

## MAKING A DRUM



**ABOUT DRUMS** - A drum is a musical instrument consisting of one or two stretched membranes, called heads, held taut across a bowl-shaped or tubular frame, called a shell, and sounded by percussion; that is, by striking the instrument with the hands or with sticks. The drum shell holds the skin or skins taut and also acts as a resonator. Drum shells that are basically tubular vary in their actual shape, from cylindrical, as in a bass drum; to barrel shaped, as in some drums of China and India; to goblet shaped, as in the single-headed Middle Eastern *darabuka*; to hourglass shaped, as in the double-headed Japanese *tsuzumi*.

If the drum shell is so shallow that it cannot act as a resonator, as on a tambourine, the drum is called a frame drum. Single-headed drums with bowl-shaped shells are called kettledrums. Usually tunable and played in pairs, they include the European orchestral kettledrums, or *timpani*; the *naqqara* of Islamic countries and their medieval European relative, the *nakers*; and the *bāya*, one of a pair of kettledrums, played in Indian classical music.

### ☆ What are drums made of?

Drum shells are commonly made of wood, metal, or pottery. The heads, made of animal skin or plastic, are fastened to the shell by nails, glue, buttons, pegs, laces, or a cord wrapped around the border of skin that overlaps the shell. Double-headed Western orchestral and band drums, such as the snare drum, tenor drum, and bass drum, usually have two hoops for each head, one around which the excess skin is lapped, another pushing against the first hoop and holding the skin taut. Lacing may be done in a W or Y pattern, adding more tension to the heads. In modern drums the lacing may be replaced by tension screws attached to the top hoop.

### ☆ Where are drums found?

Drums are found throughout the world, in practically every culture, and are known to have existed since at least 6000 BC. Almost everywhere they have strong ceremonial, sacred, or symbolic associations. In much of Africa certain drums symbolize and protect tribal royalty and are often housed in sacred dwellings. In Europe, timpani were associated with royalty as late as the 17th century. Throughout Central Asia and Siberia and among some Native American tribes of North America, shallow frame drums with one or two heads serve as ritual instruments for shamans (medicine men). The tambourine, a single-headed frame drum with or without jingling metal disks set in its frame, is traditionally a woman's instrument in Islamic countries, as it was in ancient and prehistoric times and in medieval Europe.

**Did you know?** Drums are frequently used for signaling. The talking drums of Africa imitate the pitch patterns of language and transmit messages over many miles. The snare drum, or side drum, used in European infantry regiments, coded instruction calls to soldiers. The musical use of drums varies from simple timekeeping to the carrying of complex rhythms and counterrhythms. In Islamic and Indian classical music, drums provide intricate rhythms to accompany a melody. In Africa, ensembles of drummers play elaborate rhythmic patterns superimposed on one another, all of different lengths and timing, held together by the playing of the master drummer.

*Please note: This information was excerpted from "Drum (musical instrument)," Microsoft® Encarta® Online Encyclopedia 2003, <http://encarta.msn.com> © 1997-2003 Microsoft Corporation. All Rights Reserved.*



## **MAKING A DRUM** - Now it's time to make your own drum!

**Supplies needed:** Materials for drum shell and drum head (see below), scissors, glue, paint, paint brushes (one large size for glue, smaller sizes for decorating drum head and shell), pencil/marker, tape, rubber bands (large), sponge and cord.

**Step 1** Gather materials for the drum shell and drum head

Since drums can be made in a variety of shapes, sizes and from a variety of materials, there are many options in terms of materials.

### **Options for the Drum Shell:**

- Cardboard: ice cream, oatmeal, cookie, snack cartons/containers, large tubes or boxes such as those used for shipping and construction purposes (cardboard should be very rigid)
- Metal Containers: coffee, cookie, popcorn, potato chip containers
- Plastic: food and material containers, buckets, discarded planters
- Wood: bowls, shipping containers, small crates or barrels

*Please Note: Be careful when selecting a container by making certain that it is empty (and that you have found a proper place to store any remaining contents) and that the container has not held anything that could be harmful (pesticides, certain construction or paint materials, cleaning agents, etc.)*

## Options for the Drum Head:

- Discarded drum heads (from music stores, bands, drummers, etc.)
- Fabrics: canvas, cotton, linen, muslin
- Paper: wrapping or butcher paper, large paper bags (use two layers ideally)

### Step 2 Building your drum

- Fit your drum head to the drum shell you have selected.

Trace the outline of the top of your drum on the material you have selected for the drum head.

Add an additional two inches to your outline of the drum shell to allow the drum head material to hang over the edge (to allow for attachment to the drum shell).

- Stretch your drum head over the shell.

If you are using paper or fabric, use a sponge and water to dampen the surface before attaching the drum head to the drum shell (this will allow the dampened material to shrink and tighten as it dries in place).

- Attach your drum head to the drum shell

Attach the drum head material to the drum shell by gluing the overlapping 1-2 inches of drum head to the drum shell. Be sure to add glue to the drum body to cover the 1-2 inches of area beneath the drum shell opening.

After gluing the drum head to the drum shell, you should further strengthen the construction of your drum by either taping, tacking or stapling the drum head to the drum shell, by lacing cord through holes created in the drum shell, or by encircling the drum head with elastic bands or cord.

### Step 3 Strengthening your drumhead

- (If you are using paper or fabric) Once you have attached your drum head, coat the drum head with 1-2 layers of glue (use a glue that will dry clear and apply the glue with a paint brush). Let the first layer dry completely before applying the second layer.

*Please note: If you plan to paint the surface of your drum head, do so before applying the layers of glue and make sure to let the paint dry completely before you apply the first layer of glue.*

#### **Step 4** Decorating your drum

Designs, motifs and decorations on a drum shell or drum head can contain important meanings, both personally for the individual drum-maker as well as culturally for the overall society in which the drum is used. Such designs can represent many things including cultural traditions or beliefs, important leaders, mythical or spiritual figures, special or historical events, etc.

As you design or decorate the surfaces of your drum, think about what you would like your drum to represent visually: are there any personal events or experiences or cultural ideas or expressions that you would like your drum to symbolize?

→ Materials that can be used to decorate your drum include paper (which can be decorated or painted and wrapped around your drum or simply added to the drum shell), paint, ribbons, colored tape, feathers, bells, cords, etc.

**Did you know?** Some drums used in gatherings and religious rituals contain visual messages within their designs and decorations in addition to the rhythmic messages of their beats. For example, in the Democratic Republic of Congo, the Luba people decorate their royal drums with representations of power, such as female figures that guard the knowledge of the king.

**Optional: Making a Mallet or Beater:** Although mallets or beaters are not necessary when playing a drum, they offer another way to create sounds with the instrument. If you would like to play your drum with a mallet or beater, create your own from materials (including those suggested below) that can be found in and around many households.

→ Attach materials such as corks, thread spools, wooden beads or other objects to dowels, pencils, tree branches or chopsticks. You can cover the attached materials with fabric or an old sock.

**Please note: Be sure that the objects that you choose to use for a mallet/beater don't have any sharp edges!**

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**PLAYING YOUR DRUM** - Not only do different drums produce different sounds, but also the same drum can be played in different ways in order to produce different sounds. A drum can make different sounds depending on the position of your hands or the spot on the drum that you strike when playing.

Experiment with your drum by using different parts of your hand (fingertips, knuckles, a whole hand cupped, a whole hand flattened, the heel of the hand, etc.) when striking the drum, listening for any changes in tone. Then, try striking the drum in different places, listening for differences between sounds produced by hitting the center of the drum and delete those sounds produced by striking closer to the edge of the drum. Another way to create additional variations in sound is by changing the pressure of the drum head (which changes the tone of the drum). Try applying different amounts of pressure near the edge of the drum head with one hand, and playing the drum with the other, to see how the tone is affected.

Mallets or beaters can also be used to create unique tones. Students choosing to play their drum with a mallet or beater can be creative by striking their drum in imaginative ways to produce a variety of sounds.

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**TEST YOUR KNOWLEDGE** - Can you identify Drums A, B and C? Please note: names and definitions for these drums are given below.



**Drum A**



**Drum B**



**Drum C**

*The above drums were donated by Remo, sponsor of the International House of Blues Foundation Make An Impression Drum Circle program.*

**Drum A: Talking Drum** (African instrument) - An hourglass shaped drum originating in West Africa. Also known by other names including “donno” and “dunun drum,” the talking drum has thin strips of string going up and down the length of the drum. It is typically played with a curved or L-shaped stick. The drum can be held under one arm allowing the drummer to squeeze it while playing. The squeezing action changes the pitch of the sound and allows the drummer to reproduce or imitate sounds of some languages. The drummer can also pull the strings to produce these sounds. Using these techniques, drummers can create small sentences or phrases that are understood by others. Talking drum masters are known to send messages and hold conversations using their drums.

**Drum B: Bongos** (Afro-Cuban instrument) - A pair of small, single-headed, cylindrical or conical drums permanently attached to one another. One of the drums is slightly larger than the other. Bongo drums, which are played with both hands, are typically held between the knees or mounted on a stand.

**Drum C: Djembe** (African instrument) - A goblet shaped drum originating in West Africa, typically played with bare hands.

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**REMEMBER TO KEEP THE TRUE SPIRIT OF PLAYING MUSIC  
FOREMOST IN YOUR MIND:**

**HAVE FUN WHILE EXPLORING YOUR CREATIVITY!**