

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 by 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**.

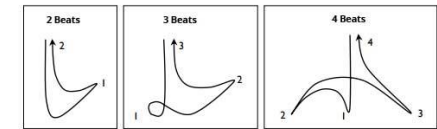
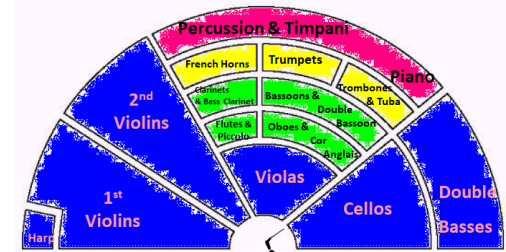
TUNING UP – Before the orchestra rehearses or plays, all instruments need to be **IN TUNE** with each other.

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*).

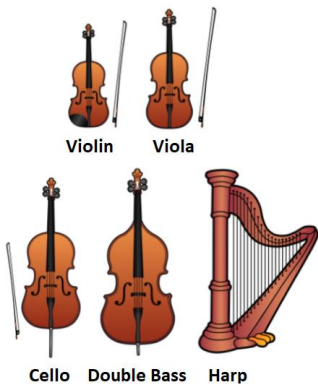


C. Strings Section/Family

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 **2nd VIOLINS**.



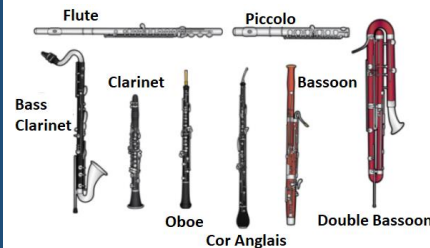
D. Woodwind Section/Family

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.



E. Brass Section/Family

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.



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)



UNTUNED PERCUSSION (only able to produce 'sounds').

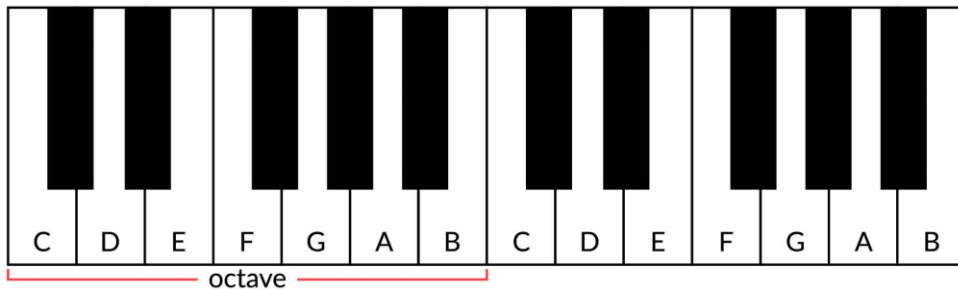


Keyboard Skills

Exploring Treble Clef Reading and Notation

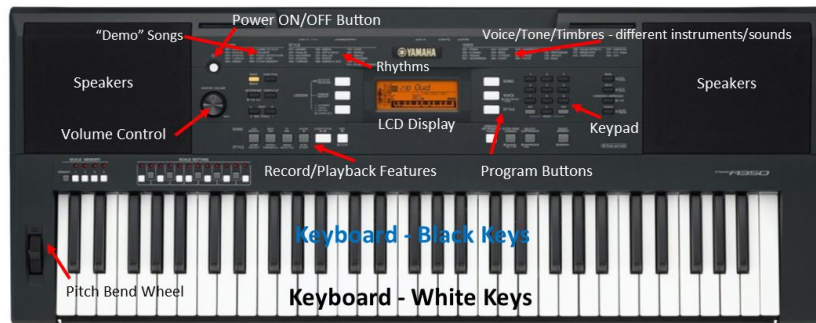


A. Layout of a Keyboard/Piano

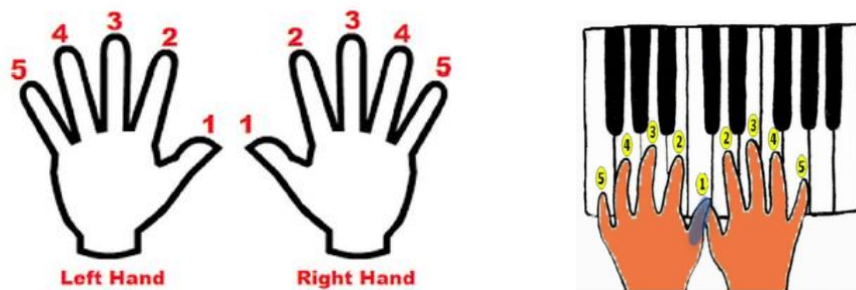


A piano or keyboard is laid out with **WHITE KEYS** and Black Keys (see section G). C is to the left of the two Black Keys and the notes continue to G then they go back to A again. Notes with the same letter name/pitch are said to be an **OCTAVE** apart. **MIDDLE C** is normally in the centre of a piano keyboard.

D. Keyboard Functions



E. Left Hand/Right Hand (1-5)



B. Treble Clef & Treble Clef Notation

A **STAVE** or **STAFF** is the name given to the five lines where musical notes are written. The position of notes on the stave or staff shows their **PITCH** (how high or low a note is). The **TREBLE CLEF** is a symbol used to show high-pitched notes on the stave and is *usually* used for the right hand on a piano or keyboard to play the **MELODY** and also used by high pitched instruments such as the flute and violin. The stave or staff is made up of 5 **LINES** and 4 **SPACES**.



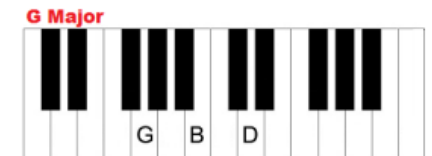
Every Green Bus Drives Fast. Notes in the **SPACES** spell "FACE"



Notes from **MIDDLE C** going up in pitch (all of the white notes) are called a **SCALE**.



C. Keyboard Chords



Play one – Miss one – play one – miss one – play one

F. Black Keys and Sharps and Flats

There are five different black notes or keys on a piano or keyboard. They occur in groups of two and three right up the keyboard in different pitches. Each one can be a **SHARP** or a **FLAT**. The # symbol means a **SHARP** which raises the pitch by a semitone (e.g. C# is higher in pitch (to the right) than C). The b symbol means a **FLAT** which lowers the pitch by a semitone (e.g. Bb is lower in pitch (to the left) than B). Each black key has 2 names – C# is the same as Db – there's just two different ways of looking at it! Remember, black notes or keys that are to the **RIGHT** of a white note are called **SHARPS** and black notes to the **LEFT** of a white note are called **FLATS**.

