Android for Beginners

All you need to get started with your Android device

For Samsung, Sony, HTC and Nexus

100% independent
Updated for 4.4 KitKat
Guides to all the key apps
Get the most from Google+
Learn in style

The Android Book

New for 2014

In-depth guides • Detailed tutorials • Essential apps

The Book Series

Discover more with the Book series’ expert, accessible tutorials for Android, Samsung, HTC, Photoshop, Windows and more

BUY YOUR COPY TODAY

Print edition available at www.imagineshop.co.uk
Digital edition available at www.greatdigitalmags.com
Welcome to Android for Beginners

It's no coincidence that Android has become the world's most popular mobile operating system, enjoyed by millions of users across the globe. Its adaptable user interface, regular updates, and vast range of available apps make it the most versatile and user-friendly platform around. Plus, the top smartphone and tablet manufacturers in the world are continually releasing superb devices running Android — with the likes of Samsung, HTC, and Sony leading the way. Indeed, it's safe to say Android offers unrivalled choice in the mobile market. Your device can be and do whatever you need to fulfill a vast number of tasks, from simple calls and texts to advanced activities that can enhance your daily routine. With this book, we introduce you to all the Android essentials, from Gmail, Maps, and Chrome, to connecting with friends on Google+. Plus, we troubleshoot all your Android issues and introduce you to the best apps on offer in Google Play.
Ultimate guide

8  An introduction to Android

Setting up

24  Connect to Wi-Fi
26  Connect to your Google account
28  Create a Google account
30  Add multiple accounts
32  Use the Settings app
33  Change your phone’s ringtone
34  Discover how to set an alarm
35  Change your wallpaper
36  Add a live wallpaper
37  Set a passcode

Getting started

38  Set a pattern lock
39  Set up a Face Unlock

42  Get to grips with the keyboard
44  Customise your home screen
46  Access your notifications
48  Add and share contact details
50  Get to know the People app
52  Make and receive calls with your device
53  Reject incoming calls in an instant
54  Discover the new Google dialler
55  Assign contacts to Groups and Favourites

56  Find your way around the Messages app
58  Explore Google’s most intuitive search tool
60  Browse the internet on your device
62  Search the web in Chrome
64  Bookmark your favourite webpages
66  Control your phone using your voice
68  Set up Gmail on your Android device
70  Organise your emails using Gmail

“Your Android device comes with everything you’ll need”
72 Set up and configure the Email app
74 Control your messages in the Email app
76 Work with attachments in Email
78 Set up and synchronise your calendars
80 Add and repeat events in Calendar
82 Keep detailed notes with Google Keep
84 Back up your files to Google Drive
86 Create documents using Google Drive
88 Find a lost phone with Android Device Manager

92 The next step
96 Manage, update and organise your apps
98 Learn how to use Google Play Books
100 Explore Google Play Newsstand
102 Overview of Google Play Movies
104 Learn to use Play Music
106 Master Google Play Music All Access
108 Take your first photograph
110 Share images with Google's Photos app
112 Edit your images across a range of apps
114 Record videos on your phone
116 Share photos and videos
118 Automatically fix and improve your photos
120 Create Auto-Awesome movies with ease
122 Exploring YouTube
124 Get to grips with Google Maps
126 Navigate in Maps
128 Tailor your settings in Google Maps
130 Navigate using Google Earth
132 Stay in touch using Google+
134 Get to grips with the new Google Hangouts
136 Play games and challenge friends online
138 Using Facebook
140 Discover how to use Twitter on Android

Essential apps
142 A guide to the best apps on offer in Google Play

Helpdesk
168 All your questions answered and an in-depth glossary
An introduction to Android

Android is the most popular mobile operating system in the world. It’s time to find out why.

Android is an open-source mobile operating system that is developed by Google. Android users have had the chance to see Android grow into the best mobile operating system today, and with the release of the Android 4.4 update, the operating system has come a long way with a more polished design, improved performance and a wealth of cool new features to enjoy.

The main new enhancement with the latest 'KitKat' operating system is voice recognition. Instead of using your fingers to perform key tasks you can now just say “OK Google” to launch voice search and then speak a command that relates to the task you want to perform. The enhanced operating system also features an improved phone app that automatically prioritises your contacts based on the people you talk to the most and, in the event of you receiving a call from an unknown number, Android 4.4 will scour Google for business numbers and try to match up your incoming call with a local listing on Google Maps. The new Android update also goes to town with the cosmetic enhancements too. For example, the new immersive mode temporarily hides screen furniture, such as your status bar and navigation buttons to give more screen space to the things that matter, such as books and films.

All the core elements of what makes smartphones a great asset are part of the Android system, but it doesn’t stop there. It can be tweaked to make the experience much more personal and widgets, themes and many other third-party apps are available to truly make an Android phone unique to you.
5 key features of Android 4.4 Kitkat
We round up some of the key attributes of the latest version of Android

1. To get things done, just say “OK Google” to launch a voice search, send a text, get directions or even play a song.

2. While listening to music or projecting movies to Chromecast, you’ll see full-screen album or movie art when your device is locked.

3. Immersive mode hides everything except what you want to see. Swipe the edge to bring it back your status bar.

4. Calling and texting is easier with prioritised contacts, smart grouping and unknown number matching.

5. Android 4.4 optimises memory and improves your touchscreen so your device responds faster and more accurately.

“Android can be tweaked to make your smartphone more personal”
READING
Thanks to the size of certain Android phones, reading has become an integral part of some of the best smartphones today. Of the many reading apps available, Kindle remains one of the best. Its software works on multiple devices, not just Android, and will synchronise your owned books and your latest reading position across any device you own. All you have to do is download the app from the Google Play Store and create an account with Amazon. You can then download books, preview new titles or make purchases.

Google's very own Play Books is also one of the paramount reading apps available for Android users. It works in the same way as the Kindle app, enabling users to store all their titles in one place and purchase new titles from the Play Books section on the Google Play Store. Books are priced well and you'll definitely be able to find a few bargains if you look hard enough. Above all else, what makes the Play Books app a truly great app is the level of customisable options that are readily available to users. You can edit the layout and design of the app to make it easier for you to read and also manage your expanding library with ease.

BROWSING
The Chrome browser is the default browser on every new Android device, with the standard Android browser still used in older devices. Chrome is the paramount web browser for Android users and offers an amazing selection of features to boot. It's remarkably quick at loading webpages and does a good job at scaling media files to the correct size. Various tricks can be employed such as dialling or emailing directly from a website and you can even install virus protectors to be doubly sure that your mobile browsing is safe.

You also have the benefit of being able to use different tabs to make browsing easier, as well as sync your Chrome app to the desktop version, if you so wish. The level of customisation available within Chrome is fantastic, and something every user should look to check out on their device.

By venturing on to the Google Play Store, you'll see there's an abundance of alternate browsers for users to choose from. The likes of Opera, Dolphin and Firefox increase the options even further and users can now benefit from a choice of add-ons to use in conjunction with the browser of their choice. No matter what your browser preference is, web browsing on Android is an absolute pleasure to do. Depending on which device you have, and the data plan that goes with it, you'll be able to browse the web using either Wi-Fi, 3G or 4G LTE. All of this means that wherever you are, you will have the whole internet available to you in the palm of your hand and that's an asset that is certainly hard to ignore.

How to turn an Android phone on
Turning an Android phone on may sound simple, but there are some steps to go through to make it quick and smooth.

1. Press the power button and the screen will light up with a graphic. Note: some phones may use different mechanisms.
2. Next tap and hold the graphic and drag it off the screen. You should see your main home screen pop up immediately.

How to turn an Android phone off
Turning an Android phone off can be done both manually or automatically; which method is used depends on how long the phone has been inactive.

1. By pressing the power button on your smartphone, a menu will appear with a variety of options on it. Select the Power Off option to turn off your phone. It can take a few seconds to complete.
2. If you hold the power button for a couple of seconds you can completely power off the phone or restart it.
steps to get to grips with the basics of your device

Follow an Android on-screen tutorial
Depending on the manufacturer, each Android phone will come with a tutorial to help you get started with your new device.
1. Look for an app in the applications screen. It will usually be called Help or Learn more. Open it to be taken straight to the tutorial.
2. You will see a selection of topics. Just tap one to see a further list – each one will be clickable and will act as an online user manual.

How to charge your Android phone
Knowing how to charge a smartphone is essential, and it will also help you get through a busy day.
1. When you plug an Android smartphone into its charger, the battery icon at the top of the screen will indicate that it is now charging.
2. You charge via a socket or USB and frequent charging is advised for prolonged battery life.

Set the date and time
Setting the correct date and time is vital, and it only takes a few seconds.
1. In Settings, find the Date & time option. If you select Automatic, the phone will use your mobile network to adjust the time.
2. You can also set the date and time by using the Set date and Set time functions on the same screen.

Adjust the brightness
There are many reasons why you might want to tweak the brightness on a phone, but this task is as simple as moving a slider on an Android phone.
1. In Settings, choose Brightness. If you tick the Automatic brightness box, the screen will adjust to the ambient light.
2. If the tick is removed you can choose the exact brightness you require – useful if you want to save battery life.

Change the volume
Volume on a smartphone can mean many things because each function may need a different sound.
1. The easiest way to change the ringer volume is using the hardware keys. Push up and down until you reach the desired level.
2. To change the volume for other parts of the phone, go to Settings and then choose Sound. Now tap Volume and you can tweak individual Media, Ringtone and Alarm volume levels.

How to unlock a phone
There’s a wide range of security features you can implement on your phone to make sure it’s safe from intruders trying to gain access to it.
1. When you turn the phone on you’ll need to unlock it by sliding the graphic off the main screen. Your home screen will then appear.
2. A pattern lock or password can be set which you need to enter after you have followed step 1. It only takes a couple of seconds to complete.
Google Play FAQs

How do I access the Google Play store?
All Android devices should come pre-loaded with the Google Play app. Search in the applications screen for an icon called Play Store. On some tablet devices the Google Play app is not included, but this is quite rare.

Why are so many apps free?
Many free apps are so because they are supported by advertising. Be aware that the adverts will show when you are using the app or game and that often there are options to pay to remove the ads.

Are Android apps safe?
As long as you only download apps from the Google Play Store, you should have no problem with the apps downloaded from the Google Play Store. Make sure to scan any download with a antivirus suite for added protection.

Can I trial apps?
Many apps are available in free and paid versions so you can try them out to see if they are worth buying. Remember that the functionality may be limited in the free versions, but rarely to the point that you cannot use them properly. You can also get a refund with 15 minutes of paid-for apps if you change your mind.

Are the user reviews worth reading?
The best way to gauge the usefulness of user reviews on the Play Store is to read the reviews and try to work out the general reactions towards the app. When reviewing the apps consider:

Are the apps better on iOS?
Yes and no. Some are, but others are better on Android. The good news is that the majority of the most popular apps on both platforms are available and they work in very similar fashion. The gap between Android and iOS for apps is minimal.

How many apps and games are available?
At the last count there were more than 800,000 so it’s safe to say that you should find anything you want. The only problem is trying to search through such a large library, but patience is the key to finding the best apps.

How do I update apps?
Newer versions of Android should highlight when an app has been updated and some even update in the background so it all happens automatically. You should not need to manually update apps and games any more.

Do I need an account?
Yes. When you first open up the Google Play Store you will be asked to sign in with a Google account you already have or you can set up a new account. The process is straightforward and the device will remember your account once it is set up.

COMMUNICATION
At the very heart of Android is communication. There’s a whole host of apps available and users will have access to them as soon as they turn on their device. The Hangouts app is a superb messaging app that can be used to send free messages to users of Google’s own social network, Google+, and hold video chats with others.

Skype is available for instant messaging and cheaper internet calling and this brings with it the possibility of completely free...
calling to other Skype users. As you might expect, social networking is also heavily integrated and expandable thanks to both built-in and third-party apps. Twitter, Facebook, Path and the rest can be used in a variety of ways on any Android handset and many of these take advantage of the core Android feature-set by using photo albums, contacts and your calendar to make everything as seamless as possible. Google+ also comes pre-installed on most Android devices these days.

On top of all of this are a range of great email providers that include apps for users to enjoy. Out of the box you receive the default email app and also Gmail. Go on to the Play Store and you’ll also be able to download the likes of Hotmail, Outlook and the Yahoo! Mail app.

PHOTOS
The quality of Android photography is amazing, to the point that Samsung even released its own camera and phone hybrid, the Samsung Galaxy Camera. Some phones now have camera reaching 41MP. App wise, the included Gallery app is not only used to store all your photos, but now also includes a brilliant editing suite for novice users to tinker with some of the elements in their photos.

Most Android cameras include similar software which lets you take a picture by tapping an on-screen button and play around with the various settings such as image adjustments and myriad other tweaks. If you have used a digital camera, you will no doubt be surprised by how many similar features are built into the Android camera software.

By venturing on to the Google Play store you’ll find thousands of photography apps available for users to download. The likes of Instagram offer the best place to distribute your images, but you then have apps like Camera FX and Paper Camera which offer unique filters to change the look of your photos. For editing purposes, Avary Photo Editor is one of the most highly regarded available, enabling users to add complete change the overall look and style of any photo they’ve taken.
HTC has a long history of producing quality Android devices, with the likes of the HTC One XL, HTC Desire and HTC Wildfire proving to be massive hits.

While HTC was one of the founding fathers of Android, it has lost market share to Sony and Korean giants, Samsung. In the past few years, HTC has gone through a dramatic change, with many of the people involved with the manufacturing of its smartphones having now left the company.

However, initial sales for the HTC One upon its launch were strong, and its newly-announced successor is due out later in 2014. Given that it has already launched the Desire 816 and Desire 610 this spring, 2014 is shaping up to be another big year for HTC.

**HTC’S TOP UNIQUE FEATURES**

**HTC SENSE 5**
The HTC One was the first device to run HTC’s Sense 5 custom skin which helps give the phone more functionality and improved general support.

**HD DISPLAY**
With the HTC One, HTC opted for a stunning 1920 x 1080 display. This at the top end of screen resolutions currently available to Android users, and the HTC One mini also supports the same impressive screen.

**APPS**
Alongside the stock range of HTC apps, there is also the chance to expand the library via the Google Play Store. As standard, you’ll also find the usual selection of Google apps readily available to users.

**BLINKFEED**
Blinkfeed is HTC’s way of personalising your news feed, so you receive the headlines that matter most to you. You can edit between categories and different feeds too.

**HTC ZOE**
HTC is aiming to transform your photography by recording video before and after you capture your image for the best picture selection.
HOME SCREEN
HTC Sense adds a
overhauled look to any
HTC phone or tablet.
Widgets and app icons
look more animated for
the most part.

MUSIC
There’s now a wide range of apps and
settings users can use to get the best
audio experience on their devices. The
overall quality for audio has increased
ten-fold in recent times on smartphones,
with the likes of the HTC One XL and HTC
One offering users pin-sharp speakers
that rival top sound systems.

The options for buying music are
wide and varied. Play Music now comes
as standard on devices, meaning you
can sync your music collection easily
and purchase songs and albums direct
from Google Play. Alongside Play Music
is All Access, a subscription service
which allows users to put together
their own personalised music service
from the music they’ve loaded on to
their smartphone. There’s also the free
Amazon MP3 app that lets you purchase
and download music on your phone.
An Amazon account is required, but the
pricing is competitive and the choice
very rich with more than 16 million tracks
available to you.

OFFICE WORK
By venturing on to the Google Play Store,
you’ll find a whole host of office editing
apps available to download. The quality
is so good, users can do their office work
wherever they like, with many apps
offering access to their work computers
on their smartphones.

Most documents will be received via
email and the office apps will integrate
themselves into the system, to the point
that when you receive an attachment it
will open directly in the relevant app. The
process should be seamless and familiar
to the one you employ on a desktop PC.
Consideration should be given to the
amount of time you expect to handle
this type of document when making a
purchasing decision because a hardware
keyboarded device may save a lot of time
when using Android for business.

Another area in which the quality of
office apps can be showed off is with
the new wave of wireless printing apps
available. These brilliant apps let you print
out perfect copies of documents you’re
working on, all from your smartphone
directly on a compatible wireless printer.
With so much on offer, the best thing
you can do is check them all out and
get downloading!

“Widgets and app icons look
more animated in HTC Sense 5”

“You can create playlists
of your top tracks”
When you think of Android, chances are the first company you link with the OS is Samsung. The company has released a whole spectrum of devices, covering different budgets and screen sizes. Some argue that Samsung is overcrowding the market, but in essence it is offering users as much choice as humanly possible.

Over the past few years, Samsung has really grabbed hold of the smartphone and tablet market, becoming the world’s leading smartphone manufacturer. Some suggest that Samsung has now become too big for Android, and a breakaway may be on the cards. This is most apparent in its current crop of devices that are leading the company into constantly high profits. The Samsung Galaxy S4 is its major flagship and blends high-end features with a high-end design to boot. Samsung uses its TouchWiz skin over the top of Android’s operating system and makes periodic updates to it. Its Premium Suite upgrade for the S4 is a prime example. The update includes multi-window viewing and Facebook integration. It’s all about hardware for Samsung – that and the never-ending strive for perfection has led to some pioneering devices that constantly push the boundaries of what we expect from a smartphone.

This year is set to be another big one for Samsung, as it sees the release of the hotly-anticipated Galaxy S5, which boasts a larger, sharper 5.1-inch display, and is also water- and dust-resistant.

**Widgets**

Widgets are now an essential tool for those who really want to customise the overall look and feel of their device. They are, in effect, mini apps that sit on the home screen and deliver the information directly to the user. For example, the news can be displayed in a widget on a home screen and will update automatically, and the same happens with YouTube and any other dedicated content-enabled widget.

The choice of widgets is rapidly increasing, and no matter if you want to see the latest weather forecast or sport scores, you can find a widget for it. Most Android devices come with a large range of widgets built in and the most popular uses are covered by these – such as a clock, calendar and such. But a quick look at the Google Play Store brings up dedicated widgets for Facebook, Google Maps, Shazam and many others.

Widgets will not only brighten up Android home screens, but can also save you a lot of time. These types of widgets can stop you from needing to open up the corresponding app and instead users can get all the information they need just from the widget. Just a word of warning, however, make sure to limit the number of widgets you use as they can drain your battery quickly.

**Entertainment**

Play Movies is Google’s answer to getting the films and TV shows you want to watch onto your device in seconds. From Google Play, you can access a whole range of fantastic movies, which you can rent or purchase. The store is easy to browse, all the latest releases are on offer and your collection syncs with your Google account, meaning you can carry on watching your content on another device if you wish.

There are many desktop applications that can rip DVDs that you own and convert it to
The Galaxy Note III
Bridging the gap between smartphone and tablet, the Galaxy Note III comes with the S Pen – an easy-to-use stylus

Samsung’s Top Unique Features

Hubs
Media Hub is designed to offer Android users streaming music and video and works in selected countries. Some devices come with credits towards free content.

Group Play
One of the best features on Samsung devices is Group Play. With this, users can stream media from their phones and watch it on other devices as part of a group and is free on Samsung phones.

S Voice
Samsung has also implemented its own voice search function with the S Voice app. Through this app you can search for answers to questions and also manage your settings verbally. A challenger to Apple’s Siri.

Eye Tracking
The S4 and S5 use incredible technology, including eye tracking software which can recognise when you’re reading something or when you’re looking away from the screen.

AllShare
AllShare enables you to stream your music and videos with DLNA Certified devices. These products include a special wireless technology which is effectively an advanced form of Bluetooth.

Various file formats for use on an Android device. Android, by default, is able to play a multitude of video formats so conversion will often not be needed, but the process for capturing movies and TV shows from a DVD is quite straightforward. You can also find new films and TV shows to watch via third-party apps such as IMDB (which is free) and details every film ever released. You’ve also got the likes of Lovefilm and Netflix. There are also a series of second screen apps that link with TV shows and let you interact with related things.

Entertainment on Android is an evolving area and one which is set to grow as the publishing houses see the potential of the platform. But for now, the Play Movies app is really all you should ever need to enjoy great films and TV shows.

“From Google Play, you can access a whole range of fantastic movies”
Motorola

Motorola originally released a wave of great devices that offered power and good design to their users. The Motorola RAZR HD is a prime example and effectively turns an Android smartphone into a laptop. It works by connecting the phone to a single unit keyboard and screen and is leading the way in converged mobile products which could catch on.

Motorola was acquired by Google in 2012 for a multi-million pound deal, the fruit of which was the Moto X (the only smartphone assembled in the USA). The Moto X places much more emphasis on voice recognition with no touching necessary to perform tasks and with the twists of your wrist the device becomes a camera to take quick and easy shots.

The ethos behind the device is to have a smartphone that fits snugly in your hand, can be operated easily and provides all of the updates you need at-a-glance. Mission accomplished.

**Tablets**

Motorola has also launched a couple of tablets, namely the Motorola Xoom.

**Moto X**

The Moto X, is a slick, simple device that has a lot going for it.

**Apps**

Each Motorola phone comes with the Google suite of apps as standard.

**Productivity**

Be it calendars or an appointment diary, there’s an abundance of productivity apps available for Android users, with each one offering a different function to help you keep track of your everyday life. What makes these apps even more impressive is that they can be used in conjunction with each other to get more from them. The ability to sync your Google calendar with all your devices is one of the many benefits Android devices offer.

On top of this, the USB connectivity within Android means that you can attach a device to a PC and use it as a storage facility. This enables you to transfer files between a computer and an Android tablet or phone or to use it as a standalone storage or connectivity device. The advantages are clear because you can now carry any number of files with you and you are only limited by the amount of memory on the device and the size of the SD card. There’s also the ability to use cloud storage as a great way to transfer your files, and the likes of Google Drive and Dropbox are essential apps for users to start using.

With so many productivity options built in, many other items can be disposed of. You will no longer need a separate diary, calculator or notepad because it is all thrown in for free and many third-party apps are available to cover other needs.

**MOTOROLA’S TOP UNIQUE FEATURES**

**MOTOBLUR**

MOTOBLUR hides the Android interface more than any other system. It is unique, but has not been universally praised.

**Syncing**

One of the best features with Motorola phones is the syncing options for those who want to keep their accounts together.

**Backup**

Your phone data will be continuously backed up which will enable you to retrieve your personal info immediately, should you ever lose your phone.

**Customising**

Use MOTOBLUR to customise the look of your home screen with the wide range of Motorola specific widgets and live wallpapers.

**Life-proof**

The Motorola Defy was the first mass-market smartphone that claimed to be able to cope with the knocks that everyday life throws at it.
Formerly known as Sony Ericsson, Sony has carved its own niche of Android smartphones and tablets, known as the Xperia range.

Similarly to Samsung, Sony caters for different screen sizes and budgets and all are named within the Xperia range. The Xperia T, made famous by its appearance in the latest James Bond adventure, Skyfall, is one of the thinnest Android phones on the market and offers a superior blend of hardware and software. Sony has placed a big emphasis on photography with its mobile devices. The Xperia Z1 is built with the same components as Sony’s compact digital cameras, meaning that you’ll always get stunning results thanks to built-in G Lens and intelligent BIONZ image-processing technology that chooses the best camera settings on your behalf. The Xperia Z2 and Z2 Tablet are the newest additions to the range; both are top-spec devices with slimmed-down profiles.

SONY’S TOP UNIQUE FEATURES

THINNESS
What you’ll find with all the latest Sony phones, is just how thin they actually are. Both the Xperia Z2 and Xperia Tablet Z2 are ridiculously thin and are very comfortable in hand.

EXMOR SENSOR
Thanks to Sony’s track record in digital cameras, it has included the impressive Exmor sensor into its own Sony smartphones to make every photograph perfect.

TINY PHONES
The Xperia mini range of Android phones reaches the limit of size that can still be considered a smartphone. Ideal for small hands and those who love their portability.

WATERPROOF
The Sony Xperia Z2 lives up to its tag as a waterproof device. Our devices are always on us, so it’s good to know this phone can take a dive without drowning.

WALKMAN
Sony has used its Walkman history to good effect by creating one of the most pleasing music software experiences on Android to date for every user.

MAPS
Nearly every Android device comes with a GPS on-board, enabling users to track their current location in the world.

The Google Maps app is the definitive place for users who want to take advantage of their GPS and also find out more about the world around them. It offers turn-by-turn satellite navigation for free and is comparable to many of the commercial offerings on the market. The recent update has made Maps even easier to use. Its biggest competition is CoPilot which offers a thorough navigation experience for users who don’t mind spending a bit of cash. Many other companies offer satellite-navigation software at a range of price points. On top of this, an Android device can be used off-road via a variety of open-sourced maps and the GPS antenna can also be utilised on train journeys and for flight tracking too.

The GPS on your phone can also be used to tag your location on social media sites, called geotagging. The options are endless and, on the whole, cheap to purchase—and, in many cases, free! No matter how you want to travel or where you want to go there will be a solution available for Android that will help you. This is in addition to Android already having all the navigation tools that the majority will need built in as standard out of the box.
KIDS

Thanks to the popularity of apps, developers are now releasing more child-friendly offerings for your little ones to enjoy. Although there are a plethora of games readily available to keep your children entertained for hours on end, you will also find a range of simple drawing and educational apps for them to get to grips with.

There’s now also devices specifically made for children, but more importantly, many phones are simple enough for children to use. The ease of use built into new products makes them accessible to the youngest children and it has been proven that children can learn a great deal from these devices. Well-known companies in the areas of education and kids’ entertainment also create a selection of apps and games so you can be assured of the titles’ suitability and quality.

If apps aren’t your kids thing, then remember that the Play Store also has a great movies section which houses lots of children movies from the likes of Disney and Pixar. Most of these movies are competitively priced when compared to the competition. Just remember to apply parental controls on to your phone before letting your child loose on the Google Play Store.

LG

LG has a long history in producing quality Android devices. Although not on the scale of HTC and Samsung, LG has managed to gain some acclaim with the L series of devices.

In recent times, LG was one of the main players in bringing the highly successful Nexus 4 to the market – a high-quality device that sold at a competitive price. It’s big brother, the Nexus 5 retains the same aesthetic pizazz and high specs whereas gimmicky devices, such as the G-flex physically bend to withstand the rigours of any lifestyle. This year, LG is launching more models in its successful L series – the L40, L70 and L90 – along with the G2 mini and G Pro 2, a large device that falls between phone and tablet in size.

LG TWEAKS

Although it runs stock Android, the Nexus 5 includes LG’s own tweaks.

LG’S TOP UNIQUE FEATURES

L SERIES

LG’s main range of Android phones is the L series which come in different sizes.

VARIETY

Although the L series includes LG’s own custom skin, the Nexus 4 uses an entirely stock Android skin. This shows the variety in the devices LG produces.

SOCIAL

You’ll find automatic syncing options used for the social media apps pre-installed on each LG phone.

HOME SCREENS

The L Series’ user interface allows for easy customisation of the home screens and rivals the iPhone for ease of use. It may well be the next ‘big’ Android device.

HD DISPLAY

LG currently uses brilliant NOVA displays for its smartphones, but it is currently looking at implementing 4K technology into them.
Other devices

Don’t think it’s just the likes of Samsung and HTC dominating the Android market. What makes the Android operating system so impressive is that it opens itself up for many other manufacturers to start producing devices. In recent times, it’s common to see hundreds of new devices hit the market every year, with a series of them coming from up and coming manufacturers or certain manufacturers who are big in Asia. So don’t spend out for a new phone until you consider everyone!

**ASUS**

Although more famed for its involvement in laptops, Asus has also started bringing out a selection of new tablets and phones. The Fonepad, is the size of a 7” tablet, but one with full phone capabilities as well, even if you do look a bit silly holding it to your head.

**HUAWEI**

Huawei is now considered one of the premier phone manufacturers in the world. The Chinese company previously sold rebranded devices, but is now making phones and tablets under its own name. Products such as the Ascend P6 have received rave reviews, and this year Huawei is launching the affordable Ascend G6 and entry-level Ascend Y530.

**GOOGLE**

Google has started producing more of its own devices, as of late, and has worked with the likes of LG and Asus to produce groundbreaking new phones and tablets for users. Its most popular device is currently the Nexus 7, which Google has recently released a successor to. There’s also the Nexus 10, a bigger version of the Nexus 7 and also the Nexus 4 smartphone. All Google phones are sold directly on the Google Play Store for very competitive prices.

**NOKIA**

After manufacturing the popular Lumia series of Windows-powered smartphones, Nokia has turned its hand to the Android OS with the release of its X series of phones for 2014. The X, X+ and XL fall squarely into the affordable category, but offer several worthwhile features, including free cloud storage using Microsoft’s OneDrive. The XL is fitted with front and rear-facing cameras, making it ideal for video calls.

**GAMES**

Mobile gaming has certainly taken off in the past few years, with the likes of Angry Birds and Temple Run leading the way. Thanks to the quality of smartphones and tablets, the quality in mobile games has vastly increased as of late. You’ll now find many 3D games on offer on the Play Store and most cost a small percentage of a console game.

Many console developers have also taken the plunge on Android, by offering mobile versions of some of their best games. The likes of Grand Theft Auto and Mass Effect have seen successful ports and both other some of the best gaming experiences available to Android users.

But what the Google Play Store can offer, which most offers can’t, is a platform for indie developers to get instantly published on. Many of the best Android gaming experiences have come from arcade-style gameplay built by a small team of developers. One of the highlights is Crush, a brilliant puzzle game that offers a unique twist on the classic Tetris format. Spend some time browsing the games section of Google Play and you’re bound to find a few hidden gems.

No matter your opinions on the state of mobile gaming, there’s no denying the overall quality of games has improved in recent years. How is a great time to look forward to the next generation of games.
Setting up

Get to grips with the basics of your Android device

24 Connect to Wi-Fi
Access the internet and join a Wi-Fi network

26 Connect to your Google account
Get more from your device by syncing with a Google account

28 Create a Google account
Set up a new Google account

30 Add multiple accounts
Manage more than one account on your device

32 Use the Settings app
Tweak your preferences on your phone or tablet

33 Change your phone’s ringtone
Set a preferred tune to play when you receive a call

34 Discover how to set an alarm
Set a wake-up call on a one-off or regular basis

35 Change your wallpaper
Adopt a different background for your home screen

36 Add a live wallpaper
Change the look and feel of your phone with a live backdrop

37 Set a passcode
Protect your phone from intruders

38 Set a pattern lock
Draw a unique pattern to unlock your phone

39 Set up a Face Unlock
Go one step further and use face recognition for security
“Tweak settings to get more from your Android device”
Setting up

Connect to Wi-Fi
Access the internet by connecting your device to a Wi-Fi network

Android devices are extremely data intensive. Whether you’re downloading apps and music, updating your Facebook feed or browsing the web, your device will be connected to the internet.

For this reason having a connection to a Wi-Fi network is pretty much essential. You can live without it – on your phone or 3G-enabled tablet you can go online via your data plan – but this is often slower than Wi-Fi, and certainly more expensive. Moreover, you may also have hard limits on the amount of data that you can use each month. You’ll also find that maintaining a 3G (or 4G) connection will drain the battery faster than a Wi-Fi connection will. For these reasons, being able to connect to the internet via Wi-Fi is an integral part of the Android setup process.

The first thing you will be prompted to do when you switch your device on for the very first time will be to connect to a network. Considering how essential doing this is, it is preferable that you do this straight away. The initial setup will include the first sync of your Google account, which may take some time and involve large amounts of data, and will possibly be followed by the downloading of new versions of apps, and sometimes even system updates too.

So when you first turn your device on, ensure you are within range of your Wi-Fi hotspot and know the username and password. The installation process is simple, and will get you going in no time. A similar method is also used later on should you want to connect to other Wi-Fi networks in the future.

01 Turn on
Turn your device on. After choosing a language, the first prompt will be to connect to a Wi-Fi network. Be aware that some non-3G devices may not allow you to skip this step.

02 Scan for networks
Your device will begin scanning for networks in the nearby area. It may take a few moments to complete depending on how many different Wi-Fi hotspots are within range of where you are.

03 Make your choice
Make sure you know the name of your own Wi-Fi access point, since you’ll need to be able to identify it from the list displayed. If in doubt, it may be printed on the bottom of your Wi-Fi router.
Connecting to Wi-Fi
Get to know your Wi-Fi options

Turn off
You can turn Wi-Fi off if you don’t need it. However, it will not drain your battery too much if you choose to leave it on.

Connect to 3G
Most devices, whether phones or tablets, will not require much in the way of setting up when you want to connect to a 3G network. Simply insert your SIM card and restart the device. The appropriate settings should be automatically downloaded and installed to get you going.

Networks
The list of available networks is shown here. You need to know the name of the one you are trying to connect to.

Scanning
The device will continually scan for new networks within range, even as you move to new locations.

Locked
A Wi-Fi icon with a padlock next to it indicates that the network is password protected. No icon means they are open, but may not be secure.

04 Enter the password
Tap on the network you want to connect to and begin typing in the password when prompted. Remember that it is case-sensitive. Tap the Show Password option to see the letters as you type them.

05 Connect
When you’ve correctly entered your password, hit the Connect button and the device will now connect to the network. This is a one-time only process, and the connection will be remembered.

06 And you’re done
Once connected you can proceed with the setup process. To connect to additional networks go to Settings>Wi-Fi and repeat the process. You can connect to as many networks as you need.
Connect to your Google account

Set up your phone to sync with your Google account.

You will find that a Google account is one of the most essential parts of an Android device. With a Google account, you can download apps, sync bookmarks, import your calendar and contact information, access your email and much, much more. If you don’t have one already, then it is important to create an account, even if it is only for use on the device itself.

If you do have one already, then you can set up your phone or tablet to use that, and it will automatically import all of your data to your device, minimising the amount of time you need to spend setting it up. Better still, you can set your device to back up its information to your Google account so that if you ever need to perform a factory reset, lose your device, purchase a second device or upgrade to a new one, your settings and information will be safely stored somewhere.

Connecting to your already established Google account is one of the first things that you will be prompted to do when you turn your new device on for the first time. You will need to have connected to a Wi-Fi network (a 3G connection will suffice if you are not within range of Wi-Fi), and from there the process is simple and largely automated. You won’t be prompted to configure the more advanced settings the first time you add the account, but if you want you can choose to do that later, as we will explain in this tutorial. You can also add more than one Google account, and choose within many apps which one you want to use.

01 Got Google?
After you have connected to Wi-Fi you will be prompted to enter your Google account details. If you have an account, then tap Yes. If not, tap No and you will be able to create one from scratch.

02 Start the sign in
Now, you can begin signing in to your account. Add your username first – there’s no need to include the @gmail.com part of your email address, as that will be added as soon as you tap the Next button.

03 Password
Now type your password into the next field. Remember that it is case sensitive. To type numbers, hold down the corresponding letter on the top row of the keyboard until the number appears.
Sync options
Control how your device and account sync

Account
You can add more than one Google account, and the sync settings can be adjusted for each one individually.

Options
All the things you can sync between your device and Google account are listed, included app data, contacts and Gmail.

Tick boxes
Untick the boxes for any parts of your Google account that you don't want to keep synchronised with the device.

More than one account
If you have more than one account, each one will be managed separately and the data from the two cannot be merged. It's a good idea to keep one account as the main one for all your Android-related apps and content.

04 Accept the terms
The final step requires you to agree to the terms and conditions. You cannot refuse this if you want to use your account with the device, although you can opt out of the additional Offers email list.

05 Signing in
The device will now begin signing in to your account. It may take a few minutes, as your data and other settings will also begin downloading, and various apps will be configured for you to use.

06 Backing up
Finally, you will be prompted about whether you want to back up your data to the account. In pretty much all cases this is a good idea, so leave the options ticked. You can turn it off later if you wish.
Setting up

Create a Google account

Get the most from your Android device by connecting it to a brand-new Google account.

Android is a platform owned and developed by Google, and Google services are at the heart of so many of its best features. Access to these services is gained by having a Google account. This is a universal account that works whenever and wherever you encounter Google, and enables you to share and access information on any device.

You don’t need a Google account, although you will be missing out without one. To access Google Play, where you can download apps to your device, you need to have first logged in with your Google account, while accessing email, creating a calendar and many other features are ones that add real value to your Android device and you probably will want to use.

The best thing about using a Google account is the syncing element of it. If you use the Chrome browser on your PC, for example, you can sync the bookmarks via your Google account to the Chrome browser on your phone or tablet and have access to an identical set of bookmarks on all your devices without needing to set them up every single time. Likewise, enter a date in your Google calendar and it will be available on your phone, PC or desktop browser; buy a movie on your tablet through Google Play, and you can watch it on your tablet. It really is an essential feature and highly flexible.

You can use multiple Google accounts on the same device, or you can even just create a ‘throwaway’ account that will give you access to Google Play but you don’t use for anything else. Best of all, they’re easy to set up, as we explain in this guide.

01 Got an account?
When you turn on your device for the first time you will be asked whether you already have a Google account. If you use Gmail then the answer is yes, so skip the rest of this tutorial.

02 Make it Google
You can set up a Google account at any time, but it’s a good idea to do it straight away when you are prompted, as this will enable you to download apps right from the start.

03 Get an account
Tap the ‘Get an account’ option. So long as you were connected to a Wi-Fi network when previously asked you will now begin the account setup process. Fill in your name to get started.
Sync your account
Control which parts of your account sync

App data
By syncing app data you ensure that your data will be restored when you reinstall an app, or if you install it on a second device using the same Google account.

Using multiple devices
There’s no limit to the number of devices you can use the same Google account on. So if you own a phone and tablet you can use the same account, and will have access to all the same data and apps.

Calendar and contacts
By syncing your calendar and contacts you will have up-to-date access to them on your device, as well as on the web through any browser.

Gmail
Gmail is at the heart of any Google account. Your email comes through in real-time, so you should turn it off if you don’t plan to use the email account.

Sound search
Play a song – or a snippet of a song – into your phone and it will not only attempt to recognise it, but show you the song in Google Play so you can buy it.

04 Username
Tap Done when you’ve entered your name, then pick a username. This will double up as your email address, so choose wisely if you intend to use the email part of the account.

05 Password
If the name is available then you’ll now be prompted for a password. Pick something secure but memorable – it must be at least eight characters long, and needs to rank as at least ‘fair’ to be accepted.

06 Complete and go
Complete the final steps, including adding a security question should you forget your password. There’s no need to join Google+ when prompted at this stage. The account will now be synced.
Setting up

Add multiple accounts

Set up and manage accounts for all your web services

In the previous tutorials we have looked at how important it is to have a Google account tied to your Android phone or tablet. Whether or not you wish to use the full suite of Google services on offer, you should still have an account so you can download apps from Google Play at the very least. But that is not the extent of what kind of accounts you can set up on your device.

You can have multiple Google accounts, for a start, enabling you to keep your various use cases separate, such as work and personal accounts. And if you head into Settings on your device and scroll to the Accounts section you will find you can not only set up accounts, but manage an unlimited number of other account types in order to suit your daily needs.

The Accounts screen is dynamic in that it becomes populated with additional apps over time – whenever you install a new app that requires a user account, it will appear here so that you can easily take control of what it is doing without actually needing to open the corresponding app itself. Examples of the kind of apps that you will see here include social networking services such as Facebook, Twitter and LinkedIn, and cloud-based services like Dropbox and SkyDrive.

Through this clear and easily accessible screen, you can switch syncing on or off on a per-service basis as a way of limiting the amount of data that you are using, or control the battery life by reducing the number of apps that are constantly running in the background. In this tutorial we will give you an overview of the kind of things that you have the capacity to do with multiple Android accounts, and how to tailor them to your needs.

01 Find accounts
To find the Accounts screen, press the Apps button from your home screen and locate Settings. Now, scroll down (or sideways on some devices) until you see the section labelled Accounts.

02 Create new account
Here, you can see all the accounts tied to your device. Tap Add Account to create a new account within any of the compatible apps on your phone – it’s not just about using a Google account.

03 Switch between accounts
You can set up a second Google account. When you open an app that uses Google you will be prompted to select which account you want to use with the app. In this example we’re using Youtube.
The accounts screen
Get to know the accounts settings

Account name
At the top of the screen you can see the app the account is tied to, as well as the email address in case you have more than one account for the app.

Sync options
Tick or untick the boxes to determine which parts of the app you want to be synced.

Service options
The available options will differ from one app to the next, so there are no universal controls where you can set them all at the same time.

Remove account
Tapping the Remove account button will delete the account and all of the data associated with it. This cannot be undone — recreating the account may not restore data that was created on the device but not synced.

Sync now
Tap the Sync Now icon at the bottom of the screen to sync. This is a button you will need to use if you turned off automatic syncing by unticking those boxes.

04 Other services
A full range of extra services are available through the Accounts screen. You can add details for a work server, or a non-Google email account as well. Simply tap the option and fill in the required details.

05 Control syncing
You can control which data gets synced and when by tapping on each of the account names. In some cases options in the corresponding app will open to the settings page; otherwise untick the boxes.

06 Remove account
Accounts can be removed easily. Tap the account name, followed by the remove account button at the bottom of the screen. Alternatively, uninstall the app for that account.
Setting up

Use the Settings app
How to control various aspects of your Android device

Straight out of the box, your Android device is primed and ready for action, but as you grow accustomed to using the device then you will undoubtedly find that you’ll want to tailor various aspects to suit your needs.

This could involve changing the sound effects, altering the brightness of the screen, enabling location services, adding users, changing the date and time… the Settings app, which can be found and launched through your Apps page, allows you to do all of this and more. Your Settings screen is broken down into various categories – Wireless & Networks, Device, Personal, Accounts and System, and each category is ramm with sub-categories. And don’t worry, you can experiment with the settings as much as you like because you can easily revert back to your previous settings. The only setting that is irreversible falls under the Backup & Reset category under Personal. If, for any reason, you wish to wipe your device clean and erase all of the contents then the Factory Data Reset option can be found here. This will wipe all apps and data off of your device (though all of your app settings and suchlike are synced to your Google account, so you won’t lose them) and allow you to start afresh – which is handy if you are passing your device onto someone else to use or are selling it.

In this tutorial we will introduce you to the Settings app and guide you through the options you can change and tinker with to suit your individual needs and preferences.

“You will undoubtedly find that you’ll want to tailor various aspects on your device to suit your individual needs”

01 Access your settings
Your settings can be accessed through the Settings app, found in the Apps pages of your device. Tap on it to launch.

02 Wireless & Networks
As well as configuring networks and enabling Bluetooth, tap More to initiate Aeroplane mode and the transfer of data.

03 Display settings
Here you can change the brightness of the screen, alter the wallpaper, change the font size and set when your device sleeps.
Change your phone’s ringtone

Learn to set a custom ringtone so that your phone rings with a tune that you can instantly recognise.

In the early days of mobile phones, the choice of ringtones was very limited. Luckily, it then became possible for users to add and choose their own tones. Back then, they tended to be monotone affairs, usually a roughly translated rendition of a classical piece or pop ditty, although quite often it would be impossible to tell what was playing. As technology advanced and allowed better quality audio output, it wasn’t long until people realised there was money to be made selling popular songs for people to use. This started with top ten chart hits and almost ended with the aural assault that was the Crazy Frog.

Thankfully, those days seem to have passed, but we still get the option to choose our own ringtone. Once you become more comfortable using your phone, you can copy your own MP3 files onto the SD card and use those as ringtones. You can even set different tones for different contacts, but for now we will start by showing you how to listen to the tones built into your phone. After you have found one that you like, we will show you how to choose and enable it so that when someone calls you you will know it’s your phone going off. No more embarrassing experiences on public transport!

**01 Open application list**
Press the Applications (or Apps) button on the home screen. This will bring up a list of all the applications that you have installed on the phone. Scroll down until you find the Settings app and open it.

**02 Open Settings**
Once you select the Settings app, you will see a huge range of options you will be able to tinker with. For the purposes of this guide, locate the Sound option and tap on it.

**03 Set the ringtone**
Scroll down until you see the ‘Device ringtone’ option. Clicking on it will bring up a list of all pre-installed ringtones on your device. Click on one, and you’ll get a preview. Once you’re happy, tap OK.
Setting up

Discover how to set an alarm

Set a one-off or recurring alarm for every day of the week with Android’s easy-to-use Clock app.

We all love a good lie-in at the weekend, but during the week most of us need a little helping hand when getting up for work. Step in the trusty alarm clock, used and abused for generations, and often bashed by a swift punch from under the covers or thrown across the room to make the loud alert stop. It’s the appliance that we all love to hate, but undoubtedly a necessary evil.

The venerable alarm clock’s days may be numbered, though, as more and more of us start to use the electronic multi-tool we all carry in our pockets to raise us from our slumber. Setting up the phone alarm is a quick task, requiring only a few presses of the screen to get an alert set up, which is a godsend for those days when you come in late, and just want to get some sleep.

There are lots of alarm clock apps available to purchase in the Play Store, with various features, but in this quick-fire guide we will show you how to set up an alarm on your Android phone using its built-in alarm function. Just try and make sure not to throw it across the room when it goes off.

“More and more of us are starting to use our smartphones every day to raise us from our slumber in the morning”

01 Open the clock
Find the Clock program in your Applications folder. Alternatively, on some versions of the Android OS, you can click the clock widget that can be found on the home screen.

02 Open the alarm
Open the Clock app. This will show you all the clock settings, and enlarge the time, making it ideal as a bedside reminder. In the Clock app, click on the alarm icon located at the bottom.

03 Set the alarm
You’ll see a list of your current alarms. Tap ‘Add alarm’, and use the scroll wheel to set the alarm time. You can then set the alarm to repeat on whichever days you want, and the length of the snooze duration.
Change your wallpaper

Bored of your background image? Why not change your wallpaper and breathe new life into your phone.

There's nothing worse than seeing a fellow Android phone that has the default wallpaper. Of course we don't want to offend anyone who does still use the default background, but it can be slightly depressing to see your fellow man's refusal to change his background image from the standard one to something more interesting, something different, something that says something about you.

The good news is that it's really simple to do. In fact, if you're a brand new Android owner, it should be the first thing you do, as the different wallpapers also offer different app layouts without you having to get your hands dirty. All it's really doing is picking different default widgets for certain themed wallpapers but it's an easy enough starting point for a fresh Android owner.

Some of the options on offer are actually quite appealing and there's nothing to be scared about when you step away from the background that comes loaded on your phone in the first place.

One thing to remember is that you want clarity as much as anything else. Some of the wallpapers might look nice until you realise the apps themselves are lost among the explosion of colour on your phone, so the best thing to do is experiment, try different wallpapers out and see which ones work to your liking.

01 Get started
Press down on an empty space on your screen. This will bring up a new screen that you can access wallpapers from. You can also access the option from the settings menu under Display and Wallpaper.

02 Experiment to find one
Wallpapers will have static, bland images, while Live wallpapers will have a moving animation that adds life to your screen. Play around with these to figure out what works best for you.

03 Set image from Gallery
You can also select an image from your Gallery as a Wallpaper for your Home screen, Lock screen or both. You can set the dimensions of your image to fit the screen. Your device is now more fun to use.
Setting up

Add a live wallpaper
Learn how to replace your phone background with a colourful, funky and interactive live wallpaper

One of the great things about Android is that it allows for a huge level of customisation. Users can change the look and feel of their phone to reflect their personality.

Similar to the clothes we wear, what we have on our phones is a reflection of our own unique outlook, and one of the easiest ways to display that is with a custom background on your home screen.

Mobile phones have long offered the ability to add a background to the home screen, and Android is no different, but it goes even further with the inclusion of live wallpapers. This feature allows developers to go wild and create beautiful backgrounds. Rather than just having a static photo, it means backgrounds can be animated, play sound effects, and even react to the phone’s orientation, the ambient sound and your touch. Others allow you to play games in the background, overlay Google Maps, and, when listening to music, display the current song’s album artwork.

Some of the more action-packed live wallpapers can use up the processor on your phone, so if you are on a lower-end device, it might be better to pick a simple wallpaper. With increased processor use comes increased battery use, and if you find your battery running out quickly, the more intense wallpapers might not be for you.

There are thousands of live wallpapers to choose from in the Play Store, along with some that come installed on your device. In this tutorial, we will show you how to download a free live wallpaper, set it, and customise its look.

01 Built-in live wallpapers
Most Android devices come with a number of live wallpapers available. Select if you wish to set it for your home and/or lock screen, and then choose one that you like the look of from the list.

02 Download a paper
If none of the built-in options are to your liking, head to the Play Store. Select Live Wallpapers from the Categories menu, and browse through the huge number of free and paid-for wallpapers on offer.

03 Set wallpaper
Once you’ve downloaded a paper that you like the look of, you’ll need to head to the options menu shown in step 1 and select the paper from the options. Then simply tap ‘Set wallpaper’.
Set a passcode

Setting a passcode is vital for any user. Here we show you how to do it and why it is so important.

Inputting a passcode every time you turn on your phone can slow you down if you need to access information quickly, but it’s worth considering what would happen if you lost your phone.

Over time, a smartphone gradually builds up a database of your life, and everything from bank account details, private contact numbers to secure passwords can be held within it. A smartphone has so many uses that to make the most of it requires having personal information handy all of the time. There is no way to avoid storing sensitive information if you want to use a phone to the best of its ability.

The passcode process is designed to be as near to the perfect compromise between ease of use and security as is possible, but also offers you the opportunity to decide how secure you want your passcode to be. If you do not use your phone too often, a longer passcode will offer extra security and not slow you down too much, but those who are constantly using their phones may prefer to use a short passcode. Remember that a four digit passcode will offer 1,000 combinations, while a five-digit passcode takes all the way up to 10,000.

No matter what level of passcode you use, it should be enough to stop someone seeing your personal information. A smartphone is expensive, but the costs involved if someone else has access to your information could far outweigh the cost of replacing the phone. It takes a few seconds to set up a passcode, and little time to use it afterwards, so there is no excuse not to have one set up.

01 Find the options
Navigate to the Settings icon, and a list will appear. Choose the Lock screen option, and then select Screen lock from the next screen that appears.

02 Select an option
Depending on which Android device you have, you may get a few different screen lock options. For the purpose of this tutorial, select PIN.

03 Enter your PIN
You will then be asked to enter a four-digit PIN. Make it something memorable, but nothing too easy. You then need to enter the PIN again to confirm.
Set a pattern lock

A pattern lock is effectively a password, but there are unexpected advantages to using this extra security.

Smartphone security is, of course, very important, but the process of inputting a PIN or a password every time you turn your phone on can become increasingly tiresome.

Fortunately, Android phones have a few options built into the device that effectively let you choose exactly how you want to unlock your phone. Of these, the pattern lock is one of the most natural to use.

If you think about security on a phone, then the obvious option is to input a simple four-digit PIN just like you do in a cash machine. The problem is that most people tend to use the same PIN for multiple uses, meaning that as a result it can easily become compromised. One solution is to input a longer code that is more secure, but that means taking more time to unlock the phone, which can greatly affect usability. The pattern lock feature is completely different, and adds this extra layer of security while retaining the ease of access you want when starting your phone up.

By default, the pattern lock has nine dots which you draw on, and this translates to a staggering 389,122 potential combinations. The beauty of this method is that it takes just a second to draw the pattern, yet offers so much security. Use something easy to remember, yet not something obvious – like the first letter of your name – even though this is what we’ve used here. Don’t worry about forgetting your pattern as you’ll be asked for a PIN as a backup while setting it up. All that’s left is for you to learn how to set up the pattern, and in the process make your device a whole lot safer.

01 Pattern lock
Like you did for the PIN tutorial, go to the Lock screen and select Screen lock. This time select Pattern. If this is the first time you’re using it, you’ll get a brief demo.

02 Set your pattern
Continue with the demo tutorial until you’re asked to enter your pattern. You’ll be asked to enter this twice before your new unlock pattern is set on your device.

03 Set backup PIN
In case you ever forget your pattern, you’ll need to recover it using your PIN. Here enter a number you can remember easily. You’ve now got added protection!
Set up a Face Unlock

Keep your phone private with this cool security feature that doesn’t require any details entered manually.

Advances in smartphone technology mean that you can now organise your entire life via your mobile phone. While this is undoubtedly a fantastic advantage when it comes to time-saving and making life easier, it does mean that a lot of sensitive information is being stored in just one place, especially if you participate in mobile banking or send emails from your phone.

There are several ways to protect all of your important data, including Face Unlock, which was introduced with the Ice Cream Sandwich update. As its name suggests, it’s a feature that enables you to use your own face as a means of unlocking your phone. Using your device’s front-facing camera, you can utilise your own features as a PIN combination, as well as set up a secondary level of security such as a PIN code or drawn pattern to help ensure that the private details on your device stay just that. You don’t even have to capture an image – just hold the phone up to your face and it will use facial recognition technology based on the face you captured when setting up the security.

So should your phone ever be lost or stolen, you’ll know that you’ve put up at least two walls against any would-be hackers, one of which is considerably difficult to get past considering that your face is needed to do so.

Face Unlock is an impressively simple process to set up considering the ingenuity of the technology, so here is a walkthrough on how to do it and what to expect along the way.

01 Settings

To change your security setup and utilise Face Unlock, go to the Settings section of your smartphone. You may have a home screen widget for it, but, if not, open your menu and swipe to it.

02 Security

Once you’ve tapped the icon and entered your Settings, look for the Security heading, which is found under the Personal sub-section. Tap it, then Screen Lock, and select Face Unlock from the list.

03 Read the intro

This will start a short introduction, giving you some advice and tips. It’s worth a read, and only lasts for two screens. Take note of the second screen, as it highlights how to get the best image.
Getting started

Everything you need to get up and running

42 Get to grips with the keyboard
   Explore typing preferences

44 Customise your home screen
   Make your home screen unique

46 Access your notifications
   Keep up to date on your phone

48 Add and share contact details
   Pass on numbers to other people

50 Get to know the People app
   Work with your contacts

52 Make and receive calls with your device
   How to handle phone calls

53 Reject incoming calls in an instant
   Send a text to reject a call

54 Discover the new Google dialler
   Work with the built-in search

55 Assign contacts to Groups and Favourites
   Organise your contacts

56 Find your way around the Messages app
   Explore text messaging options

58 Explore Google’s most intuitive search tool
   Introducing Google Now

60 Browse the internet on your device
   Surf the web on Android

62 Search the web in Chrome
   Use Google’s browser

64 Bookmark your favourite webpages
   Store your favourite sites

66 Control your phone using your voice
   Discover how you can perform actions using just your voice

68 Set up Gmail on your Android device
   Get started with Gmail and see how easy it is to read your emails

70 Organise your emails using Gmail
   Store your emails so you can access them in an instant

72 Set up and configure the Email app
   Start using the native Android Email app with any account

74 Control your messages in the Email app
   Survey your message options in the Email app

76 Work with attachments in Email
   Add documents and images to email messages

78 Set up and synchronise your calendars
   Keep track of your social and work engagements

80 Add and repeat events in Calendar
   Establish your routine

82 Keep detailed notes with Google Keep
   Jot down ideas and to-do lists while on the move

84 Back up your files to Google Drive
   Store documents using Google’s cloud storage services

86 Create documents using Google Drive
   Work directly on your device and access documents from anywhere

88 Find a lost phone with Android Device Manager
   Keep track of and remotely control Android devices that disappear
“You can create and manage emails on Android”
Get to grips with the keyboard

Learning how to get the most out of the default keyboard on your device

Although modern devices include a wide range of amazing features, something often overlooked is the highly functional built-in keyboard. Many devices offer a Swype keyboard, allowing users a combination of an easy-to-use keyboard, mixed in with numerous menus and extra bits you’ll need to tackle to get the most out of it. Because of what’s included within the Swype keyboard, there’s no real need to download a third-party keyboard from the Google Play Store as a replacement.

As well as including your standard QWERTY configuration, the Swype keyboard uses a selection of clever gestures to access different icons, punctuation marks and some great emoticons, all of which can be used to make typing and communicating on your handset a much better experience. There’s certainly a lot to take in with the keyboard and there’s no doubt that you’ll want to tweak it after using it a handful of times. Luckily, the Swype keyboard is highly customisable and you’ll be able to implement any changes you want within the keyboard’s Settings page.

In this tutorial we’ll be covering all the basics of using the keyboard. As well as showing you its basic function, we’ll also help you uncover the various menus that you’ll want to check out, in addition to other cool features that’ll make it easier for you to use in the long run. After mastering the steps, you’ll be able to discover a whole range of typing-based apps on the Google Play Store that can help put your knowledge to the test.

“The Swype keyboard uses a selection of clever gestures to access different icons, punctuation marks and emoticons”

01 Open the settings
Visit the Language & Input menu in the Settings app to alter your keyboard. You can change text sizes and usability options.

02 Begin to type
Glide your finger from one letter to another to create words. As you put letters together the keyboard predicts what you’re typing.

03 Dictionary
Above the keyboard lies a selection of similarly spelled words. Long press on this menu to find different words for you to use.
Get the most from Swype
Uncover all the features

**Expand dictionary**
You can add words to the keyboard's dictionary within the keyboard settings. You can also change the keyboard's language in this menu.

**Misspelt words**
Any word that isn't recognised by Swype will appear with a red line underneath it. Above the keyboard you'll get a list of words close to what you're typing you can choose from.

**Change layout**
Various aspects of your Swype keyboard can be changed within the keyboard's Settings menu. Use this to get the very best typing experience.

**Touch or type?**
Depending on your technique, you might find that using the glide method of typing works faster than having to manually type out words.

**Disable typing sounds**
By default, every time you type using the keyboard you'll hear a clicking sound. To disable this sound, go into the keyboard's Settings menu and disable the Sound on Key-press option found near the top of the menu.

---

**04 Use numbers**
A full number board can be found by pressing the number icon at the bottom-left. Most punctuation is stored here, too.

**05 Find hidden menus**
By long pressing on some letters and other keys, you can uncover quick shortcuts to letter accents and punctuation marks.

**06 Tired of typing?**
Press on the microphone symbol to open up Google's Voice Search and speak instead of having to type.
Customise your home screen

Your home screen is the most important area of your phone, as not only is it the first thing you see when you turn on and unlock your phone, but it can also act as a vital storage space.

It is possible to add shortcuts to all your most used apps, for example your email and calendar, so you don’t have to search through the menu list for them every time you want to access them. Luckily, it is quick and easy to customise your home screen to best suit your needs and tastes. You can add a shortcut to any app by tapping and holding on the app in question and then selecting the screen you’d like to add it to from the pop-up menu.

Once you’ve settled on the apps and widgets you would like on your device’s home screen, it is simple to then manage and place these however and wherever you like. In this tutorial we will show you the basics of how to tweak the different aspects of your home screen. First we’ll teach you to add apps and widgets to your home screen. Once you’ve customised your home screen with these additions we’ll help you get organised. When everything’s in order we’ll introduce you to other features such as how to customise the dock and the options available to you if you wish to change your wallpaper. Once you’re finished, you’ll have a unique Android home screen.

01 Widgets
Tap the Menu button, then the Widgets tab. You’ll be given a list of all available widgets. Tap and hold any of the options to place them on your home screen.

02 Add apps
Using that same method, select the Apps tab at the top and this will display all the apps installed on your device. Tap one to add a shortcut onto your home screen.

03 Organise
Tap and hold on any of the apps and widgets to see the grid layout appear. From here you can adjust the position of them to suit you.
Your Android home screen
Where to look to make changes

Wallpaper
This can be one of the Android stock images or a photo from your gallery. Tap and hold on the screen to bring up the wallpaper menu.

Widgets
Widgets are the shortcuts to different programs on your phone. You can add any app from your menu to the home screen by holding down on the icon.

Manage
You can manage all the widgets and apps on your home screen by holding down on the app in question and moving it around your screen, or drag it to the trash icon if you want to remove it.

Apps menu
This will take you to the screen housing all your apps, as well as providing you another route to managing your home screen, via the Settings icon.

Interacting with live wallpapers
For a bit of extra entertainment, or even a wow factor if you’re showing off your Android device, the live wallpapers react to your touch. Some generate new colours or new animations depending on where you tap them, but it’s nonetheless an impressive touch.

04 The dock
It’s not just the main screens you can customise. Tap and hold on an app on your dock and you can move it, and replace it with something else you might use more.

05 Using wallpapers
You can change the wallpaper to something supplied by your device, or tap Gallery to select one of your own images you’ve taken.

06 Multiple placements
You can place app shortcuts and widgets in more than one place on your home screen, so you can access them no matter which screen you’re on.
Access your notifications
See everything that’s happening on your device in an instant

One of the great things about your Android device is that it is constantly communicating to you and relaying information. You may have already noticed small alerts popping up to the left of the menu bar, but it goes a lot further by providing a detailed rundown of what’s occurring – and you can access this detailed list by pressing down on the top-left of your device’s screen and swiping your finger downwards.

Doing so will pull down a notifications list that includes new email alerts, app updates and much more, so you can stay completely up-to-date with what’s happening on your device. You can also tap on a notification from this list to be taken to the corresponding app – which is handy if you notice that a new email has come through that needs your urgent attention.

“Pull down a notifications list that includes new email alerts, app updates and much more, so you can stay up-to-date”

Also, as you may have to launch your Settings app frequently to change various aspects of your device, you may be interested to know that a pull-down pane, similar to the notifications one, also exists that focuses mainly on the settings that you’ll tend to use the most. To access this, pull down from the top-right side of the screen and a pane will appear featuring common settings such as Brightness, Wi-Fi, Battery, Aeroplane mode, Bluetooth, Users and a shortcut to the main Settings app itself. On some devices, you may find that notifications and shortcuts are all displayed on one bar, accessible by dragging down from the top of your screen.

So no matter what you are currently doing, you can tailor the settings to suit your needs. In this tutorial we will guide you through these useful notifications and settings panes to help you get the most out of your device.

01 Access your quick settings
On your Home screen, swipe down from the top-right side and you will pull down a pane of quick settings for easy access.

02 Options to hand
These include the option to switch users, adjust the brightness, change network, switch to Aeroplane mode and more.

03 Access your notifications
Again from your Home screen, swipe down from the top-left side to pull down your general notifications pane.
Notifications pane

How to get a rundown of what’s occurring on your device

Your notifications
Pull down from the top-left side of your screen to access your general notifications pane. Pull down from the right-hand side to access your quick settings.

See more
You can pull down on the bar at the bottom of the list to scroll through more notification items in order to stay completely on top of things.

Clearing the list
Tap this icon to instantly clear away all of the current notifications and leave your list completely blank ready for new notifications to come through.

Progress reports
Included in the list are new email alerts, recent functions you have carried out and progress reports on current downloads, among other things.

Clearing notifications
If you wish to remove the items currently listed in your notifications pane, then simply tap on the stack icon on the top bar (opposite the date and time) and the list will be instantly cleared, all ready for new notifications.

04 Your notifications pane
This pane presents a list of your recent notifications. This could include apps downloaded or new emails received.

05 Launch apps
Tapping on items in your notifications pane launches the corresponding app to be able to see what has arrived or occurred.

06 Instant notifications
Your device will also instantly notify you to new things by discreetly flashing messages up on your device’s menu bar.
Add and share contact details

For all the versatility of Android, they’re still phones – and phones need numbers. That’s where contacts come in.

One of the benefits of owning a smartphone – or any mobile phone, for that matter – is its ability to store hundreds (or thousands) of names and numbers. Gone are the days of lugging around bulky contacts books or relying on the desk-based Rolodex – everything fits neatly inside the smartphone in your hand.

It is therefore imperative for every Android user to know the process behind adding a contact to their device, saving it for future use and sharing numbers with friends, family or anybody else. It’s another feature that is both simple, and extremely useful to have at hand.

It isn’t too daunting to start adding the names and numbers of all those you know, or need to know, into your Android device, but it never hurts to get a few pointers on what you’re doing.

The same can be said for sharing the numbers stored on your phone – it isn’t actually hard to spread the word, but a few handy hints can make sure you know exactly what you’re sharing, and exactly who you’re sharing it with. It never hurts to brush up, just to avoid potential ‘number to the wrong person’ mishaps.

The following steps offer a quick and simple guide to both adding a contact to your phone, and then sharing it with others.

“It is imperative for every Android user to know the process behind adding a contact to their device”

01 Load it up
Either on your home screen or in your menu, you’ll find the built-in People or Contacts app. Tap the phone icon to load up the program, and you will be taken where you need to be.

02 Choosing to add
After the app has loaded, press the Menu button on the main screen. From here you can manage your contacts, or press the plus symbol on the left to add a new contact to your phone.

03 Name them
You’ll now be able to add your contact’s details. The flashing cursor will be at the top of the screen, where it says ‘Name’. Type in whatever you want your contact to be known as.
Managing contacts
An overview of the screen

**Search**
Selecting this option allows you to search through your contacts according to their name or details so you can easily track down the person that you want to call.

**Multiple numbers**
You don’t have to make multiple entries for the same person/business if they have multiple numbers—they can all be stored under a single name in your Contacts app, saving both screen space and a bit of confusion.

**The menu**
Pressing Menu brings up a number of options, all of which can be used to customise your contacts book, delete old numbers and other handy things.

**Updates**
If you have Facebook or Twitter accounts linked to your phone, you will see updates from your contacts just below their names.

**View their name**
The contacts stored in your phone show up as the name of the person – simply tap on them to see their details in full.

04 Choose phone type
Under the Phone section is a button that says Mobile. If you want to type a non-mobile number, tap the box, and select the type of number you want. This enables you to have many numbers for one contact.

05 Enter the number
Tap Phone, and then enter the phone number of the contact that you want to save. Make sure to enter the number in full, with dialling code and/or country code as necessary.

06 Save it
Once the number’s entered, press Save, and the number will be stored on your phone. You’re now able to access the number whenever you need to. You can add more numbers to the contact if you wish.
Get to know the People app
Learn to organise and deal with your contacts from one place.

A few years ago, the Ice Cream Sandwich update implemented a lot of new changes to not only the way the Android operating system looked, but also to how we use it. One of the biggest changes was the inclusion of the People app. This acts as a hub for all your contacts, and is the starting point if you’re looking for a specific person, or interested in adding a new one. Through the People app, you can also navigate to any specific contact’s page, send them a message, or even call them directly through the app. All of these may seem like standard assets, but the inclusion of being able to access them all through one application makes the whole experience a lot smoother.

Despite it being a relatively simple app to navigate through, there’s plenty of features to get your head around. A lot of these will enable you to create a comprehensive contacts list, and one that’s tailored to your needs. 

**Searching**
The search bar at the top of the app lets you hunt for a specific contact in your list. Once opened the stock keyboard will appear and you can begin typing away. The app only picks up full names, however, so don’t input nicknames!

**Profile**
Your own contact profile is listed at the top of your contacts screen. As well as the other contacts listed through the app, you can edit and change the details of your profile.

**Sorting**
All your contacts are listed in alphabetical order, although you can change this through the settings. If you have several contacts under one letter, then you can split them into different groups, as explained later in this article.

**Images**
One of the clever things associated with the People app is being able to import pictures directly from Facebook. This is a great way of identifying your contacts quickly, and makes the whole application look a little less bland.

---

**01 Open the app**
When you open People up for the first time, you’ll be greeted with the group section of the app. This is the home screen and is where you should start.

**02 Regular contacts**
Press the ‘Star’ icon to the right of the three tabs. This will show your most frequently used contacts. The app shows how many times you interact with them.

**03 Find a contact**
With your contact list loaded, press the search bar at the top of the UI. This will load the keyboard and you’ll be able to start searching for a specific person.
04 Making contact
While on the home screen, press the ‘+’ symbol at the bottom of the page. Here you can add a new contact to your list. Press on each section in order to enter text in to it, and add a picture.

05 The importance of groups
Before pressing Done, make sure to allocate them a group. Assigning contacts into groups helps you to stay organised and makes things much more manageable when you are searching.

06 Favourites
You can also manually add a person to your favourites tab, by tapping the ‘star’ option across the top toolbar. You can then view starred contacts and contact them quickly and easily.

07 Syncing accounts
Press the options menu in the bottom-right of the app and select the Accounts page. You’ll now be able to add and remove any accounts that you’re currently syncing with your contacts list.

08 Alter your display
The People app also lets you make a few customisations to its interface to tailor it to taste. Press the options button in the bottom-right of the app and select the Settings menu.

09 Import and export
The Import/Export menu is where you can share contacts with others, or import contacts from an external device. To access this menu, hit the options button and select Import/Export contacts.

10 Export your contacts
If you invest in a new device, but you want to take your list of contacts with you, then choose the Share Visible Contacts option from the Import/Export contacts menu, then tap OK to confirm the export.
Getting started

Make and receive calls with your device

How to handle phone calls while using the touch-screen interface of an Android handset

Over the last few years the traditional ‘telephone keyboard’ appearance of mobile phones has quietly disappeared in the wake of touch screen devices. For less tech-savvy users this can be daunting. Where a traditional keypad can offer a familiar interface, a touch screen can appear to be something of an intimidating blank slate.

Beyond all the media streaming, social networking and gaming opportunities there is also the matter of actually making phone calls. Thankfully, on Android devices the phone pad interface is easy to access and is intuitive to use thanks to its familiar appearance. Depending on your Android model, it's also possible to have your contacts interact with the interface in a way that makes them easy to find. On HTC handsets, for example, you can use the keypad to type the name of a contact much like texting on a traditional mobile phone. With each entered letter a list of contacts will appear that correspond to that letter. Although all devices differ slightly in appearance, the functions work in the same way. When it comes to receiving calls Android excels with a clear display of who's calling plus a simple two-button interface where calls can be answered or dismissed. In this tutorial we'll look at how these features work.

01 Receive a call
To answer a call, all you need to do is swipe right from the green icon. To reject it, swipe left from the red icon. You can reject the call with a message by swiping up.

02 Add a contact
Use the keypad option to dial a number. On some devices, as you start dialing, you'll get a list of familiar numbers. Click ‘Add to Contacts’ to add contact details.

03 Making a call
Making a call is as simple as navigating to the person you want on your Contacts list and pressing the Call icon. You can also call a person directly from your call log.
Reject incoming calls in an instant

For most of us, receiving and making phone calls is a perfectly enjoyable experience. But this is not always the case and there are times when we can’t answer our calls. One example of this is when particular people are something of a nuisance. Perhaps, for example, you find yourself bothered by calls from a sales phone number that you don’t want to deal with, or there is someone you know who is being a particular irritation. Your phone may well have a setting that allows you to reject calls from a specific number automatically. You won’t have to deal with these calls if you enable this setting.

Hopefully situations like these are few and far between, but there can be other times when you simply can’t take a call at a particular moment. You could let these calls ring out and go to voicemail, or you could set up a specific call rejection message and have this sent automatically. These call rejection messages can be as polite as you like – Sorry, I’m busy in a meeting right now but I’ll get back to you when I can” for example. They represent a halfway point between outright rejection and taking a call when it’s not convenient for you.

A number of the latest Android handsets come with some messages pre-configured, and it is really easy to customise this list and set up new messages of your own. So you see, when your phone rings, you’re not always obliged to answer it.

01 Reject a call
When you receive a call, you can accept it or reject it by choosing one of a number of different pre-configured messages on your device. All you need to do is tap the Send button adjacent to the truncated message you want to be delivered.

02 Auto reject numbers
To always reject a call from a particular number on the dial pad, tap Menu then Call Settings, then tap Call Rejection. Slide the toggle at Auto Reject mode to the right to turn on, then tap Auto Reject List to add the numbers.

03 Create reject message
On the dial pad, tap menu then Call Settings, and select Set Reject Messages. Tap Create to create your own message. Your customised message will now appear as one of the Call Reject Messages the next time your phone rings.
Discover the new Google dialler

The phone dialler in Android 4.4 now boasts a built-in Google search for incoming and outgoing calls.

In Android 4.4, the latest version of the Android OS (also known as KitKat), Google has redesigned the phone dialier. This may not at first seem like a big deal – a dialler is a dialler, after all. Except it is a big deal, and could even be seen as the first step towards removing the reliance on phone numbers in making phone calls.

Chances are you make the majority of your mobile calls by picking a name from your address book rather than punching in a number. The new Google dialler takes this a step further, extending this numberless approach to not only calls made to people that aren't in your address book, but to incoming calls as well.

It works through the integration of the Google search engine into the dialler itself. This is capable of searching both your phone and the web. So when calling someone in your address book you don't need to pick their name first; you just start typing their name and their number or numbers will automatically appear for you to call. To phone a business you no longer have to look up the business to find its number first; you simply start typing the name of the business and the dialler will search the web to locate its number for you.

This works with the type of business, too. Enter 'pizza' and your local takeaway will appear ready for you dial instantly. And finally, it also works with incoming calls. If you get a call from a number not in your address book, the dialler will perform a quick web search to try and identify who is calling.

---

01 Search your contacts
To place a call to someone already in your address book, simply start typing their name. This will then appear in the list, meaning you are left to just tap on it to start the call.

02 Search from the dialler
Alternatively enter the name or a general type of business. From the list of options that appears, tap on the right one to make the call. You can also save it to your contacts.

03 Incoming caller searches
To get the dialler to search for unknown incoming callers, take a trip to Menu→Settings and activate Caller ID by Google. You'll need an internet connection for it to work.
Assign contacts to Groups and Favourites

Save time by using Groups and Favourites to organise contacts

It is easy to amass quite a large number of contacts on your smartphone. This can particularly be the case if you like to bring in your Facebook and Twitter friends using automatic synchronisation.

If you do find yourself with a large number of contacts, then making a simple call to a particular friend you want to keep in touch with can be a cumbersome matter. If you have a lot of contacts on your smartphone, then the chances are that you won’t want to plough through them all every time you want to get in touch with important people. This is simply a bit of a time waster.

To help you get past this problem, you can designate particular contacts as favourites (or VIPs depending on your phone). If you keep the favourites list small, then it’s really easy to view your favourite contacts and get in touch with any one of them. They will only be a couple of screen taps away, saving you all the time and effort spent in scrolling and searching, instead meaning that within two or three taps you can be dialling a close friend, colleague or loved one.

There’s another way you can avoid wasting time with contacts, too. That is to set up groups. If you have groups configured, you can easily get in touch with everyone with minimal effort. The best way to do this is by sending a group SMS to all the people in your group, all in one go.

Fortunately configuring groups and marking contacts as favourites is really easy. It’s one of those things where a little energy used creates a big time saver in the future.

01 Favourite contacts
To mark a contact as a VIP, go to the Groups tab and then select ‘VIP’. Once in, tap ‘Add’ and pick a contact to add. To add favourites on other phones, tap on the greyed out star in the top right corner of all your contacts.

02 Group contacts
Tap on your Groups tab and then all of your existing groups will be listed. Open one and then tap on ‘Add’. You can now add contacts to that particular group to bunch them all together in one convenient place.

03 Create a new group
It’s easy to make a new group. Under the Groups tab, tap on ‘Add’ at the top of the interface and then type in the name of your group. Once it has been created you can start adding particular contacts to it as per the previous step.
Getting started

Find your way around the Messages app

Sending and receiving text messages is a simple way to stay in touch. Here’s how to master the process.

It’s not always a prudent decision to make an actual phone call. After all, people could be busy, you might not be in a place you can talk, or you may not be entirely comfortable with the prospect of making a phone call at that particular moment in time – the reasons are endless.

Fortunately, the vast majority of mobile phones released over the last decade-plus have possessed the in-built ability to send SMS messages, and Android-enabled handsets are no different. There are obvious benefits to sending a message rather than calling – the ease with which important information can be conveyed quickly and succinctly, the privacy it offers, and the fact that you don’t have to talk in case you’re in a situation where you cannot – so it’s probably handy to know exactly how to go about getting your messages typed up, ready and sent.

This guide walks you through all the simple and appropriate steps, from entering the number or choosing the correct contact, through to writing the message, and on to the actual sending process. It’s a process that’s reassuringly very easy to learn, but nevertheless, it never hurts to make sure you’re doing it in the right way in the first place. We’ve even thrown in a few tips to help you manage your Messaging app, including how to delete individual threads.

“There are benefits to sending a message”

01 Enter the number
If you know the number of the person you are sending your message to, tap on the ‘To’ text field and enter the number in full, including area/country code. Searches are dynamic.

02 Choose a recipient
If you have the number stored, tap the ‘People’ icon. When your contacts appear, scroll until you find the intended recipient. If your phone supports it, use the bar to the right to speed the scrolling up.

03 Write and Send
Enter your message in the text box. Your phone will send multiple messages if you go over the character limit. Once you’re done, hit the ‘Send’ button and your phone should take care of the rest.
An SMS overview
The basics of messaging a friend

Group messages
Most phones will give you the option to send messages to groups of people all at once. You can usually define who appears in these groups in your contacts, allowing you to send multiple messages with ease.

Re-read
If you want to re-read an ongoing chain of messages, or reply to a message sent to you, this is where you want to tap.

Settings
Use this option to customise the message settings to suit your needs, from text message limits and delivery reports to the language and message tone.

Compose message
This is the button you’ll want to tap to create a message from scratch, and not if you are replying to a message already sent to your phone.

Delete messages
It’s rare on modern Android devices to run out of space because of messages, but all the same it is possible to delete messages to free up room.

04 Message options
Hitting the menu button on your device while you’re in a message brings up a number of extra options, including the ability to insert a well-known smiley or even add text directly from another app.

05 Delete messages
To delete a series of messages, it’s a simple case of tapping Menu>Delete, selecting what you want to get rid of and hitting Delete. Be aware that many devices have no way of recovering deleted texts.

06 Call, don’t message
Making a phone call instead of sending a text is sometimes necessary. However, it’s easy to do this while looking at a message; simply tap Menu, then the Call button towards the bottom of the menu.
Explore Google’s most intuitive search tool

Google Now is your Android’s personal assistant when it comes to getting information on pretty much anything. By keeping an eye on what you’re searching for and your location, Google Now is able to provide you with the most relevant and up-to-date information that is useful to you.

The update to Google Now that comes with Android’s KitKat operating system provides even better search tools and more accurate results. When opening Google Now you’ll be presented with information that is relevant to you, showing updates to your favourite sites or weather information around your area.

One of the big changes to Google Now is its improvement to the voice recognition function. Much like Apple’s Siri or Samsung’s S-Voice, you can have conversations with Google Now to get more accurate results for whatever it is that you’re searching for. When searching in Google Now the app will not only search through the internet and your contacts but also any apps that are relevant to your search. This opens up a whole world of information to Google Now, allowing you to quickly connect to an app that appears in a search result, providing you with more information than ever when performing a search. As an example, if you were to search for a movie that you want to go and see, the Flixster app will appear as a result which you can then open to see showing times and locations for the movie. You’ll never have trouble finding exactly what you’re looking for again with KitKat’s updates to Google Now.

01 Activate Google Now
Google Now is inbuilt with the Google search app. Open the Google app from your apps list. Tap ‘Get Google Now’ then tap ‘Yes I want to integrate Google Now.’ Tap yes again to activate Google Now.

02 Using information panels
Scroll down to view provided details about information Google Now believes is relevant to you such as weather, travel info, stock market details and sports updates. Tap More for more information.

03 Open an app
Tap on an information panel to open the appropriate app that will display more information. For example when you tap on a travel panel, the Google Maps app will be opened.
**04 Modify info panels**
Tap the magic wand icon at the bottom of the window to customise Google Now. Tap on an option for your preferred transport method to adjust Google Now’s travel information.

**05 Add more information**
Tap on Sports Teams, Stocks or Places to add more information to adapt search results to your own preferences. You’ll be asked to add the name of a team, company or location.

**06 Edit the weather**
In the Customise Google Now window, tap Everything else to modify other information panels such as details on the weather. Choose which locations you want to receive weather information on.

**07 Search Google Now**
Back in the main Google Now window, tap on the top search bar and type in a search. Search results will include web results, device contacts as well as apps relevant to your search.

**08 Phone results**
Tapping on a contact name in the search results will open the Contacts app. Tapping on an app result will open the app. Tap Search Phone for more results from your device.

**09 Modify phone results**
Use the bottom toolbar to refine your results. Tap the menu button on your device and tap Settings. Tap Phone Search to adjust what apps Google Now uses when performing a phone search.
Getting started

Browse the internet on your device

The speed and quality of mobile internet access has progressed rapidly. Here’s how to start browsing.

Using the internet on a smartphone has progressed in leaps and bounds in recent times, and the experience of visiting websites and media content is better than ever. Browsers are becoming faster, and the rendering and buffering of media images is quicker than it has ever been. With the size of smartphones also increasing, viewing media and reading text has become easier, making mobile browsing an enjoyable experience.

The stock browser that comes as standard in Android devices has all the basic functions you’d expect, and will be the chosen browser for this tutorial. There are plenty of other alternatives, however, and users can expect to find around six or seven world-class browsers available to download from Google Play. Browsers such as Opera Mini, Firefox Beta and Dolphin Browser HD offer a browsing experience similar to what you would expect from a desktop computer on your Android device. With more recent devices, users could also try out Google Chrome (which is covered in detail in the next tutorial).

In this tutorial we will show you how to get started with the internet on your Android device. We’ll show you how to first find the browser on your phone, open up a website and then how to access the full range of settings your browser offers.

01 Open app drawer
From your home screen, open the app drawer. This will now take you to your list of apps. Select the Browser app. On some phones, this is called the Internet app.

02 Browser home screen
The Google home screen will load when you open the browser. For the purpose of this tutorial press on the toolbar on the top of the browser.

03 Type an address
As you start typing a web address, Google will offer suggestions for you to access. Press on the magnifying glass symbol once you’ve finished typing.
The stock browser options
Much more than browsing the web

Creating bookmarks
Create a bookmark to save a webpage that you may want to visit at a later date.

Viewing videos
Viewing videos on a browser can be a little hit and miss at times. The best bet is to use the official YouTube app and stream them directly from there.

Share page
You can share your favourite webpages with your contacts through the GMail client.

Find a phrase
Press the Find on Page option to search for a particular phrase or word in a large body of text.

Offline reading
Certain webpages and articles can be saved for offline viewing, meaning you can view them without the need for a browser.

04 Viewing sites
When the site has finished loading, you can freely look around it. Double tap on your screen to zoom in and out of any text you find hard to read.

05 Change your settings
Press the option button on the top right of the browser and select the Settings option. From here you can change your preferences and display options.

06 Switch between pages
Next to the option button is the tab button which, when pressed, allows you to switch between different pages you’ve opened in the browser.
Getting started

Search the web in Chrome

Use Google’s Chrome browser to locate the items you want.

One of the first things many people do when they use a mobile device is access the internet. The worldwide web is one of the most useful tools on the planet and being able to search for items from the billions of uploaded pages ensures you can make the very most out of it.

Since the Android operating system is made by search engine giant Google, searching is one of the most user-friendly and intuitive things you can do on your smartphone or tablet. While we have looked at the stock ‘Browser’ app in the previous tutorial, most recent devices will come with Chrome pre-installed. Chrome is Google’s own internet browser, and works like Internet Explorer or Firefox on a PC or Mac. For anyone who has used a browser on a computer, Chrome will appear rather familiar. But if you have not, then there is no need to worry. Much of the activity within Chrome centres around a very small part of the screen with the search facilities being handled by just one long white box. This makes it simple and intuitive to use.

You can type a web address directly into this box or you can use it as a search facility. It’s a quick and easy way to find items that you need. As well as typing in a query, you can also speak it into your device’s microphone. Again, this makes searching even easier and it means you do not need to fumble with a keyboard. It’s likely that you’ll find Chrome a much easier web app to use than the stock internet app, and use it for all your web-based needs.

In this tutorial, we will show you how to get up and running in Chrome, and within no time you’ll be able to find anything you want on the world wide web.

“Searching is one of the most user-friendly and intuitive things you are able to do on a smartphone or tablet”

01 Open Chrome browser
Open Chrome by tapping its icon on the Home screen. Typically, this will be the second icon from the left at the bottom.

02 Type in a URL
A URL is the address of a website. In the address bar at the top of the Chrome window, type in a URL. Tap Go.

03 Search via Google
The address bar can also be used to search for items. Google is the default search engine within Chrome. Tap the address bar.
Effective searching
Find your way around Chrome’s search features

**Images**
Here you can see a range of images. You can search for photos and pictures by tapping the Images option at the top of the screen.

**More features**
The More option lets you call up even more search features. They include the ability to search maps, news, shops, books, blogs and even patents.

**Search in page**
Tap the right-most icon in the browser to call up a menu. Within here is the ability to search for an item on the page itself, which is great if it is text heavy.

**Results**
The results of your search are shown in the main part of the Chrome browser. As well as being able to use the Google website, searches can also be made via Chrome’s address bar.

**Keyboard shortcuts**
When you tap the address bar, you will call up the keyboard. One of the handiest parts of this is the key in the bottom-right corner which says ‘.com’. Tapping this adds a .com suffix. Hold it down to call up other suffixes such as .net. It helps to speed up the inputting of URL web addresses.

04 **Type a term**
Type in a search term. We want a restaurant in Manchester, so type ‘Manchester restaurant’. Some suggestions are made.

05 **Look through the results**
When you tap Go, you can see the results. Scroll down. You can tap icons such as Images or Videos to tailor your search.

06 **Voice search**
Search terms can also be inputted via speech. Tap the microphone icon, speak into your device and search.
Getting started

Bookmark your favourite webpages

Discover how you can save webpages you visit often and get quick access to them on your device.

If you’re viewing an article on the internet, it can be frustrating if your reading experience is cut short for some reason and you end up losing the page that you were viewing. You can save yourself the time and hassle of having to manually search for the same article once again by creating a system of bookmarks that you can then use to speed up your browsing experience in the future.

A bookmark can be used to save a series of webpages, providing you with instant access to them. Any webpage can be bookmarked, as well as any page that has a video or podcast embedded into it. Bookmarks can be used as a reminder of a specific site, or act as a way of sending the link to a friend.

There’s no limit to the amount of bookmarks you can create on your Android device, but the way in which the browser stores and saves them differs. For this tutorial we are using the Chrome browser, but you may well find that different browsers often deal with bookmarks in different ways, although the principles remain the same.

First off we will show you how to go about finding your bookmarks, and discuss how to go about saving your bookmarks, how you can customise the look of your bookmarks, and we’ll even show you a few little tips on improving your bookmarking experience.

01 Find Browser icon
Open the app drawer while on the home screen then scroll through your apps until you find your preferred web browser. We are using Chrome.

02 Start browsing
Tap on the dual address bar/search field and then enter the URL for the site you wish to visit or keywords to search for. Now navigate to the site you wish to visit.

03 Save to Bookmarks
With the page you wish to bookmark open, tap the star icon next to the URL at the top of the browser. This will open the option to save the current page as a bookmark.
Manage your bookmarks

There are a range of bookmark options available

Bookmarks list
Tap here to access your bookmarked pages. You can manage your bookmarks by pressing and holding on them.

History
You can trawl through your recent history by tapping on the ‘Most Visited’ tab at the bottom of the screen.

Bookmark pages
Tap on this star icon to bookmark the page that you are currently viewing through the Chrome browser.

Sync pages
If you connect your tablet to your computer then all of the pages from your computer Chrome browser will be synced across.

Removing a bookmark
As well as adding a bookmark, it's also possible to remove a bookmark from your list. While on the bookmark screen, long-press on the entry in question until a drop-down menu appears. From here select the Delete Bookmark option.

04 Edit bookmark
From this pop-up window you can edit the name of the bookmark down into something shorter and choose a destination to save it to.

05 Changing details
Triple-tap on the ‘Name’ text to highlight it and then type in the replacement text. Tap the small arrow next to the ‘in’ option and choose from the three destinations.

06 Choosing bookmarks
From the main browser, tap the options icon in the top-right corner and choose ‘Bookmarks’ to choose a bookmark to go to or press and hold for other options.
Getting started

Control your phone using your voice

Although not a direct competitor to iPhone’s Siri, Google’s Voice Search feature was one of the biggest new features when the Jelly Bean update came along back in 2012. One of the biggest changes implemented into the Voice Search system is an improved voice recognition feature. The speech recognition system doesn’t need to be connected to a secure Wi-Fi network; plus you can search for anything on your device, as well as ask a series of questions that can give you access to the information you need, without having to type a single letter.

There is a fantastic amount to experiment with, including a detailed weather forecast, the latest sport scores, and even what the traffic conditions are like in your area. Android’s big focus on linking with other apps and features is clearly implemented with the Voice Search feature as it’s massively used throughout the device, and especially with Google Now.

In this tutorial we’ll take you through how to get started with the new Voice Search feature, and how you can use it with other apps to make your life even easier with your Android phone.

“As a series of questions that can give you access to the info you need, without having to type a letter”

01 What to search for?
Try and make sure you base what you search for around the features of Google Now. This will make your results clearer, plus you’ll get information from other Google apps displaying your results.

02 Slow and steady
Press the search bar for the microphone, or simply say “OK Google” to activate a search. Depending on your device, the quality of the microphone differs, so be sure to speak clearly into your device.

03 Get detailed results
If you search for something specific, such as the opening hours of a cafe or restaurant in your area, the Voice Search system will work alongside Google Maps to bring you the info you need.
Making a Voice Search
Find out how to search for information quickly

Search the web
As well as showing the information through the clever card system, you'll also find that Google will perform a web search based on exactly what you said.

Voice actions
One of the really cool features of Voice Search is its integration with other functions of your phone, allowing you to dictate emails and text messages, call contacts, play audio tracks and even call up turn-by-turn navigation by simply giving the command.

Start a new search
If you want to start a new search, press the microphone symbol on the search bar. You'll then be taken back to the blank Voice Search screen.

I don't understand...
If voice search doesn't understand what you said, you'll usually get an error message asking you to either repeat what you said, or start a new search completely from scratch.

Show the results
If the Voice Search function understands you, it should show you a card containing the relevant information to your request.

04 Get some help
If you're having any trouble using Voice Search, or need further help with setting it up, Voice Search has a help system that can be accessed on the voice search main screen.

05 Manage your language
Open up the settings menu to alter phrases or words you want blocked from your search. You can also change the display of the results and can even remove the card system all together.

06 Download voice packs
Google boasts an impressive amount of language packs that you can download, if English isn't your primary language. All results and searches can be in your chosen native language.
Getting started

Set up Gmail on your Android device

Gmail is, of course, a very popular email solution, and it was always expected that Google would create a positive experience on the Android platform. Unsurprisingly, it has done so, and in use it is intuitive and as quick to use as you could hope for on any mobile device. The installation process has also been carefully thought about, and in this tutorial we will show you the main areas to look for when adding your email account to your phone or tablet.

Adding your account is done in the main Settings menu, which then populates it to various other services and apps on your device, of which Gmail is included. You could in theory leave the settings exactly as they are and still be able to communicate with ease, but some simple adjustments will offer many benefits. For example, you can add your own signature which perhaps explains that you are on a mobile device, and also choose how many days’ worth of emails you require to be shown. Notifications can be stopped for added privacy if other people can see your device, and attachments can be set to be automatically downloaded when you’re on an available Wi-Fi network.

There are also many changes you can make to how the app works and what actions are taken automatically for you. Take some time to look through all of the options, and despite finding that most don’t need changing, you may find some that will work better for you when set up in a different way. The experience on Android is very similar to how it works on a desktop. Gmail is easy to set up and will help you every single day.

01 The latest version
Make sure you have the latest version of Gmail installed on your device. Go to Google Play and, if already installed, look for an ‘Update’ option and tap it. If it isn’t installed, download it.

02 Add your account
Go to Settings / Accounts and tap the ‘Add account’ option to add your Gmail account to your device. The Gmail app will automatically be connected with this and start working with your emails.

03 A full inbox
It may take a few seconds, but your latest emails will gradually be listed in front of you. Take some time to have a look around and understand the various controls on screen.
04 Access the settings
To access the Gmail settings, hit the menu key on your device and a selection of options should appear from the bottom of the screen. Now, choose ‘Settings’ to make your adjustments.

05 General settings
You will be given two options, one for your account and General settings. Tap the General settings option to see a list of the changes you can make. Most of the options are quite obvious.

06 Add a signature
Press the back button and tap your email address which will show a new list. Tap the ‘Signature’ option and start typing in your default signature for new emails. This will be used every time.

07 The other settings
You can now run through the other settings and adjust to your requirements. The number of days that emails are synchronised can be limited, and you can also specify the sounds for new alerts.

08 A new email
To create a new email, simply tap the icon at the top (an envelope with a ‘+’ on it) and then input an email address and subject in the next screen. After this, enter your text and send.

09 Send media
If you tap the menu key while in the email creation screen, you will be given the option to attach a photo or video to your email. You can also copy others into the email.
Organise your emails using Gmail

Almost every feature within Gmail is covered by the Android Gmail app. Let's get organised.

Managing a busy inbox can be a tricky business, even if you are using an advanced desktop system. Google, however, has created a mobile solution for its Gmail offering that gives you everything you need to keep you as organised on your mobile device as you would be anywhere else.

All of your labels can be accessed on the move, and you can also choose which ones you want to synchronise to your device. Spam can be handled in exactly the same way as on a desktop, and favourites can also be added by simply tapping one icon next to each email. No matter what your preferred method is for organising your emails, you can now do it when mobile and benefit from all of the Gmail features.

The search facility is exceptionally quick, with anything you type in being found in seconds no matter how many emails and folders you have in your account, and there are even advantages to the mobile app thanks to the touch-centric nature of the software. Archiving and deleting can be undertaken with a quick swipe, and scrolling through a long list now feels easier than ever before.

We will show you how to use each of these features, as well as how to make the most of them. Despite their easy-to-use nature, it is not always obvious where they are, and a little knowledge could help you organise your emails more effectively than ever before. You can now be organised 24 hours a day.

01 The label settings
Tap the menu key and choose Settings. Now, select your email address and look for the 'Manage Labels' option within the list. Tap it to bring up a list of your Gmail labels.

02 Manage your labels
Tap on any label in order to be directed to specific options for it. You can now tap in the main panel to synchronise messages that are held under this label in the future.

03 Check your folders
To view the emails stored under a particular label (think of it as a folder), simply tap the top left-hand corner and a panel will appear. Now, tap any label to read the emails contained within.
04 Add some favourites
You will see stars next to emails, which appear next to an email when you mark it as a favourite. You can then look for the ‘Starred’ option in the left-hand panel to read them.

05 Deal with spam
Tap the top left-hand corner again and scroll down to find the ‘Spam’ folder. Hold your finger down on any spam email and then tap the trash can at the top to remove it.

06 Archive your emails
You can archive any email by simply swiping left on it in the main list and then dismissing the new message that appears by pushing the email list upwards. You can also undo the archiving.

07 Search everything
Tap the magnifying glass at the top of the screen, enter some text, and the app will immediately start searching through all of your folders. The search mechanism is extremely quick and accurate.

08 Move your emails
When you are reading an email, tap the top-right folder icon and you will be presented with a list of folders. Select one and the email will be moved to it immediately.

09 Extra options
Hold your finger on any email in order to make a new row of icons appear. Tap the top-right icon and you will be able to report a message as spam, mute it or add a star.
Set up and configure the Email app

The stock Android Email app enables you to access all your accounts on the go.

On any Android phone there are two email apps installed. One is the Gmail app which ties in with your Google account and is the primary app you should use if you use the Gmail service for your mail. The other is the Email app. This is compatible with any and every email service, and gives you full access to all your email accounts, enabling you to set up and use, say, yourYahoo! mail and work mail and manage them on the same handset. The Email app has been redesigned in Android 4.4 KitKat, giving it a more modern look and feel. On some devices it may look different to the images in this tutorial, since some manufacturers skin the app to fit in with their own styling, but the functionality and basic set-up process will be the same.

The Email app is a powerful tool that provides you with the full complement of functions that you would expect on any phone or desktop email client. It is quite easy to set up, and in the case of the most popular email services won’t even need you to have any information to hand beyond your username (your email address) and password for the email account. If you have a more obscure account, or are trying to log into your work email you may need to have the server settings as well. You can find these on the support pages for your email service or get them from the IT support in your office.

01 Enter address
Launch the Email app and you will first be prompted to enter the email address and password for your account. Make sure you’re connected to the internet then tap Next to continue.

02 Auto setup
The app will go online and use your email address to automatically detect and configure the correct settings for the mail service. This process only takes a few seconds to complete.

03 Manual setup
If the app cannot determine the right settings, go into the manual setup option instead. First you need to choose the account type from POP, IMAP or Exchange (most office email systems).
**04 Enter server details**
You'll need the server details for your email account before you can complete this part. Once you've got them fill in the boxes – the server name is the main one to focus on.

**05 Checking frequency**
Whether you've used the auto or manual option the steps are now the same. Choose how often you want the app to check for new mail. Manual means it will never check.

**06 Your notification style**
Next choose the types of notifications you want to receive about your new mail. This might depend on how many emails you get – you don't want to be overloaded with notifications.

**07 Choose a name**
Finally give your account a friendly name. This isn't an essential step but is useful if you're juggling more than one account so that you will be able to manage them more easily.

**08 Restart the app**
With that done the app will exit. Launch it once again and this time you will see the contents of your inbox. Swipe from the left of the screen to view all of your navigation options.

**09 Adding more accounts**
If you want to add extra accounts to the app, tap the Menu button or the three dots icon in the top right, go to Settings and select Add Account. Now repeat steps 1-8 for your new account.
Getting started

Control your messages in the Email app

Become a pro email user with the stock Android app

The Android Email app is as powerful as a desktop email client. The latest version, launched with Android 4.4, has been completely redesigned and now shares a similar look to the Gmail app. If you use Gmail then that is still the best app to go with on an Android phone, but if you don’t, or have second or third accounts that you want to keep track of, then you’ll find the heavily swiping and gesture-based UI in Email to be highly intuitive and easy to get to grips with.

Email supports a full range of features for triaging and responding to the messages in your inbox. You can filter your mails using stars to remember important conversations as well as a bulk mail folder to get the junk out of your inbox. There’s also a powerful search function that enables you to home in on a specific email no matter how large your inbox happens to be. All of the features are replicated over multiple email accounts and POP, IMAP and Exchange are supported, which means you will be able to set the app up with any work or personal account you may have.

In this tutorial we’ll show you how to find your way around the Email app, how to organise your mail and also how to configure the settings to get the most from the app. Once you’re fully up to speed with the way the app works you’ll be emailing like a pro.

“You’ll find the UI in Email to be highly intuitive and easy to get to grips with”

01 Refresh your inbox
Launch the Email app and you’ll see your inbox. To make sure that you’ve got your latest messages, drag the screen downwards and it will check your online inbox and download any new messages.

02 Star a message
The sender, subject and first few lines of a message are displayed in the inbox view. You can flag important messages or conversations by tapping the star icon on the right side of the message.

03 Mark as unread
Tap a message to open it. Along the top row are icons to delete the message, mark it as unread and also to filter it to a different folder. Swipe left and right to see other mail.
The Email navigation bar
Swipe from the left to navigate through your email

Accounts
At the top, the email accounts you have set up are listed. Their inboxes are available in both separate and a combined view form.

Swiping gestures
The Email app's navigation system is built around swiping gestures. Swipe inwards from the edge of either screen to move between emails, delete and open various navigation options. Most screens have their own system of gestures.

Starred folder
Tap the Starred option to view the messages you've put a star next to. This is a useful tool for highlighting important emails.

Unread messages
Jump straight to your new emails by opening the Unread folder. It will hide the ones you have already seen.

Recent folders
When you start using various folders your most common ones will appear in their own list toward the top of the sidebar for easy access.

04 Add a signature
Tap the Menu button, choose Settings followed by your account. Here you can set up an email signature as well as a set of quick responses – predetermined phrases that you use often.

05 Swipe to delete
Back in the inbox display, hold your finger down on a message and swipe it to the right. This will send the message to the Recycle bin. Tap the Undo button if you need to get it back.

06 Batch-control messages
To manage messages in batches, select them by tapping the icon next to each of them. You can then use the icon bar at the top to delete, mark as unread or move them to a different folder.
Work with attachments in Email

Send and receive files through the Android Email app

If you are planning to use the Android Email app for serious email work, then the ability to handle attachments is essential. The app is capable of sending and receiving any file as an attachment, up to 5MB in size, and can also help you share files from cloud services like Google Drive or Dropbox. This helps reduce the amount of bandwidth you use.

It’s a straightforward process, although it differs depending on whether you are sending photos and videos or other types of file. In the case of the former two, you can add them directly within the Email app, but for the latter – for Word documents or PDFs and the like – you may need to install a file manager such as ES File Explorer or an office suite such as Quickoffice. Both of these will enable you to attach files to an email.

Receiving attachments is a more simple task. Your mail will come in indicating that it contains an attachment, and you merely need to tap on it to download and view it. Attachments won’t be downloaded by default so as not to use up your data allowance without you knowing. Bear in mind that if the attachment is on the large side you should try and download it over a Wi-Fi connection. Downloading over 3G may take time and use more battery power. In this tutorial we’ll show you the various ways you can attach and send files of all types to your emails.

“The app is capable of sending and receiving any file as an attachment”

01 Compose your mail
To get things rolling, start composing your email in the normal way. To do this open the app and from the inbox view, simply tap the Compose icon found at the top of the screen.

02 Choose an account
If you have got more than one account set up within the Email app you will need to select which one you want to use from the drop-down list at the top of the Compose screen.

03 Complete the mail
As you would for a normal message, complete all the details including recipient, subject and the content of your email message. Now tap the three dots icon in the top-right of the screen.
04 Attach an image
Choose whether you want to attach an image or video. You’ll then see all the files in either type you’ve got stored on your device. Pick the one you want to attach to your mail.

05 Send
The file is now attached to the email, displayed below the message body. You can add further files by repeating step 4, or hit the X button to remove an attachment. Hit Send when you’re done.

06 Locate another file
To attach other types of file, first find the file in its associated app. In this instance, we’re going to attach a text document that we’ve located in the free ES File Explorer app.

07 Attach it
Highlight the file and tap the Share icon. A window will open showing all the apps you can share the selected file with. Pick Email and the app will launch with the attachment in a new message.

08 Complete the message
With the file attached you can now go through the process of sending the message by filling in all the details. You can still attach images and videos to this email, too.

09 Share from the cloud
Finally, to share a file from the cloud, open your cloud service and locate the file. We’re using Dropbox. Select the file and hit Share. Pick Email and a link to the file will be placed in a new message.
Getting started

Set up and synchronise your calendars

Your Android device includes the functionality you need to set up all of your calendars and keep them synchronised.

Google has made the calendar feature of Android work as seamlessly as possible thanks to various revisions to the software over the past few years. To set up a Google Calendar that you are already using takes very little time, and some of the setup process is invisible to the user.

When you input a Gmail address into an Android device the first time you use it, the phone or tablet will look for a Calendar account and automatically populate it. This may sound too easy, but there are a lot of areas that you can tweak to make the calendar on an Android device as powerful or as simple as you require.

You can deal with multiple accounts and show appointments and events from calendar services. The openness of the system and the flexibility that’s included enables you to do anything you like with your calendars. You can select to view specific information, or even sync multiple calendars, allowing you to always be up to date wherever you happen to be. Once you are set up, you’ll have all of the information you need with you, no matter what device you’re using. Here we show you how to set up your calendar(s) on an Android device and sync in a way that suits how you work. Google Calendar is incredibly easy to use, and you’ll wonder how you lived without it.

01 Set up Google
The best place to start is by adding your Google account details to the main settings section. Go to Settings > Accounts and select Add an account. You will now be shown a selection of compatible accounts.

02 New or old
On the next screen you have to choose whether you want to create a new account or use an existing one. Select and then enter your email address and your password in the next screen.

03 What to synchronise
Once you have negotiated a couple of screens, inputting settings along the way, you need to choose what you want to synchronise for this account. Make sure the Calendar option is ticked.
**04 Initial setup complete**
Go back to the Accounts section of the Settings panel and tap Google. Your account should be listed and it should read ‘Last synced...’ below the name.

**05 Use the calendar**
Go to the Calendar app on your device and you will see any entries that already existed on your screen. If the account is new, the view will be blank.

**06 Multiple calendars**
Tap the menu icon and choose your account from the list that is displayed. Choose which calendars under that ID you want to synchronise by ticking them.

**07 Visual colours**
Each calendar that is synchronised will display its events in a different colour. This makes quickly recognising what you need to do very easy, with just a glance at the calendar.

**08 Corporate calendars**
If you want to use an Exchange-based calendar system, you need to go to Settings> Add an Account and choose Corporate. You will have to enter manual settings to set up this type of account.

**09 Use the desktop**
No matter what changes you make on your desktop or phone, they will be mirrored immediately on both sides as they happen. Calendar sync on Android is reliable and very fast.
Getting started

Add and repeat events in Calendar

The calendar on your device is the epitome of efficiency, so let’s understand how it works.

Google Calendar on Android has been improved many times as each new version of the operating system has been released. Now we can use a system that is as efficient as we could hope for. By connecting the calendar to a Google Calendar account, you will be given as much speed as you need and the ability to keep all of your devices in sync all of the time.

In this tutorial we are going to show you how to add events to your Android calendar and how to make the most of the features available to you. It sounds like a simple task (and once you have set it up, it really is), but by understanding all of the shortcuts and the defaults you can use, event planning will take a couple of seconds to schedule and you will be on top of your agenda in no time.

You can choose how new events are notified, which time zones they are delivered in, as well as hide and show particular events depending on specific aspects of each. If you have a calendar that’s busy, you may want to break your entries down into chunks by setting up separate calendars for each type of event. These will always be displayed in a fashion that makes it obvious which type of event is coming up.

We’ll show you how to manage all types of events and how to ensure that you can enter them as quickly as possible.

01 Where to start?
Open up the calendar and tap the date at the top. Now select Day and you will be presented with a view of the current day split into hours. Tap a time period during the day and a blue line with appear.

02 See the options
Tap the blue line again and a dialog screen will appear. In the Event Name field, add a description for the appointment in question. Make it descriptive, but not too long, to speed up the process.

03 Perfect timing
Selecting the time is now done using a clock face display. This will be useful for ensuring that you can check what free time you have in the day with just a glance, and is a nice way to set timings.
The event options
Manipulate new events in a myriad of ways

Meetings and appointments
You can select exactly how long you want each appointment to be, but a default time is always available. This will most certainly save you time when creating new events.

Set up the defaults
In the calendar settings, you can specify the ringtone for each event notification, default reminder time and if you require a pop-up notification. Setting these to your preferences early will save you having to input too much when creating new events.

Deal with guests
You can add guests to each appointment and email them automatically to see if they will be attending. You’ll find this is a huge time-saver.

Types of notification
The option of receiving alerts on the phone or via email is included. At times, the email option may work better if you are likely to be busy when notified.

Clever reminders
You can choose to be notified up to a week in advance of an event. This means that you should never miss an important appointment or occasion.

04 Flexible notifications
Further down this screen you can choose how and when to be notified of the event. Ranges from zero minutes to one week are available and you can choose either a phone notification or email reminder.

05 Repeating events
Some events will be repeated and you won’t want to add these every single time. Tap Repetition and then select the type of repeat you require. There are many different options available here.

06 Viewing each event
Your created events will now show up in the calendar. If you need to alter your events, you can tap each one to make changes to the time, location and the manner in which you’ll be notified.
Getting started

Keep detailed notes with Google Keep

Notes have never been so connected or easy to manage

Google Keep has been designed to let you quickly create new notes no matter what you are doing. If you are in a shop and want to note down a potential purchase or need to grab someone’s telephone number, you can do so in seconds with Google Keep. Text notes will likely be the most used option and these work as you would expect. All you have to do is tap the text note button and you can start typing content immediately.

The ability to change the background colour is also included, which can be useful when trying to group all of your notes together in visual categories. The colour choice is carried through to the main notes display for added convenience, and no matter which type of note you create, the indicators on the main screen show you what type it is straight away.

Simple task lists are available which automate much of the creation process, and a tap on each check box will clear the task when done. Snap a photo and it will be saved as a note with the ability to add text to it, or you can add an image to a previously created note. Full searching is also included, which becomes more useful as you create multiple notes, and everything you save and create is also available on the web at any time.

The standard thumbnail view may not be ideal if you have created hundreds of notes, but everything else about the app and service works perfectly. It is easy to use, efficient and hard to ignore.

01 Set it up
Go to Google Play and search for ‘Google Keep’. Download the app and open it, at which point you will be presented with a screen asking which Google account you want to use. Select one.

02 Some simple options
You will now see an almost empty screen with some icons listed at the top. Tap the far left icon that looks like a piece of paper to start creating your first note. The keyboard will then appear.

03 A text note
Simply start typing to create a new text note. You can make it as short or as long as you like, and also paste text and information from a number of other Android apps or the browser.
All of your notes

Post-it notes have become digital

Various note types
You can create a multitude of different note types by simply tapping any of the icons in the top bar.

Find everything
Tap the magnifying glass to quickly search through all of your notes to find the one you need immediately.

Can't type?
If a thought hits you when it's inconvenient to type, tap the microphone icon and save a voice recording in seconds.

Use the colours
Choosing different colours for groups of notes that pertain to a subject will help you keep them organised and visible at all times.

Access your notes anywhere
The notes you create will also be available on the web at https://drive.google.com/keep. If you make changes on your phone or desktop computer, they will be displayed on both devices. It is extremely convenient.

04 Add some colour
Tap the palette icon and a new box will appear in the middle of the screen. Select a colour and the entire note background will change. This is useful if you want to visually group notes.

05 Include an image
When viewing or creating any note you can tap the camera icon in the top right to quickly snap a photo and have it inserted at the top of the note. Photo-only notes are also available.

06 Tasks, voice etc
You can also create notes that include task lists and voice recordings by tapping the relevant icon on the main screen. Each note will be displayed as a thumbnail with obvious indicators.
Getting started

Back up your files to Google Drive

Take care of your vital files by ensuring you always have a copy stored in the cloud.

Your Android device, as brilliant as it is, can develop problems. A file or picture can become corrupt or someone could steal your handset. By backing your files up to an external location, or one based in the cloud, you will have greater peace of mind.

Luckily, Google Drive’s amazing Android app will take care of this little issue for you. Most newer devices come with Drive pre-installed, but if yours isn’t one of these, then when you install it from Google Play, it automatically begins to list it in your Share options. By selecting Google Drive, the item will then be uploaded to your Drive account and then kept safe.

By uploading to Google Drive, you are able to access your photos, documents, notes and webpages across other devices. Google Drive can be accessed via any web browser and on your PC or Mac, so a photo uploaded from your desktop can be viewed on your phone or tablet, and vice versa. This makes it a brilliant storage method for your items and it’s possible to make use of the organisation facilities of Google Drive as well. Items can be instantly placed into folders, keeping them safe, but even better the whole process is very easy.

So read on to find out you can quickly and easily access your files through Drive, and keep important documents safe.

01 Back up images
Once Drive is installed on your device you will be able to back up files to Drive. Find an image in your Gallery and click the three joined up dots in the top-right. This will bring up the Share via options.

02 Select Drive option
Google Drive will appear as one of the options alongside Bluetooth, Messaging, Gmail and any social media you may have. Tapping on the Drive icon will start the upload process.

03 Fill in details
Fill in the document title and specify your Drive account. Use the drop-down Folder option to specify where in the cloud space you want your file to save. Click OK to upload.
The Upload file screen
Getting the details right for you

**Multiple accounts**
You may have more than one Google Drive account. Perhaps you have one for work and one for home? Ensure you add these into Drive and they will show up in this drop-down menu.

**Using folders**
Placing items into folders makes for better organisation. You can also create a new folder. In the My Drive app, simply tap the Document icon and select Create New Folder. Why not have one called Images and another Documents, for example?

**Connection needed**
In order for you to be able to upload a file, you must be connected to the Internet. For larger files, it is advisable to be connected via Wi-Fi to avoid eating up your data allowance.

**Document title**
You can name your document, file, note or video anything you wish. Tap on the Document title and it will open the keyboard. Now input your new file name.

**Submitting the file**
When the keyboard disappears (click Done for it to go), you will be given an option to send the file to Drive for safe storage. Click OK for this.

---

04 Back up notes
You can also back up text such as notes jotted in the 5 Planner note-taking app. Again, you need to tap the Menu button, select Share via and fill in the form as you did for the previous step.

05 Documents and websites
As well as being able to share documents (Menu>Share>Drive), you can also share webpages too. Whenever there is an opportunity to share, the Drive icon will appear on your device.

06 Finding your files
Go to the Drive app, select the folder into which you have been saving your documents, files and images. You should find your files there, nicely backed up and safe from any accidents.
Getting started

Create documents using Google Drive

Need to produce a document or spreadsheet on the go with your Android device? We have the answer.

The app of choice when producing a word-processed file or a spreadsheet was previously Google Docs. Then Drive appeared, swallowed it up and added cloud facilities that took the app to a whole new level. Google Drive is now the default go-to app for producing documents and spreadsheets, not only allowing you to type and number crunch but save them automatically to the cloud in one fell swoop.

On top of that, you can collaborate quickly and easily, all from the comfort of your handset. Files can be shared with other people – whether that’s work colleagues, friends, or family members – and you can set different levels of privilege, giving them the ability to edit files or merely comment on and view them. This is the beauty of Google Drive. You don’t have to work in isolation and you can, in fact, ensure that everything is working towards the same aim on a document or spreadsheet, without having to rely on a desktop machine, or meeting up in person.

Here we look at creating a document or spreadsheet, working with them and then saving. The Google Drive integration means you can view and work on these documents wherever you have a web browser, making you far more efficient when on the move.

01 Create a document
Open up the Google Drive app, hit the menu button and then New. This will enable you to create a new folder, document, spreadsheet or photo. Pick whichever one of these you wish to create and tap continue.

02 Title the document
Type in the name of your document. If you have selected a spreadsheet, the process at this stage will be exactly the same. This is the name that the document will save as. When you’re done tap OK.

03 Start typing
You can now begin to type using the handy built-in keyboard. Pressing Menu on your phone brings up a variety of options to choose from. You can edit the document or share it, for instance.
Creating a document
Type and format in Google Drive

Typing
This area of the screen is where you type. Tapping on it will bring up the built-in Android keyboard.

Undo and redo
The arrows at the top of the document screen enable you to undo and redo any mistakes that you make while you are typing, making it easier to word process. You can also scroll across the toolbar to bring up colours, justification and bullet points.

Tick
When you tap the tick in the top-left, the document will appear as a full screen, so you can read it without any on-screen graphics getting in the way.

Spelling
As you type, Android will suggest spellings for you to speed up the process of your work. Tap on a word and Drive will insert it.

Formatting
You can choose bold and italics and you can also select different fonts as well as the size of them.

04 Sharing a document
Next you can type in the names of the people you wish to share your document with. You can allow them to edit the doc or comment, or you can decide that they can only view it.

05 Producing spreadsheets
In the image above you can see how the spreadsheet will look. You can add rows and columns using the Add option at the bottom and you can also tap on a field in order to place an entry into it.

06 Save the documents
As you can see here, our document is now nested within My Drive. Documents and spreadsheets automatically save so you don’t need to worry about losing any of your precious data.
Getting started

Find a lost phone with Android Device Manager

With Android Device Manager you can locate, lock or remotely wipe your lost Android phone or tablet.

It’s hard to think of too many things that are more inconvenient than losing your phone. Not only is it an expensive device, but it’s something you need with you at all times, as well as something that no doubt contains a large amount of personal information and data.

Whether it’s your Facebook or email that you’ve left logged in, or a load of personal photos or work documents, you really don’t want random people getting their hands on your phone. Fortunately, Android now comes with a built-in feature that is designed to help you recover your phone — or tablet — should you ever lose it. The Android Device Manager runs permanently in the background on your phone, and so long as it has an internet connection either through your SIM card or Wi-Fi, is able to report the device’s whereabouts. By viewing the Device Manager website on any desktop computer, or on another Android device using the Device Manager app, you can find it and control it. If you have misplaced the device somewhere around your house, you set it to ring to help you track it down. If it’s elsewhere you can view its location on a map and maybe track it down to your local coffee shop or somewhere you perhaps left it behind. Or if you suspect that it has been stolen you can remotely lock it and even erase it to ensure that although someone might have got their hands on your phone, they at least cannot get their grubby hands on your precious information.

“If you suspect your phone has been stolen you can remotely lock it”

01 Activate the Manager
On your phone or tablet go to Settings > Security and scroll to Device Administrators. You’ll see an option there called Android Device Manager. Tick this box and the service will be activated.

02 Find your phone
Use any desktop web browser and go to https://www.google.com/android/devicemanager and log in to your account. If you have multiple devices, pick yours from the top-left box.

03 View the map
Your phone will now be located and its position will be displayed on the Google Map. It’s accurate to a few metres, although does not update in real time so refresh the screen to see if it is moving.
The Device Manager screen
Find your way around the Device Manager interface

Device choice
The drop-down list in the top-left corner enables you to switch between all your Android devices connected to your Google account.

Where is it
The details card shows where the phone was last seen. This may be out of date if it hasn’t been turned on for a while.

Refresh location
Hit the Locate device icon to refresh the device’s location. It will connect again and update the map and info.

Change names
Use the pen icon to change the name of a device. This is useful if you’re managing several of the same model.

When your phone’s offline
Your phone or tablet will need an internet connection in order to report its position. Some commands, such as the Erase function, will be sent and executed the next time the device comes back online.

04 Give it a ring
If it’s somewhere nearby, you can click the Ring button. The phone will ring for five minutes at maximum volume. When you find the phone, press the power button to stop it ringing.

05 Lock and erase
If you can’t find it you can lock or erase it. Lock replaces your existing lockscreen, and you can add a message asking the finder to contact you. Erase performs a factory reset.

06 The ADM app
If you have more than one Android device, install the Device Manager app and you can track one from the other. All the features of the website are included in the app.
The next step

Download apps, take pictures, stay social and much more

92  A guide to the Google Play Store
    Browse the apps on offer

94  Purchasing an app
    Learn to buy, refund and sync the apps on your device

96  Manage, update and organise your apps
    Organise your apps and make sure you have the latest versions

98  Learn how to use Google Play Books
    Start reading on your device

100 Explore Google Play Newsstand
    Buy newspapers and magazines

102 Overview of Google Play Movies
    Enjoy movies and television shows

104 Learn to use Play Music
    Download songs to your device

106 Master Google Play Music All Access
    Subscribe and stream on Android

108 Take your first photograph
    Start snapping images

110 Share images with Google’s Photos app
    Show off your photographs

112 Edit your images across a range of apps
    Use Instagram, Google+ and Twitter to enhance your photos

114 Record videos on your phone
    Capture those magic moments

“Google Play offers apps, music, films, books and much more”
110 Share Photos
134 Chat with friends

116 Share photos and videos
   Send snaps and recordings to friends

118 Automatically fix and improve your photos
   Quickly enhance your images

120 Create Auto-Awesome movies with ease
   Produce short films in no time

122 Exploring YouTube
   Access the best videos online

124 Get to grips with Google Maps
   Find your way around Maps

126 Navigate in Maps
   Get yourself from A to B

128 Tailor your settings in Google Maps
   Tweak your preferences to get the most from Maps

130 Navigate using Google Earth
   Take a tour of the globe

132 Stay in touch using Google+
   Discover Google’s social network

132 Get to grips with the new Google Hangouts
   Chat with friends in this updated app

136 Play games and challenge friends online
   Discover Google Play Games

138 Using Facebook
   Connect with people online

140 Discover how to use Twitter on Android
   Browse your feed on the go
A guide to the Google Play Store

Google Play has recently been redesigned, so follow this guide to discover how to navigate your way around the store.

Recently receiving a complete redesign, Google Play is your one-stop shop for apps, films, games, books, magazines and music. Originally branded as Android Market, this store has come on in leaps and bounds over the past few years, offering users a much clearer and simpler way of accessing content on their Android device.

Having this central hub means all your entertainment needs will be serviced in one place. On the home page, you can see banners for the most popular current downloads on Google Play, and then individual sections for apps, music, books and movies. Movies can be rented or purchased, and viewed in standard definition or HD, and the latest songs and albums downloaded in an instant. You can also keep track of all your downloads in the My Apps section, which lists everything you have downloaded from the Store and also gives you up-to-date information to ensure you always have the latest version. You can even link different Google accounts to the Play Store and view your downloads on each as well as open or launch an app directly. The Settings section also allows you to adjust the download setup, changing whether or not you would like widgets created on your home screen for your downloads, and tailor the app to how it works best for you.

So here is a guide to the key parts of Google Play, what you need to know, and how to navigate the store to find what you’re looking for.

“On the home page, you can see banners for the most popular current downloads on Google Play”

01 Apps
From the home screen, hit the Apps button. Here you’ll find Staff Choices, games, featured apps and much more.

02 Music
Play Music is now accessible to all, meaning you can download the latest hits direct to your device, all with just a few taps.

03 Books
Head back to the home page and tap Books to see what’s available. Swipe to view new arrivals or see what’s popular.
The app page

The key parts of the Apps section

**Categories**
You can use the tabs at the top of the screen to access the various sections. If you swipe right to the ‘Categories’ section then you will be able to instantly see the most popular apps for each category.

**Recommendations**
The main ‘Featured’ page of the Google Play store provides recommendations for various apps. These could be the latest releases or just apps that are used by the staff. It’s a good way to see what’s hot.

**Options menu**
Here you can access your Wishlist, enter redeem codes to download products, access the app settings and get help and further insight into the Google Play Store.

**Search**
If you’re looking for a particular app then tap on the magnifying glass icon and then enter keywords into the search field to find something specific.

**A complete record**
The All screen lists everything you’ve ever downloaded and installed, all tied to your Google account. If you ever reset your phone, or buy a new one, you will find your favourite apps here.

---

04 Magazines
The Magazines section features a wide range of digital publications that you can either buy singularly or subscribe to.

05 Movies & TV
This section allows you to browse through films and television shows, from classics to the latest releases.

06 Search
Tapping the Search icon allows you to find something you’re looking for, plus all your previous searches are saved.
The next step

Purchasing an app

How to get the most out of Android’s growing app market, starting with your very first app download

The expanding range of utilities, games and other fun stuff on the Play Store is making the platform extremely competitive in the world of smartphones, and is something you should get stuck into in order to get the most out of your Android handset.

There are a couple of provisos before you begin, however. First and foremost you will need to set up a Google account in order to use the Play Store. Simply point your phone’s browser to http://mail.google.com and follow the simple set-up instructions, and you’re all set.

The other thing to think about is exactly how safe and high quality the content on the Store is for you and your phone. Unlike Apple’s App Store, the Play Store is a relatively unmonitored environment, which means, while there is often a greater range of choice in what you can download – at very cheap prices – rogue applications will sometimes appear that won’t offer you much in the way of value, or may even work against your unique handset.

It’s best to check out reviews from other users first (shown on the download page for each application), or download a demo of the app if one is available. On top of that, the Play Store offers an extra feature that its rivals don’t – you can refund an app. Once you’ve made a purchase, you have 15 minutes to try it out, and if you don’t like the app, you can get your money back.

All this said, the Play Store is a burgeoning shopping experience, so join us as we demonstrate how to start buying apps that will make your phone even more fun to use.

01 Go to the Store
Open the Play Store app and tap on the Apps banner. You can then search for the app you want to buy by pressing the magnifying glass icon, or browse the store.

02 Make your purchase
Once you have found the app you want to buy, complete the purchase. Click the price button, and then proceed as prompted in order to download it.

03 Test the app
You have 15 minutes in which to give the app a quick once over. Tap the app icon in the Apps screen to launch it and begin testing it.
Navigating the Play Store
Learn to shop quickly and effectively

Featured apps
The main screen features various picks to help you discover new apps that are of interest.

Start the timer!
The 15-minute limit starts the moment your transaction is completed. Bear in mind that if you’re downloading a large game, or have a poor network connection the 15 minutes might be up before you’ve had a chance to even finish downloading the app.

Search
The search function lets you track down what you want, or even type keywords in to help you locate an app you didn’t know even existed.

Sections
You can select the Staff Choices, Editors’ Choice and Games categories from the Play Store home screen.

More options
Tap the menu button and you’ll be able to access information on your account, your apps, as well as getting help and changing the settings.

04 Get a refund
Open the Play app and tap on My Apps. Locate the app, tap on it, then hit the Refund button. If you’re too late, the button will say ‘Uninstall’ instead.

05 Confirmation
Once the app has been uninstalled, you will receive an email confirming that your purchase has been cancelled, and that you haven’t been charged.

06 One time only
You can refund as many apps as you like, but only each individual app once. There’s no warning if you try to re-buy an already refunded app.
The next step

Manage, update and organise your apps

Discover how to update your apps and organise them into neat and tidy folders on your home screen.

Once you’ve purchased your Android phone, you’ll be surprised at just how quickly you start filling it with apps. Over time, you may notice that you keep getting messages informing you that there are updates available for your apps. This can happen quite often, as developers continue to improve their software and fix any bugs they find. By making sure you have the most up-to-date version, you’ll get all the features on offer.

In the first part of this tutorial, we’ll show you just how easy it is to update your apps, with just a quick trip to the Play Store all that’s required. The next thing you’ll notice once you’ve downloaded a variety of apps is that space on your home screens start disappearing fast. You want all your favourite apps easily accessible, but after a while the screen can start to become quite cluttered and you may struggle to find the apps you’re after. Don’t worry though, as on Android you’re able to organise and manage your apps in a number of ways.

Firstly, you can drag app icons around, placing them in a location that works best for you. This means you can have a whole screen of similar apps, or move your most-used apps to the main screen. You can also create folders for multiple apps, allowing you to reclaim screen real estate.

“You’re able to organise and manage your apps in a number of ways”

01 Locate your apps
The first step is to update the apps you have already downloaded. To kick things off, you’ll need to open up the Play Store, and under the Menu option, select ‘My apps’ from the list.

02 Apps to update
You can then see which apps on your device have available updates. If you wish to update just certain apps on your device, tap it and then select the Update button. Some apps will auto-update.

03 Update all
If you wish to update all your apps in one go, tap the top bar and your device will work its way through all the apps. You can stop this process at any time by tapping the Stop button.
04 Move your apps
If you wish to reorder your apps, long-press on an app icon. You’ll then be able to drag the icon to a different screen. Let go when you’re happy.

05 Manage your apps
There are some extra options available to you too. Long-press on an empty area of your screen and a dialog box will appear. Select ‘Add to Home screen’.

06 Create a folder
At this point, you could add app icons or widgets to the screen by selecting ‘Apps and widgets’. If you wish to create a new folder, select Folder.

07 Your new folder
A blank folder will now appear on your screen. You can move this to a different screen, if you wish, by dragging it. By long-pressing on the folder, you will be able to rename it.

08 Rename the folder
Choose a suitable name for your folder. You may wish to group together similar apps, or your most-used apps, making it easier for you to find what you’re after quickly and easily from your home screen.

09 Fill your folder
Once you have named your folder, it’s time to move some apps into it. In the same way as step 4, long-press on an app icon and drag and drop it onto the folder icon. It will then appear in the folder.
Learn how to use Google Play Books

On the Android platform, you can utilise Google's Play Books app to read ebooks on the fly.

On Apple you have iBooks, and on Amazon, you have Kindle. With your Google account you have access to Google Play Books, which effectively allows you to read ebooks from the comfort of your device.

An ebook is simply a digital form of a regular reading book, and is presented in a smartphone-friendly interface which can be formatted using a variety of options. Depending on your device's level of storage, you could have thousands of ebooks on your device.

Play Books forms part of the Play Store, but you may find that on your device it comes as a standalone app – either way you have access to a wealth of fantastic digital books that can be downloaded and enjoyed in seconds. In this tutorial, we are going to show you how to download a book from the Play Store, and the tools on offer when reading. If you want to get to grips with the app before spending any money, you'll find a couple of free books already installed on the app, which will give you a chance to play around with it.

Additionally, we'll look at some of the extra features on offer that will allow you to personalise your experience. These include the ability to zoom in and out, to highlight text, jump to pages or even alter the display. Play Books really is a great way to read.

---

01 The Book store
Open the Play Store app and locate the blue icon labelled Books. This is where you'll find millions of ebooks you can read on your device. Tap the icon and browse through the suggestions.

02 Find a book
Search through the store until you find a book that takes your fancy. You can then either download a free sample, or dive right in and purchase the book by tapping on the big blue button.

03 Play Books app
Open the Play Books apps and swipe your finger from the left-hand edge of the screen to open the sidebar menu. Here you can view your entire library, or skip straight to the last book you were reading.
The main book interface
Read your ebook however you want

**Display options**
The Display option is where you can adjust the ebook view according to your taste. This could involve adjusting the backlight or changing the font.

**Automatic bookmarks**
When you enable the sync option, the app will automatically remember the last page that you were reading. So if you exit the app or read a book on another device, you should be able to continue from where you left off.

**Contents**
Using the contents option, you can move between the various chapters of the book if you don't want to use the embedded search or fast track slider.

**Adding bookmarks**
If there's part of the book you wish to come back to, or you get interrupted and need to remember where you got to, simply add a bookmark by tapping on the option.

**Speak the words**
For visually impaired users, the option to read text aloud is extremely useful. It also highlights the paragraph that it is being spoken at the time.

**04 Change the Display**
Tap on a book to open it, then press the Menu button and tap 'Display Options'. Here, you can switch to night mode (white text on a black background), or adjust the font type, size or backlight brightness.

**05 Text options**
Pressing on a certain word or piece of text will bring up extra options, including a dictionary, the ability to highlight text or add your own notes. Tap again to remove the note or highlight.

**06 Fast track to pages**
If you want to jump ahead to a point in a book, or back to a certain chapter to see what happened previously, drag along the scrubber to the point you desire. Be careful though – it can be very sensitive!
Explore Google Play Newsstand

Manage your magazines and news feeds within the new Google Play Newsstand app

Combining together the best elements of Google Play Magazines and Google Currents, Newsstand is now your destination when you want to read the latest headlines or manage your digital magazine subscriptions.

Through the app you can subscribe to thousands of magazines that are currently available through the Play store, as well as download and read the latest issues of your current subscriptions. On the news side of things, users can explore various news sources based on their hobbies and interests and subscribe to the latest feeds of some of the biggest news outlets around the world. If you aren’t always near a secure Wi-Fi connection, no problem, as you can take advantage of the Save to Device feature, meaning you can read the latest headlines on your device no matter where you are.

The presentation of the app is slick and similar to that used by many major online newspapers. The content is constantly updating, capturing your attention with a host of bespoke options tailored to your interests. It’s likely that you’ll keep coming back to the Newsstand app several times a day to see new content – and one of the best things about the app is that it collates all news and magazine content in one place, so you don’t have to keep switching between various apps and websites to get your daily fix of reading material. In this tutorial we’ll be exploring the new Google Play Newsstand app and show you where and how to access all of its best features.

01 Side menu
After opening the app, read the guide to managing your subscriptions. Now open up the side menu for the app by pressing on the Newsstands icon in the corner of the app.

02 Add new material
Press the Explore option at the bottom of the menu. Here you can search for magazines and news feeds to subscribe to. You must first choose a category from the various ones listed within the app.

03 News feeds
There are hundreds of news feeds to subscribe to within each category. Simply scroll through the options listed until you find something of interest and press the menu icon underneath to subscribe.
04 The latest headlines
When you then open up the news feed you’ve just subscribed to, you’ll be able to see the latest headlines published by them, as well as links to any various social media accounts the outlet has created.

05 Add RSS feeds
As well as many news outlets, Newsstands also enables users to subscribe to the RSS feeds of popular webpages. After subscribing to the feed, you’ll be notified of new content added.

06 Read Now
Open the side menu and select Read Now at the top. This option will show you the latest headlines across your subscriptions, as well as quick links to download the articles onto your device.

07 Reading a story
Google Currents users will notice immediately the formatting used in Newsstands as it’s near enough the same. Text can be customised and images can be enlarged by pressing on them.

08 My Magazines
Through the My Magazines section you can manage your current subscriptions and add new magazines to your list. Use the search function or the category system to find a magazine of interest.

09 Share a magazine
If you’ve found a magazine that might be of interest to someone else, use the Share function to share its details. Press the menu icon and then Share to send the data to a gift or someone.
Overview of Google Play Movies

With Google Play, you can take advantage of the range of movies and TV shows and rent them on the fly.

Google first released its movie rental service in the UK back in October 2011, and with it, the launch brought a series of movies that you could rent from your handset.

Since then, Google has rebranded the Android Market and turned this into Google Play, which most handsets and tablets should have installed. It has even updated its growing catalogue of movie rental titles and television shows, so you can stream or download them for offline viewing at a later date. Typically, you get 24-48 hours from the start of watching a movie before it expires if you choose to rent, or you can purchase a film and keep it on your account.

Play Movies is extremely easy to use. Accessible as a standalone app on your device (or you can start shopping from within the Play Store app), firstly you can store your own personal movies that you’ve either recorded, or copied onto your device. But the main benefit of the Play Movies app is the ability to browse the huge collection of films and TV shows on offer. Whether you’re looking for the latest releases, bestsellers or all-time classics, there’s something for everyone here. And within a couple of taps, you can download a movie or episode and watch it on your device. The best part is that it’s stored on your Google account, so can be watched on any device.

01 The Store
From the first screen you can view any personal movies you’ve copied across to your device or films you’ve previously downloaded. To start browsing, tap Shop Movies to go to the Home screen.

02 Categories
The films on offer are organised in a number of different ways. If you’re not sure of a specific film you fancy, but want something from a certain genre, swipe across to the Categories tab.

03 New Releases
To get a more visual view of what’s on offer, swipe to the Top Selling or New Releases tab. These will display prices along with movie posters to see if anything jumps out at you.
Play Movies options
See what’s on offer from the Play Movies menu

My Movies
If you want to see which movies you’re already purchased, or jump straight to a screen so you can start watching one of your downloads, tap the ‘My movies’ option here.

Your wishlist
If you find a film you like the look of and want to make a note for later, tap this bookmark icon to add it to your wishlist. You can then view your wishlist from the options menu.

Share
Found a film you think one of your friends or family would enjoy? Tap the Share option to let them know!

Settings
Select the Settings option and you’ll be able to dig around a little deeper and tailor the Play Movies app to your specific needs and requirements.

Change Google accounts
Pressing the Android menu button within the app will bring up the Accounts option. In here, you can add or select different Google Accounts that you may own. This is ideal for separating your rentals between accounts.

04 Search the store
If you’re after a specific film, tap the magnifying glass icon at the top of the screen. The on-screen keyboard will pop up, allowing you to type in the title of the movie you are looking for.

05 Buy or rent
Once you’ve found a film you want to watch, tap its title and you can watch a preview, as well as read some reviews and a synopsis. Tap the Rent or Buy button to purchase and enjoy or buy it in SD or HD.

06 TV shows
If you tap on the TV option on the home screen, you’ll be able to browse the available shows on offer. These range from Homeland and Friends to Peppa Pig and Top Gear.
Learn to use Play Music

Listen to your favourite tunes on your tablet, download the latest tracks and use your device as a radio.

Play Music is a fairly new addition to the current crop of pre-installed apps that come with your Android device, but that doesn’t mean it isn’t already one of the best apps available to you. As well as being a great place to store all your music, it has a varied library of music for you to purchase and store directly on your phone or tablet. Many genres of music are covered and whether you’re a Beethoven or Slipknot fan, there’s definitely something for you. Pricing is also another plus and many of the most popular albums of the past few years can be bought considerably cheaper than Play Music’s competitors.

In addition to purchasing music, you’ll find a great storage and transfer system implemented here. Your current library of music can be directly transferred over from your PC or Mac into the Play Music account and can then be accessed whenever you want to listen. Controlling your music is also a major plus within Play Music and the controls that can be used to play, pause and skip between tunes are simplicity themselves to use. Dig a little deeper and you’ll also find a number of built-in features that you can use to tinker with how your music sounds at any point.

On top of all this, Google has recently released Play Music All Access. Previously only available in the US and Australia, All Access has now come to the UK. Enjoy unlimited access to millions of songs, create a personalised radio and much more. You’ll need to sign up to a monthly subscription, but free trials are also available.

In this tutorial we’ll guide you through the process of controlling your music within the Play Music app, as well as how to make the most of the settings you’ve access to while using Play Music.

01 Find the app
Open up the app drawer and select the Play Music app. If it isn’t there, download it from the Google Play Store.

02 View your music
All the album artwork on your tablet will now be displayed. To go to a specific song, simply press on a track or album.

03 Play the track
Select the track and it will begin playing. Once playing, you can use the controls at the bottom of the app to toggle the song.
Stay in control of your music
Get more from your tunes

Create a playlist
You can quickly and easily create a playlist to keep similar songs together, or have a separate playlist for certain themed songs, such as summer hits.

Put in order
If you’re interested in an artist, tap on the 'Shop this artist' option to be taken to the Play Music store.

The main screen
The main Play Music screen will display the songs contained in the album, along with the album artwork. It’s an enjoyable way to listen to music on the move.

Shuffle
If you don’t want to know what’s coming next, select the Shuffle options and Play Music will play your songs in a random order.

Storing music
Remember, Android devices come with different amounts of storage, depending on which model you buy. If you’re interested in adding a large music library on your device, then it would be a good idea to check the storage capacity.

04 Extra options
Tap the Settings icon at the top of the pages and you can choose to refresh your music or access further options.

05 Add to playlists
Another option is to add a song to a playlist. Select the in-song Settings icon and tap ‘Add to playlist’ and give it a name.

06 All Access
All Access is similar to Spotify; it allows you to listen to the huge number of songs on offer, all for a monthly subscription.
The next step

Master Google Play Music All Access

There's a lot to discover when you subscribe to Play Music's new on-demand streaming service

Although Play Music has quickly become one of the leading music apps available for Android, until recently it only supported music uploaded to the app, as well as music purchased from the Play store. Thanks to the release of its All Access subscription service, that has now changed. Launched as a competitor to the likes of Spotify, All Access looks to encompass the current features of Play Music, alongside a new service to provide on-demand music no matter if you stream through Wi-Fi or your phone's 3G/4G connection. Tracks, albums and playlists can also be downloaded for offline listening.

Although there are plenty of similarities between All Access and Spotify, All Access includes a wide range of features that propel it to the top of the current crop of available music subscription services. For example, All Access allows you to keep your music library updated across multiple devices without having to sync – so once a song is on your computer, it'll show up on your phone, too. The process is completely wireless.

In this tutorial we'll be looking at the various features of All Access, as well as discussing how to integrate your uploaded music into the All Access feed.

“Tracks, albums and playlists can also be downloaded for offline listening”

01 Import current music
After signing up to All Access, you'll be asked if you want to merge all the stored music across your Google accounts into your All Access account. This stops you needing to switch between accounts.

02 Access side menu
Press on the headphone symbol to open the side menu. Here you'll find the various features that All Access opens up. Press on the My Library option to continue to get instant access to your music.

03 Managing songs
You'll find all your stored music included in the My Library section of All Access. If it is music purchased directly from Play Music, you'll find all the artists listed alphabetically.
04 Find similar songs
One of the benefits of having All Access is the recommendations you receive. As you’re playing a particular song, scroll down to the bottom of the screen and find songs and artists that are related.

05 Use Radio feature
Another All Access exclusive feature is Radio. Through this feature you can select an artist and hear a continuous mix of their most popular songs, alongside similar and recommended artists.

06 Creating playlists
To add a song to a playlist, while on the song’s page, press on the menu button to the right of it and then select the Add to Playlist option. You can access your playlists through the side menu.

07 Access Explore
To source new songs, navigate to the Explore section via the side menu. When you load this section, you’ll find different playlists and recommendations. Scroll left or right to go to a different section.

08 Check the charts
The Charts section of Explore will list the most popular songs each week. You can play any song here, add the song to your library of stored songs with the menu button or follow the link to the Play store.

09 Find your favourites
Use the search function at the top of the app (the magnifying glass) to find something specific. All Access will then provide you with similar artists and songs based on your search in real time.
A vital component of any mobile phone today is the camera, and as you would expect, you have the ability to take photographs using your Android handset. The quality of the images depends on the camera built into the various devices on the market, but you wouldn’t expect to get less than 3MPs nowadays (and nor would you really want to if photos are important to you).

With your Android phone, you are not restricted to just pointing and shooting. The Camera app offers a whole wealth of excellent options to allow you to refine your images and get the perfect shots. You can alter the colour, saturation and contrast to name but a few. And you can adjust the settings to take into account the environment in which you are shooting.

Over the last few years, we’ve seen some major advancements to Android cameras. The options you have will differ depending on the version of the operating system you’re running and the device’s manufacturer. Smartphone cameras have really reached the point where they can challenge compacts as your main camera of choice, with devices such as the Galaxy S4 offering a 13MP rear camera. Plus you can tailor a wealth of settings to get the shot you want.

But no matter what version of Android you have, the fundamentals are the same. Your images are stored in the Gallery, or Google Photos on newer devices, so that you can manipulate them and share them with friends and family or post them to social network sites. And you can also flick the Camera app out of still picture mode and take videos.

**Camera explained**

Looking at the various camera options

**Menu**
There are many options you can play with to make your images sharper and better composed. Go to Menu>Settings within the Camera app.

**Anti-banding**
If you are taking a shot of a television or computer monitor (something that is rather common these days), then press Menu and head for the anti-banding feature. You can choose between 50Hz and 60Hz in order to get the smoothest, non-banded picture possible.

**Quick snap**
Click the round button on the app when you’re happy with your shot and the picture will be taken and then stored to the Gallery.

**View image**
You can see the last image you have taken in the top right-hand corner of the app. Click on this to see more options, including deleting it.

**Restore**
If you get in a muddle and need to go back to the original settings, just tap Restore to default settings.
Camera  Get snap happy with Android

01 **Take a photo**
Open up the Camera app on your phone. Line up your shot and tap the on-screen round button in the bottom right-hand corner (with the camera in landscape) to take a photo.

02 **White balance**
Press the Menu button and you can play around with the settings. They include the option to change the white balance, enabling you to toggle between auto, incandescent, daylight and more.

03 **Other settings**
You can also change the colour effect via Menu>Settings. There is an option, too, for picture quality with the choices including super fine, fine and normal. Picture size can also be altered.

04 **Sharpness and contrast**
There are various levels of sharpness and contrast found, again under Menu>Settings. It goes up in various levels and so you need to play around for the one that best suits your shot.

05 **On-screen options**
As you size up your shot, if you tap down on the screen, you can focus on various spots. Two interactive elements also show: a zoom option and a slider to make the image lighter or darker.

06 **View last image**
You can view the last image you have taken by tapping on the picture in the top right-hand corner of the app. This displays some options including the ability to delete it, share or set as wallpaper.
The next step

Share images with Google’s Photos app

Google’s Photos app is a must-have when it comes to managing and sharing your images.

The Google Photos app has become a worthy replacement for the Gallery app on your Android device. With the latest updates to Google services that come with the new OS, Google+’s photo tool has been transformed into its own standalone app where photos can be stored, edited, managed and shared. Within the app you’ll also be able to quickly jump to and from your Google+ account. The Photos app can be used to store and back up all photos taken on your device, as well as view photos which are synced with your Google Drive account. The convenience of the Photos app will depend on whether you are an active Google user, storing your images on Google Drive and running a Google+ account. Even if you don’t use Google’s social or storage tools that often, if at all, the Google Photos app is a great gallery app for your images.

Photos are arranged and ordered automatically into albums, and the Highlights tool locates the best images in your galleries. This makes sharing photos easier than ever, helping you avoid scrolling through photo after photo until you find one that is in focus. All videos shot on your device will also be stored in the app. Due to its flawless compatibility with other Google and non-Google apps on your Android device, sharing images is easy with the added bonus of being able to send images straight to your Google+ profile. The new Photos app from Google is the best way to manage and share all of your photos across all of your devices and computers quickly and easily.

01 Sign in
When you open the Photos app, tap the menu button and then tap Sign in. If you have a Google account already linked to your device, you’ll be signed straight into the app automatically.

02 Auto-Backup
Tap the menu button and then Settings>Auto-Backup. Here you can activate the backup tool which will store photos you take on your Google+ account, making them always accessible.

03 Highlights tab
Tap on the Highlights tab. This tab stores your app profile pictures, as well as images that Google+ has deemed to be the sharpest and highest quality photos, removing duplicates.
04 Browse through images
Scroll through your images and then tap on one to view it in full screen mode. Then it’s just a case of sliding from left to right (or vice versa) to go to the next image in the gallery.

05 Edit an image
Tap on the image in full screen mode to display the options bar at the bottom. Tap the paintbrush. Tap Crop and then use the pins to change the canvas size of an image.

06 Filters
Tap the tick icon and then tap Filters. Tap a filter multiple times to view different styles. Tap on the top-right icon to view the original image and compare it to the filter version.

07 Adjust an effect
Press and drag left and right on images to adjust the strength of applied filters. When adding a frame this technique will adjust the frame size. Tap the tick icon and then tap Save when done.

08 Share an image
With an image open tap the share icon. The top three options relate to sharing content on Google+. Below are all the available apps which you can share the image through.

09 Share on Google+
Tap Public in the Share window. Add a description. Tap location to add your current location. Tap the drop-down arrow next to public to change who can see the image and then tap Share.
The next step

Edit your images across a range of apps

Sharing photos is one of the most popular things you can do with your phone. Everywhere you go you can take high-quality snaps with your device and instantly share them so that others can enjoy your experiences. But just because it is quick it doesn’t mean you don’t want your shots to look their best. Fortunately, there are many extremely powerful apps that can help you fix up your shots in no time at all.

Delving into Google Play will reveal numerous image editors, such as Photoshop. In this tutorial we’ll be focusing on three of the simplest but most popular tools for editing your shots – and you may well find that you probably already have these apps on your phone.

First is the popular dedicated photo-sharing app Instagram, beloved the world over by photographers who want to give their shots a retro-inspired look, replacing the digital sheen of cameraphones with something more reminiscent of the analogue film days.

Next is Google+. This social network is already a hub for photographers, and supports a huge number of powerful tools for editing images in a way you would expect to see on a desktop applications.

Finally, there’s Twitter. The official app supports a host of Instagram-style filters that can quickly change the look of your snaps with a couple of taps, ready to post on your timeline. With these tools at your disposal there are no excuses for taking bad photos.

01 Using Instagram
Take or import your photo in Instagram. The app automatically makes all shots square, so you may need to crop it. Scroll through the pre-configured filters at the bottom and tap on them to try them out.

02 Applying edits
Tap the icons at the top of the screen to edit the colours and effects further. Changes can be undone easily, but when you are finished tap the green arrow in the top right to add a title and caption.

03 Google+ edits
Open one of your shots in Google+ and tap on the pencil icon in the top right corner to edit it. Hit the Enhance button to automatically correct and enhance your chosen photo.
The Instagram interface

Get the most from the Instagram app

**Frames**
Many filters come with their own style of frames. You can remove them if you don’t want them by tapping the frames icon in the top left.

**Depth of field**
You can fake a shallow depth of field in your shot. Tap the icon and select the circle. Now, position the blur circle on your image and pinch your fingers in and out to change its size.

**Colours**
Hitting the colour and contrast icon will automatically enhance the image. The effect changes depending on which filter you are using, so you may need to experiment with this.

**Filters**
Along the bottom are Instagram’s famous filters. Tapping one will apply it to the image, but nothing is saved until you press the green arrow icon in the top right.

**Non-destructive editing**
Once you’re happy with your edits tap the green arrow icon. Instagram will save a new copy of the shot, so your original is left untouched should you need it in the future.

04 Going deeper
For more detailed editing, tap Filters and pick one from the scrolling list. Hold your finger on the image to open a menu, then swipe up and down to adjust the strength of the effect.

05 Filters in Twitter
Start composing a tweet and hit the camera or gallery icon in order to add an image to share. Now, swipe the image left and right to see various filters and effects that can be applied.

06 The final touches
Use the icons at the bottom of the screen to change the strength of the effect, as well as to crop the image to the desired composition. Once you’ve finished, save it and you’re ready to send that tweet!
Record videos on your phone

Unleash your hidden directorial skills with Android’s brilliant Camcorder app

Introduced in 2009, the camcorder function built into Android phones is brilliant for those times when a simple photograph will not do. At its very basic, you can load up the app, press the record button and start shooting within seconds, which is great when you need to get an instant video when you’re out and about and have little time to waste.

But if you want to produce something a little more professional and thoughtful, you will need to tinker with the settings and take more time when composing your shots. By pressing the Menu button on your Android phone, you can call up the Settings menu. This lets you alter the quality of the video, in addition to optimising it for whatever end purpose you require. For example, if you want to share your video by MMS, then you cannot take a long, high-quality video. The settings allow you to tailor your video for this purpose. Likewise, you can choose the highest, HD quality which would look amazing on a large screen. As long as the camera facilities on your phone are good enough, you will be able to get wonderful results. Bearing in mind how far smartphone cameras have come after the past few years, the quality of video you can record has dramatically improved.

Accessing the camcorder is straightforward, and it works in tandem with the camera app so that you can quickly switch between the two. You will instantly know when you are in record mode because the bottom right-hand button suddenly becomes red, but because there is a slider to the right-hand side of the screen, this too gives the game away, and ensures you won’t mistakenly think you have recorded when you have just taken a shot. You’ll use Camcorder time and time again. All that’s missing is built-in editing facilities.

The video interface

A look at how the interface works

**Image**
The image in the corner shows one of the previous videos which you have shot. If you tap it, that previous video will play.

**Settings**
All settings are accessed by pressing the Menu button on your phone. The settings menus are displayed on the left-hand side of the screen.

**Toggle**
By moving the slider towards the camcorder or the camera, you are able to switch between taking still or moving images.

**Record**
Recording a video is a piece of cake. All you have to do is tap the red record button. Tap it again to stop your recording.

Where’s the zoom?

Zooming is not the most fluid function on your default camera app. You need to use your fingers to expand and zoom into the area. While this is not perfect, there are apps to better serve the zooming issue on your Android.

114 Android for Beginners
Camcorder Learn to record videos

01 Familiarise yourself
The Camcorder app can be launched via the Camera app. There is a slider on the right which lets you toggle between the two. Tap the red ‘Record’ button to start recording.

02 Flash
There are a range of settings for you to play with by tapping the on-screen settings option. Firstly, you can set the flash to On or Off, depending on the time of day or brightness.

03 White balance
You also have the option to change the white balance. This will depend on the lighting where you’re shooting, but changing the setting can produce a clearer picture.

04 Have fun
On your device there are a few fun effects you can add to your images. There are a range of humorous face options, as well as a choice of backgrounds.

05 Time lapse
There’s the added option of shooting time-lapse videos, and altering the duration of the gaps to suit your needs. These can create some nice video animations.

06 Video quality
As phone’s improve, so does the quality of the videos they record. Some now offer the option to record HD video. While it makes for better viewing, higher quality video will increase your video size.
The next step

Share photos and videos
Send your snaps to friends on social networks

With all Android phones having a quality camera built in, chances are you’ll be snapping more photos and shooting more video than ever. One of the joys of this is allowing others to see them and so, at some point, you are going to want to send an image you have taken to a friend or family member. The advantage of this over waiting and printing off a hard copy is the immediacy at which that person can see the image you’ve just taken.

The Android OS has an app called Gallery that’s built in. Here, all of your images and videos are stored and you can use Gallery to browse and select the ones you want. Each of the pictures are displayed as thumbnails so you can see at a glance the host of images that you have created.

By clicking on the Share icon, which is nested within the Menu option of Gallery, you can choose to send your images by email, Bluetooth or picture message (known as MMS). If images are too big to send as an MMS, then your phone will resize them to ensure that you’re not eating up too much data and to avoid error messages. On top of that, you have the option to upload your image to some of the most popular social networks straight from the Gallery app. This means that within seconds of taking a picture, you can share it with people around the world with just a few taps.

The process is basically the same whether you are sharing photos or videos, so there’s no limit to the kinds of content you can pass on to your friends. In this tutorial we’ll guide you through the process.

01 Open up Gallery
Any photos that you take using the Camera app on your Android device will be stored within the Gallery application. Open this up from your home screen or from your apps menu to begin.

02 Select an image
Navigate the folders in your gallery to see the photos displayed individually. Select an image by tapping it. After tapping the Share button you can also select multiple images. Tap an image again to deselect it.

03 Share the image
The Share button in the left-hand corner of the screen will bring up some basic sharing options, and tapping the More button will reveal even more. We’ll choose Mail first, which will open your email app.
Sending a picture
A look at how to send your snaps

**Share**
The Share icon is down in the left-hand corner. It calls up the various options that are available to you to send your picture to a friend or family member.

**Camera**
Tap the Camera button to take some new images with your phone, which will then be added to your gallery.

**Choosing**
Tap on an image to view it in full screen. From here you can then share the image by again tapping the Share button.

**Replace an image**
If you decide against sending an MMS with the image you have selected you can choose an alternative picture by clicking Replace. This will present you with a list of options, letting you attach a new image or, if you wish, take a new photo using your Camera.

**Options**
The most common options when sending a photograph to a friend are Mail, Messages and Bluetooth, and all of these are at your fingertips.

---

**04 Compose your message**
You image will be embedded in a message, allowing you to add some text and select a contact. This works the same if you select Messages or Gmail from the same place we selected Mail from in step 3.

**05 Share online**
If you want to share your image with a wider audience, then select one of the social network options (i.e., Twitter, Facebook, or Instagram) and a post will be compiled containing your image.

**06 Bluetooth an image**
To send via Bluetooth, ensure Bluetooth is turned on, select the Bluetooth options from the Sharing menu, select the device (tap Scan for Devices if none are shown) and it will be sent through the air.
The next step

Automatically fix and improve your photos

Take shots with your Android device and have Google automatically work its magic on them.

Google's Auto-Awesome can give a lovely twist to a host of images. When you take photos on your Android device or allow for older images to be backed up to Google+, they are analysed not only individually but in sets of blocks. Google looks to see whether images look similar to each other, for instance, and then figures out the best way to present them.

So if you have, for example, five photos taken in quick succession of the same object, Google will work out whether there has been any movement from one image to the next and it will create a moving gif file out them. Google shows you when an image has been altered by placing an Auto-Awesome icon on its thumbnail, leaving the originals untouched.

The good news is that it’s not a gimmick feature. Auto-Awesome really does have a positive effect. Eraser, for example, will make a note of the background of shots and work out what or who is the central focal point of the photos. So you could take a photo of a friend in front of the Eiffel Tower and have Auto-Awesome remove other tourists. Added to that is the ability to create panoramic shots and for Google to select the best features of multiple group photos to combine into one stunning image. With Auto-Awesome, you'll look more like a master photographer with no effort.

“The good news is that it’s not a gimmick feature. Auto-Awesome really does have a positive effect.”

01 Turn on Auto-Backup
For magical things to happen to your images, you will need to automatically back them up to Google+. To do this, turn on Auto-Backup by going to Settings>Auto-Backup>On.

02 Snap away
Now either take some shots or upload existing photos to Google+. These will be automatically backed up. Auto-Awesome will then start to analyse the photos you have backed up.

03 Get notifications
When you open up the Google+ app, you will be alerted if any Auto-Awesome photos have been automatically added. You can now dive in to see which images have been manipulated.
Finding Auto-Awesome images

How to identify an enhanced image

Main menu
In the Photos app, tap the menu button to see a drop-down list of options which will include Auto-Awesome.

Auto-Enhance
As well as Auto-Awesome, Google has a feature called Auto-Enhance which will look at the colour balance, noise and detail of images and correct them if they need to be enhanced. It will remove red eye, match skin tones and lighten shadows and you won’t need to lift a finger.

The icon
Note the icon next to the words Auto-Awesome. This is an indicator that an image has been enhanced automatically.

Find images
You can see the Auto-Awesome icon in the right-hand corner of a thumbnail. This shows that effects have been applied to the image.

Viewing images
Tap on the play button within a photo’s thumbnail to call up the image and see the effects that have been applied.

04 Seeing your images
Here we see, under the Auto-Awesome tab of the Google+ app, the images that have been eligible for enhancement. A typical enhancement is to make animated gifs out of similar-looking images.

05 Photos app
You can view the enhancements in motion by going to the Photos app on your device and tapping on the image that has been Auto-Awesomed. Tap the stars icon to see what has been done.

06 Share the image
Now work with the Auto-Awesome images. Share them via Google+, save them, email them, edit them and much more. There are various effects and each makes your image really shine.
Create Auto-Awesome movies with ease

Movie making used to be a laborious process. Not any more. With Google’s Photos app for Android and the brilliant Auto-Awesome feature, you can manually combine images and videos with a few clicks, sit back and allow your device to do the bulk of the hard work.

Auto-Awesome takes clips and arranges them into a mini-movie, complete with a soundtrack and one of a number of filters. These can be changed so you can re-order your clips, change the soundtrack to one of numerous tunes and swipe left and right to alter the look of your film. Equally, you can leave things as they are, press play and enjoy the presentation.

“The feature cleverly works out what will make for a great-looking video and lets you share the result”

01 Launch Photos app
Open the Google+ Photos app. It doesn’t matter whether you are in the Camera or Highlights tab; tap the movie icon at the top of the screen and you can start to create your movie.

02 Select images/videos
Select images and movies by tapping on the ones that you want to use in your video. There is no limit to the number that you can use. When you have finished, tap the Select button.

03 See your movie
The video will be rendered, pulling in the content that you have selected. It will make its own cuts and it will also add some music. You can play the video using the Play button.
04 Special effects
Filters are also applied to the videos and it will default to one of them. Here we can see that it has defaulted to an 8mm effect. To change the filter, just swipe left and right.

05 Add a title
Effects range from the great outdoors to vintage. The Time button will let you figure how long you want the video to be. You can also tap Add title and give it a name.

06 Rearrange clips
Clips – whether they be images or video – can be rearranged by pressing the Edit button. A timeline of your video will then be presented. Long-press a clip and move it around.

07 Add music
The Music button calls up a list of music. Rather nicely, the colour suggests how fast or cold the beat is (colder colours being slower). Choose a tune you like. Different themes have different audio.

08 Save video
When you are satisfied with the resulting video, you can save it. There are two options – a smaller file and a higher quality 720p one. Tap the option that you want to use.

09 Share videos
Once a video has been saved, you can share it by tapping on the Share button and selecting the social media service you want, or use email. The video will then be made available for sharing.
Exploring YouTube

Check out the wackiest and latest uploads from the most popular video community on the internet.

YouTube – the home of slightly disturbing, hilariously entertaining and sometimes interesting content.

Put aside its varying degrees of quality and you have a video portal that’s brimming with ideas, talent, experimentation, information and inspiration. There really is no other place as expansive as it online.

Its content is accessible with Android’s YouTube application, which enables you to log in to your own account to upload, create, share, comment and rate until your battery runs flat. If you can’t help but think that YouTube is a load of visually enticing waffle, then you would be wrong (for the most part). You can catch up on the latest film trailers, music videos, reviews of the newest gadgets, and much more. It’s just a case of having the patience to sift through the hundreds of completely unrelated uploads to find the one you want. And let’s face it, a big part of what makes YouTube so special is the viewers’ thoughts – positive, negative, or controversial.

Here we show you the ins-and-outs to searching for your favourite videos and how to navigate through the Android-adapted interface. Browse by category for a specific type of video, or just have a peek at what’s just been uploaded from the members of this ever-growing community of video enthusiasts. It’s a love-hate relationship no doubt, but it’s addictive on many levels. Here we show you how it all begins…

“Learn the best ways to navigate YouTube”

01 Looking for videos
Load up YouTube. If you know what you’re after, hit the magnifying glass to the top right and type what you’re looking for. You can also search within categories, by swiping the screen from left to right.

02 The categories
Here you can pick your favourite category by scrolling and tapping them. You can check out hot new videos under the ‘Trending’ category. Tap on a video to watch it. Your subscriptions are here too.

03 The back story
When you’re watching a video you can read up on information that the author has written, as well as how many people have ‘Liked’ or ‘Disliked’ it. If you like the user’s content you can also subscribe to them.
Find the video you want
Where to begin searching for clips

YouTube logo
Hitting the logo to the left takes you back to the front end of the application, displaying the latest uploads from the members of this vast online portal.

Searching
Speech recognition is another way to search for your favourite videos on YouTube. To access this option, hit the magnifying glass symbol once to go into Search mode, then hit the microphone symbol along the top. You’ll be prompted to “speak now” and the speech search will automatically begin.

Search
Tapping the magnifying glass at the top will open your keyboard. Enter in those all-important keywords for YouTube to find a relevant match for you.

Video length
The length of each video is indicated on the preview thumbnail, in minutes and seconds – so you know exactly what you’re getting yourself into before streaming a video.

Author info
You’ll always find the artist or author’s user name above the video. If you tap the user name you will still go straight to the video, rather than their profile.

04 Suggested viewing
Scroll down a little to view the Suggestions section. Here you’ll get recommended clips similar to the one you’re currently viewing. Tap the more button to see even more – the video will continue playing.

05 Having your say
Once you’ve watched a video you can post a comment, or see what others have said. From the Info panel you can also like or dislike a video by tapping the thumbs up or thumbs down icons.

06 There’s more!
By tapping More (or the Menu button) you can explore the extra features on YouTube. You can also share videos using the Share button in the top right. This enables you to post it to Facebook and more.
Get to grips with Google Maps

Discover everything Maps has to offer

There are few apps on any system that could be deemed truly essential by everyone from every walk of life, but Maps is certainly that. The app’s uses are seemingly endless, and you can lose hours of your life exploring the world through its intuitive interface.

Starting off with the basics, you can use the Maps app to search for locations. These could be potential holiday destinations, future living locations – anywhere. Simply enter keywords or postcodes into the search field and Maps will even make suggestions based on what you type, as you type it, to save you time. It will also help you get anywhere you want to go, providing step-by-step directions to ensure that you never take a wrong turn. By tapping on the compass icon in the lower-right corner of the app, Maps will jump straight to your current position (as long as you have your device’s various location services activated), and you can use this as a starting position to plot a route to anywhere else in the world.

A useful menu, accessible by tapping on the Maps icon in the top-left corner of the screen, allows you to access various overlays to provide at-a-glance warnings of heavy congestion or traffic accidents on your current route, as well as local cycle and public transport routes. From here, you can also change the appearance of the on-screen maps from the standard view to a photo-realistic bird’s eye view.

Maps is now also linked to Google Earth, so if you want more information on a particular place you can launch Google Earth from within Maps and really start exploring.

01 Searching Maps
To start searching Maps for particular locations, tap on the Search bar at the top of the screen and then type in place names or postcodes. Previous searches will be listed below.

02 Change the view
You can toggle different views in Maps in order to suit your personal needs. Tap on the Maps icon in the top left-hand corner and choose ‘Satellite’ from the menu.

03 Enable overlays
Another option that is accessible from the menu is to enable certain information to be layered onto the maps, including the current traffic conditions and transport routes.
Exploring with Google Maps

Know your way around the interface

Layer menu
Tap on the Google Maps icon in the top-left corner of the interface to access various layers – such as Traffic and Public Transport – as well as other options.

Accessory reports
By activating the Traffic field, heavily congested areas will be flagged up on your map, as will accidents, which you can read about by tapping on the hazard icons. If you see that the road ahead is sticky, you can command Maps to find an alternative route.

Search bar
Search for locations by tapping keywords or postcodes into this text field. Suggestions will start being listed based on what you type.

Directions
You can get instant directions from your current location to anywhere in the world or simply research routes between other places easily.

Your location
Jump straight to your current location in the world simply by tapping on the compass icon in the lower-right corner of the screen.

04 Launch Google Earth
As long as you have it installed on your device, you can also launch the Google Earth app from the menu, and in the process get a more detailed and informative view of locations.

05 Your current location
To find your current location on the map, tap the compass icon, which can be seen in the bottom-right corner of the interface. Make sure that the location services are enabled first though.

06 Get directions
If you want to get somewhere then you will be pleased to hear that Google Maps can direct you anywhere by tapping on the arrow next to the search field and then entering a destination.
The next step

Navigate in Maps
How to get from A to B with ease via Google Maps

As we have already discovered, Google Maps is rammed full of features to help you navigate your way around the world and explore new places without ever moving from your sofa. Now, we’re going to demonstrate just how easy it is to get directions to any of these places using Google Map’s intuitive interface.

You start the process off by tapping on the arrow icon, which is situated to the right of the Search field. You will then be required to choose a mode of transport from four options (which comprise of car, bus, bicycle and on foot) and then enter a start and end location. By default this is set to your current location, but you can change this if you like by tapping on the ‘My Location’ option.

Once your places have been determined, you can refine your route even further by tapping on ‘Route options’, which allows you to avoid motorways and toll roads, after which you will be presented with an overview of your journey, which includes vital statistics like the time that your journey will take alongside the distance. If you then tap on this box your route will be neatly laid out in turn-by-turn steps to help you on your way.

You can also get alternative routes if you aren’t completely happy with the suggested one, and if you tap on the ‘Start’ arrow you can launch Google’s Navigation service from within Maps, which has the effect of turning your device into a fully fledged satnav system, complete with spoken directions to ensure that you don’t get distracted by looking up different routes while you are driving.

In this tutorial we will guide you through the process of setting up a route planner in Maps and getting to where you need to be with ease.

01 Tap the arrow
Open up the Google Maps app. To get started with the navigation feature, tap on the two-pronged arrow icon, which is situated to the right of the search bar at the top of the screen.

02 Choose your transport
Maps can offer navigation by car, bus, bicycle and foot. Tap on the relevant mode of transport at the top of the window so the app can suggest the best route for your method of transport.

03 To and from
By default, your start position is your current location, which is determined by your device’s GPS. However, you can change this and set your destination by tapping on the options at the top.
Navigating with Google Maps

How to get where you need to be

**Transport options**
When getting directions and routes you can select a mode of transport – car, bus, bike or on foot – from the top of the screen.

**Launch Navigation**
You can also launch Google's Navigation service from within Maps by bringing up the turn-by-turn directions list and then tapping on the 'Start' arrow in the top-right corner of the box. This will turn your device into a satnav system with spoken directions to help you on your way.

**04 Route options**
Tap on 'Route options' and you will be able to command Maps to avoid motorways and toll roads on your journey. This will help you avoid any extra costs or the possibility of long motorway tailbacks.

**05 Alternate routes**
After this, you will be given a brief overview of your route. Tap on 'View alternative routes' to get other suggested routes to take. These might allow you to avoid certain areas, but they won’t be as direct.

**06 Get directions**
Tap the journey box to get turn-by-turn directions to your specified destination. Use the arrows at the bottom to cycle through steps, and read the on-screen directions to find your way.

**Your route options**
Tap on the ‘Route options’ link to command the app to avoid motorways and/or toll roads to help make your journey as painless as possible.

**Route overview**
Once you have set up a journey, tap on the overview box, which provides distance and time, to get turn-by-turn directions.

**Pinch to zoom**
You can zoom right in on the route that is outlined by pinching and expanding on the screen. This will allow you to see any hazards on the way.
The next step

Tailor your settings in Google Maps

How to access the Settings and what its features mean

If you want to get the most out of the Google Maps app then you can access the Settings menu to tweak certain features and access information quickly. To access the Settings, tap on the Google Maps icon in the top-left corner of the interface and then choose the ‘Settings’ option from the list. This will take you through to a new screen of options that covers all aspects of Maps.

From this menu you can switch Google accounts to easily retrieve all Maps’ data, such as previous searches and journeys and edit in your home and work addresses to make it easy to navigate to other destinations from these locations. Like we said, you can also track back through your entire Maps history to see all of the places you have checked out and all of the journey routes that you have plotted to make it easier to retrace your steps if you need to, and prevent you from having to enter the information needed to plot a new route.

The ‘Distance units’ option lets you change the measure of distance between kilometres and miles (by default it is set to ‘Automatic’, which picks a unit depending on where you are) and if you find that a road is labelled incorrectly or not at all within the app then you can send instant feedback to Google via the app to get things rectified.

There is so much to do that it requires a comprehensive menu to pack in all the options. Here, we’ll guide you through what each setting does in more detail, to help you tailor your Maps experience.

01 Go to Settings
Tap the Maps icon in the top-left corner of the screen to access a menu of options and then tap on ‘Settings’ in this list. This sidebar is a new feature of the latest Maps update.

02 Edit home or work
The ‘Edit home or work’ option allows you to enter your home and work address to use these as quick references when getting directions. This way you can easily choose where you’re setting off from.

03 Google location settings
The location settings option allows you to let Google use your device’s location, as well as activate Location Reporting and Location History. This is handy if you’re unsure where you are on the map.
Your Google Maps Settings

What the various options mean

**Switching accounts**
If you have multiple Google accounts set up on your Android device then you can tap this option to switch freely between them.

**Sending feedback**
Google has made it quick and easy to provide feedback for any discrepancies that you may find within Google Maps. With the ‘Shake to send feedback’ option enabled, you simply shake your device and a box will appear. Choose ‘Send feedback’ and then pick an option.

**04 Map history**
The Maps history option lists all of your plotted journeys and individual place searches, in the process making it easy to find a previously entered route or destination quickly.

**05 Distance units**
Another handy feature is the ability to tailor the units Maps displays information in. Here, you can switch between kilometres or miles as a unit of distance or let the app decide the unit for you.

**06 Send feedback**
If you spot wrong road names or missing roads then you can provide feedback to Google to get it rectified. You can also report any bugs or improvements you think would help the app.
Navigate using Google Earth
Take a tour of the globe thanks to the Google Earth app

The Google Earth desktop program first became available back in 2005. It made virtual travel a reality as the entire globe could be viewed through satellite and aerial photography from the comfort of your desk chair. Now, that same technology has come to your pocket. Google has ported the popular Google Earth program to your Android (or iOS) phone or tablet. The latest update includes some fun new features like Tour Guides and 3D imagery of popular destinations.

The app is completely free and full of handy little features that you’ll find useful and fun. By utilising the GPS function on your mobile device, it enables you to easily find your own location and see what’s around you. The menu system gives you access to several toggle-able layers such as Businesses, Panoramic Photos and Wikipedia entries, so you can discover more information about places.

In addition to this, the latest update of the app includes a 3D buildings feature (only for those devices that come equipped with a dual-core processor). Most major cities worldwide have the 3D building data already completed, and we expect more to be added over time. This feature allows you to perform virtual fly-through tours of your favourite destinations and see all the sights.

Exploring our globe has never been more convenient or fun. See your childhood home, or visit your holiday destinations ahead of time. Having the entirety of the world fit into your pocket is truly a wonder.

“This feature allows you to perform virtual fly-through tours of your favourite destinations and see all the sights”

01 Download and install
Download Google Earth from the Play Store by searching for it, and then install it. The app is free to download, but the 3D only works on dual-core devices, so be aware before you take up valuable space.

02 Launch the app
When you launch the app for the first time, a tutorial will show you how to navigate it. You will begin with a space view of our planet. Try dragging your finger across the screen to manipulate the Earth.

03 Check your position
First ensure that GPS is enabled on your device. Now open the Google Earth menu and choose ‘My Location’ from the options. You’ll be treated to a dramatic fly-in animation to your location.
Explore your world
Virtual travel made possible

Fly around
The more you explore, the more there is to discover! The information seems endless and will provide hours of educational entertainment.

Navigation
The multi-touch navigation can be a bit tricky to master. Swiping is familiar and the view pans as expected. You can also pinch and expand to zoom in and out. There is also the two-finger twist to rotate the view, and the double-finger drag will tilt the view in 3D space.

Compass direction
Like a real compass, the top widget always points north. Tapping it will hold your position, but reorient your view so north points to the top of your device.

Information icons
Floating icons indicate additional information to explore. The small yellow squares are Place icons and give brief information. The familiar Ws link to Wikipedia entries. These can be turned on or off through the Layers menu.

The Gallery
Slide open the dock on the bottom of the screen to view a gallery of bookmarks and fly-arounds relating to the area. Clicking on one activates the map movement, letting you explore fun new locales.

04 Find a location
Open the menu and tap Search. Type in the description of a location or a street address. You can also tap the mic button and speak the location name. Either way, the app will find your location.

05 Pan and zoom
Google Earth supports multi-touch gestures. Swipe to pan the camera around, or spread/pinch your fingers to zoom in/out. Tap the Look Around icon (an eye) to easily tilt the camera view.

06 See more info
Tap any floating icon to see more information on a place. There may be photos, video clips and Wikipedia entries (among many others), depending on which Layers you have enabled.
Stay in touch using Google+

Google’s social media app has undergone plenty of changes that you need to explore right away.

Google’s very own social networking service, Google+, has seen plenty of updates recently and its fan base just keeps on growing. A lot of this popularity is due to the social media network coming as a stock app on most Android phones. It’s extremely simple to connect and share with everyone you know in a matter of minutes. The way we use messaging has improved, and the overall experience is a whole lot easier to use.

For those who are still new to Google+, the messaging system is rather easy to get to grips with, and a lot of the social media features are explained when you first uncover them. Since its release, Google+ has received quite a facelift, as Google continues to tweak things to get all the features just right. Recently, this has included replacing its standalone Talk app with Hangouts, and integrating this with your Google+ account. The menu system has also been improved, and everything you’ll need is only ever just a couple taps away.

In this tutorial, we will guide you through some of the old Google+ features that have been altered as well as show you just how to use all the great new features that have been added.

“Google+ makes it simple to connect and share with everyone you know.”

01 Share a post
There are plenty of features to uncover in Google+. Adding new members to your circle can be performed here, and video and audio files can be added to any messages that you share.

02 Fast new menu
By opening up the side menu, you will notice a few changes have been made. The menu is faster to navigate, icons have been revamped and new sub menus have been added.

03 Check your position
Party Mode and the improved events page makes creating social events a lot easier. You can invite people on your contact list, or by searching other Google apps if you wish.
Inside the Google+ app

Keeping close to your friends and family just got easier

Add new photos
To showcase some of your photos, press on the camera icon at the top of the app. This will take you directly to the Gallery app where you’ll be able to upload photos, or add them from other social media sites.

Invite some friends
You can invite people to your party, as well as message them at the same time by selecting the speech bubble icon at the top of the list. Confirm everyone you want to add to your party, and press the OK button.

Public or private
If you don’t want everyone turning up to your private party, then make sure it isn’t set to public. The blue writing next to the time and date indicates whether the party is public or private. Pressing it will alternate between the two.

New notifications
Desktop users of Google+ will already be familiar with the ‘+1’ (ie share) button that can be used to send updates to friends about things you’ve discovered. Thanks to recent updates, you can now ‘+1’ directly from the new and improved notifications panel.

Tag your location
While in Party Mode, you can add a location to your party by selecting the Google Maps symbol halfway down the page. Pressing on this symbol will open up Google Maps, from which you’ll be able to select your exact location.

04 Mass messaging
Thanks to recent updates, adding people to a conversation is a whole lot easier, and the keyboard doesn’t crash as it sometimes did previously. This makes group discussions much simpler.

05 Mass video chat
One of the new features is the mass video chat option. Using your front-facing camera, you can start a video chat with someone, and add other people to the conversation too.

06 Better photo streams
The whole photo album app in Google+ responds a lot quicker than it previously did, meaning that scrolling through large quantities of photos is easier than ever on your Android device.
Get to grips with the new Google Hangouts

Enjoy the latest version of this brilliant communication app that works across multiple devices.

If you haven’t yet tried Google Hangouts, then the burning question is why not?

In addition to being able to hold video or voice chats with up to 10 people at a time – which is a great way to stay in touch with others and to cut down on travel costs – the app now lets you hold full-screen video chats. Friends, family and colleagues don’t even have to be connected either; you can still send them messages, photos and emojis which they will enjoy when they reconnect.

The app is also better for business users. It lets you search for people according to your organisation (so anyone with the same email suffix, for example) via what is called the Global Address List. This makes it brilliant not only for social use but for meetings. By setting up a Hangout, you can create groups of people that you can contact with the push of a single button. Imagine having Hangouts for your family, closest friends, select work colleagues and more, all of whom can be mass called or approached. Even better, all of your conversations can be revisited thanks to the archive function which lets you go back and see any photos or messages.

Finally, although we are concentrating here on Android, Google Hangouts is a universal app so it is also compatible with Apple devices. This opens up the possibilities and ensures that the vast majority of people can hook up with you. It works on computers, too.

“All your conversations can be revisited thanks to the archive function”

01 Share your status
When you start Google Hangouts, you will initially see a green box which will ask if you want to share your call status and mood with others. Tap Settings to select your preferences.

02 Use messaging
Google Hangouts allows for SMS and MMS messaging, letting you to send and receive texts for free. Tap the camera icon that initially appears next to the entry box to add images.

03 Create a Hangout
Tap the menu button and select New Group Hangout from the drop-down list. You can now tap on the names of people you wish to include in your Hangout. Tap OK when done.
Understanding the main Hangouts screen
How to perform basic functions with Hangouts

Menu button
The Menu button displays different options depending on what you are doing at the time. When the left side is more prominent, you can set moods or alter settings. When looking through messages, you can add new Hangouts.

Add a contact
Tap the + icon located at the top of the screen to add a contact and perform a task such as messaging.

Who you know
People you have already added to your Hangouts are listed on this page. You can also search for people via name, email, number or circle.

Making a voice call
Although there is a video function, you can, if you wish, make a voice call instead. When you activate a call, simply tap the camera icon at the bottom of the screen. When it turns red, the calls will be voice only.

Suggested people
Google Hangouts also suggests people you may know and want to add to your Hangouts. Select any of them that you wish to invite.

04 The keyboard
The new Google Hangouts app has the 2.0 version of the Google Keyboard. It has space-aware gesture typing as well as easy access to emojis if you are using KitKat. Just tap the emoji button.

05 Video calls
You can make calls via Google Hangouts. Video chat is available for up to 10 people for free and in real time. You see other people in your Hangout in small boxes on the screen.

06 Snooze away
Select the menu button with the left side options more prominent and set your mood, invite people to join you or set your snooze notifications to take yourself out of the frame for up to 72 hours.
The next step

Play games and challenge friends online

See how Google’s game service will rival the Game Center

For more than three years, Apple’s Game Center has been the hub of gaming on iPhones and iPads, and in all of that time Google has not really had a viable alternative – until now. The Google Play Games service is set to be the hub of gaming working across platforms for the overall benefit of the player. Each week, more and more games are being made to cater for the service that ensures that your gaming activity is linked to your Google+ account. Google has recently added a standalone app for Play Games, allowing you to view your achievements and more from one central location. It offers you the chance to compare scores, see yourself on a leaderboard, hook up with friends, play multiplayer games or scour for strangers to work out whether or not you really are as good as you believe yourself to be.

You can view achievements and show off which ones you have unlocked and you can invite non-players of your chosen game to download it and try it for themselves. The benefit for developers is obvious – the more you compete for scores, the more you will play and spread the word.

Having the Google+ platform as the glue that holds everything together, you can get on with those high scores and social gaming without having to worry about signing up for a new service which puts the games at the heart of your everyday life. Better still, Google plans to keep updating the service so it will only get better.

01 Sign in
You will know if the Google Play Games service is available in the title you have downloaded if it automatically prompts you to sign in or has a games icon, as with Grave Defence HD Free.

02 Agree to terms
In order to link the game with your Google+ account, you will need to tap OK when prompted. The game wants to know your name, basic info and people you are connected to on Google+.

03 See achievements
When playing the game it will pick up any achievements you have made and flag them in the score area. They will be publicly shared on Google+ if you indicated this in the previous step.
Welcome to Google Play Games
Get more from your gaming experience

Welcome
When you sign in to Google+ via your game, it will send you a welcome message. This confirms that everything has worked and that you are in.

Cross-platform
Google Play Games is not solely confined to Android devices. Unlike the Apple Game Center, Google wants to open it up so that even iOS developers will be able to take advantage, benefitting players on iPhones and iPads.

Sign out
As well as being able to sign in, you can also tell the game that you do not want it to link to Google Play Games services by signing out.

Scores
The Scores section of a game will be the most likely place to find your achievements, leaderboards and other options associated with the service.

Social media
Games do not necessarily force you to use Google+ services. Other social media may be available such as Facebook and Twitter.

04 Find other players
The Google Play Games service is great for finding other players. You can view your own circles to see if anyone has played the game you are using. Some games will allow for multiplayer.

05 Find strangers
If no one in your circle has downloaded and played the game you are using, then you can go public. This will show you the leaderboard of players unknown to you so that you can compare scores.

06 Invite people
If you want to invite someone to beat your score or get them involved in the game, then you can send them a message via GMail through the game to notify them of this fact.
Using Facebook

Stay in the loop with all your live feeds and messages synced to your handset using the Android Facebook app.

Facebook is the world's biggest social networking site with over 1 billion user accounts. Originally Facebook was a desktop platform but it has organically applied itself to mobile devices. Now there is no reason to be chained to a computer reading your Facebook feed and messages. The mobile version works perfectly in letting you stay instantly updated wherever you are and removing the need to sit indoors in front of a screen.

Over 200 million users access Facebook from mobile devices every month. Android users can benefit from the free official Facebook app available in the Google Play store. Facebook is the perfect platform to stay in contact with family and friends, letting them know what you have been doing since you last met. It is also a great way to follow interests, groups and even keep in touch with business contacts. Although the mobile app doesn't have the full functionality of the desktop version, it does offer a useful range of features.

The app enables you to use your existing login and sync all your contacts. Mobile integration of Facebook means you can use your handset to alert you when you receive new notifications. You can use handset features like the camera or the gallery to upload images quickly and easily.

We will be looking at how to sync your Facebook account, setting preferences and the basic functions of the app. If you do not have an account you can sign up through the app and start from there. All you need to sign up to Facebook is your name, a password and a valid email address.

01 Sign in
Log in with your Facebook account details. The app only supports one Facebook login at a time, but you can switch accounts once you're set up. Tap the Sign Up link below if you don't have an account.

02 Set contact sync
Syncing your contacts will add details such as email addresses, birthday, profile picture and status updates. Tap the checkbox to select to sync all your Facebook contacts or just link your existing ones.

03 Set sync interval
Open the Facebook settings menu. Make sure the notifications box is ticked. Now click on the 'refresh interval' option and set a suitable choice – this will determine the frequency at which Facebook is updated.
Your Facebook profile
A look at how to navigate your profile

Messages
Within the Messages section are all the private messages that have been sent to you during your time on Facebook.

News feed
The news feed is the place to go when you want to see what your contacts are up to. On the feed you’ll be able to look at photos and watch videos.

Nearby
Using the Nearby button you can check in at a certain location. You can also see if any of your friends are in the surrounding area.

Search
Use the search function to find friends and family who you want to add as a Facebook friend. You can also use it to find a specific page if needed.

Battery life
If there is a noticeable difference in battery life after setting up Facebook you can go back and tweak the refresh interval to a longer period or unlink some of the contacts you don’t want the extra information for.

04 Find the top stories
Tap the icon on the right-hand side of the News Feed button and you can then select to see the content that has been recently uploaded by your contacts by tapping the Most Recent button.

05 Using news feed
From the main Facebook dashboard you can get the latest updates, links and photos. From there you can like, comment and link to external content. You can tap on a photo to enlarge it.

06 Update status
To update your Facebook status from the home screen, click on the Status button in the top left. Click the text box, type your status and click Post to update it. You can also upload and post photos here.
The next step

Discover how to use Twitter on Android

Stay updated wherever you go with the official Twitter app for your Android device

Twitter is a real-time information network made up of messages called ‘tweets’. It’s free to sign up to and there’s also a free mobile app to accompany the desktop version.

Signing up for a Twitter account allows you to write and share messages with your friends and followers. It’s a great way to follow your interests through like-minded individuals, industry professionals, sports stars, celebrities and musicians.

If you read something you like and want to share, you can retweet it so your followers don’t miss it and get a chance to read the post. If you just want some search inspiration then Twitter lists all the latest trends so you can keep up with the latest news and events all around the world. There is even a list of suggested users in each of the categories to get you started. Once you have started to follow some people, what you should end up with is a vertical feed of interesting updates that you can scroll through and read at your leisure. These will often contain either links or images, or both.

Android’s official Twitter app is an accessible and easy-to-use platform for keeping up with Twitter. The app offers integration with your Google contacts, and handset notification updates as often as you wish with whatever you want to keep up to date about.

01 Sign in
On opening Twitter you will be prompted to sign in using your account details. If you do not have an existing Twitter account, click the Sign Up button and you’ll be able to create one.

02 Sync settings
Once you are signed up and logged in, click on Menu and then open Settings. Syncing contacts will display their latest tweets. Set the refresh interval for how often you want them to be updated.

03 Set notification alerts
While you’re in the Settings menu be sure to set the things you would like to be notified about. You can then select how you wish to be alerted about them. Your device may vibrate, ring, or light up.
Tweeting a message
A look at the Twitter menu

**Message users**
The @ sign in the toolbar at the bottom allows you to write your tweet and then direct it at anyone you are following.

**Bring up edit**
If you see a tweet in a search you have done, you can bring up the edit menu by long-pressing on it. The options are the same, but it saves you leaving the search list each time you want to do something.

**04 Find your friends**
Tap on the search bar at the top of the app. You can now type in the name of any friends and family you wish to follow. This can be their full name (you may get a few choices this way) or their Twitter handle.

**05 Retweet and share**
When viewing others’ tweets there is a menu bar underneath. You can ‘retweet’ the post (tweeting the same post on your profile), reply to it, add it to favourites or share it via other social media.

**06 Tweet messages**
Tap the pen and paper icon in the top right corner. Type the message and use the options below to add images from the camera or gallery, select the recipient and then press Tweet.

**Add camera image**
The camera icon will open up your phone’s camera and allow you to take pictures that you can add directly into your tweets.

**Add gallery images**
If you have already shot an image you wish to use then you can retrieve it from the gallery, allowing you to edit it beforehand.

**Enable location**
The target icon uses the phone’s GPS location data while you are tweeting. This adds geotagging information and makes it available under location-based searches.
With over 800,000 available apps, Google Play has emerged as a serious contender to Apple’s App Store. With many of the popular favourites now available on the platform, developers are looking to Android to expand their consumer base, and its open source nature means it’s easy for people to get their apps onto the store. But as always there are apps at either end of the quality scale, so in this feature we will show you the top apps available to download today, expanding the functionality of your Android device no end.
5 essential apps

Modern Combat 3: Fallen Nation
Price £4.99/$6.99 Developer Gameloft
A spin on the Modern Warfare franchise, Modern Combat 3: Fallen Nation is easily the best shooter for Android phones. The graphics are a feast, with textures and rich animation to rival the Wii. Nice touches include slow-mo pans when enemies are downed in style and subtle camera distortion when the player is hurt. The levels are varied, with dense jungles and frozen tundras to explore. Controls are touch-based, so the larger the screen, the easier the game plays.

Temple Run 2
Price Free Developer Imangi Studios
Temple Run 2 sees you returning to the jungle as you navigate cliffs, mines and zip lines as you try and outrun the crocodile chasing you. In essence, the game has the same charm that made the original a hit, but it’s as fast paced as ever and the need to be quick with your swipe and motion controls is still vitally important. Ensure you share your high scores with your friends.

CRUSH
Price £0.69/$0.99 Developer Radiogames
CRUSH is without doubt one of the most addictive games you’ll find on the Play Store. Although at its core it’s a simple puzzle game that requires users to clear the rows of coloured blocks on screen without letting the screen fill up completely, it has an insanely hard difficulty level. If you like a challenge and have some time on your hands, CRUSH is for you.

Fluid Football
Price Free Developer Fluid Games
In Fluid Football you play in a variety of cups, with the sole aim to win each match in the cup by completing a set of tasks that are outlined before the start of each match. You’re then placed in control of a small team of players, from which you can dribble, pass, lob and create runs before you attempt to score. Plus, there’s even expert commentary to help you out.

Clumsy Bird
Price Free Developer Candy Mobile
With the simple yet utterly tedious Flappy Bird causing a minor stir when it was released (and promptly deleted due to copyright infringement), this app does away with the lawsuits-inviting Mario pipes in favour of generic trees but the aim remains the same – get through as many gaps as possible without dying.

Games

With the power of modern Android devices in your pocket, it’s now possible to play the latest games at any time and in any place. Some true blockbusters await you in the Google Play Store, with action packed shooters, edge-of-your-seat racers and addictive platformers available.

Of course, controlling these games with accuracy is the key. Until you’ve played a game using touch-controls it’s hard to imagine how intuitive and easy it is. Puzzle and strategy games are easier to handle than ever before and it’s possible to rearrange the on-screen buttons to accommodate the size of your device. With in-built accelerometers it’s also possible to control games simply by tilting your device. Here we’ve rounded up what we think are the best five games currently available for Android devices. Some can be completed in mere minutes, making them perfect for commutes or long queues, whereas others are focused, lengthy titles that are great for filling long afternoons.

Clumsy Bird – one of the most annoying, yet strangely addictive apps you’re likely to play

Fluid Football, a more strategic take on the beautiful game...
Books and Reference

The internet has always been known as the greatest encyclopaedia the world has ever seen, with a tremendous amount of accumulated knowledge being added on a global level each and every day. And with more app development, more of this information is being made available to mobile users in packaged forms that enable users easy and controlled access. Many thousands of books are gradually being transferred to data to be accessed via small devices such as smartphones or specialist eReaders, while reference material is now being sorted into more manageable formats and under specialised headers and websites. Apps play a critical part in the new way information is being disseminated. You will no longer have to sift through data in a raw and unappealing format as, through the app’s interface, the information can be presented in an intuitive manner. Extra touches such as attractive font design enable you to digest it more thoroughly and more enjoyably.

“Apps play a critical part in the new way information is disseminated”

5 essential apps

**Kindle**
Price Free Developer Amazon Mobile
This app allows you to read Kindle books via your phone. Many classics are included for free as are sample pages of new titles. Optimised for use on Android devices, you have access to over 900,000 books, including popular new releases and over 100 newspapers and magazines. Amazon Whispersync can also sync your last page, bookmarks and notes across compatible devices so that you can pick up on another device from where you left off on your smartphone.

**Audible for Android**
Price Free Developer Audible, Inc.
If you aren’t a massive fan of reading on your Android device then you can still enjoy books being read to you through the Audible app. Experiencing books this way is perfect for when you’re working out in the gym or are using your device for other things. There are over 150,000 titles to choose from and the app comes with a wide range of features to help you enjoy great literature hands-free.

**Sky Map**
Price Free Developer Sky Map Dev
Through this wondrous app you can hold your device up to the night sky and learn all about the various planets, constellations, moons and more. The interface is simple and uncluttered and operates in real-time, so wherever you point your device is what you’ll see. You can also filter the display to only display what you want to and pinch to zoom in. If you have a genuine interest in astrology then this will be a great app to download.

**World History**
Price £2.33/$3.99 Developer solvapps
If history is your thing, then World History will be the perfect app for you. Learn about various eras that have formed the world as we know it and discover facts about things, people and places you never knew existed. The timeline feature is a brilliant addition to show you how a certain item or place got its name.

**Nook**
Price Free Developer Barnes & Noble
The Nook library is vast to say the least, and through the app you’ll have access to over 2 million books and magazines in a single app. The selection is phenomenal, and Barnes & Noble has done a good job in getting a wide variety of publishers on board with the app. More content is added daily so keep checking back on a regular basis.
Business

With the right apps installed on your Android device, it’s possible to have your own portable office in your pocket. There’s a wealth of incredible programs awaiting you in the Play Store, many free and packed with features. You can open and edit Word files, Excel documents and PowerPoint presentations, create and view PDF files, access any documents stored in the cloud and more – all via the touch screen on your smartphone. No longer do you need to be tied to a desktop computer or office. Using this clever software, the amount of unnecessary paperwork you’re likely to generate is also cut down significantly.

But what if you need to access the office computer while you’re outside or travelling? You’ll be pleased to hear there are apps that will enable you to remotely access any Mac or PC as well – we’ve covered all the bases.

But don’t just take our word for it. Read on to discover what we think are the five top apps for business users and give them a go yourself for a streamlined workflow.

5 essential apps

**Documents To Go**

Need to view and edit Word, Excel and PowerPoint files on the go? If so, Documents To Go is exactly what you need. It’s a full office suite for Android devices that enables you to not only edit Office files but also Google Docs and PDFs too. The interface isn’t exactly attractive, but it squeeze in all the necessary tools for writing and formatting on a small screen. Not entirely bug free, if you’re unsure give the free version ago, although this only enables you to view files, not edit them.

**Enhanced Email**
Price £6.24/$9.99 Developer Auantam Apps

As far email aggregators go, Enhanced Email is up there with the best of them. Import all your various email clients in to one place and manage them through this single app. It’s highly customisable and your inbox can be tinkered with to make it even easier to use. Where Enhanced Email really shines is that it caters for many older email clients that you don’t get with similar apps.

**Splashtop Remote Desktop**
Price Free/£5.00/$9.99 Developer Splashtop

This clever app enables you to control any desktop computer (whether Mac or PC) from your Android device. It works surprisingly well, showing your computer’s desktop on the screen. Setting it up is easy, simply download the Streamer app from www.splashtop.com/remote. It will automatically see your Mac or PC if it’s on the same network. You can pan and zoom, open files and even play games.

**PrintHand**
Price Free Developer PrintHand

Wireless printing has been made a whole lot easier with the PrintHand app. Simply connect your phone or tablet to your nearest printer over Wi-Fi, and print your stored documents there and then. You can even access your cloud account and print them from there, or simply schedule them to print at a certain date or particular time.

**Quickoffice**
Price Free Developer Google, Inc.

If you need to create Word, Excel or PowerPoint documents on your mobile device then this versatile free app lets you do so from scratch and save them straight to your Google Drive before sharing them with other people. It’s a cheap and effective means of working remotely from the office.

“**You can open and edit Word files and Excel documents**”
Comics

Collecting and reading comic books has been a popular hobby for years. Although the interest for comics had died down recently, it is quickly re-emerging with all of the new superhero movies being released. So with their popularity soaring, new and exciting ways to read comic books are becoming available. Many Android platforms are ideal for this sort of task meaning you can enjoy your comics like never before. It is not surprising, therefore, that a number of companies are cashing in on this capability and producing comic-specific apps. Some comic books are available for free while many others are available as previews, so you can check out a book before you hand over your cash for the next issue. And it’s a great way to get your favourites right here, right now without waiting a week for the shipment to arrive at your local shop.

“You can enjoy your comics like never before”

5 essential apps

Comics
Price Free Developer ComiXology
Reportedly, this app offers the largest digital comics store on the Android platform, acting as a reader for the same. Apparently, the archive of comics available for access has now topped the 6,000 figure with 300 of those available for free viewing and you can download and store with Guided View technology. The fact that the app frames each page in a readable manner is a highlight, allowing the story to be read as the author intended. This particular program also features good screen scrolling.

Cyanide & Happiness
Price 1.06/5099 Developer Explosm LLC
The Cyanide & Happiness comic has been running for years now, but they’ve only recently made their debut on Android. The comic itself has daily additions and offers some controversial humour that will certainly make you laugh out loud. There’s a huge archive of comics to look through after you’ve read all the new stuff, with 2,000 comics ready and waiting for you in the backlog. If you’re in to your comics, then definitely check this out.

A Comic Viewer
Price Free Developer Robot Media
This versatile app lets you view images and comics and is compatible with a wide range of formats, including CB2/ZIP, CAC, CBR/RAR, JPEG, PNG, BMP and more. It can read any comics stored on your SD card. You can read from left to right or right to left and the touchscreen interface makes it easy to zoom in and soak up everything that your comics have to offer. You can upgrade to a premium version that boasts more features, but as a freemium, this is a great option.

Marvel Comics
Price Free Developer Marvel
Featuring the world’s most popular superheroes, Marvel Comics contains hundreds of comic books ready for you to download. The app itself includes a variety of different reading views, and comics cater for plenty of ages. The comics aren’t free, however, and you’ll need to buy each comic individually.

Princess Girls Jigsaw Puzzle
Price Free Developer Touch Games Inc
A cheap and effective means of amusing young children, this app provides a selection of Disney Princess pictures that you can use to create simple sliding puzzles. The interface is cheap and cheerful but there is no doubting the endless hours of fun it generates.
5 essential apps

Skype
Price Free Developer Skype
Skype enables anyone to chat to another user for free, make video calls, send instant messages and call landlines or mobile phones. Why has it become the number one video-calling service? Probably because of its availability on nearly every platform on the planet. The Skype app for Android enables you to take advantage of most Skype features, including video calls. However, since it uses up a lot of data, you may notice that video quality is not as sharp as it is over a computer on Wi-Fi.

Dolphin Browser
Price Free Developer Dolphin Browser
Dolphin revolutionises the web browsing app by packing in features that make internet surfing even easier and more intuitive. For example, you are provided with your own customisable home screen from where you can leapfrog to your intended sites and you can adorn it with web apps to keep everything that matters to you in one place. Our advice is to try it for yourselves because you’ll not look back.

WhatsApp Messenger
Price Free Developer WhatsApp Inc.
WhatsApp Messenger is a great replacement for sending SMS and MMS to friends and family providing they also have the app installed on their device, and with WhatsApp’s growing popularity, that’s likely. It uses your EDGE/3G or Wi-Fi connection to send messages and files to your contacts, doesn’t cost a penny for the first year and is rather interestingly priced at $1.99 (about £1.20) a year after. With the ability to chat in groups, send files, share your location, contacts and more, this is a great way to stay in touch with the world.

Talkrany
Price Free Developer Talkrany
Talkrany offers a comprehensive and thorough messaging service allowing you to talk to your contacts wherever and whenever you feel like it. As well as text messaging, you can also send video and audio files to your contact. We especially liked being able to send a voice recording to them. Talkrany is already up there with the best of the competition.

FolderSync
Price £1.99/$2.95 Developer Tacit Dynamics
Cloud storage apps are in abundance and if you need some way of keeping tabs on each of your accounts, then FolderSync is your best bet. Use the app to conglomerate your SkyDrive, Dropbox and Google Drive accounts in one place without any hassle.

Communication

It doesn’t seem so long ago that we could only talk over long distance via the wizardry of landline calls. For the last 15 years, however, mobile phones have revolutionised how we communicate and only recently have apps added even more features to our handheld devices. We can now video call, send instant messages, files and more – all for free. Thanks to Google’s C2DM (push) technology we can also run apps constantly in the background without losing battery life, removing any need to send SMS and MMS messages.

With so many features available for free that can enrich a user’s life, there’s honestly no reason to buy a non-smartphone device. Want to send free messages and make video calls for free? You can only do that on a smartphone using apps. We’ve rounded up our five essential apps to get you started. Read on to discover how to communicate inexpensively like never before.
Education

As mobile devices become more integrated in classrooms, educators and students are looking for new ways to apply them to the learning process because these devices can add new dimension to the subjects. Applications on all of these devices can help automate current classroom (or out-of-the-classroom) processes and present new ways to learn that have previously been unexplored. As we know, it is sometimes the way that a person learns new information itself that affects how well they are able to retain it. As has been hinted above, technology has made it possible for children and adults alike to learn from almost anywhere. Whether students need help defining a word, locating the lumbar spine or practising French vocabulary, there’s definitely an app for that. Because of the imaginative methods employed by many of today’s developers, the innovative methods on offer provide fresh impetus to even the most bland subjects.

“Children and adults alike can learn from almost anywhere”

5 essential apps

Learn Piano
Price Free
Developer RubyCell
This app attempts to help you learn to play songs on the piano by turning into a Rock Band-style game. As the notes float down the screen you have to tap or hold the corresponding key. It’s a very user-friendly method of learning that users can easily transfer across to a real piano when they get proficient enough with the flow and timing of the song. It comes with a selection of songs installed but you can buy more in-app if you should wish.

Kids Paint Free
Price Free
Developer Virtual G5
Kids love to paint, and parents have to indulge them, but how would you rather do it – let them loose with real paints or hand over your Android device? This app is perfect for letting kids unleash the power of their imagination, doodling and dabbling colour on the screen and then shaking the device to clear the digital canvas and start over. A great app that will prove popular with children of all ages.

SPB English Cards – Learn By Heart!
Price £2.99/$4.95
Developer SPB Software
An app that takes the old-fashioned method of utilising a flash card sequence to teach English and gives it an Android twist by adding photos, native speakers’ dubbing, learning progress visualisation, smart adaptive algorithm and detailed statistics. Featuring over 1000 words and over 65 different categories, the program negates the need to first learn the word in your mother tongue. Instead, the image does the talking, you just learn English.

NASA App
Price Free
Developer NASA
If you’re looking for a source of NASA images and information on the Android platform, then this official app from NASA will be the place to go. Packed with in-depth information related to recent missions, you’ll also find latest tweets, videos, TV and radio channels, along with maps of the space centres. This really is the ideal app to learn about NASA.

Perfect Ear Pro
Price £0.99/$1.99
Developer Exaybachay
Perfect Ear Pro is an ideal app for a music enthusiast who’s looking to improve their accuracy in recognising musical sounds. The app covers a variety of scales and chords, and helps perfect your ability to hear when a note is out of tune. It’s hard to get started with it, but your musical recognition will improve tenfold over time.
Finance

Managing your money shouldn't get in the way of living your life. That’s why personal finance apps are such a natural fit for your Android device. They let you track your stocks, convert currencies, calculate how much you owe and track expenses – all on the go. The more full-featured among the available programs even let you manage multiple bank accounts with the ability to transfer money between them, plus you’ll always have your device with you.

The best options are those that take advantage of the Android’s finger-friendly interface or features such as location-awareness. For example, GPS or Wi-Fi can be helpful in finding the way to the nearest ATM. Most of these apps are free or available for a nominal charge, so there’s little to lose by trying them. Keeping track of your money can easily become a daunting task, but we have some apps here that can help you set budget goals, while others will help you convert currency and track your outgoings.

“Finance apps are a natural fit for your device”

5 essential apps

Expense Manager
Price Free Developer BSIniNews
If you have a job that involves the handling of expenses, it can become a bit of a headache after time. This app is designed to help as well as manage your income too. Initially, it can be set up to track your expenses and incomes by week/month/year, or by categories if you prefer. You can set up multiple accounts to separate different types of payments, there is the option to schedule payments and recurring payments and, if you need to, flag payment alerts.

PayPal
Price Free Developer PayPal Mobile
PayPal is the safest way to pay for goods and manage your money online and this app makes it easy to check your balance and send and receive money. What’s more, as more and more stores are now accepting PayPal as a legitimate payment for goods, you can use your mobile device as a digital wallet for sale and secure shopping. With regular updates boasting innovative new features, the PayPal app is well worth checking out.

Unit Convertor Full
Price £0.99/$0.99 Developer AIA Technologies
An all-embracing but easy-to-use conversion utility that enables you to convert between common units with a few extra surprises to boot. It can convert units such as length, weight, volume and cooking to engineering units such as power, force, pressure, frequency and energy and, as this is a financial section, many units of currency. The program is quite advanced in many areas. For example, it even has Ohm’s and Watt’s Law equations built in - in case you were interested!

Home Budget with Sync
Price £3.92/$5.99 Developer Anishu, Inc
Use the integrated expense tracker to keep account of all your incoming and outgoing payments in Home Budget with Sync. As well as seeing your monthly balance, you can create charts to outline where you’ve been overspending and when your bills are due.

My Budget Tracker
Price Free Developer Teknowledge Softwares
Plan your monthly and weekly expenses based around your income and outgoings in this useful planning app. As you go through the month you can add each small transaction to your planner and see how you’re faring each month. Compare your monthly expenses to see where you can improve.
Health & Fitness

Android devices are packed with clever technologies that can aid in exercise and improve your health. The GPS can be used to track your route and distance in real-time, the accelerometer can monitor footsteps, the web connection can compare food nutrition and the incorporated camera flash can even monitor your heart beat.

“Improve your health with apps”

Making the most of these features to improve your health is easy thanks to the myriad apps available on the Store. Nearly all are free, so there’s no excuse not to download an app, put on your sports shoes and get active.

We’ve scoured the Store and rounded up the five essential apps that can improve your health and fitness. You’ll find reviews of a distance tracker, fitness monitor, calorie counter and gym mentor here. With these apps and a little determination, you could be a whole new person in next to no time.

| 3D videos show you the correct workout technique |

Quickly check how many calories you’ve consumed

Endomondo tracks your duration and distance covered

---

5 essential apps

**Endomondo Sports Tracker**

<table>
<thead>
<tr>
<th>Price Free Developer Endomondo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anyone who exercises outdoors or over long distances will really appreciate this app. It tracks your progress in real-time via GPS, then creates a post-activity report. Simply tap Start on the Workout page and the app will track your progress, giving you audio feedback for every km or mile. You can compete and compare workouts with friends, upload results to Facebook and track your workouts over time via the website.</td>
</tr>
</tbody>
</table>

**Calorie Counter - MyFitnessPal**

<table>
<thead>
<tr>
<th>Price Free Developer MyFitnessPal, Inc</th>
</tr>
</thead>
<tbody>
<tr>
<td>This app enables you to keep a daily diary of your food intake and calculate how many calories you have consumed and how many you have remaining. The app has more than 75,000 food items stored in its database, so finding the correct entry is a breeze. It also works out how many calories you’ve burned during exercise. As a result, it’s easy and surprisingly fun to work out the best techniques for losing weight.</td>
</tr>
</tbody>
</table>

**White Noise**

<table>
<thead>
<tr>
<th>Price £1.22/$1.99 Developer TMsoft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sleeping apps are few and far between on the Google Play Store, that alone makes White Noise something of an oddity. The app uses ambient sounds to help you fall asleep at night and make sure you get a good night’s rest. It also help block out outside distractions which can wake you up and promises to lower your general stress levels. The perfect accompaniment to one of the fitness apps we have covered here!</td>
</tr>
</tbody>
</table>

**VirtuaGym Fitness Home & Gym**

<table>
<thead>
<tr>
<th>Price Free Developer VirtuaGym</th>
</tr>
</thead>
<tbody>
<tr>
<td>This is a fantastic app for learning new workout routines and discovering tips for maximising results. It includes dozens of exercises that can be completed in your own home or the gym, with 3D graphics that demonstrate how to complete them. This is the perfect app for those looking to improve their fitness.</td>
</tr>
</tbody>
</table>

**Zombies, Run!**

<table>
<thead>
<tr>
<th>Price £2.99/$4.99 Developer Six to Start</th>
</tr>
</thead>
<tbody>
<tr>
<td>If you are in need of a little motivation to get you running then how about a pack of salivating zombies? This ultra-immersive running game and audio adventure beams all of the horror to your headphones and makes you feel as though you are actually running for your life!</td>
</tr>
</tbody>
</table>
Essential apps

5 essential apps

Rightmove
Price: Free
Developer: Rightmove

Whether you're actually in the market for a new property or you just like virtually snooping around other people's houses, this app is perfect on so many levels. With full Google Maps Street View integration, you can take a tour of the area before venturing out to see the property first-hand to determine if the neighbourhood is right for you, and you can also view photos and floorplans full-screen on your device to get a feel for the building. It's a great app that will help you find the house of your dreams.

Gumtree
Price: Free
Developer: Gumtree UK

This free app lets you search over a million classified ads for stuff to buy. Whether you're in the market for furnishings or second-hand DVDs, Gumtree has it well covered. But it goes deeper too. If you're looking for a new job then Gumtree can help you out there as well, plus it can aid in your search for a new place to live, perhaps closer to your new place of work, and even help you find a car to drive to work. You'll be surprised what it can do for you.

Mixology Drink Recipes
Price: Free
Developer: Digital Outcrop

This is an impressive alcoholic drink mixing and bartending app that is packed with around 7,900 drink recipes plus 1,300 ingredients. Using a combination of unit types to mix, you can feature drinks you have to hand, enter those and derive recipes from the list which is a great way to get the most out of the stock you have available. Featuring a range of categories, the app can even utilise your phone's GPS to find the nearest off-licence for those dry moments.

Ancestry
Price: Free
Developer: Ancestry.com

Tracing your bloodlines has never been more stylish as through this app. You can build your family tree, easily add or update people, calculate the relationship between you and your ancestors, view records and photos saved to your tree, upload images at the drop of a hat and tag relatives. Engrossing and eye-opening stuff.

Buddhist Meditation Trainer
Price: Free
Developer: Spacebug

By using the Buddhist Meditation Trainer you can go through ten levels of enlightenment to help you reach your inner zen. The different meditations are amazingly simple to perform, and will definitely leave you in a chilled state. Use the accompanying timer to make sure you're meditating for the correct amount of time.

Lifestyle

In the Lifestyle section of this guide you will find programs that can both affect and enhance your routine or even change how you live your life, whether that be within a practical, environmental way or for rather more frivolous reasons. Lifestyle apps are often the most interesting and fun because they normally group together the most unusual and slightly bizarre programs on the Store such as spiritual examinations within the psychic field or even, it has to be said, the alcoholic one. You'll also see various items such as jokes and soap opera updates. These applications will offer truly personal services that follow you throughout the day and offer bursts of entertainment when convenient.

The key ingredients of lifestyle apps are cool, current and compelling data. They reflect the personal, attend to the fickle and serve those user preferences that can be viewed as fashionable.

“Lifestyle apps are often the most interesting and fun”
Media & Video

With a dizzying array of multimedia based apps to be found in the Google Play Store, it’s possible to have a never-ending source of video and entertainment on your smartphone or tablet ready for moments of boredom.

Those with a creative streak can find painting apps that enable you to create fantastic digital art with your fingertips or manipulate images with realistic brushstrokes. There are multimedia apps that can find and play nearly any video format, enabling you to watch classic movies and heavily compressed files alike.

It’s possible to catch up on your favourite TV shows and movies, watch live TV and copy any video file to your device for later. It’s also possible to stream video, leave comments and read thoughts by others, all in the palm of your hand.

In short, your Android device is an incredibly powerful tool for entertainment purposes. Read on to discover just a few of the best video, audio and creative media apps available on the Store along with some of their stand-out features.

5 essential apps

Podkicker Pro
Price £0.99/$0.99 Developer qvqa

There are some brilliant podcast management apps available to Android users, but none rival the scope of Podkicker. Use the app to search through over 200,000 podcasts and select exactly the type of cast you want to listen to. One of the best features it includes is a subscription system that lets you keep track of individual channels and receive automatic downloads when they have a new episode readily available to you; although this option can be removed if needs be. You’ll also find other features such as a sleep timer.

Vaulty Stocks
Price £3.09/$4.99 Developer Squid Tooth

Privacy can be an issue on Android smartphones and even more so if you’ve plenty of media stored upon it. By using the Vaulty Stocks app you can keep all your media safe from outside interference by putting it in a virtual vault that only you have access to. As well as keeping your files safe, the vault also has an identification system to double and triple check no one can get in but you. There’s also other security features you can explore to suit your needs.

Magisto
Price Free Developer Magisto

Magisto is a simple solution for people who want to create high quality videos, but don’t have the knowledge or skills to give their clips a full editing makeover. There’s a great selection of editing tools available, as well as a help menu if you get stuck. If your finished movie is looking a little rough around the edges, no worries, as Magisto automatically renders your movie in to a great looking piece. Steven Spielberg, we’re coming for your job!

Watch TV Free
Price Free Developer Rayunzahood

This app lets you stream a wide range of TV channels from all around the world for free. You don’t even need to set up an account, you can just select what to watch from the categories provided and within seconds the channel will be beamed straight to your device. The range of channels make this superior to TVCatchup.

Hide pictures – KeepSafe Vault
Price Free Developer KeepSafe

With smartphone cameras now offering the quality you’d expect from compacts, it’s likely you’ll be taking lots of pictures on your device. If you want to shield some from prying eyes, download this app to keep them safe.
5 essential apps

**IMDb Movies & TV**

*Price Free, Developer IMDb*

The IMDb app enables you to access the entire website from your smartphone, but it also packs some clever features that enhance the experience. For example, it's possible to view movie trailers, read critic and user reviews, check out movie showing times for your local cinema, shop for DVDs and Blu-rays via Amazon and see the latest US Box office results. All of this is wrapped in an easy-to-use interface that's perfectly suited to Android devices.

**Netflix**

*Price Free, Developer Netflix Inc.*

Netflix is quickly establishing itself as the go-to on-demand streaming service because it has such a varied and diverse range of films and TV programmes to watch. You can watch the entire boxset of Breaking Bad or enjoy the works of Alan Partridge on your mobile device. It also remembers where you're up to so you can continue watching later.

**TVCatchup**

*Price Free, Developer Styler Media*

This app is available for all smartphones, and for very good reason – it's brilliant. It provides access to the TVCatchup web service, through which you can watch a live stream of any freeliew TV channel. So with a Wi-Fi connection, you can watch TV on your device for free. All you have to do is set up an account and then you'll be able to browse through a guide to what's on before tapping on a channel and then watching. The stream tends to run a minute or so behind a proper TV, but this is a very small price to pay for what this great app offers.

**Sky+**

*Price Free, Developer BSkyB*

This is impressive technology! If you're an existing Sky+ customer then this app allows you to peruse the TV guide and command your Sky+ box to record something, even if you are on the other side of the world. It works fantastically well and is one of the most useful apps we have ever used.

**FPse for Android**

*Price £2.27, Developer Schruck & LDchen*

The hackable nature of the Android OS means you never know the type of apps you'll come across. FPse is a Sony PlayStation emulator, allowing you to play your favourite PS1 games wherever you go. You need to source your own legal ROMs to play on it, but the app is intuitive and will certainly warm the hearts of any retro gaming lovers out there.

“There’s never an excuse to be bored with an Android”

There’s never an excuse to be bored when you have an Android device in your pocket. That’s because there’s a nearly never-ending selection of fun apps to be discovered in the Play Store, many available for free and more being developed and brought out all the time.

It’s possible to instantly check the cinema times at your local screen without even entering your location, and while we’re on the subject of movies, you can read critic and user reviews, watch trailers and see how films are faring in the box office.

Some of the other entertaining apps that await you in the store include image manipulation programs that enable you to twist and morph photos into strange shapes. These intuitive and hands-on apps are great for keeping children entertained. Guessing games can also be found that attempt to read what’s on your mind with just a short set of specific questions.

Read on to discover some of the best entertainment apps in the Play Store. We’ve rounded up our five favourites, three of which happen to be free.
Medical

Mobile medicine is a growing sector in the app market. Apps have the ability to take advantage of the growing internal CPU power of the smartphone and the support of attendant, complex operating systems to enable you to achieve results that were unheard of just a few years ago. Associated with that, not so long ago the mere suggestion that your phone could provide any sort of medical assistance was a joke. But how times have changed. Some apps let you cut away images of muscle layers to see what lies beneath, while others offer an e-health record system or even a smartphone-based blood pressure monitor. Some medical programs can be downloaded and used for a bit of fun, some can be almost used for educational purposes while others provide a genuine use or offer advice to enable you to change your lifestyle in a positive way.

“Some programs can enable you to change your lifestyle”

5 essential apps

Breathing Zone
Price £1.25/$1.99 Developer Breathing Zone

Surprisingly, breathing correctly is a hard thing to do, and for those who have irregular breathing, then Breathing Zone is worth checking out. The app monitors your breathing levels to see how fit and healthy you’re and alert you in case you need to see a doctor immediately. It also gives advice on helping those suffering anxiety and how breathing can help you. After using the app for a while, you should have your breathing under control and generally understand how important keeping tabs on it actually is.

Medscape
Price Free Developer WebMD, LLC

Medscape provides clinical information for physicians, medical students, nurses and other healthcare professionals. Included within this app is all the latest medical news — which is updated daily — a searchable medical database, and the ability to save and email articles of interest. The app also contains detailed information on the prescription of over 8,000 brand and generic drugs plus all relevant images and guidelines.

NHS Health and Symptom Checker
Price Free Developer NHS Direct

With many of us put off by visiting a doctor or going up to the long waits at A&E, this Android app is perfect for help diagnosing problems. Simply scroll through the symptom checker and accurately choose what applies to you, answer a few basic questions and you’ll be advised on what action to take next. Although this is obviously no replacement for going to a doctor, it is definitely a good port of call to get an idea of what may be wrong.

Medical Terminology and Abbrev
Price £1.25/$1.99 Developer Simple Tree

If your diagnosis from your doctor has left you slightly baffled, or you are struggling to understand a medical term in a text book or on a website, then this is the app for you. Breaking down medical jargon into simple terms, it’s also a great app for all medical students who are looking to understand all the terms.

Anatomy Atlas
Price Free Developer Focus Medica

This enormous anatomy guide provides a variety of ways to learn, review and teach the various parts of the body and how they work. Each body part has an animation to help you understand what it does, and you can even skip between different areas of the body.
Music

It wasn’t so long ago that jukeboxes were the only way to store dozens of albums in one place and play any track at will. Now, though, we are totally spoilt with the ability to download and play millions of songs through the tiny Android device in our pocket. We can even stream live radio programs – all at the tap of a finger.

With the shift to storing music online and listening to it on any device, Android is at the forefront with support for Amazon’s Cloud Drive and Google Play Music. That means you can upload your entire music collection and listen to it at any time – without taking up precious space on your SD card. There’s a wealth of other great abilities awaiting you in the Google Play Store, including apps that help find music from your favourite bands or apps that can recognise music playing in the background. We’ve rounded up five essential music apps to help you get started in this area.

Amazon MP3
Price: Free Developer: Amazon.com
The Amazon MP3 Store is quickly catching up with iTunes as the number one place for music online. You only need to read about the free Lady Gaga album giveaway to see how serious Amazon is at taking that spot. This app enables you to buy, download and listen to music from the Amazon MP3 Store, and features an attractive, bright interface that’s easier to use than the stock music player. US users can also save and stream their music over the internet via the in-built Cloud Drive feature.

Spotify
Price: Free Developer: Spotify, Ltd
By giving you instant access to millions of songs, Spotify is a brilliant means of discovering new music and listening to new stuff before you make a decision on actually buying it. The only downside is that, unless you pay for a premium subscription, you have to tolerate adverts popping up in your playlists, but really this is a very small price to pay. You can enter searches for artists, albums and songs and create your own playlists for others to listen to.

SoundCloud
Price: Free Developer: Soundcloud
If you’re heavily into music then this app lets you hook up with your favourite recording artists and sample some of their new tunes before everyone else. SoundCloud is akin to a social network for music fans and more and more established artists are using it to gauge opinion of new projects and more and more up and coming bands are using it to link up with new fans. The audio on offer is staggering.

Winamp
Price: Free Developer: Nullsoft
After installing the Winamp app, you’ll be able to play and manage the music currently stored on your Windows or Mac, and then in turn sync your entire library of music between devices. There’s also full iTunes support for those who want to stream their virtual library of music without having to root their phones or tablets.

ZPlayer
Price: Free Developer: Odeskami
ZPlayer is an audio player that allows you to tailor your music experience. Album artwork looks absolutely fantastic, and the app’s design uses tiles and stylised text. For audiophiles, ZPlayer also includes a built-in equalizer that you can use to heavily customise your songs to perfect their sound.
5 essential apps

LinkedIn Pulse
Price Free Developer Alphonso Labs
Pulse takes a selection of both news and social networking sites and organises them, in aggregate fashion, as a series of tiles on your device’s screen. Just press a tile and you access the news from that site. Pulse is multitasking in nature because you can browse news as you read and, if you find something you like, it takes just two taps to share it with someone on a social networking site. You can also import news from Google Reader. The news itself is divided into a range of subjects for perusal such as Breaking, Technology, Sports and so on.

Flipboard: Your News Magazine
Price Free Developer Premanand
This app stylishly brings together world news and all of your social network feeds in a magazine format. You can simply flick pages and tap on stories to discover what is happening in your world and the world at large. It’s an imaginative and innovative way to help you digest news and see everything from posts and photos shared by friends on Facebook to all the latest travel and entertainment news.

Pocket
Price Free Developer Read It Later
If you haven’t got time to read all the articles that are of interest to you, use Pocket to keep a virtual record of them and read them whenever you feel like it. There’s no limit to how many articles you can save for future reference, and on top of all of that, once something is placed in your pocket it automatically syncs across all of your devices so that you can access it from anywhere, on any device and even without an internet connection.

Umano
Price Free Developer SoThree, Inc.
After discovering a story that interests you, instead of reading it through the app, Umano instead uses a voice actor to read the story out to you. Voices are easy to understand, and stories are read at a steady pace. Each story also comes with a direct link to the published piece.

Google Currents
Price Free Developer Google Currents
Delivering beautiful, magazine-like digital editions of specialist publications, such as Forbes and The Guardian, Currents uses Google search technology to build a set of editions tracking the most recent trending stories in categories such as entertainment, sports, science and mode – and all can be read offline.

News & Magazines

Arguably, the combination of news text along with the mobile platform is a match made in heaven. In fact, the concept of the 24-hour news world has largely been forged around the mobile phone. The smartphone has turned news access on mobile platforms into an accepted and increasingly specialist medium which has encouraged mobile magazines to take firm root in many genres. It is little wonder then, that you will see newsstand publications offering free content as an app to partly encourage you to also buy the paper version or perhaps to try and tempt you with further data coverage upon the payment of a fee. Because this is a data medium, news on a mobile platform can be manipulated in a variety of different ways, which means feeding you information via RSS or aggregating it to combine a variety of sources. Ultimately, news and magazine apps allow you to modify and tailor reports to how you want to receive them.
Photography

The inclusion of photo-related apps on your mobile phone is both an understandable and, to be honest, obvious move. After all, every smartphone has a camera attached to it. Even the lowest quality modern smartphones have the ability to take pretty decent photographs nowadays. Some of the generally available photo apps utilise the camera by attempting to enhance your images subtly or enabling you to modify in a more dramatic fashion either to improve the quality of the inherent image or to add a slice of fun to the output by giving you extra colours, distortion effects and so on.

Some apps encourage you to make use of the additional facilities of your phone's camera to give you more image flexibility while others take a step away from the hardware and look at the wider world, offering the chance to view other people's work as archives or as pieces of art.

5 essential apps

**QuickPic**
Price Free Developer alensw.com
One of the most frequently used parts of any smartphone is the picture viewer. As long as a phone features a camera, then you will always need to store the images in some manner and, it follows, you will always require the ability to view them. Trouble is, once your store of images starts to reach humongous proportions, the ability to store them becomes less important. All of a sudden, the ability to access each photo quickly becomes the priority, so an efficiently designed picture viewer is invaluable. This app is just that: a viable alternative to the Gallery option.

**Flipagram**
Price Free Developer Cheerful, Inc
Facebook users will have been unable to escape the recent ten-year birthday celebrations that allowed you to create your own picture slideshows and invite your friends to use them. Well, Flipagram allows you to create such digital presentations. You can create beautiful video stories using your Facebook, Instagram and Camera Roll photos and set it to music that you love. If you want to share your story with others, this app provides all of the tools you need.

**Photoshop Express**
Price Free Developer Adobe Systems
This app is derived from the much respected, well-known and broadly used suite of programs that amateurs and professionals use all day and every day, and so has the advantage, over other similar programs, of a broad familiarity. Many users will find that they can load and use it without too much of a learning curve intruding. The app itself enables you to perform basic edits and share photos, and then access them all on Photoshop.com.

**PicsArt – Photo Studio**
Price Free Developer PicsArt
PicsArt is one of the best photo-editing apps available on Android. Packed full of features, you can apply impressive effects in an instant, add overlays or put your image in a frame. On top of that, it's easy to share your edited image straight from within the app.

**Instagram**
Price Free Developer Instagram
There are two very distinct sides to the apps that will cater for two very different audiences. On one side you have a strong social aspect, and strong photography aspects which will cater for both novices and seasoned photographers alike. For a free app, you can't really ask for much more.

“Add a slice of fun to your image output”
Personalisation

One of Android’s strengths is its personalisation features, enabling users to tweak notification settings, add widgets and more without any restrictions. It’s what sets Android devices apart from the more locked-down operating systems such as iOS and the PlayBook OS.

Browse the Google Play Store and you’ll discover apps that apply statistic widgets on your home screen, add notification bubbles that can be interacted with and display amazing graphics in the background of your home screen, as well as programs that can give you access to literally millions of ringtones and wallpapers for you to use.

All of these features can be downloaded as apps – most for free – and you don’t need to hack or root your device to use them – you’re largely free to customise your Android device as you see fit. To help you get started we’ve rounded up our five favourite personalisation apps. Read on to discover how you can customise your device with amazing graphics, audio and communication notifications.

5 essential apps

Zedge™
Price Free
Developer Zedge

If you’re looking to add some personality to your Android device, then Zedge™ is an excellent app to download. It offers a wealth of wallpapers, live wallpapers, ringtones and more, allowing you to customise the way your device looks and sounds. Simply download the app and browse through the options on offer, many covering some of the latest trends. You’ll also be able to manage your downloads from one place, plus the app will recommend games for you to try out at your leisure.

Smart Launcher 2 Pro
Price £2.49/3.49
Developer Gni.lemon

There are plenty of alternate launchers to check out on the Google Play store, but one of the best, and most unique, is Smart Launcher Pro. This alternate launcher is very minimalist in design, enabling users to customise and add different elements to the launcher to their exact specification. It’s still being worked on by the developer to provide new features and icons that users can use.

iOS 7 Launcher Retina
Price Free
Developer GO Launcher Dev

This app will fool your friends into thinking that you own an iPhone, despite the obvious exterior of your device: that suggests otherwise! This app brings iOS 7 icons and wallpaper to your Android device and features all of the authentic animations, changeable backgrounds and dynamic calendar icons. It’s so convincing that it can’t possibly be right, so maybe grab it while you can!

Symphony of Colors
Price Free
Developer maxelus.net

This is a live wallpaper that displays in the background of the home menu. As the title suggests, it emits a symphony of colours across the screen that slowly rotate. Pan to the left and right and it quickens pace, prod the colours with your finger and they spin under your control in a rather mesmerising way.

Device Info Live Wallpaper
Price Free
Developer kurousa

Although there are a huge number of live wallpapers available on the Play Store, this one is rather special. It uses information about your device (including the battery level, available RAM and how it’s tilted), and displays it for interesting viewing.

“You don’t need to hack or root your device to use them”
5 essential apps

**Evernote**
Price: Free
Developer: Evernote Corp.

Battery life on certain Android devices is dismal, but with an app such as JuiceDefender you can preserve as much battery as possible without impacting on your phone's performance. The app looks to stop any processes that your phone is currently undertaking and removes any that aren’t currently in use. You’ll be surprised with just how much battery you can save when using the app and how much your phone’s overall performance improves.

**Firefox**
Price: Free
Developer: Mozilla

Your Android phone already comes with a fantastic browser. So what incentives are there to swap to Firefox? Well, if you’re a fan of the desktop client then you’ll be pleased to learn this mobile iteration can sync with your bookmarks, tabs and passwords. You can also install add-ons (such as Adblock and foursquare), browse tabs via a sidebar and run full-screen. For Firefox fans with bookmarks galore on their desktop, this is a good option.

**Dropbox**
Price: Free
Developer: Dropbox Inc

Dropbox is a cloud storage service that everyone should take full advantage of. By creating a free account, you are provided with 5GB of online storage space that you can fill up with documents, photos or videos. What’s more, once you upload something you can access it from any device via the Dropbox app or via a web browser. You can also share content with other people and invite them to collaborate on projects. All of the changes will be instantly synced so you’re always completely up to speed. The app is so easy to use that really it’s just an extension of your Android device.

**Jottacloud**
Price: Free
Developer: Jottacloud

Jottacloud allows you to put all your contacts, texts and MMS messages within the cloud, creating a virtual backup of them whenever you need them. By using the same Jottacloud account on multiple devices, you can download and upload all the contents at a click of the button and get access wherever you are.

**Google Drive**
Price: Free
Developer: Google Inc

Rapidly taking over as the cloud storage facility of choice, Google Drive lets you store all of your files in one place so that you can access them from anywhere and share them with others. This app lets you access files stored on your drive and upload new stuff straight from your device. You can also make files available offline if you need to work on them.

---

**Productivity**

Android smartphones might have relatively small screens, but that doesn’t mean they can’t be used as productive tools. The Google Play Store is ripe with apps that enable you to take notes and sync them with any device in the world, store photos, videos and documents in the cloud, share them with friends and browse the web with the same bookmarks and passwords that you saved on your desktop computer. Unbelievably, your Android device can also take a photo of any landmark, product or piece of art, and then instantly tell you more about it. It’s staggering technology wrapped in a number of easy-to-use interfaces.

To help you be more productive we’ve carefully chosen the five most impressive apps in the Play Store and featured them here. Read on to discover some incredible apps that were almost unimaginable only a few years ago. Working while on the go and discovering more about the world around you will be easier than ever before, and you may be able to do it all faster than you thought too.
Shopping

First we fell in love with shopping online, now it’s all about doing it on the go. Not that the high street retailers are particularly happy, but it does make life easier. It is a wider symptom of a changing shopping world and the ability to shop via apps has triggered a shift in how we buy our products. Mobile shopping has enforced a tremendously super-quick evolution of the entire shopping experience. This has not only added to shopping convenience (forget to order a birthday present for your loved one? Sort it while you’re on the train to work), but it has meant that anything and everything is now available and accessible at your fingertips (want to buy that rare record but it’s only available in somewhere like London and you live in Lake District? Switch to your app).

In short, shopping via an Android app is efficient, direct and enables you to find the best price for what you want.

“Everything is at your fingertips”

5 essential apps

**Out of Milk**
Price £1.49/$1.99 Developer Capigami Inc
With Out of Milk, your shopping list stays with you wherever you go on your phone or tablet. You can track the items you desperately need, as well as see the items you’ve been buying recently. As you use the list feature, you can tick off the items as you put them in your basket. The app has recently added a to-do list feature, which means users can now set reminders of daily tasks that need to be completed. Out of Milk is a superb all-round app that can save you the hassle of trying to manage your shopping list, and instead take it with you wherever you need to do a spot of grocery shopping.

**eBay**
Price Free Developer eBay Mobile
The most well known and popular online auction site in the world has a mobile presence. Because auctions can be accessed nationwide, the necessity to be able to monitor bids that you have made at any time can be critical. So monitoring on the move with this app can be a godsend. Includes barcode scan-matching, PayPal payments, item views via text and images, messaging functions, notification alerts, search, watch and buy options and more.

**ThisIsWhyImBroke**
Price Free Developer ThisIsWhyImBroke
Although your wallet won’t forgive you, ThisIsWhyImBroke is a free magazine showcasing some of the coolest products available online. There’s a wide range of products available, and you’ll find most of them are completely zany. You can’t buy any products through the app directly, however, and instead you’ll need to go to the linked online retailer where you’ll be able to purchase said item. Who wouldn’t want a Super Mario Toilet Seat, right?

**Groupon**
Price Free Developer Groupon Inc
Using your current location as a starting point, the Groupon app will scan your surroundings for brilliant offers and then present you a list of special offers and discounts in your area. Offers range from nights away to spa breaks, meals out and even balloon rides. Perfect for surprising someone who deserves it.

**Amazon**
Price Free Developer Amazon Eurasia
Amazon is king when it comes to online shopping boasting, as it does, pretty much everything under one roof. This app lets you browse the store from the comfort of your device, make orders, add items to your wish list and purchase items for other people quickly and easily.
Social

Perhaps the greatest aspect of owning a smartphone is the sheer number of opportunities to stay in touch with friends, family and the wider world. Thanks to the amazing amount of social networking apps available, there’s a wealth of content out there waiting to be discovered. Some of the very best apps enable you to chat with friends in real-time, share and view photos, send free messages, read tweets from friends and the famous alike, ‘check-in’ at locations to share your current whereabouts, plus plenty more. Incredibly, almost all of these apps are free to download and use.

Read on to discover five essential social networking apps that enable you to stay in touch and tell the world what you’re thinking without spending a penny. You’ll wonder how everyone managed to communicate with only landline telephones just two decades ago.

“Stay in touch and tell the world exactly what you’re thinking”
Sports

Around 20 years ago following your favourite sports team was a challenge. You had to buy newspapers, watch television and listen to the radio to get the right results at the right time. How things have changed! The sonic boom that was the internet left our computer screens and fell into our laps, and now wherever you go, whatever your sport, the Play Store has an app that means you’re never more than a few seconds away from up-to-the-second information about your team or your own athletic pursuits.

You used to have to count the hours until your favourite sports team took the field or court, and there was precious little to do between games. Fortunately, now there are apps that help you while away the hours until kick-off. There are tools for tracking scores in football, cricket, golf, tennis and even fencing, playing fantasy sports games and much more.

5 essential apps

**My Tracks**
Price Free Developer Google

When you take part in any sport that involves distance such as running or biking, you follow a course or, as this app would have it, a track. The app itself enables you to record these via your GPS function along with statistics related to it. Those figures can include things like the distance, waypoints, the speed and the elevation. The data itself can be viewed live and saved for later or shared with friends and colleagues. You can also attach external physical monitors to extend the information retrieval.

**Coach’s Eye Legacy**
Price £30.34/$49.99 Developer TechSmith

Coach’s Eye provides a unique service to help identify ways a person can improve the sport they’re playing. The app includes a video capture mode that uses slow motion to track the movement of the person playing, and then allows the user to pinpoint flaws and improvements that can be made. Add animations to the slow motion videos to help identify constant flaws, bad posture and technique issues.

**SkyDroid – Golf GPS**
Price £1.28/$1.99 Developer Paul Goldstein

For anyone who loves golf this is the perfect partner for when you’re out on your next round. SkyDroid is a GPS app that will help you improve your game by informing you of the distance to the green, as well as any hazards that may pose a risk. It has satellite views for many popular courses, as well as the option to download extra course details. It even has shot tracking so you can see where you’re going wrong!

**Soccer Saturday Super 6**
Price Free Developer BSkyB

Super 6 is a fun game that everyone can play – all you have to do is predict the correct scores for six featured Premier League, Championship or FA Cup fixtures and you could win £250,000. There’s no catch and it’s completely free to enter and this app lets you enter your predictions and compete with friends.

**Sky Sports News**
Price Free Developer BSkyB

Get the latest sports stories via dedicated sections and stay up to date with all the latest scores, fixtures, results and tables. Exclusive video content will allow you to watch news, interviews and reactions to all the top stories as they unfold - all from your mobile device. A polished app that is a must for sports fans.
Tools

Some of the most powerful tools available for any computer are obtainable for free within Google Play. Thanks to the clever wizards at Google, it's possible to translate text between 50 languages and even have a conversation with someone who doesn't speak your native tongue. Simply talk out loud and let your smartphone translate in real-time.

There are even more amazing apps to install on your device for a range of problems or situations. How about voice search? It lets you speak commands aloud, such as “map of my current location”, and see the results spring into life on the screen. Other great features include the ability to measure your connection speeds, and set up security features on your device. You can even download apps that turn your device into a flashlight, and much more.

We've trawled the Play Store to bring you the top five app tools to enrich your Android experience and your life in general. Read on to discover some truly mind-blowing programs.

5 essential apps

Google Translate
Price: Free
Developer: Google Inc.

Have you ever wished you had your own personal translator when travelling abroad? Google Translate can be exactly that, translating speech from one language to another in real-time. Tap on the Conversation Mode button, say whatever needs to be translated aloud, confirm whether it's correct and Google Translate will speak it for you. It's incredibly clever, although at the time of writing the app can only translate English and Spanish spoken language - though it can do 50 languages in text only.

Speedtest.net
Price: Free
Developer: Ookla

If you feel as though the internet connection on your device is running slow, then Speedtest.net is the ideal app for you. Once downloaded for free, simply open the app and you’ll be welcomed by a smart-looking interface. Tap the ‘Begin’ button and the app will run a connection test for Ping, Upload and Download. You’ll then be able to review the results in graph form and as a list, and share the results with others if needed.

GO Keyboard
Price: Free
Developer: GO Dev Team

This free app helps to speed up your typing and reduce accidental typos. It supports over 40 languages and over 100 themes and keyboard layouts, making your typing more fun and even more personalised. The auto-correct mode is refreshingly accurate and you can also embellish your notes and messages with a wide range of emoticons. So if you find that your default keyboard isn’t cutting it, look here.

Tiny Flashlight + LED
Price: Free
Developer: Nikolay Ananiev

This app lets you use your device’s camera flash as a torch – which is useful on so many levels, such as finding dropped keys in the dark, coping in a power-cut and finding your washbag in the darkest corner of your tent. Simple and incredibly easy to use, this is one of those apps that you won’t use too often, but it will prove incredibly useful for the times when you do.

Adblock Plus
Price: Free
Developer: Adblock Plus

Keeping your browsing experience free from annoying ads is the aim of Adblock Plus, and it works a treat. After setting the app up, you can tailor the type of adverts you want to block, and after a few seconds, they won’t appear on your device anymore. It even works for apps that include ads in them.

“IT’S POSSIBLE TO TRANSLATE TEXT IN 50 DIFFERENT LANGUAGES WITH EASE”
5 essential apps

**Triplt**
Price Free Developer Triplt Inc.

Triplt is a travel organiser that attempts to put all of your travel plans together on your mobile phone. The app asks you to forward travel confirmation details and emails to its email address and then steadily builds an itinerary; making Triplt a sort of travel-based aggregator along with maps and directions. This action of creating the itinerary can also be produced automatically if you use Google's apps or Gmail, the idea being that the app stops you having to collate a wide variety of disparate information which is easily lost.

**Maverick Pro**
Price £4.49/$5.99 Developer Code Sector

Maverick Pro is an off-road GPS navigator that supports offline maps support, as well as compass and track recording. It includes a wide choice of global and regional maps, and each can be altered depending on your mode of transportation. Every time you set a new destination within Maverick, the app will automatically give you directions, as well as an estimated time of arrival with several points of interest that you'll come across on your journey.

**Petrol Prices Pro**
Price £2.99/$4.70 Developer Fuba Limited

By connecting your device's GPS to the app, Petrol Prices Pro will tell you the best places to get petrol in your area. Listings show the cheapest places in your area, and you can customise different areas of the app to add different fuel types to make searching easier for you. It also shows the average prices for each fuel type in your area, and you can compare how the prices stack up to the rest of the country.

**Navfree**
Price Free Developer Navfree INC

This is a completely free navigation app that offers turn-by-turn directions, spoken and on-screen instructions, offline map use and address search, plus live search via Google and Microsoft Bing. It works very well and will ensure you never wind up lost again.

**thetrainline**
Price Free Developer thetrainline

If you are a regular rail commuter then this app lets you get the latest information on ticket prices, timetables and possible delays. The app also offers mobile barcode tickets on selected routes, so you don’t have to queue at the platform for one. This will revolutionise your train journeys.

---

**Transportation**

What better method of accessing information relating to transport than via a mobile phone, and what better time to do it than while you are on the move? The two mediums are truly sympathetic and both change their content regularly. Transport-related apps have the ability to access timetables, for example, in real-time. As such, they can pick up late changes in those timetables due to adverse weather conditions or problems on the route. Some apps enable you to plan your route and offer advice as you do so, while some give you a real-time movement monitor. By utilising your phone's GPS system, they can see where you are relative to the rest of the country or find out how close you are to the next station, endlessly useful if you find yourself in an unfamiliar location. Information like this also enables you to ring ahead to friends, family and business colleagues with up-to-date information.
Essential apps

Weather

We’ve come to expect that weather forecasts may not be absolutely accurate, but at least they give us a general idea of what’s in store for the next day or so. When we’re looking forward to an outdoor event, we always check the forecasted conditions. Luckily, there are plenty of apps that will let you check the weather at any time from anywhere. Many of us also have lines of work which benefit from regular weather updates. As such, it is crucial to know the weather forecast at the drop of a hat.

The weather app built in to Android phones is a simple, no-fluff, no-rubbish weather app. It does its job well but any weather app can give you the highs and lows for the day. Often you might want more information such as the humidity, wind speeds or sunrise and sunset times and other data.

“Check the weather at any time from anywhere”

5 essential apps

The Weather Channel

Price: Free
Developer: The Weather Channel

A fully-featured weather app, this provides a voice-search facility that enables you to grab information by stating your location (your address, your city or even your postcode), with a type-ahead feature for quicker searches. A newly integrated navigation bar offers a swipe-on, one-click access to saved locations, current conditions, hourly forecasts, 36-hour forecasts, ten-day forecasts, severe alerts, video and settings. In addition to metric (°C and kph) and English (°F and mph) options, a hybrid now offers Celsius and mph for the UK and Canada.

Phases of the Moon Pro

Price: £1.19/$1.99
Developer: Universe Today

If you have an interest in the universe around us, Phases of the Moon will be perfect for you. The app covers everything you could possibly want to know about the moon, and even comes with an accompanying live wallpaper and widget. Knowledge is in abundance here, and you can learn about the different names of the various phases of the moon, a monthly calendar on what the moon will look like over time and its distance from planets.

BBC Weather

Price: Free
Developer: Media Applications

The simple and clear design of this free app makes it easy to access and absorb the latest weather forecasts. You can search for locations, get hourly forecasts with detailed information for the next 48 hours and get additional climate information such as pressure, visibility and humidity. One of many great free weather apps, the ease of use makes this a worthy addition to your home screen.

3D Digital Weather Clock

Price: Free
Developer: Factory Widgets

This little app gives you a full weather forecast, a digital clock, calendar and system information. There’s a choice of 12 or 24 hour service along with a battery indicator and two different layouts for you to choose from to suit your individual tastes.

AccuWeather

Price: Free
Developer: Accuweather.com

This feature-packed weather app provides accurate reports and forecasts, push notifications for severe weather alerts, current news and weather videos and social media sharing facilities. One of the most popular Android weather apps – and for good reason.
Travel & Local

Perhaps the biggest benefit to owning an Android device is that the devices make it almost impossible to get lost. In an instant you can pull up an entire map of the world, manipulate it with your fingers, see yourself pin-pointed and get directions to any destination you wish. Pulling up to the side of the road to ask a stranger directions is now a thing of the past. As is carrying (and folding) a paper map.

Of course, there's a wealth of further benefits to owning a smartphone. Thanks to the myriad apps in the Play Store, you can see live flight details for any commercial plane in the world, see your seat on a plane map, view departures and arrivals for any airport, navigate the world's streets in first-person and then see the entire surface of the planet in 3D. There's a mind-boggling array – all accessed through your device.

5 essential apps

Skyscanner – All Flights!
Price Free Developer Skyscanner Ltd
If you are in need of cheap flights on the go then this app is designed to deliver all of the information you need in an instant and save you money in the process. Search millions of flights from hundreds of airlines around the world and when you find the perfect match this app will divert you straight to the airline or travel agent so that you can buy direct and get the best deal – all in a few taps. The interface is tidy and easy to navigate and searching for destinations and fares is completely stress-free.

Field Trip
Price Free Developer Niantic Labs@Google
Field Trip is a fantastic little app that will help you discover some of the most interesting things around you. The app runs in the background on your device, and using your GPS location it alerts you when you’re near a hidden local gem. This could be a historic building, park, or museum, and is a great way to see some amazing sights. Even better, you may discover some fascinating places in the area you live.

Yell
Price Free Developer Yell.com mobile
The Yell.com app can do far more than just find local businesses and services. It’s possible to get a local weather forecast, see businesses on a map, read user reviews, discover special offers and even call a listing with just one tap of a finger. More than 18 million businesses are stored in its worldwide directory, and with some useful search features including predictive text and voice recognition, it’s easy to find the correct listing.

TripAdvisor
Price Free Developer TripAdvisor
If you’re planning a holiday, night out or weekend away, then this is the perfect app to help you out. You can explore places on your device, read user reviews, get the best deals on flights and other travel arrangements and see what places of interest are in or around the area you intend to visit.

Waze social GPS traffic & gas
Price Free Developer Waze
One of the main reasons people choose Waze over other navigation apps is that it’s far simpler to use than the competition. Input details of your current location and your end destination and Waze will automatically create the best journey and route for you to follow.
Your Android problems solved

If you’re new to the Android operating system, it can be a lot to take in, and you may come across a few problems across the way. We have put together a guide to some of the most common problems that many users face, as well as some helpful tips and tricks to get even more from your Android device. If you follow the steps closely, you should be able to understand the ins and outs of your new Android device.

Can you use your own photo as a wallpaper?

The logical approach is to create a 1280x720 pixel JPEG photo on your PC and copy it across to your microSD card, in the /DCIM folder. However, when you go to Gallery and try to set this as your ‘Wallpaper’, you’ll only get given a highlighted square to crop this down and, if you accept the ‘crop’ then you’ll end up with a very grainy image. The secret is to notice that on your phone, as you swipe between home screens, the wallpaper ‘pans’ slightly. The effect is subtle, but it is there and it’s rather cool. In other words, your 1280x720 pixel-screened phone actually needs an image that’s wider, wide enough to contain extra slices of wallpaper than can be scrolled across into. The exact dimensions do vary according to your device (and even according to firmware/version number, in some cases) but 1280x800 pixels is common. This ‘almost square’ image is the actual wallpaper that your phone will pan across in normal operation.

Creating a new Android wallpaper

1. Go back to your source material (perhaps a family photo) on your desktop (PC or Mac) and create/crop/resample it to end up with a 1280x720 image.
2. Copy this into a folder on your microSD. The gallery app’s ‘Set as wallpaper’ tool will now match with your new image.
3. Tap on Home to get back to your home screens and swipe from side to side, admiring the way your new image pans smoothly.

Can I use more than one Android phone on the same account?

This is an area in which Google and Android excel. With some budget Android phones coming in at around £50 now and tablets coming in at ten times that, there’s a big gamut of devices, all of which run Android and which are compatible. So you can have a backup phone, or even just another to ‘play with’ and try out. Android OS talks to servers on the internet for its main data, meaning that you can log into your Google account from any device and, essentially see the same emails, the same PIM data, even the same purchased apps and device settings in many cases. And yes, purchased applications can be downloaded on every device, too, all on the one account – as long as each device is physically capable of running the apps.
What are push notifications?

The idea with push notifications is very simple. Rather than you having to remember to check for any new emails, then remember to check for Twitter mentions of your username, then remember to check for updates for your phone and applications (and so on), every single day — or even numerous times each day in many cases — a large number of operations on your phone and on the internet can be set up with ‘push’ functionality.

Traditionally, you would ‘pull’ information from a source — the idea of push, as it sounds, is that the source pushes the information to you immediately and without you having to ask for it in the first place. On an Android device, push messages from online sources and local messages from the programs on your phone are all gathered in the ‘notifications’ bar, as shown here.

Getting notified of new email

1. In the top ‘notifications’ bar of the Android interface, notice the icons that appear as events and installs. New push emails happen, finish or arrive respectively. They’re all ‘pushed’ in that you don’t have to ask for any of them.

2. When you’re ready to view them (ie when it is convenient for you), swipe your finger down from the top of the screen towards the bottom. The notifications ‘curtain’ descends and you can see far more detail.

3. Tapping on ‘Clear’ will (naturally) clear these notifications, i.e. acknowledge them, but you can also tap on one, e.g. the ‘new email’ one, to switch directly to the appropriate application.

How do I know if my phone needs updating?

Here we show how to check for updates to your phone’s operating system. But if you have an Android phone and the manufacturer hasn’t announced any upgrade path from Android 2.3 to 4.0, or from 4.0 to 4.1 or beyond, you may feel somewhat marooned while the rest of the world moves on. Is there anything you can do? Firstly, contact your manufacturer (and/or network, depending on how you came by the phone) and let them know the update is in demand. Secondly, if there’s a particular feature you have been longing for, look in the Store for later Android features being made available for older devices. Thirdly - be patient – updates do often arrive in the end.

Checking for updates

1. Although your phone will eventually tell you about a waiting update, you can check for yourself at any time by going into Settings from the home screen and scrolling right down to ‘About phone’. Tap on it.

2. The ‘About phone’ screen shows the version of Android that your phone is currently on. To check for updates, tap on ‘System updates’ option.

3. If there is an update available, as there is here, tap on the ‘Update’ button and wait while it downloads and installs. You won’t lose any data, don’t worry!
How do I manage the data usage on my phone?

People can easily be caught out with pricey additions to their mobile bill if they don’t keep an eye on how the device is using data. However, if you only use your phone on a Wi-Fi network at all times, then you have nothing to worry about, but for those who like to use their phone when they’re out and about, it’s something worth addressing.

By digging through some menus on your device, you can uncover what apps are burning through your data allowance, as well as allowing you to see how much storage you currently have left on your device. All of this can be tracked on your phone, without the need for an external app.

The ‘Data Usage’ screen also is where you’ll find all of this, as well as a chart depicting your usage on a monthly basis. This chart can be edited to mould around your mobile data contract and when your monthly data allowance gets updated and also changed to alert you when you’re close to your data limit, stopping you from every going over.

Sorting and managing your apps

1. Tap on Menu and then go to the Settings page. From here you’ll need to navigate down the page until you reach the Apps tab. Open it up and your list of apps will begin to slowly generate in front of you.

2. Browsing your apps (tap on ‘Downloaded’ to restrict the list to the ones you have added), tap on Menu and then ‘Sort by size’ if you’re in a hurry to find the space hogs and reclaim that storage!

3. Tapping on an application name, with one tap you can ‘Uninstall’ it, ‘Clear its data (if you think it’s out of control) or ‘Move to SD card’ if needed. Rinse and repeat for any other problem apps.

How do I add a word to the Dictionary?

When typing away on the Android virtual keyboard, you’ll have noticed the way mistakes get auto-corrected as you go. As a word is typed, a dictionary within the phone is consulted and suggestions offered for either auto-completing the word or, if the phone thinks you’ve made a mistake, for correcting the word. This is all great if it knows the word you want. But what about unusual names or places? What about slang and technical words for your work? For these, you need to know how to add them to the built-in User Dictionary.

“The phone dictionary is consulted and suggestions are made”

Adding a word

1. You’re typing a sentence and you want to use (for example) a technical word that’s not in the built-in dictionary (“widgetizer”, here). The word is underlined by Android and there are no suggestions shown.

2. Next time you need to use the word, just type away and, even if you slightly mistype the word, as here, the correction software successfully retrieves the right spelling from the User Dictionary. Cool, eh?

3. Long press the word in the suggestions line and you’ll see a pop-up message confirming that the word has been saved (you can also long press the underlined version and pick ‘Add’ from the menu offered).
Will I need to wipe my device?
There’s a variety of reasons why you may need to potentially wipe your device. For example, if your phone is virtually unusable because of a virus, completely wiping your device is the only solution if an antivirus suite doesn’t solve the problem.
Completely wiping your phone isn’t a long process by any means, but it does remove everything from your phone, meaning you should perform a full backup of stored contacts and apps before proceeding using an app like MyBackup Pro or something similar.

“Completely wiping your phone isn’t a long process by any means, but it does remove everything”

How to perform a factory reset
1. Venture into the Settings menu on your device and scroll down the list of options until you reach the ‘Backup & reset’ tab. In this menu you will be able to see the various options to remove files.
2. At the bottom of the backup menu, you will find the option to restore your phone to the factory defaults and ultimately wipe it. Press on it to continue on to the next step of the tutorial.
3. After confirming the process, your phone will automatically begin the process and then turn on to the account setup screen for you to register with your wiped device. It may take a few minutes for the process to complete.

What’s the difference between an app & a widget?
The very name ‘widget’ implies something small. And that’s effectively what widgets are – small computer programs that occupy a tiny amount of home-screen space, usually serving up information or offering a couple of buttons to perform some vital function that will help make your life easier. Widgets can be various sizes, usually expressed in multiples of the size of an icon on-screen. So, 1x1, 2x1, 2x2, 4x1, 4x2, etc. You’ll discover these various dimensions as you start to add widgets to your own phone – fitting widgets around each other on a home screen can often seem more like a tile puzzle game. In contrast, applications run full-screen on your phone, and on their own (ie you can’t see the home screen behind and around them).

Widgets and applications do have lots in common and, in fact, are often linked at the hip, in that an application will ‘come’ with its own widget ready for you to add to your home screen. So you install the application from the Play Store and lo and behold – there’s a new widget of the same name available to add to your home screen. One good example of this is the official Twitter application, as we will demonstrate in the mini tutorial located to the right.

Get installing!
1. Head into the Play Store and look for Twitter. You’ll spot the official app, so install it. Wait a few seconds until the top notifications bar shows that it’s fully installed.
2. Long tap on a blank area on a home screen and choose Widgets. Pick Twitter (large). You’ll see a large (4x2) widget appear and you can place it on the screen.
3. You’ll then get updates direct from the widget on your home screen. To sign in, tap on the widget and you’ll be taken to the full-screen app.
10 steps to a better battery life

Android may be the most powerful mobile operating system in the world and we’re sure you’re enjoying using it. But it can be a little power hungry, especially when allied to large screens and fast processors. However, there are a few ways you can use your device in order to make it last longer and give you more battery to sustain till the end of the day. Here’s what you can do to stop your phone from running out of charge before you have access to your charger.

“There are a few ways you can use your device to make it last longer”

01 Avoid 3G
If you’re spending much of each day in an area where there’s little or no 3G coverage, your phone can use most of its power just trying to connect to a 3G cell tower. Look in Settings> About phone> Status if you’re not sure how good your local network is. Go into Settings> Wireless and networks and scroll down to Mobile networks. Tick the box marked ‘Use only 2G networks’ – and see a huge improvement in battery life!

02 Tidy up
When you get your phone, it’s tempting to load up every home screen with every widget under the sun. But each of these is effectively a program that uses up processor power, RAM and (usually) data too, all of which will ultimately hit your battery to some degree. Prune your widgets down to the ones you actually need and your battery will thank you.

03 Timeout
While in the ‘Display’ page, note the option ‘Sleep’ or ‘Screen Timeout’ and tap it. This gives options for how soon the display should turn off after your last tap or keypress. Set this to as short a time as you can stand (eg 30 seconds) and you will drastically reduce the amount of display power that’s usually wasted.

“You will reduce the amount of power that’s usually wasted”
04 Brightness
Open up the app drawer on your device, and scroll through your list of apps. Then tap on Settings and once again on Display and then once last time on Brightness. Tick the box that is marked ‘Automatic brightness’ and tap OK. This will a) save power overall and b) avoid dazzling you when you use the phone at night. If you really want to cut down on the power usage, set the brightness to the lowest level possible, but still enough for you to be able to see what’s on the screen.

“If you want to cut down on the power usage, set your brightness to the lowest level possible”

05 Data hogs
Watch out for other applications which try and go online all the time. The generic email application (ie not the Mail app) is notorious for checking on email and establishing connections often – if you use it for checking an ISP or Hotmail account (for example), then go into your account and change the ‘Email check frequency’ to something less damaging to your battery.

Watch out for games and apps that include online adverts too, as these will also keep a data connection active. Opt for the paid up, ad-free versions, if available. For the sake of a few pounds, you might be able to stop them going online altogether. Assuming that the app or game isn’t supposed to be online, of course.

06 Constant data
Partly related to the 3G point mentioned earlier, another huge drain on your phone’s battery is when you’ve got a data connection running, ie your phone is ‘online’. Even when you think your phone is idle, it could be connecting up constantly. Apart from your phone, Wi-Fi, GPS, Bluetooth, app syncing and Screen Rotation all contribute to loss of battery drain in different measures. Use Wi-Fi only in a Wi-Fi zone, and turn GPS and Bluetooth on only when you need it. Toggle sync by using the Sync icon on the Power Control widget or go into Settings > Accounts and sync and un-tick ‘Auto-sync’ if you don’t need to keep all your Google and social data updated all the time. These tips will increase your battery life.

TIP: As with any other electronic devices powered by Li-Ion or Li-Poly rechargeable batteries, don’t ‘stress’ your phone too much. Avoid leaving it in the full sun or outside in the snow and never, ever leave it stored for any length of time with a drained battery. Doing so can kill the battery for good.

07 Disable GPS
Download Android’s Power Control widget. It’s a great way to switch Wi-Fi or Bluetooth off when not using them. You can also disable GPS if, for example, you want Google Maps running to look something up, but don’t need to know your location. GPS is a huge power hog, so watch out for other apps which try to use it – they can usually be satisfied by a fix from Android looking at the local cell towers or scanning for local Wi-Fi networks, and both of these methods use up minimal power. The Wi-Fi, Bluetooth and GPS radios all use significant power, so take control over when they’re turned on!

08 Wallpaper
The animated (and often interactive as well) wallpapers in Android are great for showing off to your friends, but once that’s done, switch back to a traditional still wallpaper. The animated versions use a lot more of your phone’s processor and therefore drain more from its delicate battery.

09 Battery Defender
Look this utility up in the Play Store – many swear by it. It essentially automates a lot of the advice in this list, though it does require a bit of tech understanding to really get to grips with. It’s also highly customisable to suit what you require from it on your device.

10 Power control
Make a beeline for Android’s Power Control widget, if it’s not already one of your home screens. It’s a strip of five icons, letting you switch Wi-Fi, Bluetooth, GPS and Syncing on and off, plus the fifth one switches to minimum brightness and then back to ‘auto’.
3G
3G is the means by which you connect to the Internet on your phone when not in range of an available Wi-Fi network. Your phone contract will normally come with a bundled data allowance that you can use each month.

App
An app (or application) is a piece of software that adds functionality. They are downloaded from Google Play, and denoted on an Android phone by an icon. There are apps for virtually anything, from big names like Facebook and Twitter to more obscure apps.

Browser
The browser on an Android phone is your access point to the world wide web. The browser supports almost every feature that your desktop browser does, including multiple tabs and Flash video. Third-party browsers can also be installed, if your prefer.

Browser jargon:
• Tabs: You can browse multiple web pages at the same time by opening new ones in a new tab.
• Flash: Flash is a web technology that is commonly used for animations and video.
• Bookmarks: Keep your favourite pages bookmarked. These will be backed up to your Google account.

Dock
The dock appears at the bottom of the home screen. It may differ from one phone to the next, but generally the icons will include ones for the phone, text messaging, and camera. You can customise the dock – it’s a good idea to put your most-used apps or functions in it.

Gestures
Android phones are built around a touch-screen user interface. Many of the functions you’ll access will require you to tap on the screen as if pressing a physical button, but on some occasions you’ll be using gestures such as swiping or pinch and zoom.

Gestures jargon:
• Swipe: Hold your finger on the screen and swipe it to move between screens.
• Pinch and zoom: In the browser or Maps app, hold two fingers together on the screen and spread them apart to zoom in. Pinch them together to zoom out.
• Tap and hold: Hold your finger on the screen and leave it there. In some apps a menu will open with a list of options. This is sometimes called a ‘long press’.

Google account
When you first turn on your Android phone, you will be prompted to enter the details for your Google account. If you don’t have an existing account, then it is a good idea to create one, as you won’t be able to download apps or back up your address book without it.

Google jargon:
• Gmail: The Gmail app links to the mail service for your Google account.
• Calendar: All your calendar entries are backed up to your Google account.
• Contacts: Contacts are shared with the Gmail service and backed up whenever you add new ones.
• YouTube: YouTube is owned by Google – the app will log in and remember your favourite videos.

Google Play
Google Play is the name of Google’s content store. It comes with six main
parts: Apps, Games, Movies & TV, Books, Music and Magazines. Downloads can be accessed on desktop computers as well as Android phones.

Google Play jargon:
- Apps: Apps are available in either free or paid form, and can be downloaded direct to your phone.
- Movies: Movies can be streamed over 3G or Wi-Fi to your phone as you watch them.
- Books: Books can be purchased then viewed in the Play Books app.
- Music: Download songs direct to your device, and enjoy them while mobile.

Google Maps
Maps comes installed on every Android smartphone, and is one of the best apps for the OS. It uses the same maps that you’ll find on your desktop, including local search, Street View and directions. It also functions as a full, free satnav app, using your phone’s GPS technology with voice guidance.

Home button
The Home button, typically indicated by a Home icon, appears on every Android phone. This button will return you to the home screen no matter where you are or what you are doing. It’s the easiest way to exit from another app, and also an effective method of starting from scratch should you ever get lost.

Home screen
The central part of the Android experience, the Home screen is the first screen you’ll see and the main location of app icons and widgets. Android phones come with multiple home screen panels – swipe your finger to see additional ones.

Lock screen
To prevent accidental button presses the device locks when you turn it off. Pressing the power button will show the lock screen, which you need to bypass by swiping your finger. Some phones add functions to the lock screen, enabling you to unlock the phone and launch an app simultaneously.

Menu button
Many Android phones have a menu button. However, many newer Android devices are now removing the physical button, replacing it with an on-screen icon in the form of three vertical dots.

microSD card
Most Android phones include support for a microSD card. This tiny memory card enables you to increase the amount of memory on your phone by up to 32GB. This is an effective way of upgrading your phone without buying a new one.

microUSB connector
Every phone has a microUSB connector. This is the means by which you charge the device, either via a mains connector or by connecting it to the USB port on your computer. microUSB also lets you connect your phone to a PC or Mac.

Notifications pane
Hold your finger on the top of the screen and drag it down, and you will open the notifications pane. Here, you’ll find information on things happening on your phone, such as incoming text messages, calendar alerts or system events.

OS
OS stands for operating system, and is the software on any computing device that makes it function. In this case, Android is the OS, and enables you to browse the web, play games, check your emails, make calls and much more.

Search
Android is a Google product, so it’s no surprise that search plays a large part in how it functions. Many new Android phones have a dedicated Google Search bar on the home screen, while some have a physical button.

Wi-Fi
Wi-Fi is the other way, along with 3G, that you will get your phone online. If your home broadband includes Wi-Fi, you can access that same connection on your phone by entering the password when prompted. You can also use Wi-Fi to go online without eating into your 3G data allowance.

Widget
A widget is an element of an app that is placed on your home screen, displaying live information about the data within that app. The most common kind of widget is for weather, where the forecast will be displayed without you needing to open an app. There are also ones for news and utilities.
Enjoyed this book?

Exclusive offer for new

Try 3 issues for just £5*

* This offer entitles new UK direct debit subscribers to receive their first three issues for £5. After these issues, subscribers will then pay £21 every six issues. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code ZGGZIN must be quoted to receive this special subscriptions price. Direct debit guarantee available on request.

** This is a US subscription offer. The USA issue rate is based on an annual subscription price of £65 for 13 issues, which is equivalent to approx $102 at the time of writing compared with the newsstand price of $162.50 for 13 issues ($12.50 per issue). Your subscription will start from the next available issue.
The only magazine all about Android

App reviews
Android Magazine guides you through the best apps in the Google Play Store

Features and tutorials
Do more with your phone or tablet with our in-depth guides

Hacker zone
The unique enthusiast section shows what you can really do with Android

subscribers to...

Android magazine

Try 3 issues for £5 in the UK*
or just $7.85 per issue in the USA**
(saving 37% off the newsstand price)

For amazing offers please visit
www.imaginesubs.co.uk/and

Quote code ZGGZIN
Or telephone UK 0844 245 6963 Overseas +44 (0) 1795 414 972
Learn in style

The Book Series

Discover more with the Book series’ expert, accessible tutorials for Android, Samsung, HTC, Photoshop, Windows and more

BUY YOUR COPY TODAY

Print edition available at www.imagineshop.co.uk
Digital edition available at www.greatdigitalmags.com
Enlightened this book?

Exclusive offer for new

Try 3 issues for just £5*

* This offer entitles new UK direct debit subscribers to receive their first three issues for £5. After these issues, subscribers will then pay £21 every six issues. Subscribers can cancel this subscription at any time. New subscriptions will start from the next available issue. Offer code ZGGZ1N must be quoted to receive this special subscriptions price. Direct debit guarantee available on request.

** This is a US subscription offer. The USA issue rate is based on an annual subscription price of £65 for 13 issues, which is equivalent to approx $102 at the time of writing compared with the newsstand price of $162.50 for 13 issues ($12.50 per issue). Your subscription will start from the next available issue.