turn it back on—when you see the “Motorola” logo during power-up, press and hold both volume buttons until you see the home screen, with Safe Mode in the lower left. Then, try removing the app.

• Reinstall apps: To reinstall apps from Google Play, tap Apps 📱 > Play Store, then tap 📦 > My apps. The apps you downloaded are listed and available for download.

• See or clear app details: Tap Apps 📱 > Settings > Apps. Swipe left or right to see the list of DOWNLOADED, RUNNING, or ALL apps, then tap an app in the list to see its details and storage usage. You can tap Clear data, Clear cache, or other options.

Tip: To quickly show app details, tap Apps 📱, touch and hold an app, then drag it to App info.

• See app data usage: To see which apps are using the most data, tap Apps 📱 > Settings > Data usage. For more, see “Data use”.
Update your phone

Use your phone or computer to check, download, and install phone software updates:

• Using your phone:
  If your phone notifies you about an update, follow the instructions to download and install it.

  To manually check for updates, tap Apps > Settings > About phone > System updates.

  Your phone downloads updates over your Wi-Fi connection (if available) or mobile network. We recommend that you download updates over a Wi-Fi connection. Remember, these updates can be quite large (25MB or more) and may not be available in all countries. If the mobile network updates are not available in your country, update using a computer.

• Using your computer:
  On your computer, go to www.motorola.com/update.
Quick start: Control & customize
Take control of your phone:
• **Touch, press, and speak**: Learn phone gestures and commands. See “Controls and gestures”.
• **Change your sounds and more**: To put widgets like a clock, interactive calendar, and more on your home screen, see “Customize sounds and appearance”.

Tips & tricks
• **Speak**: Tap 🗣 in a search window, or ⏪ on a keyboard.
• **Add a home screen page**: Drag an icon to the right side of the home screen until you see a white bar. You can add multiple pages.
• **Quick settings**: To change Wi-Fi, Bluetooth, Airplane mode, and other settings, swipe the status bar down with two fingers. For even more settings, tap ☰ Settings.
• **Can’t find a setting?** Tap Apps 📲 > Settings.

Controls and gestures
**Touch**
Find your way around:
• **Tap**: Choose an icon or option.
• **Touch and hold**: Open options for items in lists.
• **Drag**: Move items on the home screen.
• **Swipe**: Scroll through lists or between screens.
• **Pinch or double-tap**: Zoom in and out on websites, photos, and maps.
• **Twist**: Twist a map with two fingers to rotate it, and pull two fingers down to tilt it.
• **Back**: Tap Back ⬅️ to go to the previous screen.
• **Home**: Tap Home 🏠 to return to the home screen.
• **Overview**: Tap Overview 📷 to see your recent apps (or browser tabs), and tap an app to reopen it. To remove an
Control & customize

Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

app from the list, swipe it left or right. To scroll the list, swipe up or down.

Tip: You don’t need to remove apps from Overview for your phone to run efficiently.

• Menus: When ‖ or ‖ appears on a screen, you can tap it to open options for the current screen.
• Close keyboard: To close a touchscreen keyboard, tap ‖.
• Reboot: To reboot your phone, press and hold the Power button until the screen goes dark and your phone restarts.

Press
Power button
Your power button helps in a few ways:
• Power off: Press and hold the Power button to choose Power off.
• Sleep: To conserve battery power, prevent accidental touches, or when you want to wipe smudges off your touchscreen, put the touchscreen to sleep by pressing the Power button.
• Wake up: Press the Power button again.
Tip: To add security to your phone, see “Protect”.

Volume buttons
Your volume buttons help in a few ways:
• Ringer volume: Press the buttons when your phone is ringing to silence it.
• Earpiece volume: Press the buttons during a call.
• Music/video volume: Press the buttons during a song or video.
Tip: For more on volume control, see “Volume”.

Speak
Just tell your phone what you want.
Tip: Speak naturally but clearly, like using a speakerphone.

• Search: Tap ‖ on the home screen to search by voice, or say, “OK Google” to speak your search. To change your voice input and text-to-speech settings, tap Apps + > Settings > Language & input.

• Dialing and commands: Tap ‖. To dial, say “Call” and then a contact name or phone number. Or, say a command like “Send text,” “Go to” an app, or “Help” for voice command help.
Tip: If a contact has more than one number, you can say which number to call. For example, “Call Joe Black Mobile” or “Call Suzi Smith Work.”
Control & customize

Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

Text entry: On a touchscreen keyboard, tap , then speak your message or search text. You can also speak punctuation.

Tip: To make your phone read out loud, see “TalkBack”.

On, off, lock & unlock
Your touchscreen is on when you need it and off when you don’t. To turn the screen on, press the Power button.

Notifications: Double tap a notification to open it. You’ll be prompted to enter your passcode.

Tip: To choose which notifications to show, tap Apps ➤ Settings ➤ Sound & notification ➤ App notifications. Then tap Apps ➤ Settings ➤ Display ➤ Screen notifications.

Owner info: To add a message to your lock screen, tap Apps ➤ Settings ➤ Security ➤ Owner info. To set your message, just tap Back.

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

Screen timeout: To change your timeout (screen locks automatically), tap Apps ➤ Settings ➤ Display ➤ Sleep.

Customize sounds and appearance
Customize your phone’s sounds and appearance:

Ringtone and notifications: Tap Apps ➤ Settings ➤ Sound & notification.

Vibrate or silent: To make your phone vibrate for incoming calls, tap Apps ➤ Settings ➤ Sound & notification ➤ Also vibrate for calls. To turn off ringtones for incoming calls, tap Apps ➤ Settings ➤ Sound & notification ➤ Phone ringtone ➤ None.
Control & customize

Quick start: Control & customize

Controls and gestures
On, off, lock & unlock

Customize sounds and appearance

Redecorate your home screen

Quick settings

Accessibility

• Ringtone for a contact: To set a personal ringtone for a contact, tap Apps ➔ Contacts, and tap the contact. Tap ➔ then tap Menu ➔ Set ringtone.

• Message alert: To change your message notification settings, tap Apps ➔ Messaging ➔ Menu ➔ Settings, and check Notifications.

• Display settings: To change brightness, animation, and other display settings, tap Apps ➔ Settings ➔ Display.

• Rotate: In many apps, the touchscreen switches from portrait to landscape when you rotate your phone. To turn this on or off, swipe down the status bar with two fingers and tap Auto-rotate.

• Wallpaper: To change your wallpaper, touch and hold an empty spot on your home screen. For more, see “Redecorate your home screen”.

• Language and region: To set your menu language and region, tap Apps ➔ Settings ➔ Language & input ➔ Language.

Redecorate your home screen

For quick access to your favorite things, customize your home screen the way you want.

• Change wallpaper: Touch and hold an empty spot on your home screen and tap WALLPAPERS.

• Add a home screen page: Drag an app to the right side of the home screen until you see a white bar. You can add multiple pages.

• Add shortcuts: Tap Apps ➔ touch and hold the app, then drag it to one of your home screen pages. To see all your apps, tap Apps ➔ and swipe to the left.

• Create shortcut folders: Drag one shortcut onto another. Add more shortcuts by dragging them onto the first shortcut. To name the folder, tap it, tap the name, and type a new name.

• Customize your phone and home screen: To put widgets like a clock, interactive calendar, and more on your home screen, touch and hold an empty spot on the home screen.

• Add widgets: To put widgets like a clock, interactive calendar, and more on your home screen, touch and hold an empty spot on the home screen. Then tap WIDGETS.

• Resize widgets: You can resize some widgets—touch and hold a widget until you feel a vibration, then release. Drag the white circles at the edges to resize.

• Move or delete widgets and shortcuts: Touch and hold a widget or shortcut until you feel a vibration, then drag it to another spot, another page, or Remove.

  Note: Removing a shortcut from your home screen doesn’t uninstall the app from your phone.

Quick settings

For quick access to Wi-Fi, Bluetooth, Brightness, Airplane mode, and other settings, swipe down the status bar or the lock screen with two fingers. For even more settings, tap  .

Need help finding this screen? See “Status & notifications”.
Control & customize

Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

Note: Your quick settings may look a little different.

Tip: Your phone has a flashlight that you can turn on and off from this screen or make a "chop chop" motion with your hand.

Accessibility
See, hear, speak, feel, and use. Accessibility features are there for everyone, helping to make things easier.
Find it: Apps → Settings → Accessibility

Note: For general information, accessories, and more, visit www.motorola.com/accessibility.

Voice recognition
Just tell your phone what you’d like to do—dial, browse, search, send a text, and more. Check it out—say the prompt to ask your phone a question. Tap 🎤 at the top of the home screen for voice search.

TalkBack
Use TalkBack to read your screen out loud—your navigation, your selections, even your books.
To turn on TalkBack, tap Apps → Settings → Accessibility → TalkBack, then tap the switch to turn it on.

Note: You might need to download text-to-speech software (data charges may apply).
To use TalkBack:
- **Menus and screens:** Tap an item in a menu or screen. Your phone speaks the name.
- **Dialer and text entry:** Start typing. Your phone speaks each number or letter.
- **Notifications:** Drag the status bar down. Your phone speaks all of the notifications.
- **Books and more:** Open a book, file, message, and more. Your phone reads the text out loud (app dependent).
- **Browsers:** Enable web pages in your browser to be read out loud. Move between pages, paragraphs, lines, words, or characters.

Tip: Navigate through your apps and menus to hear how voice readouts work on your phone.
To pause/resume TalkBack, wave your hand over the screen. To activate this feature, tap Apps > Settings > Accessibility > TalkBack > SETTINGS > Use proximity sensor.

Tip: If Explore by touch is on, swipe down then right to open the global context menu, then use the menu to pause TalkBack.

To turn off TalkBack, tap Apps > Settings > Accessibility > TalkBack, then tap the switch to turn it off.

Explore by touch

Use Explore by touch to expand TalkBack, and have your touches read out loud as you move your finger around the screen.

To turn on Explore by touch when TalkBack is active, tap Apps > Settings > Accessibility > TalkBack > SETTINGS > Explore by touch.

Tip: When you turn on TalkBack for the first time, your phone asks if you want to Enable Explore by touch? Tap OK to turn it on.

Explore by touch changes your phone’s touch gestures so the location of your touches can be read out loud.

• Tap something on the screen to hear a description or text readout.
• Double-tap anywhere on the screen to open or activate the last touched item.
• Swipe using two fingers to scroll through lists or between screens.

Shortcut gestures let you navigate your phone with simple swipe gestures (for example, swipe up then left in a single motion to go to the home screen). To see or change these shortcuts, tap Apps > Settings > Accessibility > TalkBack > SETTINGS > Manage gestures.

Tip: When you turn on TalkBack for the first time, your phone asks if you want to Enable Explore by touch? Tap OK to turn it on.

Explore by touch changes your phone’s touch gestures so the location of your touches can be read out loud.

• Tap something on the screen to hear a description or text readout.
• Double-tap anywhere on the screen to open or activate the last touched item.
• Swipe using two fingers to scroll through lists or between screens.

Note: The way these gestures are interpreted is specific to TalkBack. Other accessibility services may use the same gestures for different actions.

Explore by touch

To learn more about navigating your phone with Explore by touch, tap Apps > Settings > Accessibility > TalkBack > SETTINGS > Launch “Explore by touch” tutorial.

To turn off Explore by touch when TalkBack is active, tap Apps > Settings > Accessibility > TalkBack > SETTINGS, and uncheck Explore by touch.

Braille

Combine your Braille display with TalkBack for braille and speech feedback.

1 Download the BrailleBack app from Google Play (tap Apps > Play Store), and install it on your phone.
2 Tap Apps > Settings > Accessibility > BrailleBack.
3 Turn on your Braille display and put it in Bluetooth® pairing mode.
4 On your phone, tap Apps > Settings > Bluetooth, then tap the Bluetooth switch to turn it on and scan.
5 Tap the name of your Braille display to pair it with the phone.
Control & customize

Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

Accessibility shortcut
Use simple gestures to quickly activate TalkBack and other accessibility features on your phone. For more information, tap Apps ☰ + ☰ Settings ➔ Accessibility ➔ Accessibility shortcut.

Caller ID
When you want to hear who’s calling:
• Read out loud: Have your caller announced—tap Apps ☰ ➔ Settings ➔ Accessibility ➔ TalkBack ➔ SETTINGS ➔ Speak Caller ID.
• Ringtones: Assign a unique ringtone to a contact. Tap Apps ☰ ➔ Contacts, and tap the contact. Tap 📞, then tap Menu ☰ ➔ Set ringtone.

Volume & vibrate
Find it: Apps ☰ ➔ Settings ➔ Sound & notification ➔ Volumes or Vibrate when ringing
• Volumes opens sliders that let you set different volumes for your music or videos, ringtone, text or email notifications, and alarms.
• Vibrate when ringing determines whether your phone vibrates for incoming calls (even if the ringer is silent).
Tip: For more on volume control, see “Volume”.

Zoom
Get a closer look.
• Pinch to zoom: Pinch to zoom on maps, web pages, and photos—to zoom in, tap the screen with two fingers and then drag them apart. To zoom out, drag your fingers together.
Tip: To zoom in, you can also double-tap.
• Screen magnification: Triple tap the screen for full screen magnification, or triple tap and hold to temporarily magnify. Tap Apps ☰ ➔ Settings ➔ Accessibility ➔ Magnification gestures.
• Big text: Show bigger text throughout your phone. Tap Apps ☰ ➔ Settings ➔ Accessibility ➔ Large text.
Tip: Or tap Apps ☰ ➔ Settings ➔ Display ➔ Font size ➔ Huge.
• High contrast text: Show higher contrast text throughout your phone. Tap Apps ☰ ➔ Settings ➔ Accessibility ➔ High contrast text.
• Browser: Choose text scaling and other accessibility settings for your browser. Tap Apps ☰ ➔ Chrome ➔ Menu ☰ ➔ Settings ➔ Accessibility.
Tip: Use Force enable zoom to allow zooming on all webpages.

Display brightness
Your phone automatically adjusts the screen brightness when you’re in bright or dark places. But you can set your own brightness level instead:
Swipe down the status bar with two fingers, and slide the bar to adjust.
Control & customize

Control & customize
Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

Note: Setting brightness to a high level decreases your phone’s battery life.

Touchscreen & keys
To hear or feel when you tap the screen, tap Apps > Settings > Sound & notification > Other sounds:
• Touchscreen: To hear a click when you tap something on the screen, select Touch sounds.
• Keys: To feel a vibration when you tap the keyboard, select Vibrate on touch.
• Screen lock: To hear a click when you lock or unlock the screen, select Screen lock sounds.

Messages
To make text entry even easier, use features like auto-capitalization, auto-correction, and more. Tap Apps > Settings > Language & input, then tap a keyboard type.
Of course, if you don’t want to type at all, use your voice. Tap on the touchscreen keyboard.

Hearing aids
To help get a clear sound when using a hearing aid or cochlear implant, your phone may have been rated for use with hearing aids. If your phone’s box has “Rated for Hearing Aids” printed on it, then please read the following guidance.

Note: Ratings are not a guarantee of compatibility (visit www.motorola.com/hacphones). You may also want to consult your hearing health professional, who should be able to help you get the best results.

TTY
You can use your phone in TTY mode with standard teletype machines. Tap Phone > Menu > Settings > Calls > TTY mode and select the mode you need:
• TTY Full: Type and read text on your TTY device.
• TTY HCO: Hearing-Carry-Over—type text on your TTY device and listen to voice replies on your phone’s speaker.
• TTY VCO: Voice-Carry-Over—speak into your phone and read text replies on your TTY device.

Note: You’ll need a cable/adapter to connect your TTY device to the headset jack on your phone.
Control & customize

Quick start: Control & customize
Controls and gestures
On, off, lock & unlock
Customize sounds and appearance
Redecorate your home screen
Quick settings
Accessibility

Refer to your TTY device guide for mode and usage information.

Apps
Google Play has something for everyone, and many apps provide useful accessibility features.

Find it: Apps → Play Store
Calls
when you need to talk

Quick start: Calls
Dial contacts, recent calls, or numbers, all from one app.

Find it:

- To call a contact or recent call, tap it.
- To open the dialpad, tap . Enter a number, then tap  to call it.

Tips & tricks

- **During a call:** Your touchscreen goes dark to avoid accidental touches. To wake it up, move it away from your face or press the Power button.
- **Multi-task:** While you’re on a call, tap Home to hide the call screen and look up a phone number, address, or open other apps. To reopen the call screen, swipe down the status bar and tap Ongoing call.
- **Contacts:** To search your contacts, tap CONTACTS.
- **Favorite contact:** Have someone you call all the time? Touch and hold an empty spot on your home screen, tap WIDGETS, then touch and hold the Direct dial widget. Drag it to your home screen, then select the contact. Tap the widget to dial the person.
- **Voicemail:** appears in the status bar when you have new voicemail. To hear it, tap , then touch and hold 1.

Make calls
When you make a call, you have options:

- Tap Phone, to see your recent calls, favorites, and frequently-called contacts. Select a contact or number to call it.
- To dial a number, tap , enter a number, then tap  to call it.
- To enter the international dialing code (+), touch and hold 0. To add a pause or wait after numbers, tap Menu .
**Answer & end calls**

- **Answer a call:** When your phone is unlocked, tap ✆️ ANSWER.
  
  **Note:** When your phone is locked, swipe right to answer a call.

  With call waiting on, tap ☰️ and drag to ✆️ to answer the new call, then tap Hold current call + Answer or End current call + Answer.

- **Ignore a call:** When your phone is unlocked, tap ✗ DISMISS. If locked, swipe left to send the call to voicemail. You can also press the Power button to ignore the call or press a volume button to silence the ringer.

- **Respond with a text:** To send a pre-set message to an incoming caller, tap the caller's name (if visible). Tap ☰️ and drag to ✆️.

- **End a call:** Tap ✆️.

- **During a call:** Tap Mute to mute the call. To hide the call screen, tap Home ☰️. To reopen it, swipe down the status bar and tap Ongoing call.
  
  **Note:** When you hold your phone to your ear, the touchscreen goes dark to avoid accidental touches. When you move your phone away from your ear, the screen lights up again.

  Don't use covers or screen protectors (even clear ones) that cover the proximity sensor.

**Recent calls**

View your calls (with newest first), and then call, text, or store them:

- **Find it:** ✆️ Phone → RECENTS
  
  - To call a number, tap a contact name, then tap CALL BACK.
  
  - To send a text message, store the number, or other options, tap the contact picture.
  
  - To remove an entry from the call log, tap it, then tap DETAILS → ✉️.
  
  - To clear the list, tap Menu → Call History, then tap Menu → Clear call log.

**3-way calls**

During a call, you can start another call, switch between them, or join them in a 3-way call:

- To answer a second call, tap ☰️ and drag to ✆️. To ignore it, tap ☰️ and drag to ✗.

  The first call goes on hold if you answer the second call. To switch between calls, tap ☰️.

- To dial a second call, tap ☎️, enter a number, then tap ✆️ to call it.

  The first call goes on hold when you tap ✆️. To join the calls after the second call answers, tap ✆️.
Calls

Your phone number

Find it: Apps > Settings > About phone > Status > My phone number

Note: May not be available in all countries.

Emergency calls

Note: Your service provider programs one or more emergency phone numbers that you can call under any circumstances, even when your phone is locked. Emergency numbers vary by country. Your pre-programmed emergency number(s) may not work in all locations, and sometimes an emergency call cannot be placed due to network, environmental, or interference issues.

1. Tap Phone (if your phone is locked, drag up to unlock it, then tap EMERGENCY CALL).
2. Enter the emergency number.
3. Tap to call the emergency number.

Note: Your phone can use location based services (GPS and AGPS) to help emergency services find you. See "Location Services" in your Legal Guide.
Quick start: Contacts
Combine information from your Google™ contacts and social networks for quick access to everyone you know.

Find it: Apps ☰ + ☰ Contacts

• **Create:** Tap ☰.
• **Edit or delete:** Tap a contact, then tap ☰.
• **Call, text, or email:** Tap a contact, then tap an option.

Tips & tricks
• **Search contacts:** From the home screen, tap the Google search box and enter a contact’s name. Or, in the **Contacts** list, tap ☰.
• **Send contacts:** Tap a contact, then tap Menu ☰ > Share to send it in a message, or over a Bluetooth® connection.
• **Shortcuts:** Tap a contact, then tap Menu ☰ > Place on homescreen to add a shortcut for this contact on your homescreen.
• **Synchronize:** On your phone, tap Apps ☰ + ☰ Settings. Go to the **ACCOUNTS** section, choose your Google account, then tap your account name to sync it if it has not recently been updated. You can also see these contacts at www.gmail.com.

For help with transferring contacts, learn about Motorola Migrate in “Old phone to new phone” or go to www.motorola.com/TransferContacts.

Create contacts
Find it: Apps ☰ + ☰ Contacts ☰

Tap a text box to type the name and details. When you’re finished, tap ☰ **DONE** at the top.

**Note:** To import contacts or change where they’re stored, see “Get contacts”.

Call, text, or email contacts
Find it: Apps ☰ + ☰ Contacts
Contacts

Quick start: Contacts
Create contacts
Call, text, or email contacts
Favorites
Edit, delete, or hide contacts
Get contacts
Share contacts
My details

Tap a contact to see more options. Depending on the information you have for that person, you can call, text, or send email. You can also use voice recognition (see “Speak”).

Favorites
Set your most-used contacts as favorites, so you can get to them faster.
• To set a favorite, tap Apps → Contacts, select a contact and tap .
• To see your favorites, tap Apps → Contacts → FAVORITES.

Edit, delete, or hide contacts
Find it: Apps → Contacts
• To edit a contact, tap it, then tap . Tap a field to edit it. Tap to choose the contact’s picture.
• To set a personal ringtone for the contact, tap it, tap then tap Menu → Set ringtone.
• To delete the contact, tap it, tap , then tap Menu → Delete.
  Contacts from social networks will be hidden if you select Delete. To view these contacts, or delete them permanently, use the social network’s app or website.
• To hide the contacts from an account in your Contacts list, tap Menu → Contacts to display. Tap an account type to show it. Tap Customize to uncheck accounts you always want to hide.

Get contacts
Get all your contacts in one place.
• To add your social networking contacts, tap Apps → Settings → Accounts, then tap → Add account.
  Note: You’ll need a social networking app first. See “Google Play™” to get apps.
• To add your email contacts, see “Email”.
  Tip: If you add a Corporate Sync account, you can send messages to your coworkers, even if you don’t have them stored in your contacts.
• To import contacts from your SIM card (if it didn’t happen automatically): Tap Apps → Contacts → Menu → Import/export → Import from SIM card. Tap OK to confirm.
• To import contacts from your computer, upload the contacts to your Google™ account at http://contacts.google.com. On your phone, tap Apps → Contacts → Menu → Accounts → Menu → Auto-sync data. You can also see these contacts at http://mail.google.com.
  For help with transferring contacts, see “Old phone to new phone”.

Share contacts
Share a contact with a Bluetooth® connection, in a message, or using Google Drive™.
Find it: Apps → Contacts

Menu More
Back Next
To share a contact, tap it, then tap Menu > Share and choose how you want to send it.

Note: You can’t share your social network contacts.

My details

Find it: Apps 📱 > 📞 Contacts

To store your user profile, tap Set up my profile under ME at the top of the contact list.
Messages
say it & go

Quick start: Messages
Stay in touch with messages and pictures.
Find it: Apps 🎉 → 📩 Messaging
• Create: Tap 📩.
• Attach: When you’re typing a message, tap 📦 to attach a picture, video, or other file.
• Send: Tap 🤝 to send the message.

Tips & tricks
• Forward a message: In a conversation, touch and hold a message for more options, such as forwarding it.
• Save pictures: Touch and hold a picture to save it. To see the picture, tap Apps 🎉 → 📷 Gallery.
• Voice entry: Just tap a text box, then tap $ on the keyboard.
  Tip: If you don’t see $ on the keyboard, tap Apps 🎉 → 📷 Settings → Language & input → Google voice typing to activate voice entry.
• Text your best friend: Use a widget to text your favorite contact quickly: Touch and hold an empty spot on the home screen, tap WIDGETS, touch and hold Direct message to drag it to your home screen, then choose a contact.

Read, forward & more
Find it: Apps 🎉 → 📩 Messaging
• Open: Tap a conversation to open it.
• Attachments: When you open a message with an attachment, tap the attachment to open it, or touch and hold it to save it.
• Reply: Open a conversation, then enter your response in the text box at the bottom.
• Copy, Forward or Delete: Open a conversation, touch and hold the message you want, then tap an option. To delete a whole thread of messages, open the thread, then tap Menu 📁 → Delete thread.
Messages

Quick start: Messages
Read, forward & more
Set your default messaging app
Chat using Hangouts™
Wireless Emergency Alerts (U.S. & some countries only)

• **Settings:** Tap Menu ☰ + **Settings** to change your notifications and other options.

**Set your default messaging app**

You can also use Hangouts™ to send and receive your text messages.

To set Hangouts or Messaging as your default messaging app:

**Find it:** Apps ☰ + **Settings** + More + Default SMS app

For more about Hangouts, see “Chat using Hangouts™”.

Email

Send and receive email. Set up and manage accounts.

**Find it:** Apps ☰ + **Gmail**

• **Add Gmail accounts:** The first time you turned on your phone, you probably set up or logged in to your Google™ account—that sets up the Gmail app for one account.

To add more Google accounts, tap Apps ☰ + **Settings** + Accounts, then tap ☰ + Add account + Google.

• **Add email accounts:** The Gmail app manages all of your email accounts. To add personal email accounts, follow the prompts when you first open the Gmail app, or tap

---

**Inbox**

Tap to search mail.

Tap to choose multiple messages, then touch ☰ to select an option.

Swipe left or right to archive a message.

Tap to compose a new email.
Apps ☰ > Settings > Accounts, then tap ☰ Add account > Email. For Microsoft® Exchange server work email accounts, tap ☰ Add account > Exchange, and enter details from your IT administrator.

- **Change account settings:** To change Gmail™ account settings, tap Apps ☰ > Settings > Accounts > Google.
- **Delete accounts:** To delete a Gmail or email account, tap the account name, then tap Menu > Remove account.
- **Switch accounts:** To quickly switch between your email accounts, tap ☰, and tap your other account at the top.

**Chat using Hangouts™**

Sign in with your Google account to stay in touch with friends and family.

**Find it:** Apps ☰ > Hangouts

- **Start a new hangout:** Tap ☰, then tap a name in your list of friends. You can send a text message, or tap ☰ to make a video call.
- **Change settings:** Tap ☰ to see your old hangouts, change your profile pic, other settings, and more.
- **Chat from a computer:** You can chat from a computer, too. Find out more at www.google.com/hangouts.

**Wireless Emergency Alerts (U.S. & some countries only)**

Wireless Emergency Alerts, also known as CMAS or PLAN, is a U.S. national emergency alert system. Emergency alerts can pop up to tell you about a national or local crisis. After you close an alert, you can reopen it by touching Apps ☰ > Settings > More > Emergency broadcasts.

**Tip:** Emergency alerts have a special sound and vibration that is two seconds long, followed by one second, then another one second.

To choose which types of alerts you receive, tap Apps ☰ > Settings > More > Emergency broadcasts. The U.S. and local governments send these alerts through your service provider. So you will always receive alerts for the area where you are, and you won’t receive alerts if you’re outside of the U.S.

For more, visit www.ctia.org/consumer_info/safety/.
Quick start: Type

When you tap a text box, like in a message or search, you have keyboard options.

• **Type or gesture**: Enter letters by touching them one at a time. Or, enter a word by tracing a path through the letters.

• **Close the keyboard**: Tap \( \checkmark \).

**Tips & tricks**

- **Move the cursor**: Tap a spot in the text to place the cursor, then drag the arrow under the cursor to move it.

- **Dictionary**: To add a word you enter often, enter it, tap the word in the word list below the text box, then tap there again to add it to your dictionary.

- **Symbols**: Touch and hold a letter to enter the small number or symbol at the top of it. To enter several numbers or symbols, tap \( \mathbb{N} \).

- **Double letters**: Circle a letter to enter two of them.

- **Capital letters**: Tap \( \mathbb{U} \) or drag it to the letter you want to capitalize.

- **Special characters**: Touch and hold a letter to choose from other special characters.

- **Word prediction**: While you’re typing, word suggestions appear above the keyboard. Tap one to select it.

- **Voice entry**: Tap \( \mathbb{L} \) on the touchscreen keyboard, then say what you want to type. You can speak as long as you like, pause whenever you want, and dictate punctuation.

- **Vibrate**: Don’t like the vibrating keys when you type? Tap Apps \( \mathbb{C} \) > Settings > Language & input > Google Keyboard > Preferences.
Text entry settings & dictionary

Choose your keyboard style and edit the dictionary of words your phone suggests:

Find it: Apps > Settings > Language & input

• To choose your touchscreen keyboard, tap Current Keyboard. To allow voice entry from the keyboard, tap Google voice typing.
• To change the preferences for your keyboard, tap Google Keyboard.
• To add or edit the words that your phone suggests and recognizes, tap Personal dictionary.

Cut, copy & paste

Cut, copy, and paste names, phone numbers, addresses, quotes, or anything else in a text box.

1 To highlight a word, touch and hold it.
   To highlight more words, drag the selector at the edge of the highlight.

2 Tap the icons to cut or copy.
   Tip: Touch and hold icons to show labels.

3 Open the text box where you want to paste the text (even if it’s in a different app).

4 Tap in the text box, then touch and hold to show the PASTE option. Tap PASTE to paste the text.
**Clock**

**Find it:** Apps > Clock

- **Alarm:** Tap \( \odot \). Tap an alarm to edit it, or tap \( \odot \) to add a new alarm.
  
  **Tip:** Pressing the volume button up or down while you’re setting an alarm sets the volume level for that alarm.
  
  When an alarm sounds, tap \( \odot \) and drag to \( \odot \) to turn it off, or drag to \( \odot \) to snooze for ten minutes.

- **Settings:** To change your alarm volume, snooze delay, or other settings, tap Menu > Settings.

- **Timer:** For a timer, tap \( \odot \).

- **Stopwatch:** For a stopwatch, tap \( \odot \).

- **World clock:** For other time zones, tap \( \odot \).

  **Tip:** To find out what an icon means, touch and hold it. To set your current date, time, time zone, and formats, tap Apps > Settings > Date & time.

---

**Calendar**

See all your events, all in one place.

**Find it:** Apps > Calendar

- **Change the view:** Tap the month at the top to choose a date to view, or tap Menu \( \odot \) to choose Day, 3 Day or Schedule.

- **Go to today’s date:** Tap \( \odot \).

- **Add events:** Tap a time on the calendar and tap \( \odot \). Enter event details, then tap SAVE.
Organize

- **Show, edit, or delete events**: Tap an event to open it, then tap edit. Tap **DELETE** to remove the event.
- **Show, hide, or add calendars**: Tap **≡** to show or hide calendars from your Google™ account. You can use a computer to add or remove calendars on your Google account at [www.google.com/calendar](http://www.google.com/calendar).

  **Tip**: Add a **Calendar** widget to your home screen. Touch and hold an empty spot on the home screen, tap **WIDGETS**, then touch and hold the **Calendar** widget.

**Corporate sync**

If you use Microsoft® Office Outlook on your work computer, your phone can synchronize email, events, and contacts with your Microsoft Exchange server.

- To add your **Corporate** account, see “**Email**”.
- To choose what to sync from your **Corporate** account, tap **Apps > Settings > Accounts**, tap your account, then check options like **Calendar**, **Contacts**, or **Email**.

**Office network**

To connect your office network with a Virtual Private Network connection, see “**Virtual Private Networks (VPN)**”.

**Google Drive™**

Keep all your photos, videos, documents, and more safely in one place—private unless you choose to share. Available on Google Drive from all your devices.

**Print**

To print your photos, documents, and more from your phone, check to see if your printer’s manufacture has an app on Google Play. Then tap **Apps > Settings > Printing** to get started.

You can also send your photos, docs, and more to any Android device in your cloud or to Google Drive. Just download the Cloud Print app from Google.
Google Play™
Google Play is a digital content experience from Google where you can find and enjoy your favorite movies, books, magazines, and Android apps and games.
• **Download apps**: Tap Apps ➔ Play Store.
• Find out more about Google products: See www.google.com/about/products.
• Log in or open a Google account: Visit www.google.com/accounts.
• Google help: See www.google.com/support.
• Access all of your files in the cloud: Check out “Your cloud”.

Google Now™
Google Now brings you just the right information at just the right time, before you even ask. Weather, traffic, transit schedules, even the latest scores come automatically, appearing throughout the day just as you need them.

To get started, touch and hold Home, then swipe up to the Google icon.
To turn Google Now on/off, set your preferences, or learn more, open Google Now, tap ➔ Settings.

Tip: When Google Now is on, swipe right from the home screen to see it.

Google+™
Google+ makes connecting on the web more like connecting in the real world. Share your thoughts, links, and photos with the right circles.

Find It: Apps ➔ Google+
Google Apps™

Upload photos: Tap Apps > Gallery and tap a photo or video. Choose ‹ Google+ and select your account.

Add a widget: Use a widget to quickly read your Google+ posts. Touch and hold an empty spot on the home screen, tap WIDGETS, then touch and hold Google+ Posts to drag it to your home screen.

Help: For more about Google+, visit www.google.com/+

Other social networks: You can also use Facebook®, Twitter, and more. Open Google Play to find the latest official apps and widgets.

Play Games
Check out your game achievements, play with your friends and pick up where you left off playing on another device.

Find it: Apps > Play Games

Tips & tricks
- Challenge friends: You can play against people in your Google+™ circles. Scroll down to Players and choose a person or tap Add friends.
- Find more friends: Scroll down to Add players you know and choose a person or tap MORE.

Play Books
Discover a new kind of library with Google powered recommendations from the world’s largest collection of books, easy navigation, and the power of Google behind every page.

Note: You can buy books only in the U.S. and some countries.

Find it: Apps > Play Books
- Shop: To shop for books, tap Apps > Play Books > Shop.
  Browse by category, or tap 🔍 and search for a title or author. Tap a book to show details. Then, tap the book’s price to buy it (or tap OPEN to open a free book). After you confirm a purchase, the book is added to your library.

- Magazines and more: Tap Apps > Play Newsstand.
Quick start: Chrome™

Find it: Apps > Chrome

- Go to a webpage: Tap the address bar at the top of a page and enter an address.
- Add a bookmark: Open the address bar (drag down if you don’t see it), then tap Menu > .
- Open a bookmark: Open the address bar, then tap Menu > Bookmarks.

Tips & tricks

- Webpage shortcut: To add a shortcut to a webpage on your home screen, when viewing the webpage, tap Menu > Add to homescreen.
- Internet search shortcut: In the home screen, tap the Google search box at the top and enter a website address.
  Note: If you can’t connect, contact your service provider.
- Mobile sites: Some websites automatically show you a “mobile” version of their page—if you want to show the standard computer versions of all websites, tap Menu > Request desktop site.
- Reload: If a page doesn’t load correctly, tap Menu > .
- Tabs: To open a new tab, tap Menu > New tab. If you have more than one browser page open, tap Overview to move from one to another.
- Clear history: In the browser, tap Menu > Settings > Privacy > CLEAR BROWSING DATA. Then choose history, cache, cookies, and other options.
- Help: For more about Google Chrome, tap Menu > Help & feedback or visit www.supportgoogle.com/chrome.

Web connection

To access the web, your phone uses your Wi-Fi network (or your mobile phone network if no Wi-Fi network is connected).

Note: Your service provider may charge to surf the web or download data over your mobile phone network.
To connect to a Wi-Fi network, see “Wi-Fi networks”.

Why do we yawn?

- KidsHealth

www.independent.co.uk > News > Science

One is that when we are bored or tired, we just don’t breathe as deeply as we usually do. As this theory goes, our bodies take in less oxygen because our breathing has slowed. Yawning helps us bring more oxygen into the blood and move more carbon dioxide out of the blood.

May 12, 2014 A new study has suggested that the reason we yawn is to cool our bodies down. Researchers found that yawns can reduce our body temperature by up to 0.05 degrees Celsius.
Downloads
Warning: Apps downloaded from the web can be from unknown sources. To protect your phone and personal data from theft, download apps only on Google Play™.
To download a file, picture, or webpage, tap Apps 📡 → 🌐 Chrome and go to the website:
• **Files**: Tap the download link. To show the file or app, tap Apps 📡 → 📚 Downloads.
• **Pictures**: Touch and hold it to choose Save image. To see the picture, tap Apps 📡 → 📈 Gallery → Download.
To download apps or phone updates, see “Download apps” or “Update your phone”.

Browser options
To change your browser security settings, text size, and other options, tap Menu ⬇️ → Settings.

Safe surfing & searching
Keep track of what your browser and searches show:
• **Incognito**: To open a tab that won’t appear in your browser or search history, tap Apps 📡 → 🌐 Chrome → Menu ⬇️ → New Incognito tab.
• **Clear history**: To clear your browser history and other saved information, tap Apps 📡 → 🌐 Chrome → Menu ⬇️ → Settings → Privacy → CLEAR BROWSING DATA.
• **Auto complete**: When you enter your name in an online form, your browser can automatically enter your address information. If you don’t want that, tap Apps 📡 → 🌐 Chrome → Menu ⬇️ → Settings → Autofill forms, then tap the switch at the top to turn it off.
• **Pop-ups**: To stop pop-up windows from opening, tap Apps 📡 → 🌐 Chrome → Menu ⬇️ → Settings → Content settings → Block pop-ups.
Photos & videos
see it, capture it, share it!

Quick start: Photos & videos
Use the 13 megapixel camera to take crisp, clear photos with two twists of your wrist and a tap on the screen.

- **Launch it**: Even when your phone is asleep, open your camera with two twists of your wrist.
- **See it**: Swipe left for your photo gallery (Gallery).
- **Share it**: View a photo or video from your gallery, then tap Share.

Tips & tricks
- **Quick Capture**: Tap Apps > Camera, swipe the screen right and tap to turn Quick Capture on or off. When Quick Capture is on, twist your wrist twice to open the camera.
- **Take a selfie**: Tap in the camera screen or twist your wrist to switch to the front camera.
- **Record a video**: Tap in the camera screen to temporarily switch to the video camera and start recording. Then tap to stop recording.
- **Capture a still shot during a video**: Tap anywhere on the screen while recording to save a photo.
- **View, share, or delete**: To open your gallery, swipe the camera screen left. Pick a photo or video. Choose to share, to delete, or Menu for more options.
- **Change settings**: To open camera options, swipe the camera screen right. Rotate the dial to see more options.
- **Zoom**: Drag the camera screen up or down using one finger.
- **Multi-shot**: When you’re ready, touch and hold the camera screen to take a burst of photos.
- **Panorama**: To take a panoramic shot, swipe the camera screen right to open settings, then tap. Use the on-screen guide to slowly pan your phone.
- **Crop**: To edit a photo, tap the photo to select it, then tap .
- **Print**: Want to print your photos? Check out “Print”.

Photos & videos
Quick start: Photos & videos
Take photos
Record videos
The perfect shot
View, share, & use photos & videos
Capture your screen
Play Movies & TV
Photos & videos

Take photos
Find it: Apps 📷 → Camera
Tap anywhere on the camera screen to take the photo.

Record videos
Find it: Apps 📷 → Camera, then tap 🎥
The camera temporarily turns into a video camera and immediately starts recording. Tap 🎥 to stop recording.
Tip: To send a video in a text message, swipe the camera screen left to open your gallery, tap the video, then choose 🔄 to share.

The perfect shot
Point, tap, and you’re done. But when you want something a little different, play with these camera options.
Tip: To open camera options, swipe the camera screen right. Rotate the dial to see more options.

Options

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🕵️‍♂️ HDR</td>
<td>Turn on HDR (high dynamic range) effect for better pictures in challenging lighting situations, such as outdoors.</td>
</tr>
<tr>
<td>⚡️ Flash</td>
<td>Set On, Off, or Auto Flash.</td>
</tr>
<tr>
<td>✗ Control focus and exposure</td>
<td>Set the camera to focus on the object you tap in the screen. Turn the focus dial to adjust the exposure.</td>
</tr>
<tr>
<td>🗺 Slow motion</td>
<td>Take a slow motion video.</td>
</tr>
<tr>
<td>🏠 Panorama</td>
<td>Take a wide-angle shot. Use the on-screen guide to slowly pan while you are taking the photo.</td>
</tr>
<tr>
<td>⏳ Timer</td>
<td>Set a timer to 3 seconds or 10 seconds.</td>
</tr>
<tr>
<td>📍 Location</td>
<td>Tag your photos with a location.</td>
</tr>
<tr>
<td>📡 Memory card</td>
<td>Store photos on a memory card, if you have one inserted.</td>
</tr>
<tr>
<td>🔐 Resolution</td>
<td>Take a widescreen photo.</td>
</tr>
<tr>
<td>✨ Shutter tone</td>
<td>Turn the shutter click on or off.</td>
</tr>
<tr>
<td>🎨 Quick Capture</td>
<td>Twist your wrist twice to turn camera on. Twist twice again to switch to front camera.</td>
</tr>
</tbody>
</table>
Photos & videos

Photos & videos
Quick start: Photos & videos
Take photos
Record videos
The perfect shot
View, share, & use photos & videos
Capture your screen
Play Movies & TV

Photos & videos
Quick start: Photos & videos
Take photos
Record videos
The perfect shot
View, share, & use photos & videos
Capture your screen
Play Movies & TV

View, share, & use photos & videos
Find it: Apps > Gallery

• Play, share, or delete: Tap a thumbnail to open it, then choose 📈 to share, 🗑️ to delete, or Menu for more.
  Tip: To select multiple files, open a folder, touch and hold a photo, then tap others.

• Zoom: Open a photo in your gallery, then drag two fingers apart or together on the screen.
  Tip: Turn your phone sideways for a widescreen view.

• Wallpaper or contact photo: Open a picture, then tap Menu > Set picture as.

• Edit: Open a picture, then tap 🖌️.

• Slideshow: Tap a picture, then tap Menu > Slideshow. To stop the slideshow, tap the screen.
  Tip: To show the slideshow on a television or other device, see “Connect & transfer”.

Capture your screen
Share a screen capture of your favorite playlist, your new high score, or a friend’s contact information. If you can show it on your phone, you can share it with your friends.

To capture your phone’s screen, press and hold both the Power and the Volume Down keys at the same time.

To see the screen capture, tap Apps > Gallery > Albums > Screenshot.
Play Movies & TV
movies & shows, wherever you go

Photos & videos
Quick start: Photos & videos
Take photos
Record videos
The perfect shot
View, share, & use photos & videos
Capture your screen
Play Movies & TV

Quick Start: Digital HDTV
Watch your favorite TV channels when you’re away from home. To enhance your TV reception, plug in the antenna (included in the box).

Find it: Apps 📱 → 📺 Mobile TV
  • Record now: To record the show you’re watching, touch the screen, and then touch the record button •.
  • Record later: To schedule a recording, touch the screen, touch Menu → Schedule.

Tips & tricks
  • Better reception: To enhance your TV reception, plug in the antenna (included in the box).
  • Brightness and more: Tap Menu → Settings to set options, like screen brightness, language, and sleep timer.

Play Movies & TV
Find and rent movies and TV shows to watch on your phone, tablet, or computer:
Find it: Apps 📱 → Play Movies & TV
To shop, rent, or watch on a computer, go to www.google.com/play and choose “Movies & TV”.

YouTube™
Watch videos from YouTube users everywhere—or log in to your account to share your own.
Find it: Apps 📱 → YouTube

Change the channel or search for one.
Record a show:
Make a favorite:
Schedule, watch saved shows, and more.

Menu
More
Back
Next
Quick start: Music
Music everywhere—stream it, buy it, save it, play it. Listen and create playlists anytime.

Note: You can buy music only in the U.S. and some countries.

Find it: Apps > Play Music
To get your music on Google Play™ using a computer, visit www.google.com/music.

Tap Listen Now to see recommendations and more.

Tips & tricks
• Volume: Press the volume buttons.
• Hide the music player: To use another app while your music plays, tap Home. To return to the music player, swipe the status bar down and tap the song title.

Tip: You can also select Next, Pause, or Previous by swiping down the notification bar or using the controls on your unlock screen.

• Home screen: Control music playback from the home screen by adding the Google Play Music widget.
• Shop: Tap Shop to shop for more music. (If you don’t see the Shop option, tap , then tap Shop.)

• Playlists: Tap Menu ; next to a song in your library to add it to a playlist or show other options. To edit, rename, or delete a playlist, touch and hold its name in the music library.
• During a flight: Swipe down the status bar with two fingers and tap to turn off all your network and wireless connections and listen to music during a flight.

• File types: Your phone can play MP3, M4A, AAC, AAC+, MIDI, and WAV files.
• Radio: For FM radio, plug in a headset or earbuds, then tap Apps > FM Radio.

Note: Copyright—do you have the right? Always follow the rules. See “Content Copyright” in your legal and safety information.
Locate & navigate
where you are, where you’re going

Quick start: Locate & navigate
Find a nearby cafe, get directions or step-by-step GPS voice navigation using the Google Maps™ you know and trust.

Find it: Apps 🔄 → 🖋 Maps
Enter what you want to find in the search bar, then tap it to see more information and options.

Note: Your map screen may look different.

Tips & tricks
• Find an address: In the search field, enter an address or something you’re looking for, like “restaurant.” The map moves to show the address or local suggestions. Tap the address info at the bottom for more details.
• Get directions: Enter a place or address, then tap 🖋.
• Save an address: Tap the address info at the bottom of the screen and then tap SAVE.
• Zoom: To zoom in or out, drag two fingers together or apart on the screen.
• Turn and tilt: Rotate two fingers on the map to turn it, or drag down/up to tilt.
• Share a location: Tap a location, then tap the address and tap Menu 📢 → Share.
• Identify address: Touch and hold a spot on the map to show the nearest address.
• Get map help: Tap 📢 → Help.
Connect & transfer

Quick start: Connect & transfer
Connect accessories, computers, networks, and more.

Find it: Apps ☰ → Settings

Tips & tricks
• Quick settings: Get to the most used settings quickly. Swipe down the status bar with two fingers. See “Quick settings”.
• Bluetooth® devices: To connect a Bluetooth headset, keyboard, or other device, tap Bluetooth.
• Wi-Fi networks: To connect, tap Wi-Fi.
• Wi-Fi hotspot: To make your phone a hotspot, check out “Wi-Fi hotspot”.
• USB cable: Your phone’s micro USB port lets you exchange media and other files with a connected computer. To change the type of USB connection, tap Apps ☰ → Settings → Storage → Menu → USB computer connection.
• Automatic connections: When Bluetooth or Wi-Fi power is on, your phone automatically reconnects to available devices or networks it has used before.
• Airplane mode: Need to shut down wireless connections quickly? Swipe down the status bar with two fingers and tap Airplane mode.
• Print: Want to print your photos, docs, or other things? Check out “Print”.

Can’t find a setting? Search for it.
Change Wi-Fi settings.
Change Bluetooth settings.
Bluetooth® wireless

Turn Bluetooth power on/off

Find it: Apps 📲 → 🗑️ Settings → Bluetooth, then tap the switch to turn it on.

Note: Swipe down the status bar with two fingers to quickly turn Bluetooth on or off.

Tip: To extend battery life or stop connections, turn Bluetooth off when you’re not using it.

Connect devices

The first time you connect a Bluetooth device, follow these steps:

1. Make sure the device you are pairing with is in discoverable mode (for details, refer to the guide that came with the device).
2. Tap Apps 📲 → 🗑️ Settings → Bluetooth.
3. Make sure the switch is on.
4. Tap a found device to connect it (if necessary, tap Pair or enter a passkey like 0000).

Tip: Tap 📁 next to rename a device.

When the device connects, the Bluetooth status indicator shows at the top of the screen 📱.

To automatically disconnect or reconnect a device anytime, like a wireless headset, just turn the device off or on.

Note: Using a mobile device or accessory while driving may cause distraction and may be illegal. Always obey the laws and drive safely.

Manage devices

To manually reconnect your phone with a paired device, tap the device name in the list.

To manually disconnect your phone from a paired device, tap the device name in the devices list, then tap OK.

To remove a paired device, tap 📁 next to the device name, then tap Unpair.

To change the name your phone shows to other devices, tap Apps 📲 → 🗑️ Settings → Bluetooth, turn Bluetooth power on, then tap Menu → Rename phone. Enter a name and tap Rename.

Let devices find your phone

To let a Bluetooth device discover your phone, just turn the Bluetooth switch on.

Transfer files

• Photos or videos: Open the photo or video, then tap 📸 → Bluetooth.

• Contacts: Tap Apps 📲 → 📞 Contacts, tap a person, then tap Menu → Share → Bluetooth.
Wi-Fi networks

Turn Wi-Fi power on/off

Find it: Apps 📱 → 🛠️ Settings → Wi-Fi, then tap the switch to turn it on

Connect to networks

To find networks in your range:
1 Tap Apps 📱 → 🛠️ Settings → Wi-Fi.
   Tip: To show your phone’s MAC address and Wi-Fi settings, tap Menu 📗 → Advanced.
2 Make sure the Wi-Fi switch is turned on.
3 Tap a found network to connect it (if necessary, enter Network SSID, Security, and Wireless password, and tap Connect).
   When your phone connects, the Wi-Fi status indicator 💥 appears in the status bar.
   Note: If you see a question mark in the Wi-Fi status indicator 💥, swipe the status bar down, tap the network, and enter the network’s password.
   Tip: When Wi-Fi is on, your phone automatically reconnects to available networks it has used before. If a router previously had no internet connection, your phone will not automatically connect to it.

Wi-Fi hotspot

Note: This phone supports apps and services that may use a lot of data, so make sure your data plan meets your needs. Contact your service provider for details.

Your can make your phone a Wi-Fi hotspot to provide portable, convenient internet access to other Wi-Fi enabled devices.

Note: Keep it secure. To protect your phone and hotspot from unauthorized access, it is strongly recommended that you set up hotspot security (WPA2 is the most secure), including password.

Find it: Apps 📱 → 🛠️ Settings → More → Tethering & portable hotspot and check Portable Wi-Fi hotspot

Note: These steps may vary depending on your network.
1 Your phone turns off Wi-Fi and uses the mobile network for internet access. Tap Set up Wi-Fi hotspot to set up security:
   • Network SSID: Enter a unique name for your hotspot.
   • Security: Select the type of security you want: Open or WPA2. For WPA2, enter a unique password that others will need to access your Wi-Fi hotspot.
     Note: WPA2 is recommended by IEEE.
   • Password: Create a password with at least eight characters.
2 Tap SAVE.
   When your Wi-Fi hotspot is active, other Wi-Fi enabled devices can connect by entering your hotspot’s SSID, selecting a Security type, and entering the correct Wireless password.
Wi-Fi modes
For those who like to get a bit more technical, your phone supports the following Wi-Fi modes: 802.11b, g, n.

USB cables
Note: Copyright—do you have the right? Always follow the rules. See "Content Copyright" in your Legal Guide.
To load music, pictures, videos, documents, or other files from your computer, connect your phone to your computer with a USB cable. To change the type of USB connection (if necessary), tap Apps > Settings > Storage > Menu > USB computer connection.
Tip: Make sure to connect the phone to a high power USB port. Typically, these are located directly on your computer.
Note: The first time you use a USB connection, your computer may indicate that drivers are being installed. Follow any prompts you see to complete the installation. This may take a few minutes.
• For Microsoft® Windows®: On your computer, choose Start, then select Windows Explorer from your list of programs. In Windows Explorer, your phone will appear as a connected drive (mass storage device) where you can drag and drop files, or it will appear as an MTP or PTP device that lets you use Windows Media Player to transfer files. For more instructions or driver files, visit www.motorola.com/support.

Share your data connection
Your computer can access the internet through your phone’s mobile network—you just need a USB cable.
Tip: To share a Wi-Fi connection, see "Wi-Fi hotspot".
1. Connect your phone to your computer using a USB cable.
Note: If your computer is running something older than Microsoft® Windows® 7 or Apple™ Macintosh™ OSX, it might require special configuration.
2. On your phone, tap Apps > Settings, then make sure the Wi-Fi switch is set to off.
3. In Settings, tap More > Tethering & portable hotspot, then check USB tethering to start the connection.
To stop the connection, uncheck USB tethering, then disconnect your phone from your computer.

Data use
You can track the amount of data your phone uploads and downloads.
Find It: Apps > Settings > Data usage
Your phone shows a data usage graph. Below the graph, apps appear from highest to least data usage. Apps that use a lot of data might also use a lot of battery power.

Some apps transfer data in the background when you’re not viewing them—to stop an app from doing this, tap it and then check Restrict app background data.

To turn off background data use for all apps, just tap Menu > Restrict background data.

Note: Usage information is provided to help you manage your phone. This may not match the amounts charged by your service provider, as they’re not measured in the same way.
Connect & transfer

Memory card
Your photos, videos, and other files are automatically stored in your phone’s internal memory. You can set certain apps, like the camera, to store files on a microSD card.

Note: Your phone supports memory cards up to 32 GB.

Find it: Apps > Settings > Storage > SD CARD

Mount or unmount memory card
To mount a memory card, simply put it into your phone. To unmount your memory card (so you can take it out of your phone), tap Apps > Settings > Storage > Unmount SD card.

Caution: Do not remove a memory card while your phone is using it or writing files to it.

Erase memory card content
To delete all the information (music, photos, and files) from your memory card, tap Apps > Settings > Storage > Erase SD card.

Virtual Private Networks (VPN)
A VPN lets you access files on a secured network (like an office network with a firewall). Contact the network administrator to ask for VPN settings, and any additional apps or other requirements.

To enter VPN settings, tap Apps > Settings > More > VPN. Tap to add a new VPN. Choose the type of VPN and enter settings from the network administrator. The network is stored in the VPN list so you can select it whenever you need to connect.

Mobile network
You should not need to change any network settings. Contact your service provider for help.

To see network settings options, tap Apps > Settings > More > Cellular networks.

Airplane mode
Use airplane mode to turn off all your wireless connections—useful when flying. Swipe down the status bar with two fingers, then tap Airplane mode.

Note: When you select airplane mode, all wireless services are disabled. You can then turn Wi-Fi and/or Bluetooth® power back on, if permitted by your airline. Other wireless voice and data services (such as calls and text messages) remain off in airplane mode. Emergency calls to your region’s emergency number can still be made.
Quick start: Protect your phone
Make sure your information is protected in case your phone is lost or stolen.

Find it: Apps > Settings > Security
The easiest way to protect your phone is to use Screen lock. You can choose to swipe to unlock, or enter a pattern, PIN, or passcode to unlock your phone.

Screen lock
To keep your phone secure, you can make the touchscreen lock when it goes to sleep.

For a screen lock, you can use a pattern, password, or other option.
Add some info to show on your lock screen.
Encrypt the data stored on your smartphone.

Find it: Apps > Settings > Security > Screen lock, then select the lock type:
• None: Turn off the screen lock.
• Swipe: Tap and drag up.
• Pattern: Draw a pattern to unlock.
• PIN: Enter four to sixteen digits to unlock.
• Password: enter four to sixteen letters, digits, or symbols to unlock.

To change when your touchscreen goes to sleep, tap Apps > Settings > Display > Sleep.

Note: You can make emergency calls on a locked phone (see “Emergency calls”). A locked phone still rings, and you do not need to enter a PIN or password to answer a call.

Can’t unlock?
Pattern, PIN, or password: If you forget your pattern, PIN, or password, you can enter your Google™ account email and password to unlock the phone.

If you don’t have a Google account on your phone, contact your service provider to have your device factory reset.

Warning: A factory reset will delete all data on your phone.

Screen pinning
Need to keep an important screen handy, such as a boarding pass or shopping coupon? Pin the screen for easy access.

To set up screen pinning, tap Apps > Settings > Security > Screen pinning.
Protect

Quick start: Protect your phone
Screen lock
Screen pinning
SIM card lock
Encrypt your phone
Backup & restore
Reset
Stolen phone?

To pin a screen, open the app you want to pin, tap Overview and scroll up. Tap . To unpin the screen, tap Back and Overview at the same time.

SIM card lock
Caution: If you enter an incorrect SIM PIN code three times, your phone locks your SIM card and asks for your PIN unlock code. Contact your service provider for your PIN unlock code.

You should not need to use this feature, but to set a SIM card PIN that you must enter when you turn on your phone, tap Apps > Settings > Security > Set up SIM card lock > Lock SIM card.

To set your SIM PIN, enter a 4-digit code. To change your code, choose Change SIM PIN.

Encrypt your phone
Caution: If you forget your encryption code, you cannot recover the data stored on your phone or memory card.

Encrypting your files can take an hour or more. Leave your phone plugged in, and be careful not to interrupt the process.

Encryption protects the accounts, settings, apps, and files on your phone, so that people cannot access them if your phone is stolen.

You should not need to use this feature, but to encrypt your phone and require a PIN or password whenever you turn on your phone, tap Apps > Settings > Security > Encrypt phone.

Backup & restore
Find it: Apps > Settings > Backup & reset, then tap the switch to turn it on.

Your Google account data is backed up online. If you reset or replace your phone, just log in to your Google account to restore the contacts, events, and other details you synced with the account.

To choose what syncs with the account, tap Apps > Settings > Accounts > Google, tap your Google account, and check things to sync.

Note: Text messages, call logs, and items stored on your phone will not be restored. To restore your Google Play Store apps, see “Take care of your apps”.

Reset
To reset your phone to factory settings and erase all the data on your phone, tap Apps > Settings > Backup & reset > Factory data reset > RESET PHONE.

Warning: All downloaded apps and user data on your phone will be deleted. Data in the cloud will not be deleted.

Stolen phone?
Your phone has Android Device Manager. You can remote lock or reset your device to protect your device from thieves. For details, see www.google.com/android/devicemanager.
Get help & more
Get answers, updates, and info:

- **Help is here:** Tap Apps ➔ Help to get walk-through tutorials, how-tos, FAQs, or chat with people who can help, right on your phone.
- **Everything Moto:** Get PC software, user guides, and more at www.motorola.com/mymotog.
- **Accessories:** Get accessories for your phone at www.motorola.com/mobility.
- **Get apps:** Tap Apps ➔ Play Store to buy and download apps.
- **News:** Here’s how to find us:
  - YouTube™: www.youtube.com/motorola
  - Facebook™: www.facebook.com/motorola
  - Twitter: www.twitter.com/motorola
  - Google+™: www.google.com/+Motorola/posts

Tips

- **Interactive:** To get started quickly, tap Apps ➔ Help for interactive tutorials.
- **Google help:** In almost every Google app, you can tap Menu ➔ Help. You can also view the Google Help Centers online at www.google.com/support.

Troubleshooting

We can help.

**Crash recovery**
In the unlikely event that your phone stops responding to touches and button presses, try a reboot—press and hold the Power button until the screen goes dark and your phone restarts.

**Service & repairs**
If you have questions or need assistance, we’re here to help.

Go to www.motorola.com/support, where you can select from a number of customer care options. You can also contact the Motorola Customer Support Center at: 1-800-724-5870 (United States), 1-888-390-6456 (TTY/TDD United States for hearing impaired), or 1-800-461-4675 (Canada).