

# **Have a Little Android**

#### In This Chapter

- Freeing the phone from its box
- Installing things inside the phone
- Charging the battery
- Familiarizing yourself with the phone
- Obtaining optional accessories
- ▶ Taking the phone with you
- Keeping the phone in one place

t may have a funky name, like a character in a science fiction novel or a sports hero. Or it can simply be a fancy number, perhaps with the letter *X* thrown in to spice it up. No matter what, the phone you own is an *Android* phone because it runs the Android operating system. Before getting into more detail, let me specify that the adventure you're about to undertake begins with removing the thing from the box and getting to know your new smartphone.

# Liberation and Setup

The phone works fastest when you remove it from its box. The procedure differs depending on whether you're a technology nut or someone desperate to make a phone call. I prefer to gingerly open the box, delicately lifting the various flaps and tenderly setting everything aside. I even savor the smell of industrial solvent. If you prefer, you can just dump everything on the tabletop. But be careful: Your phone may be compact, but it's not cheap. Several useful items might be found loitering inside your Android phone's box. Some of them are immediately handy, and others you should consider saving for later. Even if you've already opened the box and spread its contents across the table like some sort of tiny yard sale, take a few moments to locate and identify these specific items:

- The phone itself, which may be fully assembled or in pieces
- Papers, instructions, a warranty, and perhaps a tiny, useless *Getting Started* pamphlet
- The phone's battery, which might already be installed inside the phone
- The phone's back cover, which might already be on the phone
- The charger/data cable or USB cable
- The charger head, which is a wall adapter for the charger/data cable
- Other stuff, such as a SIM card; or if the SIM card is already installed, the SIM card holder, SIM insertion tool, or other scary electronic tidbits



The phone itself may ship with a clingy, static, plastic cover over its screen, back, or sides. The plastic thingies might tell you where various features are located or how to install the battery. You can remove all plastic, clingy sheets at this time. Check the rear camera to confirm that you've removed the plastic thingy from its lens.

In addition to the items described in the preceding list, you might have received a bonus package of goodies from whoever sold you the phone. If the outfit is classy, you have a handy little tote bag with perhaps the Phone Company's logo on it. Inside the bag, you might find these items:

- A microSD card to use as the phone's removable storage
- A smart-looking, leatherette belt-clip phone holster
- ✓ A micro-USB car charger
- A car windshield mount
- Headphones
- Screen protectors
- 🖊 A phone case
- A desktop dock or multimedia station
- Even more random pieces of paper

You can safely set aside all this stuff until you put the phone together. I recommend keeping the instructions and other information as long as you own the phone: The phone's box makes an excellent storage place for that stuff — as well as for anything else you don't plan to use right away.

If anything is missing or appears to be damaged, immediately contact the folks who sold you the phone.

- ✓ The phone's box contains everything you need to use the phone. Anything extra you buy merely enhances the phone-using experience.
- See the later section "Adding accessories" for a description of various goodies you can obtain for the typical Android phone.

# **Phone Assembly**

Most Android phones come disassembled in their boxes. The primary thing you must install is the battery. The phone's back cover must then be attached. Only if your phone has no removable battery does it come fully assembled, and even then it may have a SIM or microSD card (memory) that you must install. The following sections offer a general idea of how everything fits together.



Oftentimes, the people who sell you the phone assemble the thing for you. That's a plus. Even so, it helps to be familiar with how to open your phone, access its guts, and reassemble it. Such knowledge will come in handy later, for example, should you need to replace the battery or access some other internal phone doohickey.

# **Opening the phone**

If you've just received your phone, it might already be in an opened state. If so, skip to the next section for information on installing the battery.

The process of opening the phone involves removing its back cover in one of two general ways:

- Use your thumbs to slide the back cover up (or down) and lift it off the phone.
- Insert a thumbnail into a slot on the phone's top or edge, and pop off the back cover.

In either case, the phone is facing away from you when you pop off the back cover.

After the cover is removed, set it aside. You're now ready to add or remove items from the phone's cramped interior.

Don't fret if you hear a clicking or popping sound when you pop off the back cover; this type of noise is expected when you remove a cover that doesn't slide off.

Not every Android phone has a removable back cover. If yours doesn't, that's fine, but it also means your phone lacks a removable or replaceable battery.

## Installing the battery

The most common thing to install in a new Android phone is the battery. The battery is supplied separately inside the box. Unless the friendly folks at the Phone Store installed the battery for you, it's your job to stick it inside your new phone.



MEMBER

Before installing the battery, ensure that you don't first need to install other items in your phone. For example, on some phones the microSD may be installed internally. The card must be inserted before the battery is installed.

Obey these steps to stick the battery into your phone:

- 1. If necessary, remove the battery from its plastic bag.
- 2. Remove the phone's back cover, as discussed in the preceding section.
- 3. Orient the battery.



The battery goes in only one way, but because of its shape, it can be oriented improperly.

Look for an arrow or for written directions on the battery or inside the phone to find a hint to the proper orientation.

4. Place the battery in the phone so that the contacts on the battery match the ones on the connector inside the phone.

Figure 1-1 illustrates an example of inserting the battery into an Android phone.

5. Insert the battery the rest of the way, as though you're closing the lid on a tiny box.

When the battery is properly installed, it lies flush with the back of the phone.

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Contacts
Figure 1-1: Sticking the battery in your phone.

After the battery is installed, your next step is to charge it. See the later section "Charge the Battery."

### Removing the battery

Removing the phone's battery is uncommon but sometimes necessary. One reason would be to replace the battery with a better model or to access a microSD card or SIM card obscured by the battery inside the phone. Another, albeit sad, reason is that removing the battery is often the only way to regain control over a phone run amok.

To remove the battery, follow these steps:

- 1. Remove the phone's back cover and set it aside.
- 2. Locate the "lift here" or "pull" tab on or around the battery.
- 3. Lift the battery out of the phone.

Just as you insert the battery, removing the battery works like opening the lid on a tiny box.

Set the battery aside.

If you're replacing the battery, store the original inside a nonmetallic box in a dark, dry location. If you need to dispose of the battery, do so properly; batteries are classified as hazardous waste and should not be placed in the trash.

### Installing the SIM card

A *SIM card* identifies your phone on a digital cellular network. Before you can use the phone, the SIM card must be installed.

If the kind people at the Phone Store haven't installed the SIM card, you must do so yourself. Follow these steps:

#### 1. Remove the SIM card from its container.

For a 4G LTE SIM card, pop the card out of the credit-card-size holder.

#### 2. Insert the SIM card into the SIM card slot.

On some phones, the SIM card is inserted internally. In that case, remove the phone's back cover and, if necessary, remove the battery to access the SIM card slot.

On other phones, the SIM slot is found on the device's outer edge. You must open the tiny SIM slot cover and insert the SIM card into the slot. This procedure may require a special pointy-thing that came with your phone; insert the pointy-thing into the hole by the SIM slot cover to open the cover. Insert the SIM card directly into the slot, or first place the card into a SIM card carrier and then insert it.

The SIM card is shaped in such a way that it's impossible to insert improperly. If the card doesn't slide into the slot, reorient the card and try again.

#### 3. If necessary, replace the battery and the phone's back cover.

You're done.

The good news is that you seldom, if ever, need to remove or replace a SIM card.



- Don't lose that SIM-card-cover-opening doohickey, also known as the pointy-thing. Keep it in the phone's box for long-term storage.
- SIM stands for subscriber identity module. SIM cards are required for GSM cellular networks as well as for 4G LTE networks.

# Understanding the microSD card

Many Android phones feature two types of storage: internal and removable. Removable storage comes in the form of a memory card. For Android phones, the microSD form factor is used.

If your phone accepts a microSD card, it may not have come with one. That means you'll have to purchase a microSD card and install it all by yourself.

A microSD card comes in a capacity rated in gigabytes (GB), just like most media storage or memory cards. Common microSD card capacities are 8GB, 16GB, and 32GB. The maximum size allowed in your phone depends on its design; some older phones cannot read higher-capacity microSD cards. When you're in doubt, get the 16GB size.

# Installing the microSD card

After obtaining a microSD card for your phone, install it by obeying these directions:

#### 1. If necessary, remove the phone's back cover.

Most newer phones have the microSD card slot on the phone's outside edge. It's covered by a flexible door or hatch. If your phone features such a slot, you do not need to remove the phone's back cover.

#### 2. Locate the slot into which you stick the microSD card.

When the microSD card is installed internally, you may find its slot behind or somehow obscured by the battery.

#### 3. Insert the microSD card into the slot.

The card goes in only one way. If you're fortunate, a little outline of the card illustrates the proper orientation. If you're even more fortunate, your eyes will be good enough to see the tiny outline.



You may hear a faint clicking sound when the card is fully inserted.

#### 4. Reinstall the battery (if necessary), and reassemble the phone.

If the phone is on, you may see a prompt on the touchscreen with information about the card. And, yes, it's okay to insert the microSD card while the phone is on. However, if you need to remove the phone's battery to install the card, well, the phone is going to be off.

# Removing the microSD card

To remove the microSD card, follow these steps:

#### 1. Turn off the phone.

Regardless of whether or not the microSD card is installed by removing the phone's back cover, this operation works best when you power off the phone. Specific power-off directions are found in Chapter 2.

- 2. Open the little hatch covering the microSD card slot.
- **3.** Using your fingernail or a bent paperclip, gently press the microSD card inward a tad.

The microSD card is spring-loaded, so pressing it in pops it outward.

4. Pinch the microSD card between your fingers and remove it completely.

After you've removed the card, you can replace it or close up the back cover and continue using the phone without a microSD card.



- A microSD card is teensy! If you remove it from your phone, keep it in a safe place where you won't lose it. Never stick the microSD card into your ear.
- You can purchase microSD card adapters to allow the card's data to be read by a computer, by either a standard SD memory slot or the USB port.



- If you're upgrading to a new Android phone, simply remove the microSD card from the old phone and install it in the new one. By doing so, you instantly transfer your pictures, music, and videos.
- ✓ Your phone works with or without a microSD card installed.

Refer to Chapter 20 for more information on storage.

- GB is stora
  - GB is an abbreviation for gigabyte, which is one billion characters of storage. One gigabyte is enough storage for about an hour of video, or a week's worth of music, or a year's worth of photographs. It's a lot of storage.
  - SD stands for Secure Digital. It is but one of about a zillion different media card standards.

# Closing the phone

When you're done with phone surgery, you need to close up the patient. Specifically, you must reinstall anything you removed — battery, SIM card, microSD card — and reattach the back cover. The back cover affixes itself to the phone in the reverse manner in which it was removed. Do one of the following:

- Position the cover over any slots or tab holes, and then use your thumbs to slide the back cover up (or down) to secure it on the phone.
- Position the cover directly over the back of the phone, and then press it gently on all sides to seal it shut.

When the back cover is on properly, you should see no gaps or raised edges. If the cover doesn't seem to go on all the way, try again. Never force it!

# Charge the Battery

The phone's battery may have enough oomph in it to run the setup-andconfiguration process at the Phone Store. If so, count yourself lucky. Otherwise, you need to charge the phone's battery. Don't worry about flying a kite and waiting for a lightning storm. Instead, follow these steps:

1. If necessary, assemble the charging cord.

Connect the charger head (the plug thing) to the USB cable that comes with the phone. They connect in only one way.

2. Plug the charger head and cable into a wall socket.

#### 3. Plug the phone into the USB cable.

The charger cord plugs into the micro-USB connector, found at the phone's side or bottom. The connector plugs in only one way.

As the phone charges, a notification light on the phone's front side may glow or you may see a charging battery graphic on the touchscreen. Such activity is normal.

The phone may turn on when you plug it in for a charge. That's okay, but read Chapter 2 to find out what to do the first time the phone turns on. You also may need to contact your cellular provider for additional setup instructions the first time you turn on the phone.

- I recommend fully charging the phone before you use it.
- ✓ You can use the phone while it's charging, although the phone won't turn on if the battery is too low.



✓ You can charge the phone in your car, using what was once called a cigarette lighter. Simply ensure that your car-phone-charger device features the proper connector for your phone or is designed for use with your cell phone brand.

- The phone also charges itself whenever it's plugged into a computer by way of a USB cable. The computer must be on for charging to work.
- Cell phones charge more quickly when plugged into the wall than into a computer's USB port or a car adapter.
- Unlike the old NiCad batteries, you don't need to worry about fully discharging your phone before recharging it. If the phone needs a charge, even when the battery is just a little low, feel free to do so.
- Many Android phones use the micro-USB connector. This connector has a flat trapezoid shape, which makes it different from the mini-USB connector, which is squat and slightly larger and used primarily on evil cell phones.

# Android Phone Orientation

First impressions are everlasting. Your Android phone is, no doubt, a new thing. It's also something that will grow to become an important part of your life. Now is not the time to botch your introduction!

### Finding things on your phone

I think it's cute when people refer to things that they can't name as a *doodad* or *thingamabob*. Cute, but inaccurate. Take a gander at Figure 1-2, which illustrates common things found on the front and back of a typical Android phone.

Not every item shown in the figure may be in the exact same spot on your phone. For example, the Power/Lock key might be found on the top of the phone, not the side.

The terms referenced in Figure 1-2 are the same as the terms used elsewhere in this book and in whatever scant Android phone documentation exists. Here are the highlights:

**Power/Lock key:** The Power/Lock key could be called the phone's on/off button, but it's not. That's because the key does more than just turn on or off the phone. Chapter 2 covers the details.

**Volume key:** The phone's volume control is two buttons in one. Press one end of the key to set the volume higher; the other end sets the volume lower. This key might also be used to control the zoom function when using the phone as a camera.



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Figure 1-2: Your phone's face and rump.

**Touchscreen display:** The main part of the phone is its *touchscreen* display. It's a see-touch thing: You look at the display and also touch it with your fingers to control the phone. That's where it gets the name *touchscreen*.

**Front camera:** The phone's front-facing camera is typically found above the touchscreen. It's used for taking self-portraits as well as for video chat. Not every Android phone features a front-facing camera.

**Speaker(s):** The primary phone speaker is located top center on the phone. One or more additional speakers might also be found on the phone's backside.

**Microphone:** Somewhere on the bottom of the phone, you'll find the microphone. It's usually tiny, about the diameter of a pin. Don't stick anything into the hole! A second, noise-cancelling microphone might also be found on the back of the phone.

**Headphone jack:** On the top of the phone, or high up on one of the sides, you find a hole where you can connect standard headphones.

**Rear camera:** The rear camera is found on the phone's back. It may be accompanied by one or two LED flash gizmos.



**USB/Power connector:** This important jack is usually located on the phone's bottom edge, right in the center, although some phones may place the connector on the side. Whatever the location, use the USB/Power connector to attach the phone's USB cable. That cable is used both to charge the phone as well as to communicate with a computer. Charging the phone is covered in this chapter; see Chapter 20 for information on sharing files with a computer.

Beyond the features shown in Figure 1-1, you'll find a variety of buttons, holes, connectors, and other important doodads on your phone. The location of these items varies. They include:

**SIM card cover:** This spot is where the phone's SIM card is inserted, although some phones may use an internal SIM card, as described in the earlier section "Installing the SIM card."

**Media card slot:** Lift the cover on this slot to add or remove a microSD memory card. See the "Installing a microSD card" section, earlier in this chapter.

**HDMI connector:** This connector allows the phone to use an external HDMI monitor or TV set to show movies, watch slide shows, or do other interesting things. Not every Android phone has an HDMI connector.

**Home key:** Some phones, such as those in the Samsung Galaxy line, feature a physical button called the Home key. This key is found below the touchscreen.

Not shown in Figure 1-2 is a physical keyboard, found on a few Android phone models. The keyboard might be below the touchscreen, or it might slide out or flip up. See Chapter 4 for additional information on the keyboard.

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Take a moment to locate all the items mentioned in this section, as well as shown in Figure 1-2, on your own phone. It's important that you know where they are.

- Some Android phones may also show navigation icons or keys just below the touchscreen. See Chapter 3 for more information.
- A few Android phones feature a pointing device, such as a trackball or a teensy joystick. This device can be used for editing text, navigating links on a web page, or choosing items on the screen.
- The Galaxy Note line of phones feature a pointing device in the form of a digital stylus called an S Pen.
- The main microphone is found on the bottom of the phone. Even so, it picks up your voice loud and clear. You don't need to hold the phone at an angle for the microphone to work.

### Using earphones

You don't need to use earphones to get the most from your Android phone, but it helps! If the nice folks who sold you the phone tossed in a pair earphones, that's wonderful! If they didn't, well then, they weren't so nice, were they?

The most common type of cell phone earphones are the *earbud* style: You set the buds into your ears. The sharp, pointy end of the earphones, which you don't want to stick into your ear, plugs into the phone.

Between the earbuds and the sharp, pointy thing, you might find a doodle on which a button sits. The button can be used to mute the phone or to start or stop the playback of music when the phone is in its music-playing mode.

You can also use the doodle button to answer the phone when it rings.

A teensy hole that's usually on the back side of the doodle serves as a microphone. The mic allows you to wear the earphones and talk on the phone while keeping your hands free. If you gesture while you speak, you'll find this feature invaluable.

- You can purchase any standard cell phone headset for use with your phone. Ensure that the headset features a microphone; you need to both listen and talk on a phone.
- Some headsets feature extra doodle buttons. These headsets work fine with your phone, though the extra buttons may not do anything specific.
- ✓ The earbuds are labeled R for right and L for left.



- See Chapter 16 for more information on using your Android phone as a portable music player.
- Be sure to fully insert the earphone connector into the phone. The person you're talking with can't hear you well when the earphones are plugged in only part of the way.
- ✓ You can also use a Bluetooth headset with your phone, to listen to a call or some music. See Chapter 19 for more information on Bluetooth.
- ✓ Fold the earphones when you put them away, as opposed to wrapping them in a loop. Put the earbuds and connector in one hand, and then pull the wire straight out with the other hand. Fold the wire in half and then in half again. You can then put the earphones in your pocket or on a tabletop. By folding the wires, you avoid creating something that looks like a wire ball of Christmas tree lights.

### Adding accessories

Beyond earphones, you can find an entire Phone Store full of accessories and baubles that you can obtain for your Android phone. The variety is seemingly endless, and the prices, well, they ain't cheap.

#### **Docking station**

A *docking station* is a heavy base into which you can set your phone. The most basic model simply props up the phone so that you can easily see it. I use the basic docking station on my nightstand, where my Android phone serves as my alarm clock. (See Chapter 17.)

More advanced docking stations offer HDMI output, USB connections, and perhaps even a laptop-size screen and keyboard.

#### Car mount

If you plan to use the phone while driving, a car mount is a must-have item. It provides a cradle into which you set your Android phone. It may also have a cable you can use to charge the phone while you drive. That way, the phone is handy and visible for making calls, listening to music, finding navigation instructions, or undertaking other interesting activities while you perilously navigate the roads.

#### Inductive charging coil

Though it sounds like a bogus technical term from the old *Star Trek* TV show, an inductive charging coil is a new technology you can really use. Basically, the coil replaces the battery and back cover so that you can wirelessly charge your phone. Not every Android phone manufacturer provides the inductive charging coil as an option.

#### HDMI cable

If your Android phone features an HDMI connector, you can obtain an HDMI cable. Using the cable, your phone can throw its sound and image onto a computer monitor or TV screen. It may sound like a silly thing at first, but I've used the HDMI cable on my Android phones so that the whole family can sit around our large-screen TV and enjoy rented movies. See Chapter 17 for more information about renting movies on your phone.

# A Home for Your Phone

I've been in more than one older home that features a special vault in the wall, into which the phone was set. Later on, phones just sat on tables or were affixed directly to the wall. Then came the cordless era, when phones were stored in couch cushions. Today's cell phones? They end up everywhere! They do, that is, unless you read my handy advice on where to store the phone, as described in this section.

# Toting your Android phone

The compactness of the modern cell phone makes it perfect for a pocket or even the teensiest of party purses. And its well-thought-out design means you can carry your phone in your pocket or handbag without fearing that something will accidentally turn it on, dial Mongolia, and run up a heck of a cell phone bill.

Your Android phone most likely features a proximity sensor, so you can even keep the phone in your pocket while you're on a call. The proximity sensor disables the touchscreen, which ensures that nothing accidentally gets touched when you don't want it to be touched.

- Though it's okay to place the phone somewhere when you're making a call, be careful not to touch the phone's Power/Lock key (refer to Figure 1-2). Doing so may temporarily enable the touchscreen, which can hang up a call, mute the phone, or do any of a number of undesirable things.
- You can always store your phone in one of a variety of handsome carrying case accessories, some of which come in fine Naugahyde or leatherette.



Don't forget when the phone is in your pocket, especially in your coat or jacket. You might accidentally sit on the phone, or it can fly out when you take off your coat. The worst fate for any cell phone is to take a trip through the wash. I'm sure your phone has nightmares about it.

# Storing the phone

I recommend that you find a single place for your phone when you're not taking it with you: on top of your desk or workstation, in the kitchen, on the nightstand — you get the idea. Phones are as prone to being misplaced as are your car keys and glasses. Consistency is the key to finding your phone.

Then again, your phone rings, so you can always have someone else call your cell phone to help you locate it.

- Any of the various docking stations makes a handsome, permanent location for your Android phone.
- ✓ I store my phone on my desk, next to my computer. Conveniently, I have the charger plugged into the computer so that the phone remains plugged in, connected, and charging when I'm not using it.
- Phones on coffee tables get buried under magazines and are often squished when rude people put their feet on the furniture.
- ✓ Avoid putting your phone in direct sunlight; heat is bad news for any electronic gizmo.
- Do not put your phone in the laundry (see the preceding section). See Chapter 23 for information on properly cleaning the phone.