

Meet The Instruments!

Brass instruments-instruments that are made of brass and use a buzz or “fart noise” to make sound

String instruments-instruments that have strings (here divided between orchestral or classical strings, and guitars)

Woodwinds-instruments that are made of wood, used to be made of wood, or use wood to make a sound

Percussion-anything that you hit to make a sound

Ensemble-a group of instruments

- *orchestra*-an ensemble that has strings
 - full orchestra-strings, brass, woodwinds, and percussion
 - string orchestra-strings only
- *concert band*-wind instruments and percussion, no strings
- *jazz band* or *big band*-large groups that play jazz, usually 5 saxophones, 4 trombones, 4-5 trumpets, piano, bass, drums, guitar
- *jazz combo*-small group that plays jazz
- *rock band, banda, etc.*



Woodwinds

instruments that are made of wood, used to be made of wood, or use wood to make a sound

flute

- the highest pitched woodwind
- descended from recorders, originally had no keys
- Now uses the Boehm system, developed by Theobald Boehm in the 1830s and 40s



*Theobald
Boehm*

single reed instruments use a small piece of wood called a *reed* to make sound, attached to a *mouthpiece* by a *ligature*

clarinet

- originally descended from the chalumeau
- eventually adopted the Boehm system in the 1850s
- 3 instruments in 1! The chalumeau register, the clarion register, and the altissimo register



chalumeau

saxophone

- invented by Adolphe Sax in the 1840s and 50s, originally in 14 different sizes
 - today we generally use 3-alto (small), tenor (medium), and baritone (large), and occasionally soprano (really small)
- uses Boehm system
- used mostly in concert band and jazz band, less in orchestra



Adolphe Sax

double reeds use two pieces of wood wrapped together to make a sound

oboe

- descended from the *shawm*, an Arabic instrument
- uses Boehm system
- SCHOLARSHIP INSTRUMENT



shawms

bassoon

- descended from the bass shawm, which evolved into the dulcian
- the only band woodwind not to use the Boehm system
- SCHOLARSHIP INSTRUMENT



bassoon

Brass

made of brass (an alloy of copper and zinc) and uses a lip buzz or “fart noise” to make sound

trumpet

- the highest pitched and loudest brass
- did not have valves until the 1830s and 40s
- used in classical, jazz, rock and roll, and many other genres

french horn

- the last brass instrument to get valves
- one of the most important instruments in the orchestra
- SCHOLARSHIP INSTRUMENT

trombone-the one with the slide!

- the oldest brass instrument in its modern form
- descended from the *sackbutt*, with very few changes
- used in classical, jazz, rock and roll, and many other genres



sackbutts

euphonium or *baritone horn*-the “minituba”

- also invented by Adolphe Sax
- uses the same mouthpiece as trombone
- the most important instrument in the concert band

tuba-the subwoofer or the bass cannon of the band

- the youngest brass instrument-modern form in 1840s and 50s
- *concert tuba* is the upright instrument, *sousaphone* is the wraparound instrument usually used in marching band
- SCHOLARSHIP INSTRUMENT

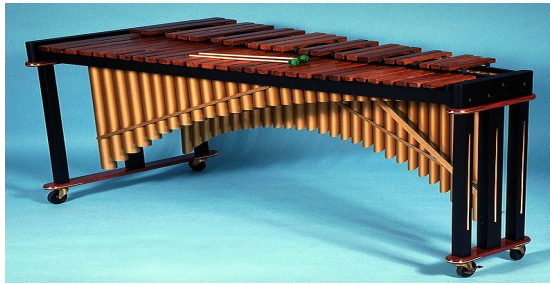
Percussion

anything that you hit to make a sound

- Percussion instruments are the oldest instruments in human history-every culture has them
- Most of our percussion comes from Turkey (the Ottoman Empire) in the 1200s and 1300s
- Roughly 4 categories
 - *drums*-unpitched percussion, usually have heads stretched over a frame, ie snare drum, bass drum, etc.
 - *cymbals*-made of metal, usually thin and circular
 - *mallet percussion*-pitched percussion, with keys laid out exactly like a piano, ie xylophone, marimba, vibraphone, concert bells, tubular bells



vibraphone



marimba



*concert chimes or
tubular bells*

- *auxiliary percussion* or “toys”-all the other percussion instruments that are only used occasionally or effects in concert and jazz band-congas, bongos, maracas, vibraslap, claves, shakers, etc.

Strings

anything that uses strings to make a sound

In orchestra we use the *orchestral strings* or *classical strings*, all of which use *bows* to make sound. Orchestral strings can be plucked (called *pizzicato*), but most of the time they're bowed, unlike guitars/banjoes/etc. All of them evolved at roughly the same time (with the bass coming last) and have similar mechanics to play.

The four orchestral strings are:

violin

- the highest pitched string instrument
- used in many genres of music: classical, bluegrass, jazz, mariachi, dubstep, etc.
- originally had catgut strings

viola

- has 3 strings in common with the violin, plus 1 lower string
- only instrument to use alto clef
- played by what famous cartoon characters?

cello (short for violincello)

- one of the largest ranges of any instrument
- used in rock and folk rock, not just classical

double bass (or *contrabass* or *string bass*)

- the lowest voice of the orchestra
- the exact same fingerings and notes as the electric bass
- used in classical, jazz, rockabilly, and bluegrass, among other styles