# Sonority City

# Exploring Instruments of the Orchestra

### A. Key Words, Terms and Facts about the Orchestra

ORCHESTRA – A large ENSEMBLE (group of musicians) of performers on various musical instruments who play music together. No set numbers of performers although a **SYMPHONY ORCHESTRA** (a large orchestra) can have between **80-100+** performers. Famous orchestras include: THE LONDON SYMPHONY ORCHESTRA, THE BBC SYMPHONY ORCHESTRA and the HALLÉ ORCHESTRA (Manchester).

CONDUCTOR – Leads the orchestra with a BATON (white 'stick') and hand signals. Stands at the front so they can be seen my all performers. Sets the TEMPO and BEATS TIME. Brings different instruments 'in and out' when it is their turn to play. Keeps the performers together. Takes charge in rehearsals. In ultimate control of the performance of the music, adjusting DYNAMICS, TEMPO. and mood.

**FAMILIES/SECTIONS** – Instruments of the orchestra can be divided into 4 families or sections: STRINGS, WOODWIND, BRASS and PERCUSSION.

TUNING UP – Before the orchestra rehearses or plays, all instruments need to be IN TUNE with each other.

The **OBOE** always sounds the note 'A' which all other instruments **TUNE** to.

**SONORITY** (also called **TIMBRE**) – Describes the **UNIQUE SOUND OR TONE QUALITY** of different instruments and the way we can identify orchestral instruments as being distinct from each other -Sonority can be described by many different words including - velvety, screechy, throaty, rattling, mellow, chirpy, brassy, sharp, heavy, buzzing, crisp, metallic, wooden etc. PITCH - The HIGHNESS or LOWNESS of a sound, a musical instrument or musical note (high/low, getting higher/lower, step/leap).

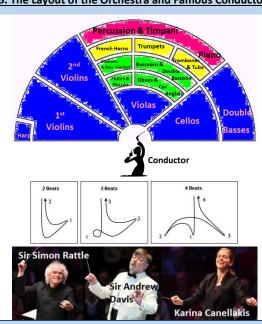
Four types of brass instruments in an orchestra, all made from metal – usually brass and **BLOWN** by the player 'buzzing their lips' into a **MOUTHPIECE** (shown right). The Trumpet, French Horn and Tuba all have three **VALVES** which, along with altering the players mouth positions, adjust the length of the tubing allowing for different notes to be played. The Trombone has a **SLIDE** which adjusts the length of the tubing. Brass instruments (along with Percussion) have often been used to play **FANFARES**: a short, lively, loud piece of music usually warlike or victorious in character used to mark the arrival of someone important, give a signal e.g., in battles, of the opening of something e.g., a sporting event or ceremony. Fanfares often use

notes of the

**HARMONIC SERIES** – a limited range of notes played by **BUGLES** (smaller trumpets with no valves) and valveless trumpets.

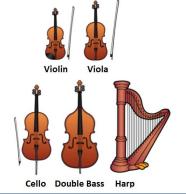


#### B. The Layout of the Orchestra and Famous Conductors



# C. Strings Section/Family

Largest section of the orchestra who sit at the front, directly in front of the conductor. Usually played with a **BOW** (ARCO), (not the HARP) but can be PLUCKED (PIZZICATO). VIOLINS split into two groups: 1st VIOLINS (often have the main **MELODY** of the piece of music) and 2<sup>nd</sup> VIOLINS.



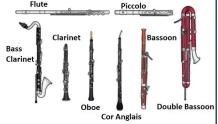
# D. Woodwind Section/Family

Originally (and some still are) made from wood (some now metal and plastic). All are **BLOWN**.

FLUTES: Flute and Piccolo – air blown over hole.

SINGLE REED (small piece of bamboo in the mouthpiece): Clarinet, Bass Clarinet & Saxophone (not traditionally in the orchestra, but some modern composers have used it)

**DOUBLE REED** (two reeds in the mouthpiece): Oboe, Cor Anglais, Bassoon, Double Bassoon.



# F. Percussion Section/Family

Always located at the very back of the orchestra (due to their very loud sounds!). Large number of instruments which produce their sound then hit, struck, scraped, or shaken.

TUNED PERCUSSION (able to play different pitches/notes)



Piano Xylophone Glockenspiel Timpani Celesta Tubular Bells UNTUNED PERCUSSION (only able to produce 'sounds').



Bass Drum Snare Drum





Triangle

Gong Tambourine

Maracas