

# Chapter 1

## Drum Basics

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### *In This Chapter*

- ▶ Understanding what a drum is
  - ▶ Discovering how a drum makes its sound
  - ▶ Identifying the parts of a drum
  - ▶ Recognizing the modern drumset and traditional drums
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**D**rums are members of the *membraphone family* of musical instruments and are considered one of the world's oldest, dating back thousands of years . . . *yawn*. Bottom line, a drum is a musical instrument that creates a sound when you hit it. What distinguishes a drum from, say, a soup pot, is a membrane (I call it a *head* from now on) strung across a hollow chamber (called the *shell*).

Don't get me wrong. I have nothing against soup pots. Or garbage cans or matchboxes or any other improvised drum for that matter. They can be just as fun to play and listen to as a regular drum — just look at the rhythm group Stomp; now *they* have fun. Face it though, a soup pot may be satisfying to hit for a little while, but sooner or later you're gonna want a more refined sound. Enter the drum. A well-made and well-tuned drum can produce all the subtle dynamic textures of a finely crafted violin and create a variety of pleasing sounds, whereas a soup pot only clanks when you hit it.

In this chapter I introduce you to some drums, both the modern drumset and traditional styles. I also show you the difference between a drum and those kitchen appliances that you've probably been banging on for a while now. (It's okay to admit it. Most drummers spend their careers exploring the rhythmic possibilities of household objects — I'm tapping on my computer mouse right now.) I also explain why a drum sounds better than a cardboard box, and I let you know when you should use your hands, or when arming yourself with sticks works better.

## *Picking a Drum Apart from Head to Shell*

Like pots, pans, and garbage cans, drums come in all shapes and sizes. Most are round, but some are octagonal. Some are shallow and others are deep. Some are shaped like bowls or cylinders, others like goblets or an hourglass. Some you beat with sticks, while others you strike with hands or fingers. (See Figure 1-1 for a few drum shapes and sizes.) But, regardless of their shape or size, all drums consist of three basic components:

- ✓ The head (the membrane strung across the shell)
- ✓ The shell (the body of the drum)
- ✓ The hardware (the stuff that holds the other two parts together)

The look of drum hardware can vary in a lot of ways. The hardware can be as simple as tacks nailed through the head into the shell, or it can be as elaborate as gold-plated cast metal rims with bolts that are tightened to precise torque tolerances (try saying that ten times fast). Either way, they all do the same thing: They create tension on the head so that it can vibrate freely against the edge of the shell. Check out Figure 1-2 for a few hardware styles.



**Figure 1-1:**  
Drums  
come in all  
shapes and  
sizes.

## *Exploring How Drums Create Sound*

When you hit a drum, the head vibrates much the same way as a guitar string vibrates when you pluck it. And like the electric guitar when it's not plugged into an amp, not a lot of sound comes out of the head itself, which is where the shell comes in handy. The shell acts like the amplifier that your friend uses with his or her guitar — only you don't need to plug it in. So, you hit the



## The power of one

Here's a story of a Vietnamese village that was about to be attacked by an enemy: The village had no soldiers available, so one man, a drummer, gathered the entire village's drums and began pounding them all as loud and fast as he

could, making a huge ruckus. The attackers retreated and fled figuring that the village's army had to be very large and powerful to have command of such a group of drummers.

drum, the head vibrates, and the sound bounces around inside the shell. This motion makes the shell vibrate too. All the sound is then projected out of the opening in the drum and, *voilà!* The result is the sound of sweet music. Amazingly enough, this action all happens in a fraction of a second.

How the drum sounds depends on the circumference of the head, how tightly it's tuned, and the size, shape, and hardness of the shell. All these factors determine why drums can sound so many different ways and still be just a head, a shell, and some hardware. Without getting too technical, the size and tension of the head dictates the drum's *pitch* (how high or low the drum's tone is) while the size, shape, and hardness of the shell control the volume and timbre of the drum. *Timbre* is a fancy word for the quality of sound produced by an instrument. This timbre is why not all acoustic guitars or violins cost the same amount. For these instruments, the better the timbre, the higher the price. Luckily, this idea isn't necessarily true for drums. (To find out more about the relationship between a drum's timbre and its cost, go to Chapter 19.)



**Figure 1-2:**  
A variety of  
hardware  
styles.

I can go on and on about how the relationship between the head and the size and shape of the shell creates particular sounds, but doing so won't help you play the darn thing. So, the important thing to remember here is that the larger the diameter of drum, the deeper the sound, and the longer the shell, the louder the sound. As always, some exceptions exist, but for the most part you can count on this idea being true.

## Deconstructing the Drumset

Once upon a time, you played drums one at a time. Each drummer played only one drum, and in order to make bigger and better noise — er, music — more drummers were needed. Then somewhere along the way, innovative drummers started putting groups of drums together and beating them all at once. Today's drumsets consist of the following (see Figure 1-3):

- A. Bass drum.** The bass drum usually sits on its side on the floor and is played by stepping on a pedal with the right foot. This drum is generally between 18 and 24 inches in diameter and between 14 and 18 inches deep. Its sound is the foundation of the rhythm of a band, often pounding out the basic pulse of the music or playing along with the bass player's rhythm.
- B. Snare drum.** The snare drum is a shallow drum (typically between 5 and 7 inches deep) that's 14 inches in diameter and has a series of metal wires (called *snare*s, hence the name *snare drum*) stretched against the bottom head. When you strike the drum, the bottom head vibrates against the snares. What you hear is a hissing sound. The snare drum creates the *backbeat* (the driving rhythm that you hear in most popular music; you can find out more about backbeats in Chapter 6) of the music and is what makes you want to dance.
- C. Tom-tom.** The tom-toms are pitched drums that are usually between 9 and 18 inches in diameter. A drumset commonly has at least two, if not three, of them (some drummers, such as Neil Peart from the 1970s rock band Rush, have dozens of tom-toms, so go wild if you want to). Generally, the largest tom-tom (called a *floor tom*) is set up on the floor with legs that are attached to the shell of the drum. The smaller tom-toms (often called *ride toms*) are attached to a stand, which extends up from the bass drum or from the floor next to the bass drum. These drums are used for *fills* (a fill is a break in the main drumbeat, as I cover in Chapter 13) or as a substitute for the snare drum in some parts of songs.
- D. Hi-hat cymbals.** The hi-hats are cymbals that are mounted on a stand, one facing up and one facing down, and are 13, 14, or 15 inches in diameter. The stand has a pedal that pushes the cymbals together (closed) or pulls them apart (opened). Your left foot controls the opening and closing of the hi-hats with the pedal while you hit the cymbals with a stick. The hi-hats can make either a "chick" sound when closed or a "swish" sound when open. You use them with the bass drum and snare drum to create the basic drum beat.



**Figure 1-3:**  
The modern  
drumset.

**E. Ride cymbal.** The ride cymbal is an alternative to the hi-hats. Ride cymbals range in size from about 16 inches all the way up to 24 inches across (20- and 22-inch ride cymbals are the most common). The ride cymbal is traditionally used to create a louder, fuller sound than the hi-hats and is often played during the chorus of a song or during a solo.

**F. Crash cymbals.** The typical drumset usually has one or more crash cymbals used for accentuating certain parts of the music, usually the beginning of a phrase or section of a song. These cymbals create a sound that resembles — you guessed it — a crash, not unlike the sound of a frying pan lid hitting a hard floor, only more musical. Crash cymbals generally range in size from 14 inches to around 20 inches in diameter.

The following aren't included in Figure 1-3, but many sets include them.

- ✔ **Splash cymbals.** Crash cymbals aren't the only accent cymbals that drummers use with today's drumsets. Other cymbals include the splash cymbal, a small cymbal usually between 8 and 14 inches in diameter, which makes a little splash-type sound. The splash cymbal is kind of a softer, watery-sounding version of the popular crash cymbal.
- ✔ **Chinese cymbals.** These accent cymbals have become common over the last couple of decades or so. Chinese cymbals have a slightly rougher, clangier sound than a crash cymbal (more like a garbage can lid). They range in size from around 12 inches to 20 inches and usually have an up-turned outer edge. They're often mounted on a stand upside down.

✔ **Gongs.** These cymbals were really popular additions to drumsets during the stadium rock era in the 1970s when drumsets were huge and drum solos were a staple. Gongs actually come in many shapes and sizes, but the most popular are large (up to three feet across) and very loud.

You can find many other additions to drumsets, which are limited only by the drummer's imagination and budget. In fact, many of the traditional drums and rhythm-makers that I describe throughout this book are showing up in many drummer's kits (*kit* is another word for a drumset).

Although it's the new kid on the block, the drumset has found a home within all the popular music genres that have emerged over the 20th and 21st centuries. You can put a drumset to work playing rock (see Chapters 6 and 11), the blues (see Chapter 7), R&B (see Chapter 8), jazz (see Chapter 9), and Latin and Caribbean music (see Chapter 10).

## *Appreciating the Old-timers: Traditional Drums*

People have been playing drums since they discovered that banging a stick against a log made a pleasing sound (or at least a loud one). Unlike most musical instruments, you can find drums in all parts of the world. Different cultures created different drums based upon the materials they had on hand, their rhythmic sensibilities, and whether they were nomadic or agrarian people (people who moved around a lot developed smaller, lighter drums). As a result, you see an awful lot of different types of drums in the world.

### **The dawn of the drumset**

Early forms of drumsets consisted of two or three hand drums lashed together and played by one person. Today's drumset, on the other hand, is a highly evolved grouping of specialized instruments, designed to allow one drummer to make as much noise as humanly possible. (I'm just kidding about that last part, but the current design of the modern drumset does have a specific purpose.)

The modern drumset was first developed with the emergence of jazz music early in the 20th

century. Early jazz drummers put together the drums and cymbals used in military bands and folk music in order to be able to play all of these instruments by themselves. This setup allowed one drummer to use a variety of drums and cymbals that best complemented the music of the other musicians in the band. The drumset is indispensable in popular music today, and is the image formed in many people's minds when they think of drums.

The most common traditional drums include the *conga*, which is a barrel-shaped drum from Cuba; the West African, goblet-shaped *djembe*; the *Surdo* bass drum from Brazil; and the *frame drum*, which has a very narrow shell and comes from a variety of places all around the world (see Figure 1-4). (In Chapters 15–17, I introduce you to a wide variety of drums and other traditional percussion instruments.)



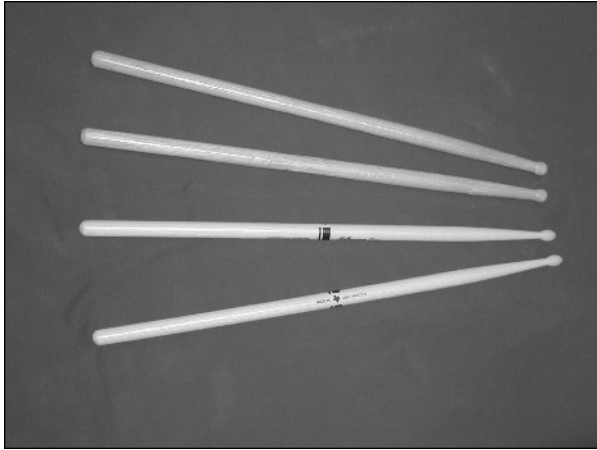
**Figure 1-4:**  
Traditional  
drums that  
you're likely  
to see  
today.

Just as you have a wide variety of drum styles in the world, you also have a bunch of ways to play them. Some drums require hands or fingers while others require the use of sticks to produce their characteristic sounds. Still others utilize both hands and sticks.

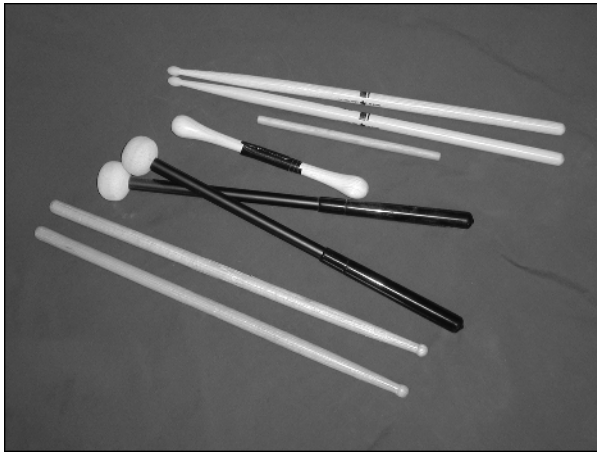
## *Swingin' Sticks and Slapping the Skins*

The most common and recognizable drumstick is used on the drumset and for playing *rudiments* (used for classical music and in drum corps; see Chapter 3). This stick is generally about 16 or 17 inches long with a diameter ranging from about  $\frac{3}{8}$  inch to almost one inch. The stick tapers down at about the last 2 or 3 inches (called the *shoulder*) to a beaded tip, which is what strikes the drum. The tip is made of either wood or nylon. The nylon-tipped stick produces a crisper and brighter sound than the wood-tipped stick. Figure 1-5 shows you a typical drumstick.

Some of the more traditional drums have other types of sticks. Some are wrapped in felt or fleece, some are just straight sticks with no tip, some are curved, and others have *beaters* (the part that actually “beats” the drum head) on both ends. See Figure 1-6 for a variety of stick shapes and sizes.



**Figure 1-5:**  
The most  
common  
drumstick  
used today.



**Figure 1-6:**  
A variety of  
drumsticks.

Regardless of its shape or size, a stick can create a louder, sharper sound than a hand, but a hand can create more subtle textures than a stick. With your hand, you can *slap*, *pound*, *brush*, *fan*, or *tap* (for more about these and other hand strokes, check out Chapter 4). You can use your whole hand or just your fingertips. In many ways, this versatility allows hand drummers to create an almost limitless variety of sounds on a drum.