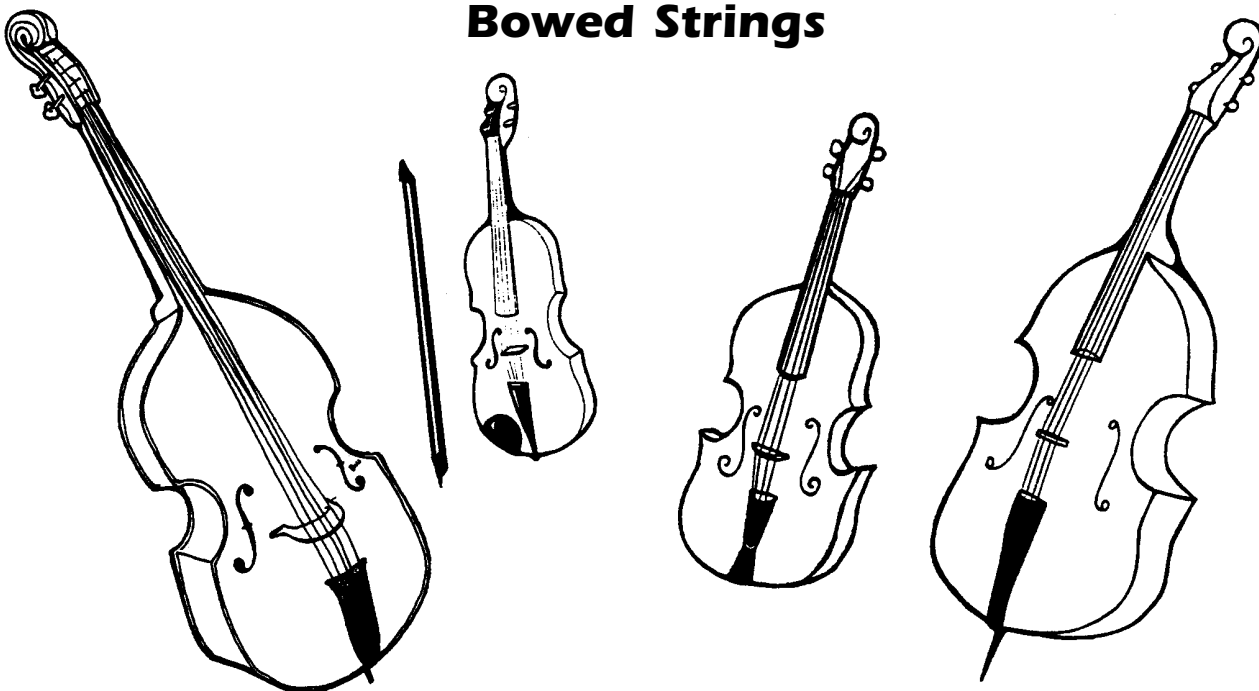


# The String Family

The string family of instruments includes stringed instruments that can make sounds using one of two methods.

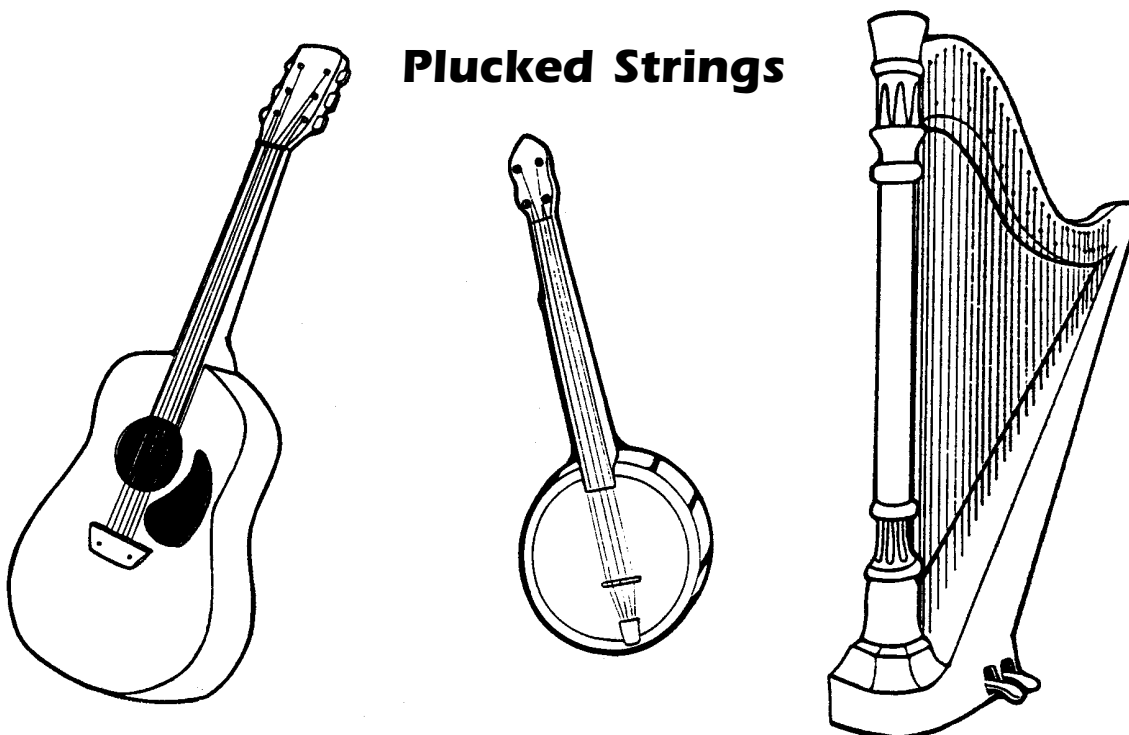
**Method 1:** The sound is produced by moving a bow across the strings. The violin, viola, cello, and string bass produce sound in this way.

## Bowed Strings



**Method 2:** The sound is produced by plucking the strings. The guitar, banjo, and harp are some of the stringed instruments that produce sound in this way.

## Plucked Strings

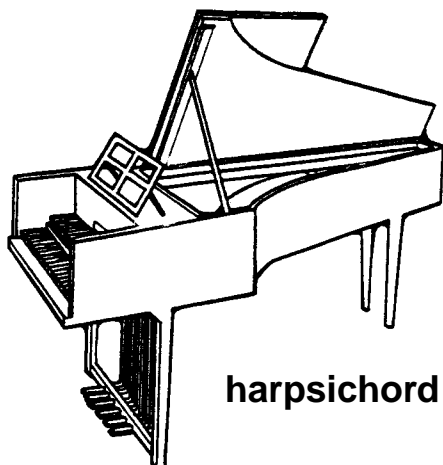


# The Keyboard Family

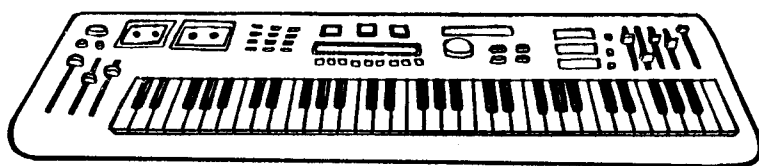
Keyboards are instruments that use a keyboard in some way to make sound.

Some keyboard instruments make their sound when a key is pressed down and moves a small device called a plectrum that plucks the string. Harpsichords and spinets produce sound in this way.

Electronic organs and electric pianos are widely used in many of the music styles of today. Electronic keyboard instruments produce a wide variety of sounds and special effects.

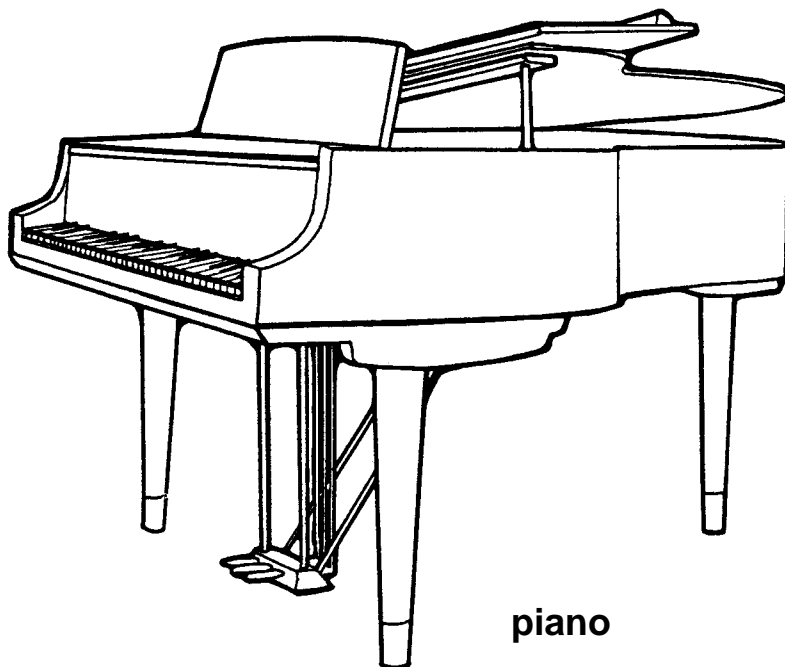


harpsichord



keyboard

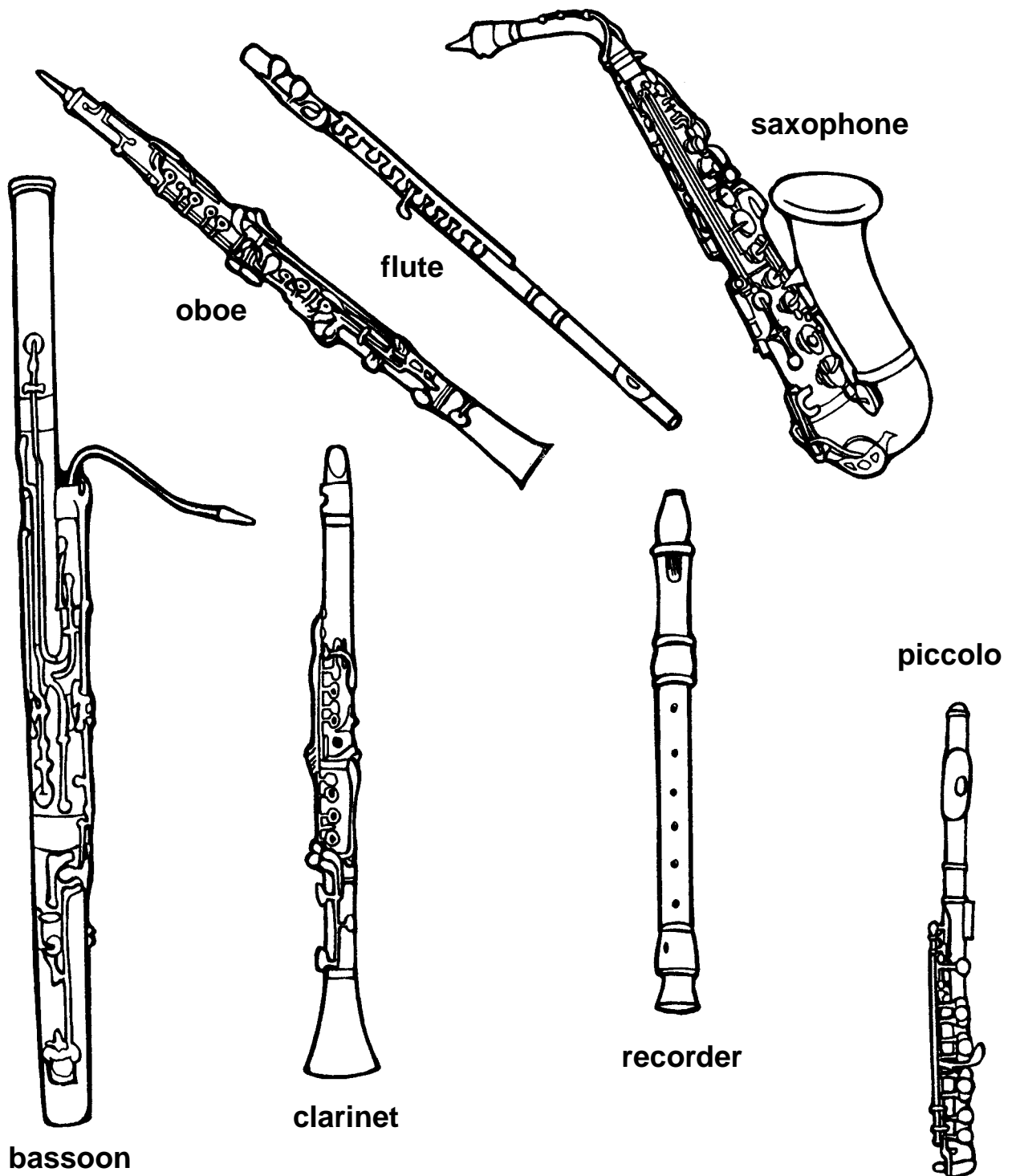
One of the most popular instruments makes its sound when a key is pressed down and a soft “hammer” hits the string or strings. This instrument is the piano.



piano

# The Woodwind Family

Woodwinds are one of two families of wind instruments. Woodwind instruments were so named because they originally were made out of wood and were played by blowing into them. In modern times, not all woodwinds are made out of wood, but they are still played by blowing. The woodwind family includes the flute, recorder, piccolo, oboe, clarinet, saxophone, and bassoon.

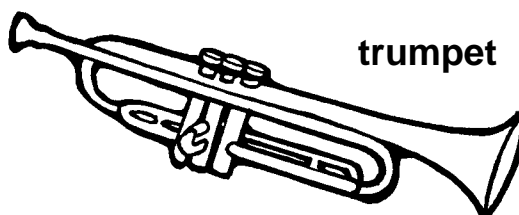


# The Brass Family

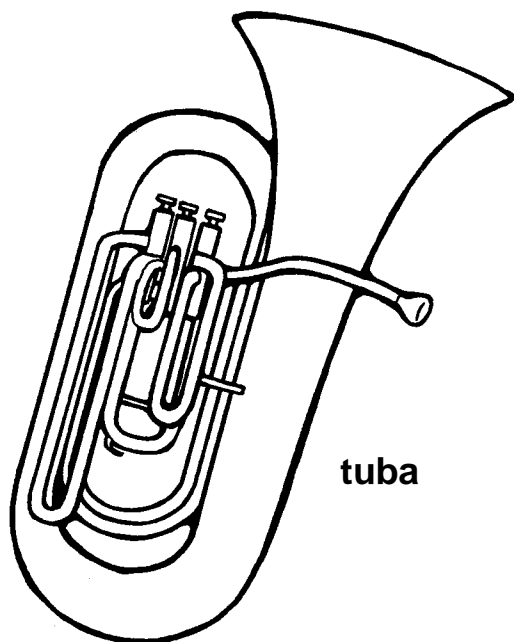
The brass family of instruments received its name because of the metal from which they are usually made. They are blown like woodwinds and have keys or slides to change the notes. Some of the members of the brass family include the trumpet, French horn, trombone, tuba, and sousaphone.



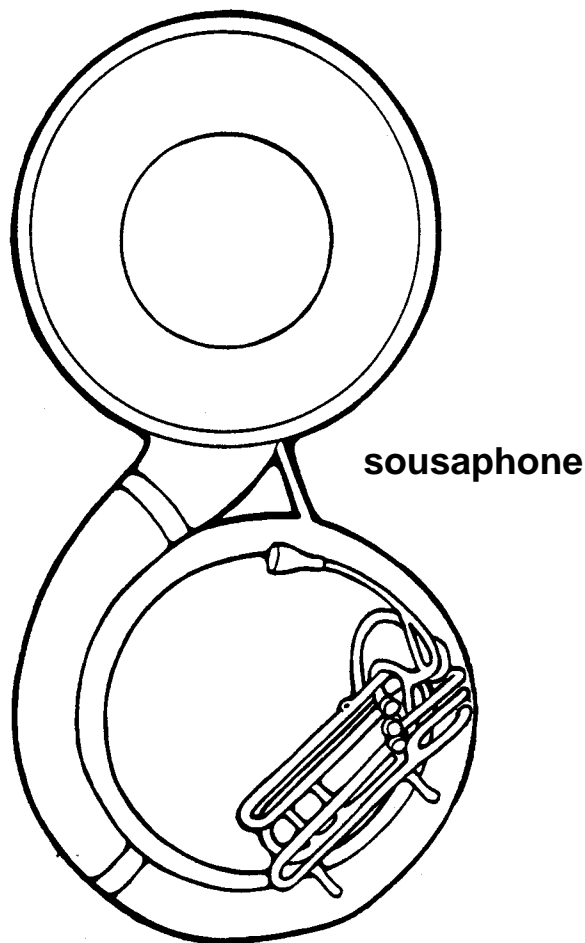
French horn



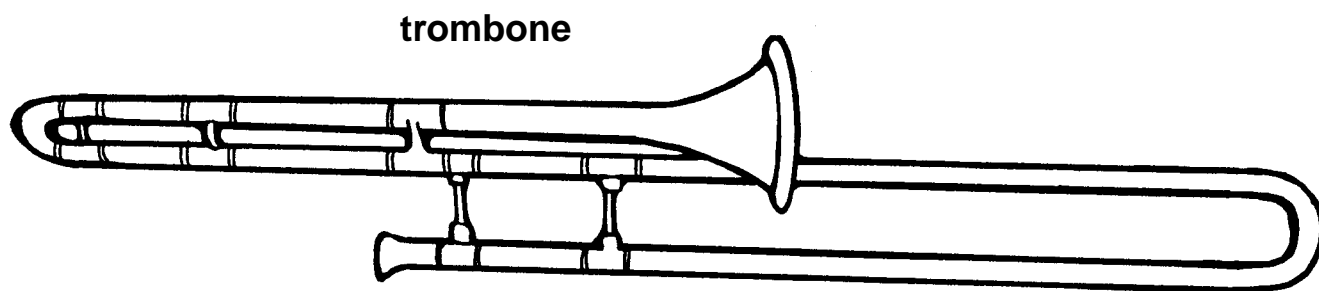
trumpet



tuba



sousaphone



trombone

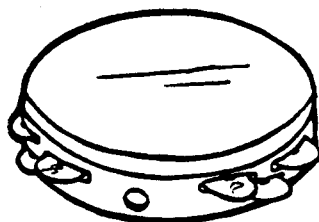
# The Percussion Family

The percussion family of instruments are instruments that are struck in some way. This family includes more members than any other instrument family. Some percussion instruments are the tambourine, castanets, triangle, cymbal, gong, xylophone, and drums.

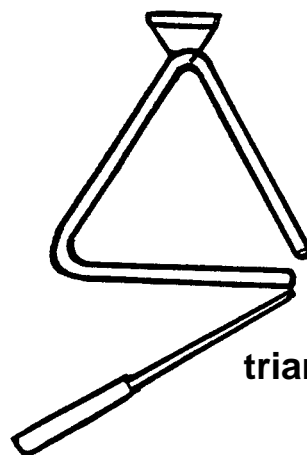
castanets



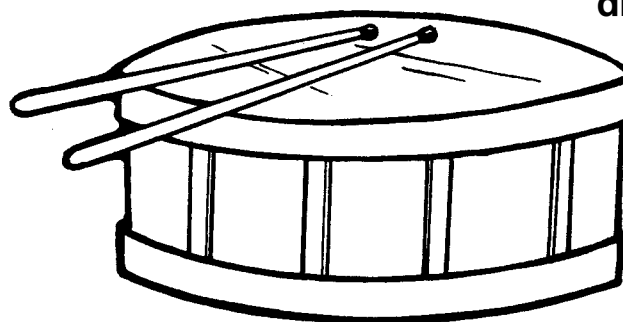
tambourine



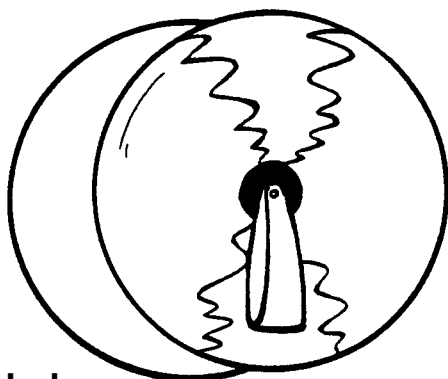
triangle



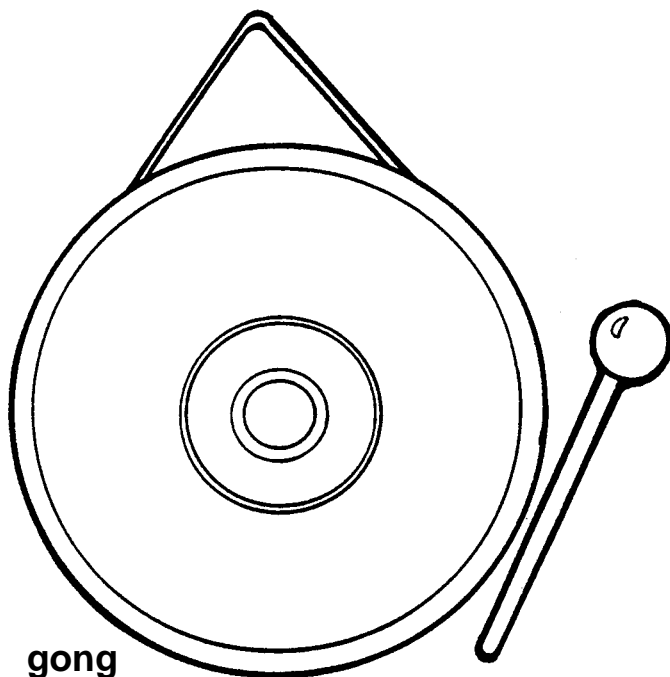
drum



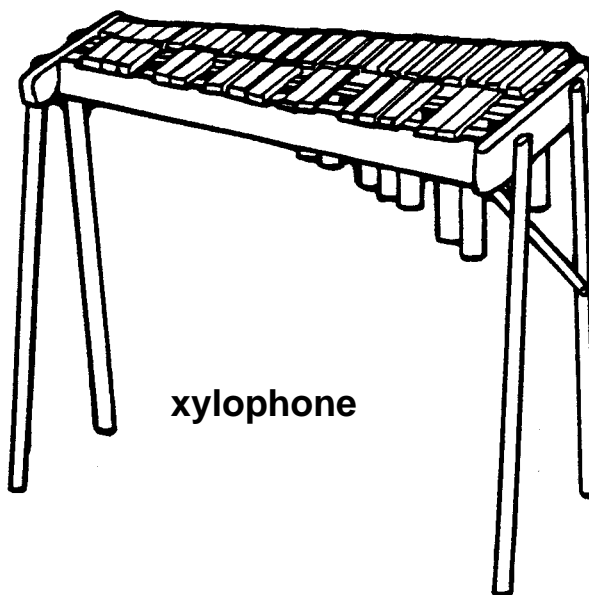
cymbals



gong



xylophone



# Musical Terms

The musical terms on this page are part of the language of music. If you learn them, your knowledge can add to an appreciation of the music you hear and play, as well as an appreciation of the composers who have created it. Knowledge of musical terms also can help you understand more about the similarities and differences of music through times, places, and cultures.

**Rhythm** is the recurrence or repetition of beats in a regular, predictable way. It divides the time in musical works, using accented and unaccented beats to create a pattern. Some rhythms make you want to clap and dance while others help you fall asleep. Sample rhythms can be found on page 109.

**Notes** are symbols that show musicians how long to make sounds. Each note stands for a specific time length for a tone to be held. Whole notes are held longer than half-notes, and half-notes are held longer than quarter-notes. More information about notes and their time values can be found on pages 109 and 110.

**Melody** is an organized succession of tones. It is the memorable tune that we sometimes walk about humming or singing!

**Harmony** is the combination of groups of tones sounded together. The basic unit of harmony is the chord, where two or more tones are played together.

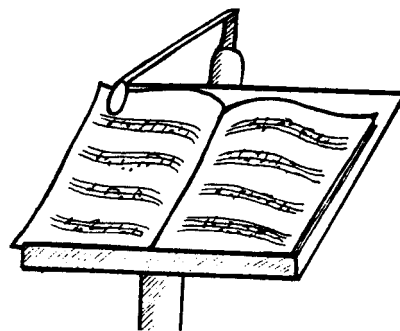
**Tone color** is the timbre or special quality of a voice or musical instrument. Tone color distinguishes the tone of one musical instrument or voice from another.

**Form** is the structure of a musical piece. It is the way in which the entire composition is built. Sometimes composers follow certain forms when they create, such as the form of A (statement)—B (contrast)—A (return) in an orchestral work, or the verse and chorus form of many popular songs.

**Pitch** is the highness or lowness of a tone.

**Tempo** is how fast or slow music is played.

**Dynamics** is how loudly or softly the music is played.



# Simple Note Values and Rhythms

Learning note values and rhythms requires mathematical skill. You must be able to divide and count.

*Notes have specific values.*

**one whole note =**

two half notes



four quarter notes



eight eighth notes



**one half note =**

two quarter notes



four eighth notes



**one quarter note =**

two eighth notes



**Notes that are dotted add half their value to the note.**

**dotted half note =**

three quarter notes



**dotted quarter note =**

three eighth notes



*Notes written in musical notation have specific rhythms.* Music is written in measures with a time signature at the beginning of the piece. The top number of the time signature tells you how many beats are in each measure. The bottom number tells you that a note of that value gets one count.

**3**  
**4**















**4**  
**4**



Make some songs using the simple note values and rhythms you have learned on this page. The notes provided on page 110 can be cut out and used to create your songs.

# Acoustical Notes

Reproduce as many copies of this page as needed. Cut out the notes and arrange them to equal each other and/or to create rhythms.

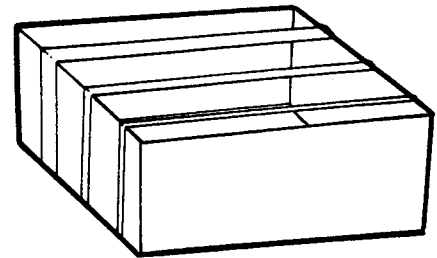
			
whole note	quarter note	quarter note	quarter note
			
half note	half note	dotted half note	dotted quarter note
			
eighth note	eighth note	eighth note	eighth note



# A Potpourri of Musical Activities

Explore the world of music with the following activities.

- Create “Answer Back” songs, where one person sings a question and another person answers the question in the same melody.
- Tap out rhythms and have listeners copy what you have done.
- Investigate how sound travels. Strike a tuning fork and touch it to each of the following materials: wood, glass, rubber, water, and air. Place your ear near the object and listen to the sound. Through which object(s) does sound seem to travel the best, fastest, or loudest?
- “Play” a rubber band to find its highest and lowest tones. Try to play a “tune” on it! Stretch rubber bands of varying lengths and thicknesses across a sturdy cardboard box (with top removed). Pluck the rubber bands and compare the sound produced. Discuss why the thickness, length, or tautness of the rubber bands makes a difference in pitch.
- Add some of the following homemade instruments to those suggested in the book sections.>



- Make finger tappers out of toothpaste caps, thimbles, acorn hats, or buttons sewn on gloves.
- Cut conduit pipe, PVC pipe, or wooden bars to produce different pitches. (Copper pipe, while more expensive, produces a better quality sound.) Conduit pipe cut to the following lengths can be struck with a wooden spoon, drum stick, or rubber mallet to produce the notes of the scale.

Use a 10-foot (3 meter) length of  $\frac{1}{2}$ " (1.27 cm) electrical conduit pipe. Cut to these measurements, starting with the longest pipe:

<b>do</b>	9 $\frac{3}{4}$ " (24.8 cm)	<b>so</b>	7 $\frac{13}{16}$ " (19.8 cm)
<b>re</b>	9 $\frac{1}{8}$ " (23.2cm)	<b>la</b>	7 $\frac{3}{8}$ " (18.7cm)
<b>mi</b>	8 $\frac{9}{16}$ " (21.7 cm)	<b>ti</b>	6 $\frac{7}{8}$ " (17.5 cm)
<b>fa</b>	8 $\frac{5}{16}$ " (21.1 cm)	<b>high do</b>	6 $\frac{23}{32}$ " (17.1 cm)

Cut 8 notches in a length of styrofoam block and rest the cut pipes in order from lowest to highest pitch.

- Collect and arrange a variety of bells in order of lowest pitch to highest pitch.
- Make a tambourine using two paper plates, a hole punch, yarn, and a handful of beans. Put the beans in one plate and place the other plate face down over it. Punch a series of holes through both plate rims. Attach the rims by threading yarn through the holes. Tie the yarn ends as shown.

