

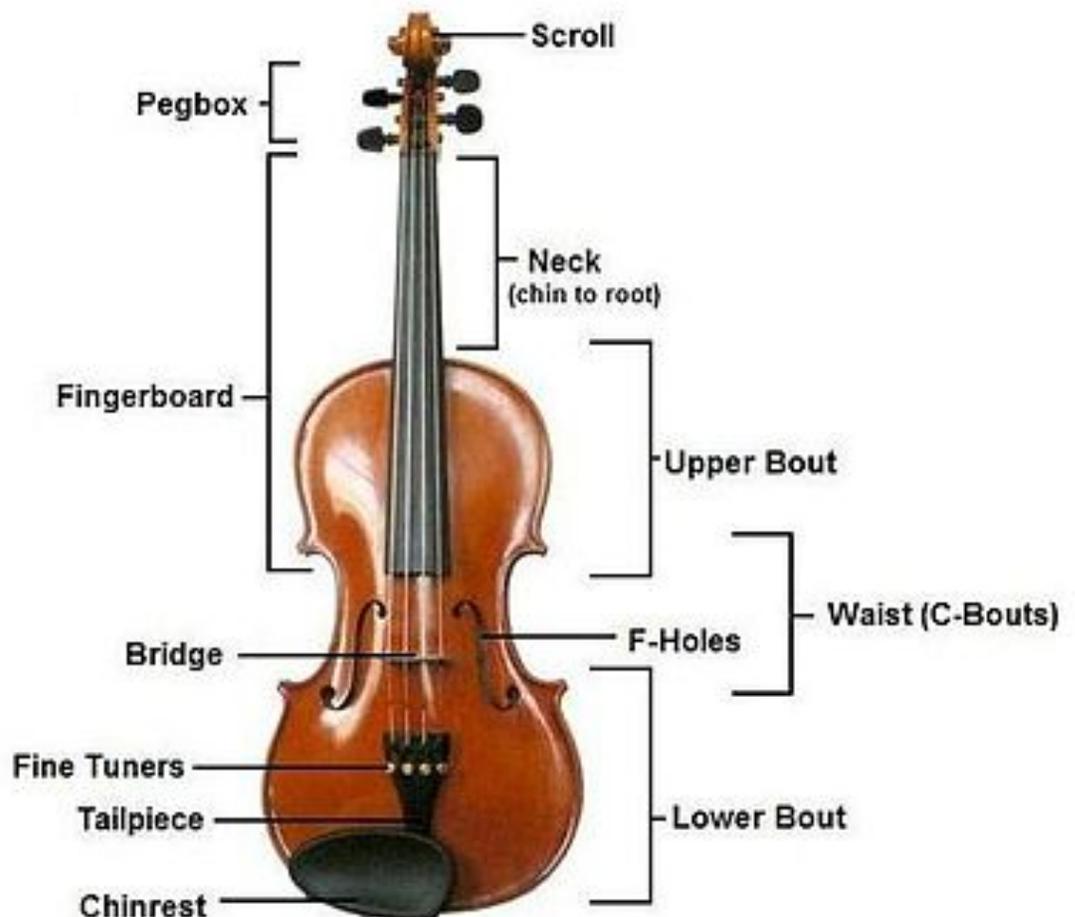
INSTRUMENTS OF THE ORCHESTRA



String Family

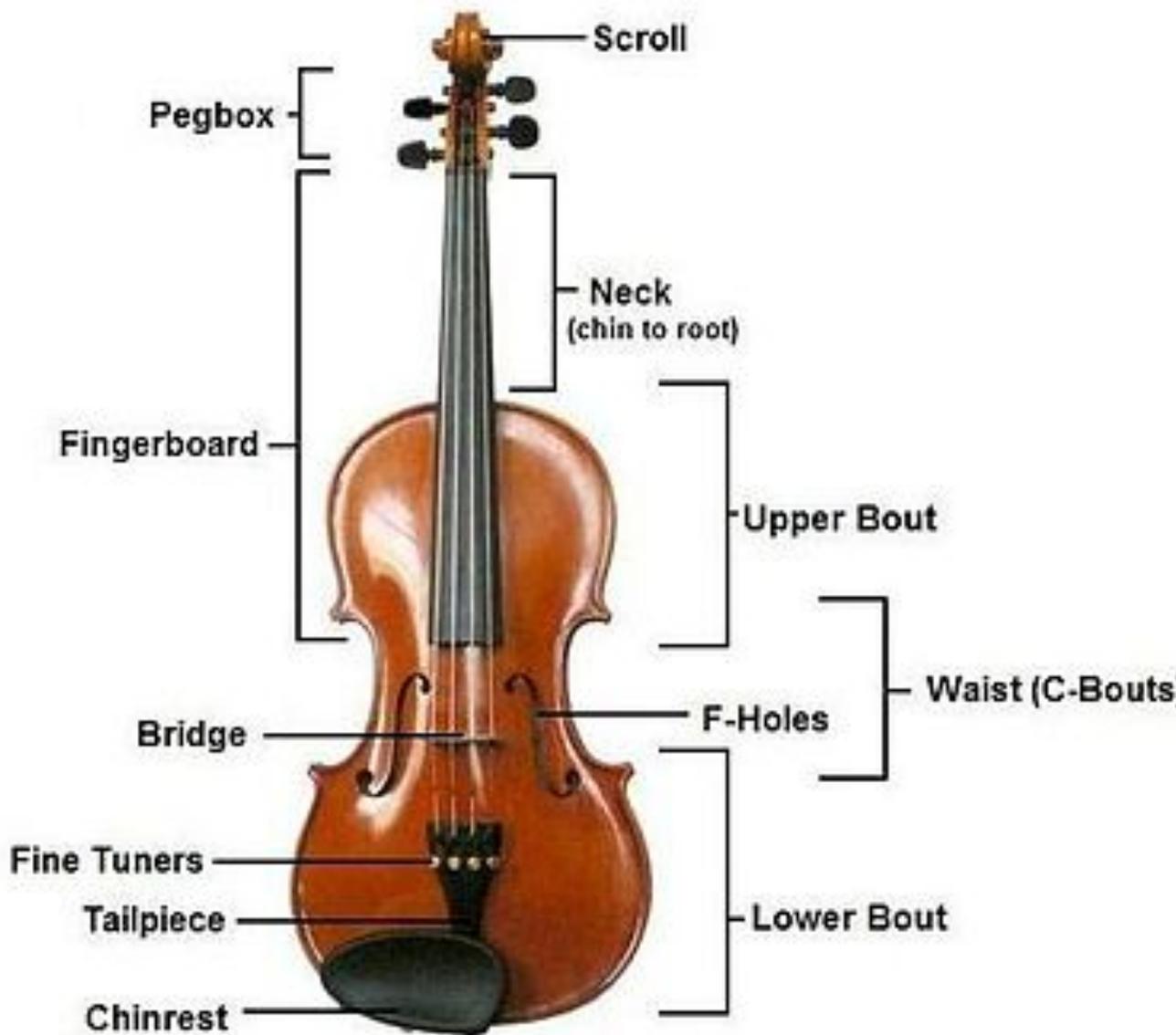
Violin

The violin is the smallest of the string family. It has 4 strings and is played with a bow. The bow is made out of wood and the hair is made out of horsehair. It can also be plucked to create a sound. The violin is made out of wood. The violin is considered the main string instrument for many virtuosic and solo playing. The violin is the highest pitched string instrument of the 4 of the string family. It is played by balancing it under your chin.



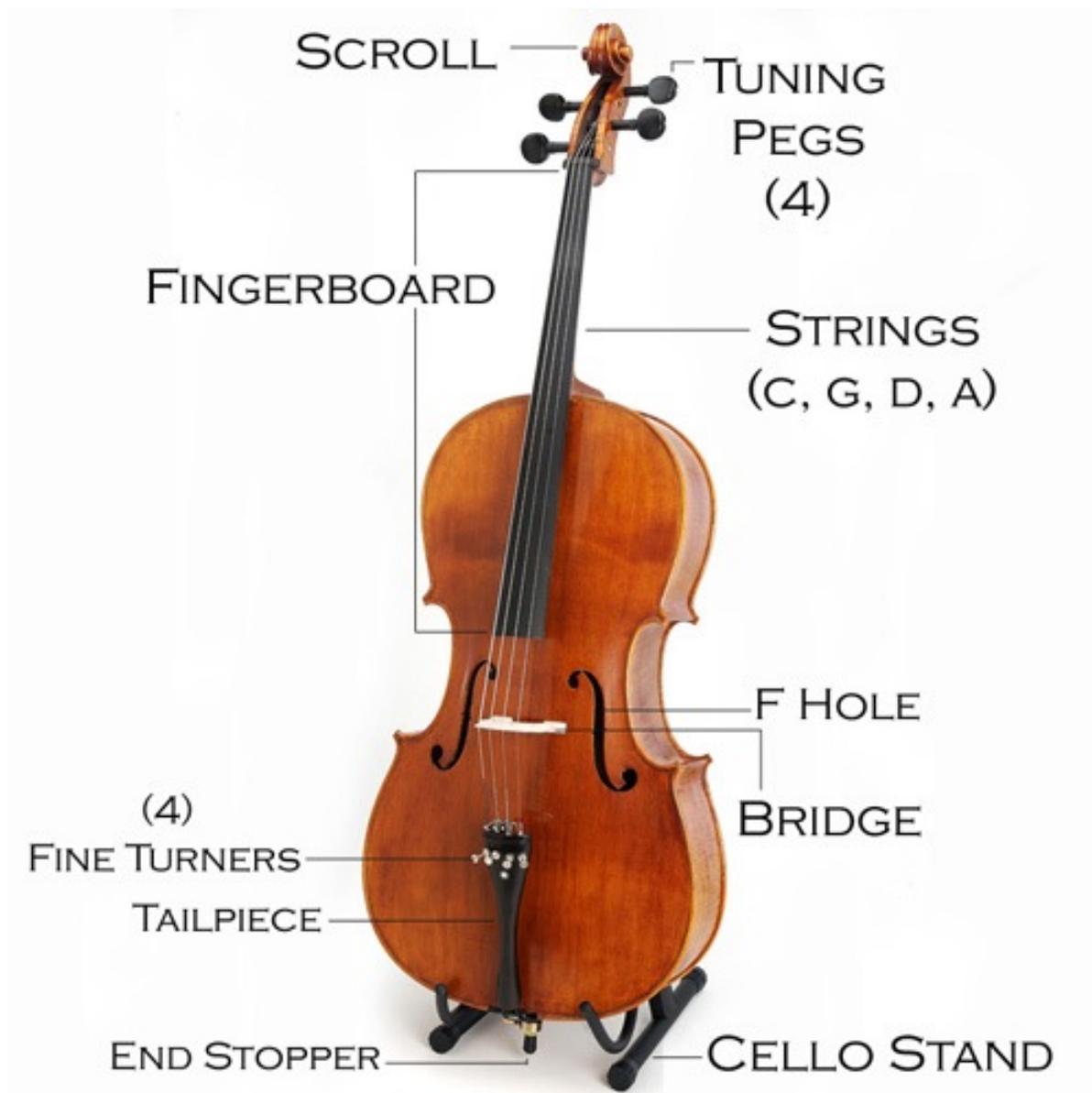
Viola

The viola is a little bigger than the violin and has lower pitched strings. It is known for being used to support the violins and have more harmonic qualities. It has 4 strings and is played with a bow. It can also be plucked to create a sound.



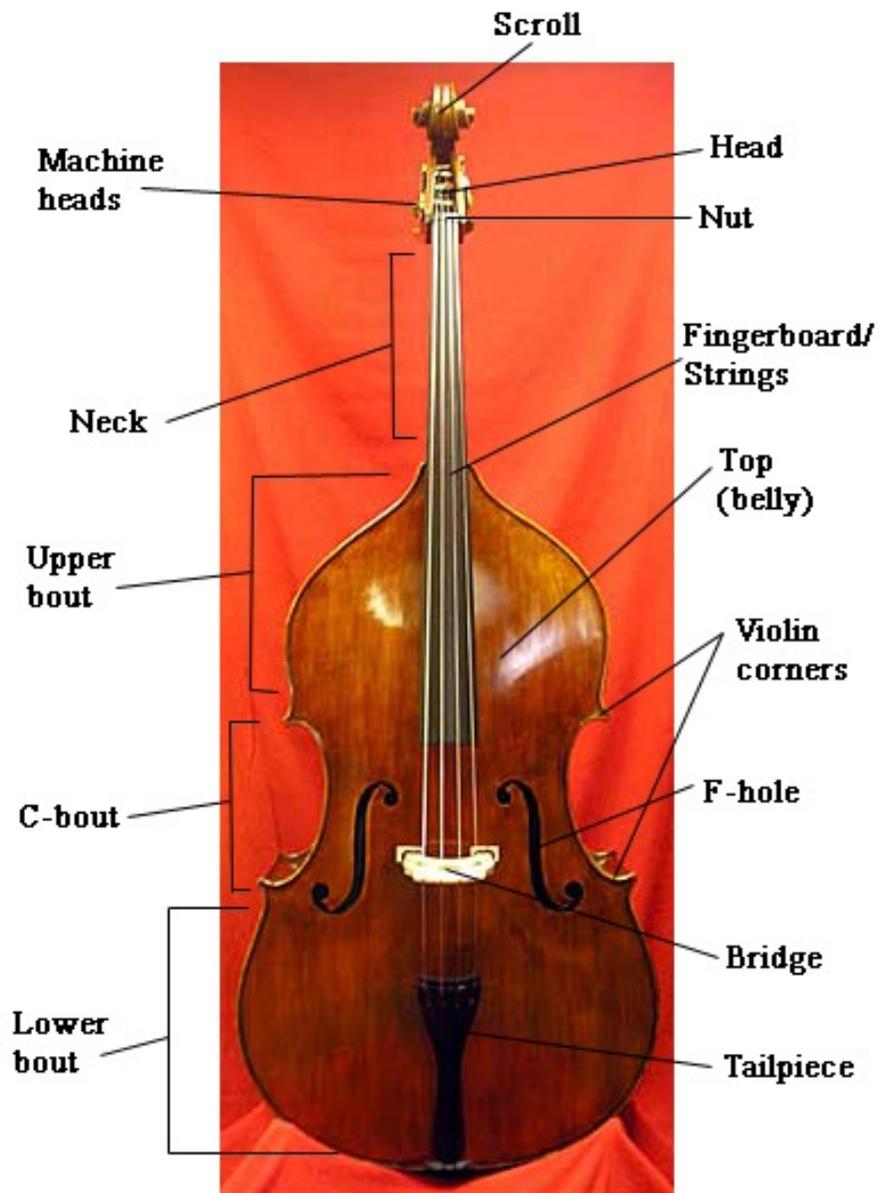
Cello

The cello is bigger than the viola and violin. It has 4 strings and is played with a bow. It can also be plucked to create a sound. The cello is played through sitting in a chair. There is an end pin on the bottom of the cello to raise or lower the instrument.



Double Bass

The bass is the biggest and lowest sounding instrument of the string family. It has 4 strings and is played with a bow. It has an end pin to lower and raise the endpin of the instrument. It can also be plucked to create a sound.



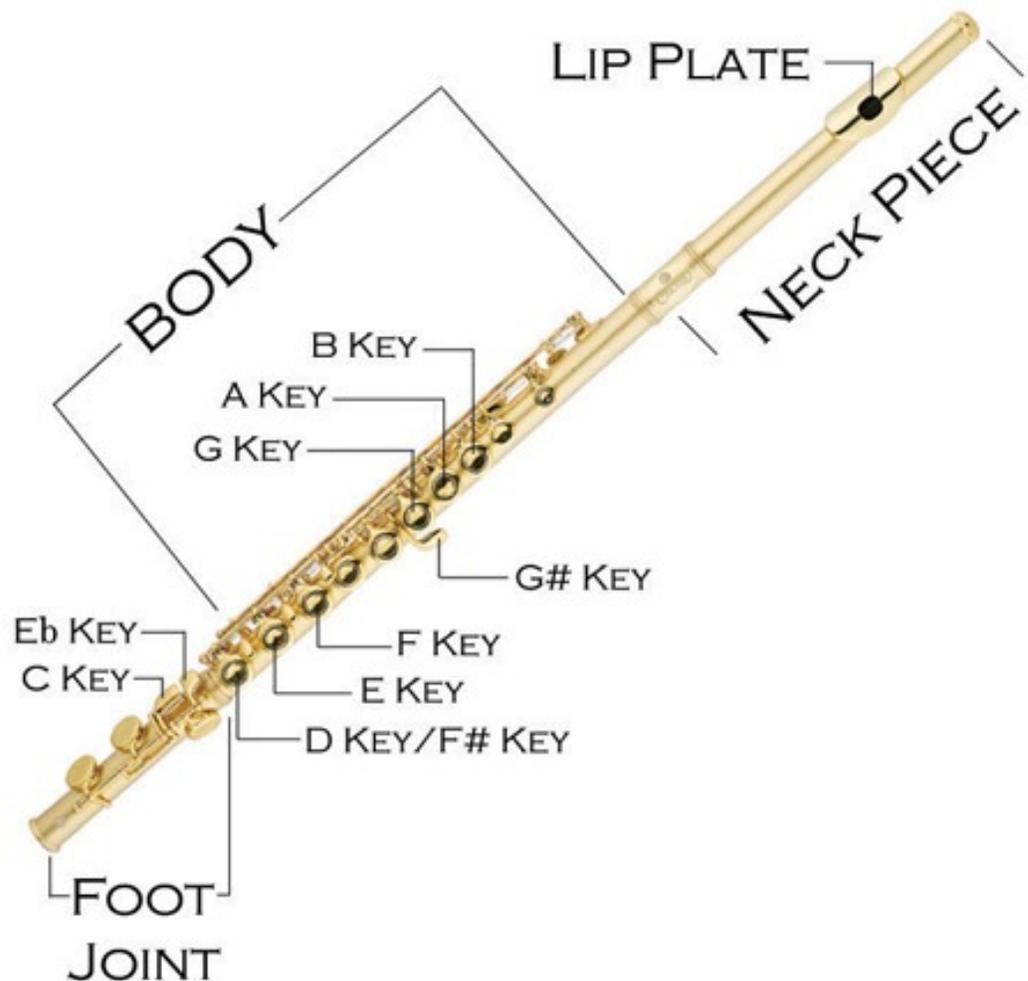
Woodwind Family

The Flute

The flute is made out of metal. It can be made of gold, nickel, platinum or silver. The sound is produced by blowing air through the neck piece.

The keys are pressed down to produce different pitches on the instrument.

FLUTE



Clarinet

The clarinet is also made out of wood. The sound is produced by blowing air through its mouthpiece where a thin piece of reed that rests parallel to its mouthpiece. The vibration is sent through the instrument to create a sound. The keys are pressed down to produce different pitches on the instrument.



Oboe

The oboe is made out of wood. The sound is produced by blowing air through a double reed. Two pieces of wood which is made out of balsa wood. They both vibrate and create a sound. The keys are pressed down to produce different pitches on the instrument.



Bassoon

The bassoon is made out of wood. It has the lowest sounding instrument in the woodwind family. Just like the bass, it has harmony parts in the orchestra. Like the oboe, the bassoon also has a double reed made out of balsa wood. The keys are pressed down to produce different pitches on the instrument.



Brass Family

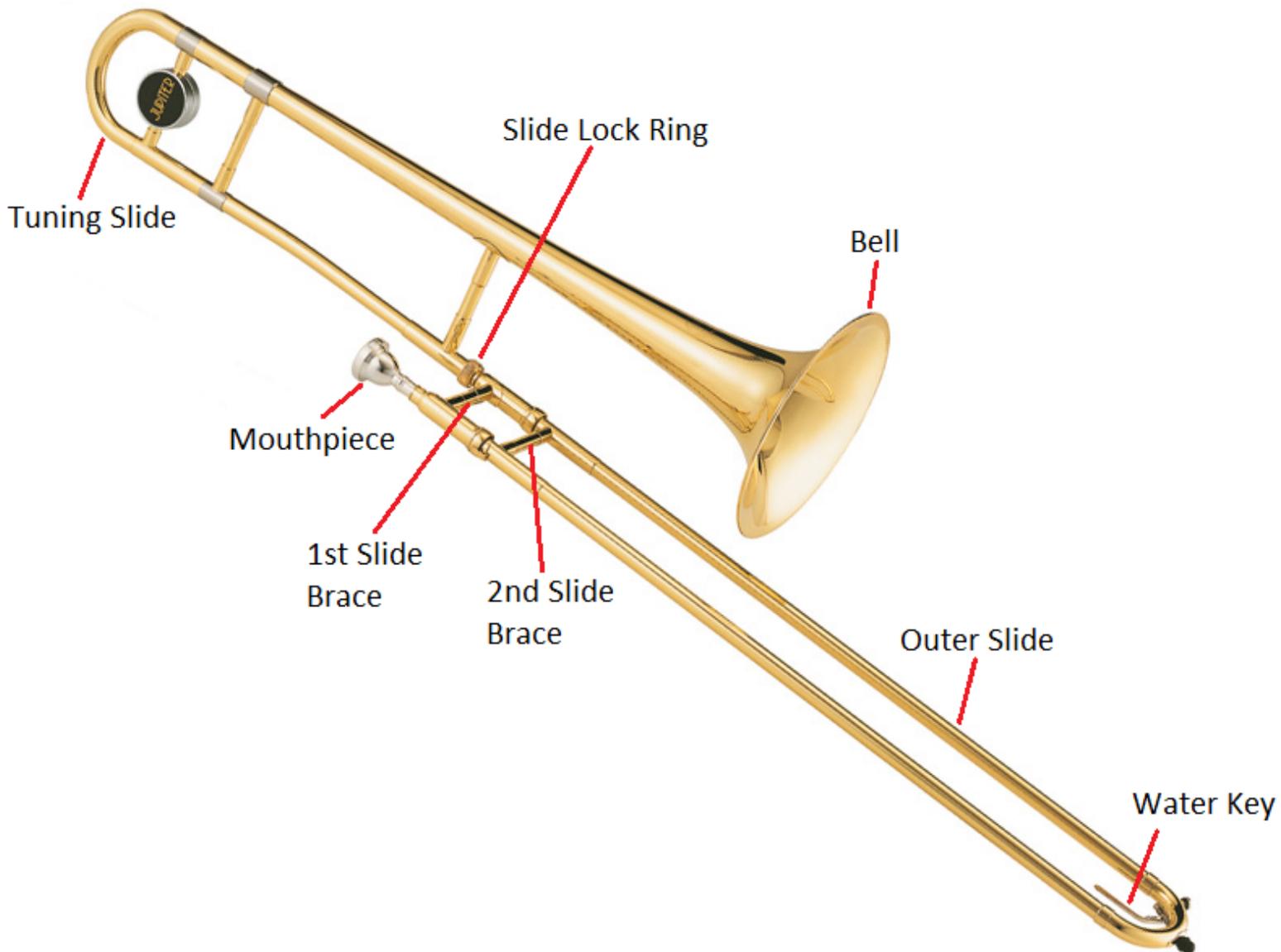
Trumpet

The Trumpet is made out of brass. The sound of the trumpet is produced by the technique called “buzzing” to create a sound through the instrument. Buzzing is created by blowing one's air through the mouthpiece of the trumpet. A set of 3 valves are pushed individually down to create pitch. The trumpet has the brightest and highest pitch in all of the brass family.



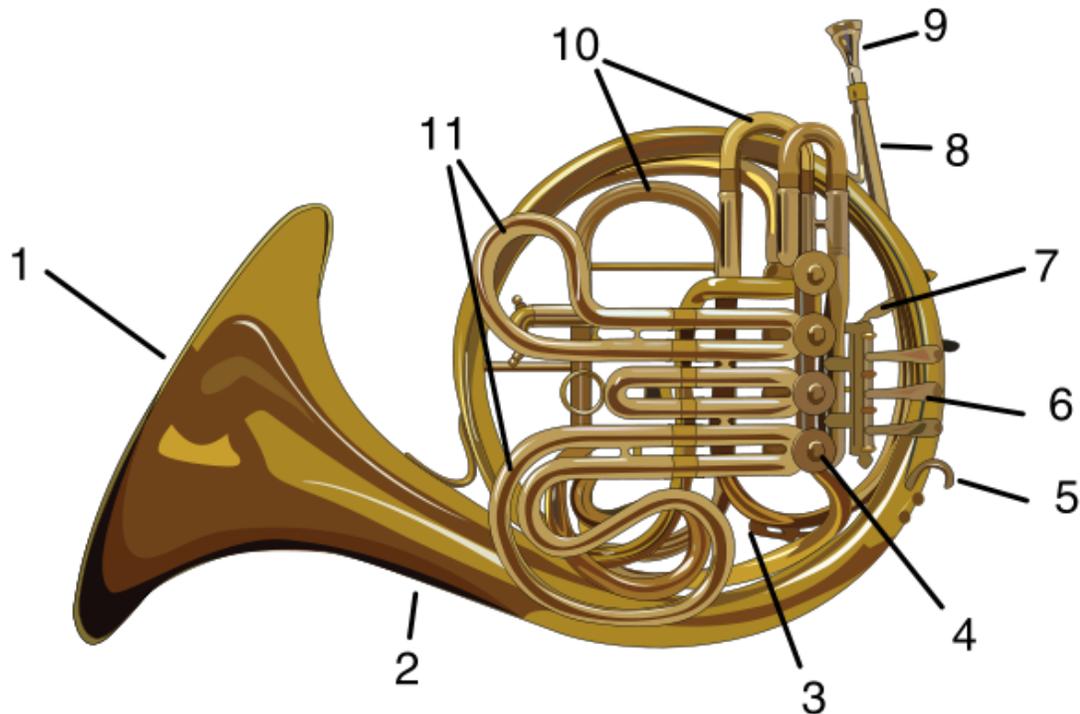
Trombone

The Trombone is made out of brass and also has a mouthpiece where you buzz to create a sound. The Trombone changes pitch by moving its *slide* up and down through the instrument. The Trombone is highly unique in this concept because it is the only brass instrument that can do this. The Trombone has a thick and heavy sound. The Trombone is also used in Jazz music as well.



French Horn

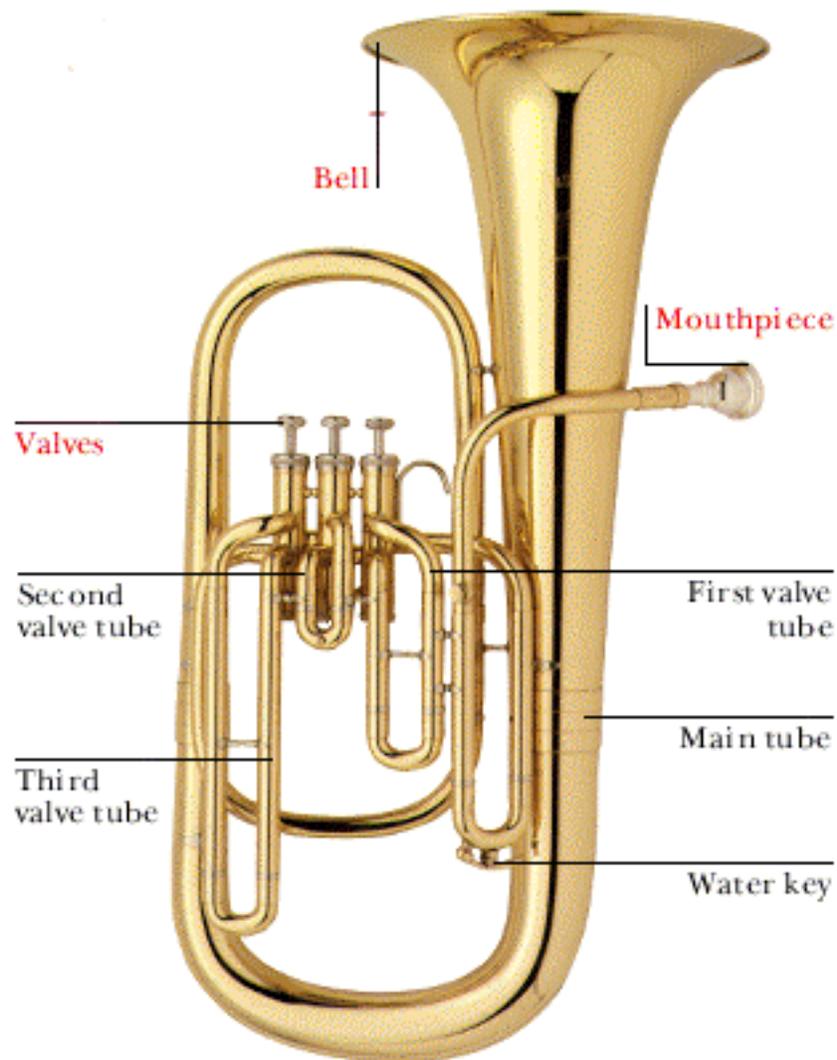
The French horn is made out of brass. The sound of the trumpet is produce by the technique called “buzzing” to create a sound through the instrument. Buzzing is created by blowing ones air through the mouthpiece of the trumpet. A set of 3 valves are pushed individually down to create pitch. The French horn has a brilliant warn texture of a sound. True brass sound.



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|------------------|-----------------------|-------------------|
| 1. Bell | 5. Finger Rest | 9. Mouthpiece |
| 2. Bell Pipe | 6. Three Valve Lever | 10. Tuning Slides |
| 3. Spit Valve | 7. Fourth Valve Lever | 11. Valve Slides |
| 4. Rotary Valves | 8. Leadpipe | |

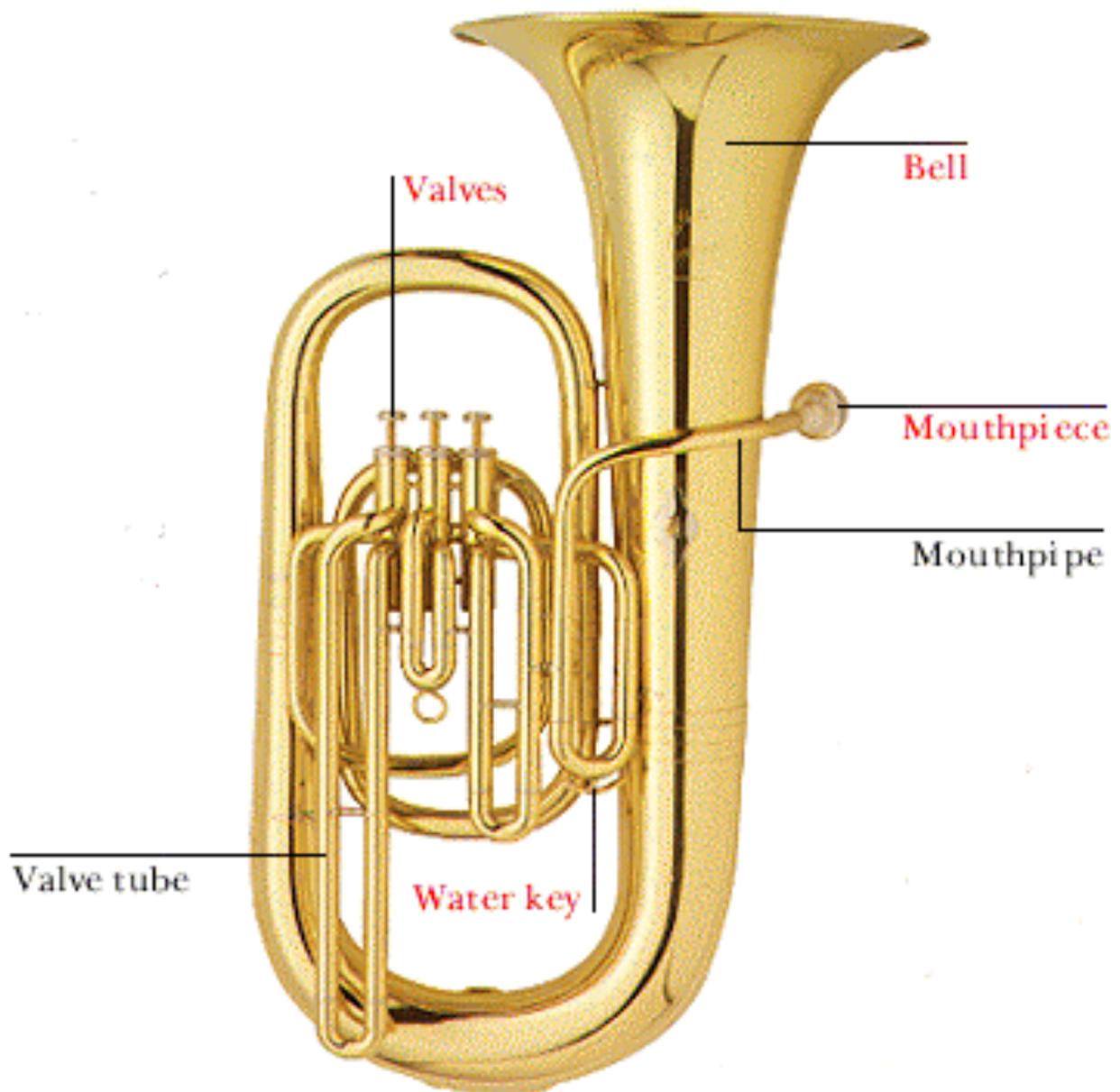
Baritone Horn

The Baritone Horn is made out of brass and uses a mouthpiece as well. The Tuba like horn is only smaller than the Tuba. It also has 3 individual valves to create pitch. The Baritone Horn's sound is very similar to the Trombone. Size pitch relationship plays a big part in all instruments. The Baritone Horn has mostly harmony parts as well as solo parts in the orchestra.



Tuba

The Tuba is made out of brass and uses a mouthpiece as well. The Tuba like the French horn, Trumpet has 3 individual valves to create pitch. The Tuba is the lowest pitched brass instrument in the brass family. Size pitch relationship plays a big part in all instruments. The Tuba has mostly harmony parts in the orchestra.



PERCUSSION FAMILY

A. The **Timpani** also known as the kettle drums. The Timpani has pedals underneath the drum to change pitch to move higher or lower depending on the music. Timpani's are usually played with 4 or 5 sets of drums. Smallest to Biggest. They are struck with mallets. Two sticks wrapped with yarn on its tip. Striking the heads causes vibration and thus amplifies its pitch and sound.



32"

B. The **Vibraphone**, **Xylophone**, and **Glockenspiel** are very similar to each other but are made out of different materials such as metal, wood to create timbre. They are struck with mallets as well. Mallets can be firm and soft tipped.

C. The **Chimes** are like the organ. They have long metal pipes suspended in air. They are struck with a rubber or hard plastic hammer causing vibration and thus sound.

D. The **Harp** is an amazing and a very large instrument. It is played with the string family most often. The strings are plucked, causing it to vibrate and thus producing a sound. The Harp has about 4 pedals to sustain its sound like the piano and to change to different keys in the scale series.

E. The **Piano** is played by pressing down on the keys to create pitch and sound. Once a key is pressed a hammer like object hits the string, thus causing a sound. The Piano is used for solo works, percussive works, and blended into the string family.





A. The **Snare drum** has two heads. One on the top and one on the bottom. The bottom part has the authentic snare attached to it. When the Snare drum is hit, it causes vibration and has a high but non-pitched sound. The snare drum has been used in the army for centuries through out time. One of the most popular percussion instruments. The Snare drum is also used to teach young students to understand sticking.



B. The **Bass drum** is a very large drum with heads on both sides just like the snare drum. It produces a big and deep sound that you can literally feel it in your body. It is struck with a huge mallet like stick with the tip heavy and firm.



C. The **Cymbals** are made out of brass and other types of materials. They are round and struck with mallets or drum sticks. They cause an incredible vibration and have a crashing sound. Cymbals can vibrate for a long period of time once hit.

