

The woodwind family

Piccolo

- Tiny flute that plays highest pitch/sound in the woodwind family
- Made of wood, silver or plastic
- Played out to the side, not down like a recorder
- Smallest instrument in the woodwinds



Oboe

- ❖ Made of special wood called rosewood
- ❖ Has a cone-shaped pipe, narrower at the top than at the bottom
- ❖ Has a double reed (looks like a straw) which is placed in the top end of the instrument
- ❖ Has a wide range of note/pitches
- ❖ Produces a high, but soft tone



Bassoon

- ❖ A long, tube-shaped, double reed instrument, open at both ends
- ❖ The natural bass of the woodwind family
- ❖ Has two side by side tubes with a "U" tube at the bottom
- ❖ Made of maple wood
- ❖ Makes the lowest sounds in the orchestra; much like the double bass.



Flute

- ❖ A long, round tube closed at one end
- ❖ Notes are changed by pushing on the keys with your fingers
- ❖ Has a very high pitch
- ❖ Often made of silver, sometimes gold, platinum
- ❖ Older flutes were generally made of wood
- ❖ Does not have a reed



The Woodwind Family

Woodwinds got their name as they used to all be made of wood. Today the instruments are made of either wood, metal, or a mixture of both. The “wind” part come from the air that is blown through needed to make the sound.

- ♪ Woodwinds are basically long narrow tubes with holes. Some of the holes have covers called *keys*.
- ♪ Most instruments use a small piece of wood called a *reed* to produce their vibration. The reed vibrates when air is blown across it.
- ♪ The main woodwinds in the orchestra include the: piccolo, flute, Clarinet, oboe and bassoon.
- ♪ Some woodwinds like the flute do not have a reed. The sound is produced by blowing across a hole in the instrument, like you would do if you were blowing across the top of a pop bottle.

Clarinet

- ❖ A long, round tube closed by a single reed at one end
- ❖ Most often made of hard wood
- ❖ Has a very warm and pretty tone
- ❖ It can play very low notes and very high notes
- ❖ Keys are pressed with your fingers to change the sound
- ❖ Played down towards the floor like a recorder



The Brass Family

- ♪ All of the instruments in the brass family are really made of...BRASS!
- ♪ They are the loudest of all the orchestra instruments.
- ♪ They are made from brass tubes that are very long but have been curved to save space. The tubes flare at the end called the *bell*.
- ♪ Brass instruments have a cup-shaped mouthpiece you “buzz” into. Buzzing makes the air vibrate and the sound come out.
- ♪ Most brass instruments have valves or buttons you push down. You can change the notes and sound by your fingers or mouth.
- ♪ The four main brass instruments are the: trumpet, French horn, trombone, and tuba.

Trumpet

- **Has three valves**
- **You can change the sound by blowing faster or slower air or by pushing the valves**
- **Sounds can be softened or changed by using a mute that is placed in the bell**



The Brass Family

Tuba

- A large funnel-shaped instrument with a long neck
- Made of brass and sometimes silver or gold material
- Buzzing the mouthpiece creates the sound
- Has 3 to 5 valves. Pushing the valves makes different notes
- Biggest and lowest sounding member of the Brass family
- Has a mute that can be placed in the bell to soften the sound



French Horn

- The horn is the most difficult brass instrument because it can make so many different pitches.
- Has a nice, warm sound
- Has three valves like the trumpet.
- Horn players traditionally put their right hand in the bell to make a softer, beautiful sound.



Trombone

- The alto, tenor and bass trombone are the most common
- Has a slide instead of valves
- The slide is made of a small tube inside a larger one. There are 7 places along the slide to get the different notes
- Uses a mute (to cover the horn) to make the sound softer



The String Family

- ♪ The string section makes up more than half of the orchestra.
- ♪ All of the instruments in this section are made of...you guessed it.....**STRINGS!**
- ♪ The strings are made of gut, steel, or nylon.
- ♪ Stringed instruments are played by drawing a horsehair bow across the strings, or by plucking or tapping the strings to make them vibrate.
- ♪ All of the strings (except the harp) have curvy, hollow, wooden bodies and long necks.
- ♪ The strings are stretched from the pegs at the neck, through the body and down to the tailpiece.
- ♪ The four main instruments in the string family are the:

Violin

Viola

Cello

Double Bass

Harp



Violin

- **Highest pitched family member**
- **Fits under the chin while being played**
- **Played with a bow or plucked**
- **Smallest member of the String family**
- **Can be played softer by using a clamp that looks like a comb. It is placed on the bridge.**

The String Family

Viola

- A little larger than the violin
- Has a lower and warmer tone
- Fits under the chin while being played
- Played with a bow or can be plucked
- Plays a 5th lower than the violin
- Because it is slightly larger than a violin, you may need a larger hand to play it comfortably.



Double Bass

- Lowest pitched member of the string family
- So large that it can be taller than the musician
- Widely used in jazz where it is mostly played by plucking the strings
- Can be played standing up or sitting on a stool
- An extension at the top of the lower string allows for deeper notes to be played



Cello

- The bass member of the violin family
- Played with a shorter and thicker bow
- The player sits to play
- The cello rests on the floor supported by a peg or spike and is held between the knees
- It's larger body makes a deeper sound

Harp

- The harp is not like any other member of the string family.
- It has about 45-47 strings stretched across its tall triangular frame made of wood.
- The strings are plucked by hand
- The harp is played sitting down.



The Percussion Family

- ♪ Instruments are played by *hitting, striking, shaking or scraping*. Sometimes by hitting something against itself, or by using a stick or mallet.
- ♪ Instruments are made of material that can vibrate - animal skin, metal or wood. They come in many shapes and sizes.
- ♪ They are used to keep the rhythm, make special sound effects and even play different notes
- ♪ Some are tuned to make different notes like the xylophone and timpani, and some are untuned like the snare drum or bass drum.
- ♪ The main percussion instruments in the orchestra are timpani, snare drum, bass drum, marimba, gong and cymbals.

Timpani



- A set of drums of different sizes, which play different notes, played by one performer
- Each drum has a bowl of copper with plastic stretched over it
- Pitches/notes are changed by tightening or loosening the head with a pedal
- Played with sticks covered with felt

Snare Drum

- Has two heads, either calf skin or usually plastic
- The top, "batter head", is played
- The bottom, "snare head", has gut or metal snares stretched across it
- The snares vibrate when the drum is beaten giving a rattle or buzz sound
- Played with wooden sticks



The Percussion Family

Cymbals



- Round brass plates, slightly curved out
- Play by holding them in either hand and bringing them together in a swinging brushing motion
- A single cymbal struck with hard drumsticks, stroked with a wire brush or rolled with soft cord sticks
- All cymbals come in a variety of sizes from 15 to 30cm or larger

marimba

- Struck with round-headed mallets
- Top row is similar to the black keys on a piano
- Bottom row is similar to the white keys on a piano
- Comes from Africa and South America
- Played with a variety of sticks or mallets, hard, medium and soft, rubber or cord



Gong

- Large metal disc hanging from a metal frame
- Untuned percussion instrument from China
- Comes in different sizes (Very small to very large)
- Orchestral tam-tam (gong) is over 3-feet wide
- The best place to strike a gong is just off-center.
- Hit with a soft drumstick



Bass Drum



- Largest and lowest of the drums, it can be 3 feet wide
- Untuned instrument that has a very low sound
- Can sound thundering or quiet
- Played with very large felt or wood sticks

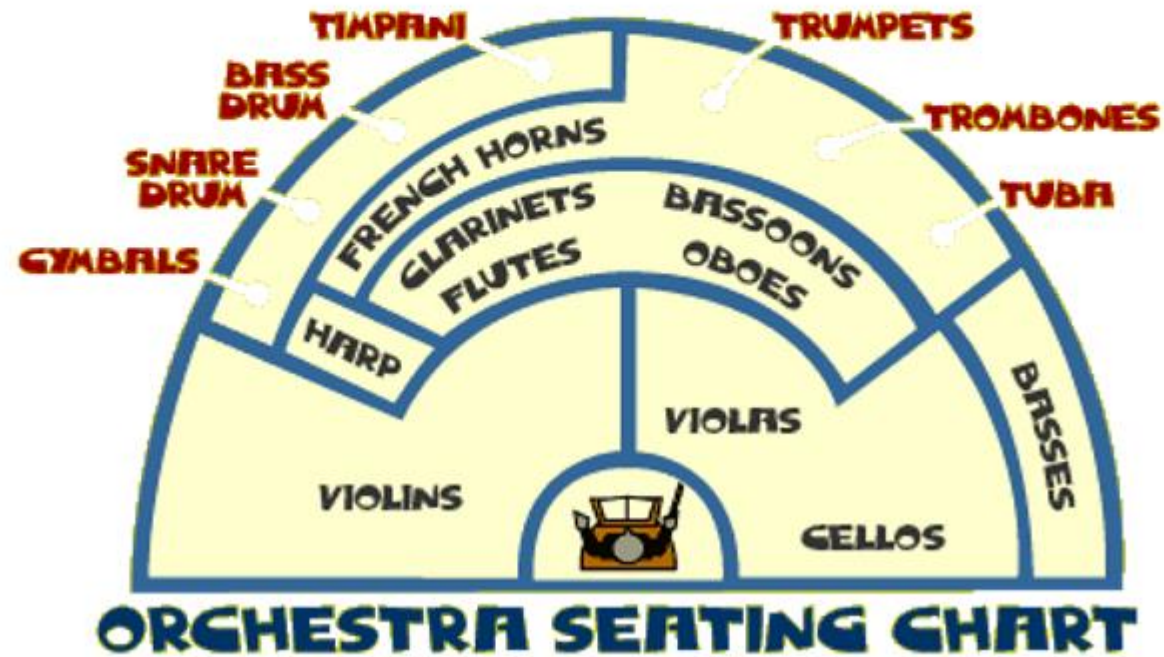
The Four Families of the Orchestra

Each family is grouped by the way the instrument produces vibration. The 4 families are

- **string** family
- **woodwind** family
- **brass** family

All of the musicians sit according to their section. This is how the orchestra is set up.

INSTRUMENTS OF THE ORCHESTRA



- **percussion** family

