

Name



Stuart Singers Music Theory

This booklet is designed as a statement of facts about the presentation and construction of a piece of sheet music.

Whatever your prior knowledge of Music Theory may be, this booklet is a tool to remind or inform you of some basic facts about music. Please read it at your own pace, never be afraid to ask me if you don't understand a section, and keep it handy in your SS music bag as we may refer to it during a rehearsal.

I didn't learn Music Theory properly until I had a part-time job that required me to teach it to young children (about 15 years ago), it's never too late to learn and I am very enthusiastic about it now.

The information in this booklet only covers to Grade 1 level and has been produced for all Stuart Singers members as part of the Committee's aim to develop the choir as a whole in both knowledge and ability.

You will find overleaf:

- the meaning and relevance of the lines, dots, symbols and squiggles on the music you are looking at?
- why I am calling out numbers and waving my arms about?

Please read on

Index

<u>Subject</u>	<u>Page</u>
Front cover	1
Index	2
Introduction & 'Sheet music' - The 1st page	3
Accreditation	4
Pitch:	
• Lesson 1 The staff - overview	4
• Lesson 2 Clefs and Names of Notes	5
• Lesson 3 Natural Notes; plus Sharps, Flats and Natural signs	6
• Lesson 4 The Key Signature	7
• Lesson 5 Enharmonic notes	10
• Lesson 6 Intervals - The distance between pitches	12
• Lesson 7 The major Scale, Tones and Semitones	13
• Lesson 8 Tonic Triads	14
Time:	
• Lesson 9 The Parts of a Note	15
• Lesson 10 The length of a Note or its equivalent Rest	15
• Lesson 11 Time signatures (in 'Simple time')	17
• Lesson 12 Time signatures (in 'Compound time')	17
• Lesson 13 Dots after the Note head	18
• Lesson 14 Tied notes	18
• Lesson 15 Triplets and Duplets	19
• Lesson 16 Tempo	19
• Lesson 17 Gradual Tempo changes	21
• Lesson 18 Repeats and Other Musical Road Map Signs	22
Style:	
• Lesson 19 Dynamics	24
Articulation:	
• Lesson 20 Common Articulations, Accents, Legato, Slur	25
Vocal Ranges:	
• Lesson 21 Vocal Ranges	28
Conducting	
• Lesson 22 Waving my arms about and shouting numbers	30
• Lesson 23 Conducting the beat	30
• Lesson 24 Idiosyncrasies and gestures	31
• Lesson 25 Performances - Be 'ALERT'	32

Introduction

Music Theory is a vast subject and I am only going to address the things that I believe you should really know in order to gain as much as possible from the sheet music of the songs that we sing. Perhaps this document will spark a further level of interest for you to pursue? There could be “further reading” if you would like!

‘Sheet music’ - the first page - before you look at the notes! What can you find out?

The diagram illustrates the components of a sheet music score for the piece "God so Loved the World". Callout boxes point to specific elements on the score:

- Performance direction, speed of the piece (tempo):** Points to the tempo marking "Andante, ma non lento (♩ = 90)".
- Speed of the beat (tempo):** Points to the tempo marking "Andante, ma non lento (♩ = 90)".
- Title of piece:** Points to the title "God so Loved the World (from 'The Crucifixion')".
- Composer:** Points to the composer's name "Sir John Stainer (1840-1901)".
- Dynamic markings (soft / loud):** Points to the dynamic marking "p" (piano).
- Number of beats in a bar and type of beat:** Points to the 3/4 time signature.
- Number of voice parts (SATB):** Points to the Soprano, Alto, Tenor, and Bass staves.
- Treble clef + 8 = to be sung one octave lower:** Points to the Bass staff.
- Piano (staves are bracketed together):** Points to the Piano or Organ staves.
- Bar number to help you find your place when I shout "start at bar 9":** Points to the first bar of the score.

The score includes the following text:

God so Loved the World
 (from "The Crucifixion")
 Anthem for SATB quartet or Mixed Chorus (unaccompanied)
 Sir John Stainer (1840-1901)

Tempo: *Andante, ma non lento* (♩ = 90)

Dynamic markings: *p*, *cresc.*, *mf*

Voice parts: Soprano, Alto, Tenor, Bass

Piano or Organ: (For rehearsal only)

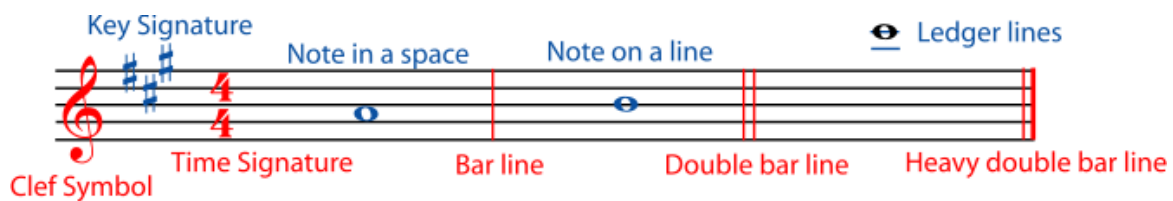
Lyrics: God so loved the world, God so loved the world, that He gave His on - ly be - got - ten Son, that who - so be - liev - eth, be - liev - eth in

The information below was written by Catherine Schmidt-Jones and originally published on OpenStax CNX. It has been slightly amended by Helen Sims to: change the musical language from United States to English; restrict the information to the appropriate level; and add information to provide further understanding if required.

PITCH

Lesson 1 - The Staff - overview only

The five horizontal, parallel lines are called a staff/stave (plural staves). Most of the notes of the music are placed on one of these lines or in a space in between lines. Extra ledger lines may be added to show a note that is too high or too low to be on the staff.



The Key signature is shown after the Clef symbol, immediately before the Time signature. The Key signature is shown at the start of every staff of the music.

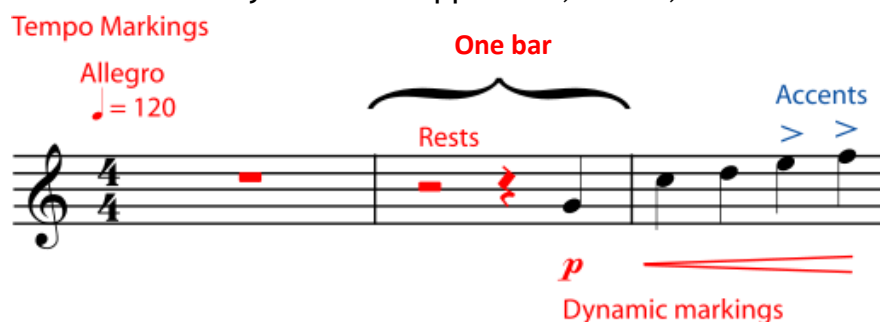
The Time signature is only shown at the beginning of the piece or whenever it changes during the piece.

Vertical bar lines divide the staff into short sections called bars. A double bar line, either heavy or light, is used to mark the ends of larger sections of music, including the very end of a piece, which is marked by a heavy double bar.

The notes and rests are the written music:

- a note stands for a sound
- a rest stands for a silence

Many different kinds of symbols can appear on, above, and below the staff:



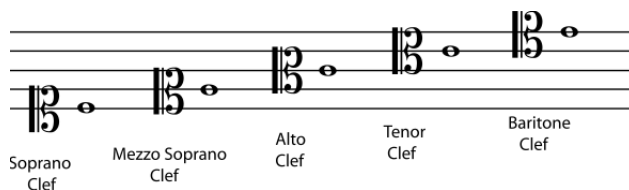
Symbols that appear above and below the music may tell you:

- how fast it goes (tempo markings),
- how loud it should be (dynamic markings)
- where to go next (repeats, codas)
- how to perform particular notes (accents, staccato)

Lesson 2 - Clefs and Names of Notes

99% of the music for our choir will only use the **Treble Clef** and the **Bass Clef**.

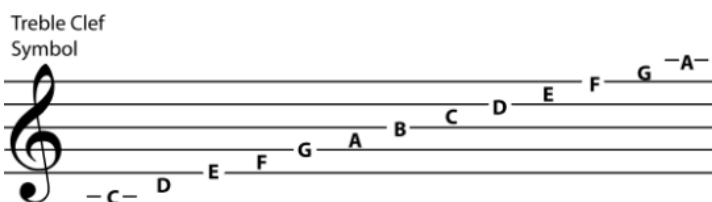
(For information there is also a: Soprano Clef, Mezzo Soprano Clef, Alto Clef, Tenor Clef and Baritone Clef but please do not worry about these, you will rarely see them in our music.)



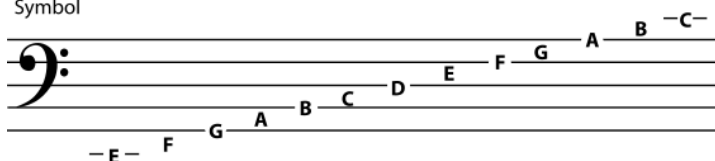
The 5 lines of the staff mean nothing unless you know the Clef that is at the front of the line, it is the clef that delineates which note is on which line or space.

The Treble Clef is also known as the G Clef due to the starting point for drawing a Treble Clef which curls around the G line.

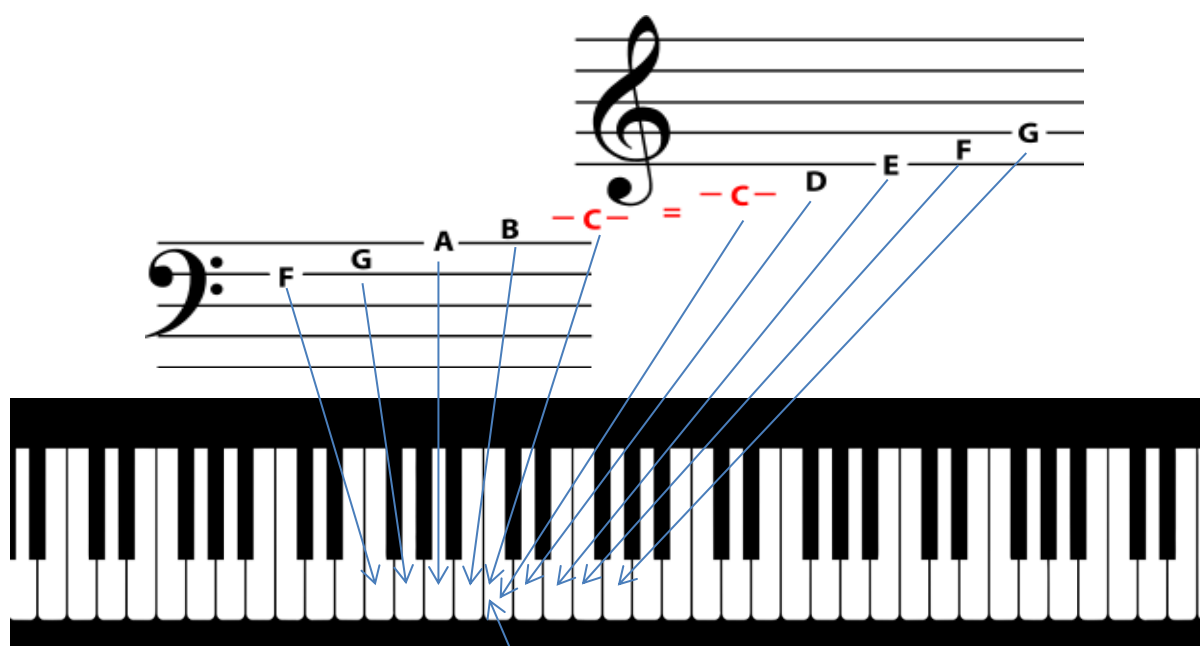
The Bass clef is also known as the F clef, once again the starting point for drawing a Bass Clef is on the F line, and the dots are placed either side of the F line.



Bass Clef
Symbol



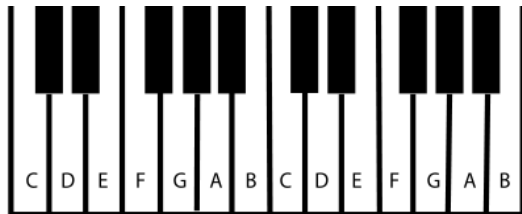
SO: imagine that the Treble and Bass clefs were put closer together, **AND** that one line is inserted between the two clefs. You would have a complete run of 11 lines and flowing note names, just as you have on a keyboard.



Middle C is, usually, the middle of a keyboard and it is right in the middle of the staves

Lesson 3 - Natural Notes plus the Sharps, Flats and Natural signs

The pitch of a note is how high or low it sounds, denoted by the letter name of the note. We only use the letters A, B, C, D, E, F, and G. These seven letters name all the natural notes (on a keyboard these natural notes are all the white keys). The seven notes (plus a repeated start letter name), form one octave, (i.e. C to C). When you get to the eighth natural note, you start the run again for the next octave.



However we have the black notes to consider as well. If you count both white and black notes from C natural, stopping just before the next C natural, you will see that there are twelve notes, each one is a semitone apart.

How do you name the other five notes (the black keys)?

Answer: by use of three signs.

Sharp Symbol



Natural Symbol



Flat Symbol



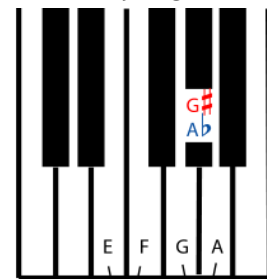
A **sharp sign** means "the note that is one semitone higher than the natural note".

A **flat sign** means "the note that is one semitone lower than the natural note".

A **natural sign** either cancels out a previous sign or cancels out the key signature of the equivalent note name.

If there isn't a black note between two white notes then the natural (white) notes are only a semitone apart.

If there is a black note between the white notes, then the white notes are a tone apart (i.e. 2 semi-tones make a tone). When they are a tone apart, the note in between them can only be named using a flat or a sharp.

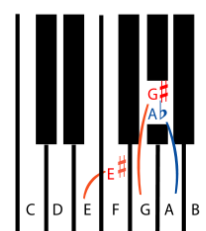


E natural and F natural are a semitone apart; there is no black note between them.

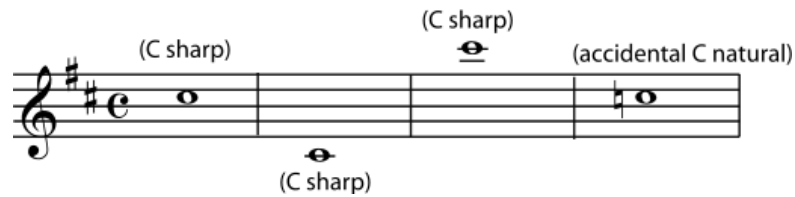
G natural and A natural are a tone apart; the note between them can be called G sharp or A flat.

Using flats and sharps, any pitch can be given more than one note name.

For example, the G sharp and the A flat are played on the same key on the keyboard; they sound the same. You can also name and write the F natural as "E sharp"; F natural is the note that is a semitone higher than E natural, which is the definition of E sharp. Notes that have different names but sound the same are called enharmonic notes. See Lesson 5.



Sharp and flat signs can be used in two ways: they can be part of a key signature (see next article), or they can become an accidental. For example, if most of the C's in a piece of music are going to be sharp, then a sharp sign is put in the "C" space at the beginning of the staff, in the key signature. If only a few of the C's are going to be sharp, then those C's are marked individually with a sharp sign right in front of them.



When a sharp sign appears in the C space in the key signature, all C's are sharp unless marked as accidentals.

Lesson 4 - The Key Signature

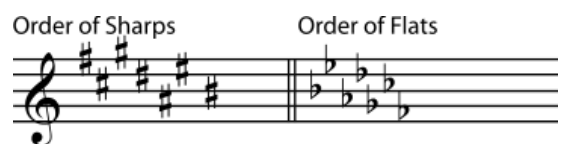
Questions:

- a) What is a key signature? Why have one?
- b) Why does it matter to know the 'key' of a piece of music?

Answers:

- a) A key signature is used to tell you the key of the piece of music. It is set out at the beginning of the line of music just after the Clef sign, the number of sharps or flats reduces the use of accidentals thereby making it easier to read.
- b) The 'key' of a piece of music generally does not matter to most singers, but it allows for a relatively easy adjustment for singing purposes if a piece is too high or too low for the singers. There are 'Major keys' (bright sounding music) and 'Minor keys' (sadder sounding music). Minor key signatures are beyond Grade 1 level but it is useful to know they exist and how to work out which is which.

The sharps or flats always appear in the same order and in the same position in all key signatures. The order of flats and sharps, like the order of the keys themselves, follows a circle of fifths (see later information on Circle of Fifths).



Order of Sharps →
F C G D A E B
 ← Order of Flats

There are two easy mnemonics to remember this by:

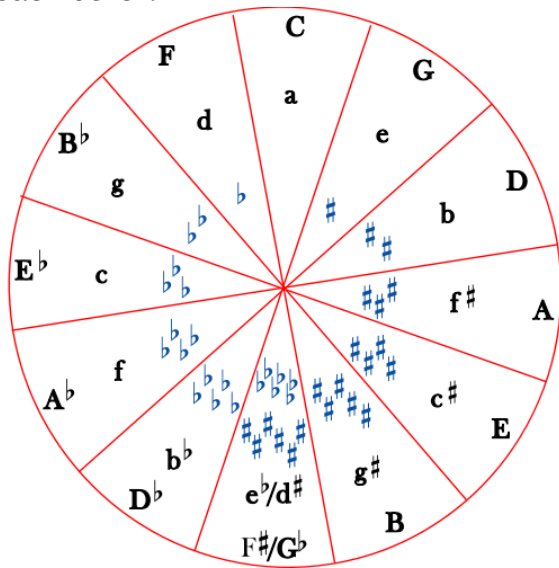
Father Christmas Gave Dad An Electric Blanket (order of Sharps)
 Blanket Explodes And Dad Gets Cold Feet (order of Flats)

Or

Father Charles Goes Down And Ends Battle (order of Sharps)
 Battle Ends And Down Goes Charles' Father (order of Flats)

Circle of Fifths

The circle of fifths is a way to arrange keys to show how closely they are related to each other.



The major key for each key signature is shown as a capital letter; the minor key as a small letter.

Keys are not considered closely related to each other just because they are near each other in the chromatic scale (or on a keyboard).

What makes two keys "closely related" is having similar key signatures.

So the most closely related key to C major, for example, is A minor, since they have the same key signature (no sharps and no flats). This puts them in the same "slice" of the circle.

The next most closely related keys to C major would be G major (or E minor), with one sharp, and F major (or D minor), with only one flat.

The keys that are most distant from C major, with six sharps or six flats, are on the opposite side of the circle.

The circle of fifths gets its name from the fact that as you go from one section of the circle to the next, you are going up or down by an interval of a perfect fifth. If you go up a perfect fifth (clockwise in the circle), you get the key that has one more sharp or one less flat; if you go down a perfect fifth (counterclockwise), you get the key that has one more flat or one less sharp.

Since going down by a perfect fifth is the same as going up by a perfect fourth, the counterclockwise direction is sometimes referred to as a "circle of fourths".

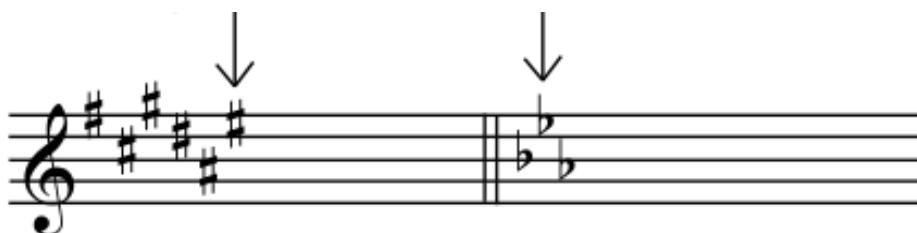
How to use the key signature to tell you which key a piece of music is in

1. Assume for a moment that you are in a **major** key.
 - If the key contains sharps, the name of the key is one semitone higher than the last sharp in the key signature.
 - If the key contains flats, the name of the key signature is the name of the second-to-last flat in the key signature.

You can often check this out by looking at the last chord of the piece of music (as long as it hasn't changed during the piece); the last chord will generally have the lowest note on the tonic (1st) note of the chord.

Last sharp is E sharp; key is F sharp major (a semitone higher than E sharp)

Second-to-last flat is E flat; key is E flat major



The only major keys that these rules do not work for are C major (no flats or sharps) and F major (one flat). It is easiest just to memorize the key signatures for these two very common keys.



2. If the music is in a minor key
 - Each major key has a 'relative minor' for that key signature.
 - You may be able to tell just from listening whether the music is in a major or minor key. If not, the best clue is to look at the final chord. That chord (and often the final note of the melody, also) will usually name the key.

A minor key will have the same key signature as its relative major, so work out the major key from the key signature as above and **then count down 3 semi-tones** to find the relative minor. E.g.

3 flats in the key signature are either **E flat major** or **C minor**.



From the major key (**E flat major**) count down:

- i. E flat down a semi-tone to D,
- ii. D down a semi-tone to D flat,
- iii. D flat down a semi-tone to C.

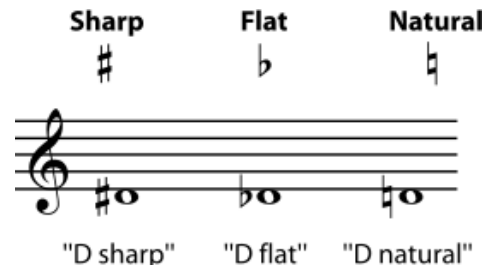
= **C minor**

Lesson 5 - Enharmonic Notes

In common notation, any note can be sharp, flat, or natural.

A sharp symbol raises the pitch (of a natural note) by a semitone;

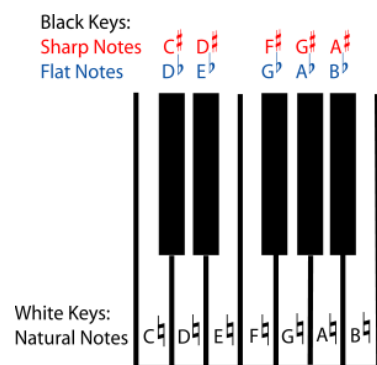
A flat symbol lowers it by a semitone.



Why do we bother with these symbols?

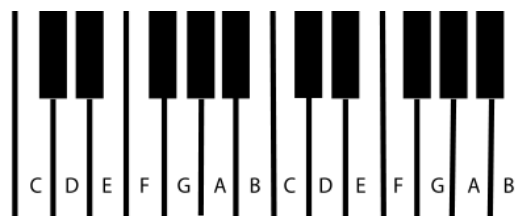
There are twelve pitches available within any octave. We could give each of those twelve pitches its own name (A, B, C ... to L !!) and its own line or space on a staff...

But ... that would actually be fairly inefficient, because most music is in a particular key. And music that is in a major or minor key will tend to use only seven of those twelve notes. So music is easier to read if it has only lines, spaces, and notes for the seven pitches it is mostly going to use, plus a way to write the occasional notes that are not in the key.



There are only seven note names (A, B, C, D, E, F, G), and each line or space on a staff will correspond with one of those note names. To get all twelve pitches using only the seven note names, we allow any of these notes to be sharp, flat, or natural. Look at the notes on a keyboard.

Seven of the twelve possible notes in each octave are "natural" notes.

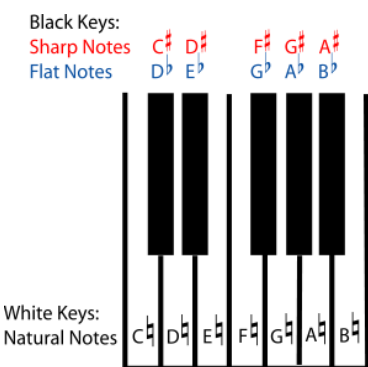


Because most of the natural notes are a tone apart, there are plenty of pitches that you can only get by naming them with either a flat or a sharp (on the keyboard, the "black key" notes).

For example, the note in between D natural and E natural can be named either D sharp or E flat. These two names look very different on the staff, but they are going to sound exactly the same, since you play both of them by pressing the same black key on the piano.



To conclude this section, a little further information:



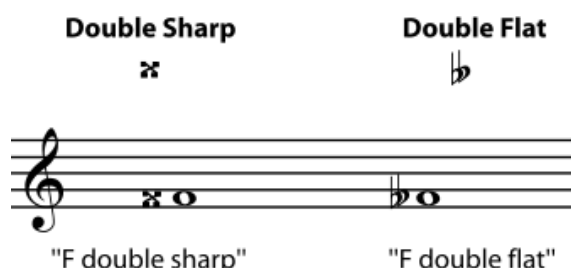
Any note can be flat or sharp, so you can have, for example, an E sharp. Looking at the keyboard and remembering that the definition of sharp is "a semitone higher than a natural note", you can see that an E sharp must sound the same as an F natural.

Why would you choose to call the note E sharp instead of F natural?

Even though they sound the same, E sharp and F natural, as they are actually used in music, are different notes. They may, in some circumstances, also sound different; but that is beyond this briefing paper.

Not only will they look different when written on a staff, but they will have different functions within a key and different relationships with the other notes of a piece of music. So a composer may very well prefer to write an E sharp, because that makes the note's place in the harmonies of a piece more clear to the performer.

This need (to make each note's place in the harmony very clear) is so important that double sharps and double flats have been invented to help do it. A double sharp is a tone higher than the natural note. A double flat is a tone lower than the natural note. Double sharps and flats are fairly rare in our choir's music and triple and quadruple flats even rarer, but all are allowed.



Lesson 6 Intervals - The distance between pitches

The **interval** between two notes is the distance between the two pitches - in other words, how much higher or lower one note is than the other.

This concept is so important that it is almost impossible to talk about scales, chords, harmonic progression, cadence, or dissonance without referring to intervals. It is a good idea to spend some time getting comfortable with the concepts below and practicing identifying intervals. We regularly do this in warm-ups when I ask you to sing 1,2,3,4,5,6,7,8; or 1,3,5,3,1.

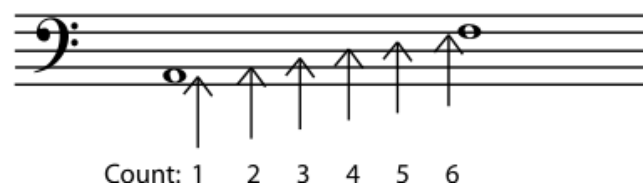
Scientists usually describe the distance between two pitches in terms of the difference between their frequencies. Musicians find it more useful to talk about interval. Intervals can be described using semitones and tones. For example, you can say "B natural is a semitone below C natural", or "E flat is a tone and a half above C natural". But when we talk about larger intervals in the major/minor system, there is a more convenient and descriptive way to name them.

Naming Intervals

The first step in naming the interval is to find the distance between the notes **as they are written on the staff**. Count every line and every space in between the notes, as well as the lines or spaces that the notes are on. This gives you the number for the interval.



Try singing 1,2,3.
Now sing 1,2,3,2,1.
Now sing 1,3,1
Can you hear the difference by missing out no. 2?



The interval between B and D is a third. The interval between A and F is a sixth. Note that, at this stage, key signature, clef, and accidentals do not matter at all.

The **simple intervals** are one octave or smaller.

1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th (Octave)
-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------	-----------------------------

Lesson 7 The Major Scale, Tones and Semitones



A "scale" is any defined series of musical notes.

This is a scale of **C major**.

In the C major scale, both the first and the last notes are Cs. On the piano a C major scale uses all the **white** notes (it doesn't have any sharps or flats).

To start on any other note (i.e. not C) sharps or flats are needed to achieve a Major Scale. How do we know which sharps or flats to use? There is a rule:

- Find the **distance** between each of the notes in the scale.
The distance between any two notes of the scale which are next to each other will be either a **tone** or a **semitone**.

The C major scale clearly shows what the pattern of tones and semitones is.

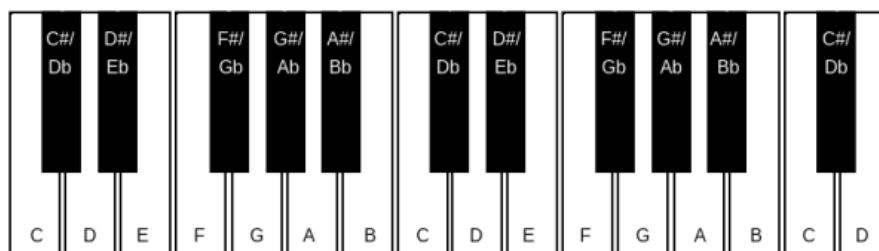
The distance between each pair of notes is written below the staff:



T for tones and S for semitones:

The pattern in the C major scale is T-T-S-T-T-T-S. In fact, **all** major scales follow the same pattern of tones and semitones - **T - T - S - T - T - T - S**

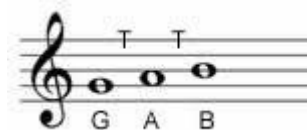
Applying the rule it is possible to establish the sharps or flats required for all Major scales.



So, for the scale of G major:



The next note needed is a tone higher than G i.e. **A**, (because 2 semitones make a full tone, G to G#, and G# to A).

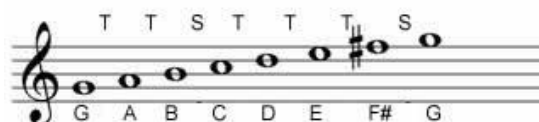


Similarly the third note is a tone higher A to **B**.

Next is the first semitone **C**. (There is no black note between B and C).



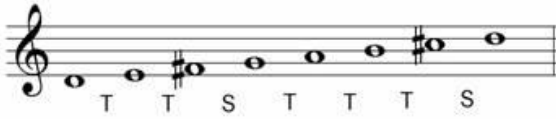
Continue in the same vein for the rest of the scale. Note the use of a sharp when moving from E via 2 semitones: E to F, then F to F# to achieve the full tone step.



In a scale, **each letter of the alphabet is used once only**, except for the first and last notes which must have the same letter. Therefore in the example of G major the F# cannot be annotated as Gb.

Further examples of Major scales, all following the same pattern T, T, S, T, T, T, S

D Major Scale



F Major Scale

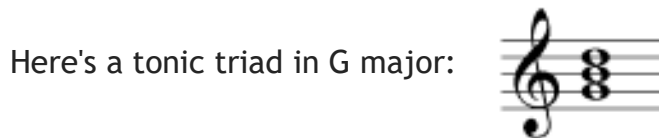


Lesson 8 Tonic Triads

What does the term "tonic triad" mean?

The **tonic** is the first (and last) note in a scale. "Triad" means "chord built with thirds".

A "tonic triad" is a music theory term for a chord of **three notes** and the lowest of these notes is the **tonic** of the key we are in.



Building Tonic Triads

Tonic triads are simple to build: first you need to know what key you are in. The tonic is the first note of the scale.

To build a D major Tonic Triad:

- D is the tonic. It is the lowest note of the chord.
- The next note in the triad is the third note of the scale which is F#
- The last note of the chord is the fifth note of the scale, which is A



Tonic triads are always made up of the **tonic**, **third** and **fifth** notes of the scale. We say that tonic triads are built out of **thirds**, because the interval between the lowest note and the middle note is a third, and the interval between the middle note and the highest note is also a third.

Remember choir warm-ups when we sing 1 - 3 - 5.

There are many other triads, and chord patterns. Tonic triads are often inverted or changed around using the same notes but with a different one at the bottom, middle and top places. These inversions go beyond the scope of this document.

Time

In standard notation, a single musical sound is written as a **note**.

The two most important things a written piece of music needs to tell you about a note are:

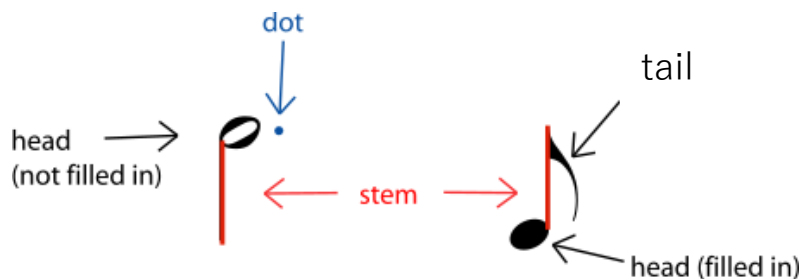
- its **pitch** - how high or low it is
- its **duration** - how long it lasts.

We have covered the pitch of a written note in the previous section.

To find out the duration of the written note, you look at the tempo and the time signature and then see what the note looks like. See page 3 to find out where on the sheet music you will find this.

Lesson 9 - The Parts of a Note







All of the parts of a written note affect how long it lasts.



- The head of the note may be filled in (a black note) or not (a white note).
- The note may also have (or not) a stem,
- The note may have one or more tails or beams connecting it to other notes,
- The note may have one or more dots following the head of the note.

All of these things affect how much time the note is given in the music.

Lesson 10 - The Length of a Note or its equivalent Rest

	Semibreve 4 beats		Crotchet 1 beat		Semi-quaver Quarter of a beat
	Minim 2 beats		Quaver Half a beat		Demi-Semi-quaver Eighth of a beat

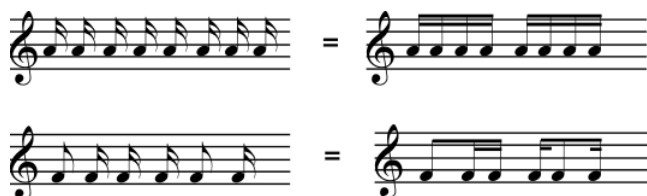
See the Note and Rest Pyramid at the bottom of the next page for the relationship between note values and rest values.

There are four beats in each of these bars



You may have noticed that some of the quavers above don't have tails; instead they have a **beam** connecting them to another quaver. This is to connect the notes into easy-to-read groups.

The beams may connect notes that are all in the same beat, or, in some vocal music, they may connect notes that are sung on the same text syllable.



Each note will have the same number of beams as it would have tails.

In certain music tempos the beams may connect a whole bar of quavers. More on the subject of beams later on, when we discuss time signatures.

Rests

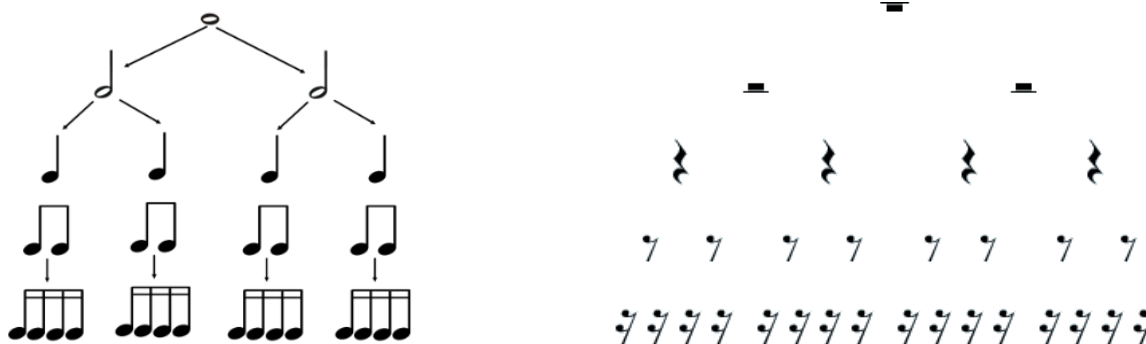
A **rest** stands for a silence in music. For each kind of note, there is a written rest of the same length.

The Most Common Rests



Semi-breve Minim Crotchet Quaver Semi-quaver Demi-Semi-Quaver

The Note and Rest Pyramids



Lesson 11 - Time signatures (in 'Simple time') - 2/4, 3/4, 4/4, 2/2, 3/8

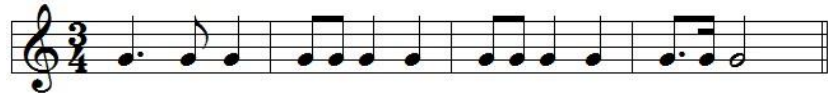
The upper number shows how many beats in each bar and the lower number indicates the type of beat (i.e. 2 = Minim, 4 = Crotchets, 8 = Quavers).

The time signature doesn't mean all the notes have to be the same length but each bar must contain notes that add up to that indicated in the time signature.

2/4 means two crotchet beats in a bar



3/4 means three crotchet beats in a bar



4/4 means four crotchet beats in a bar



3/8 means three quaver beats in a bar



Lesson 12 - Time signatures (in 'Compound time') - 6/8, 9/8, 12/8

Sometimes the beat may be based on a 'dotted crotchet' or 'dotted quaver'. This means the beat is in 'Compound time'

e.g. 6/8 would be 6 quaver beats in a bar, but could be grouped in 2 sets of 3 quavers. There the conductor would beat the whole bar in 2 as there are 2 dotted crotchets to each main beat.



↓ = beginning of a beat

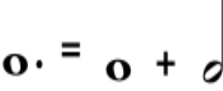
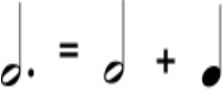
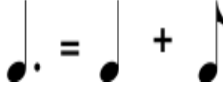
The counting would be as follows:

Meter	Count	Example Time Signature
Duple Simple	1 & 2 &	2 4
Triple Simple	1 & 2 & 3 &	3 4
Quadruple Simple	1 & 2 & 3 & 4 &	4 4
Duple Compound	1 & a 2 & a	6 8
Triple Compound	1 & a 2 & a 3 & a	9 8
Quadruple Compound	1 & a 2 & a 3 & a 4 & a	12 8

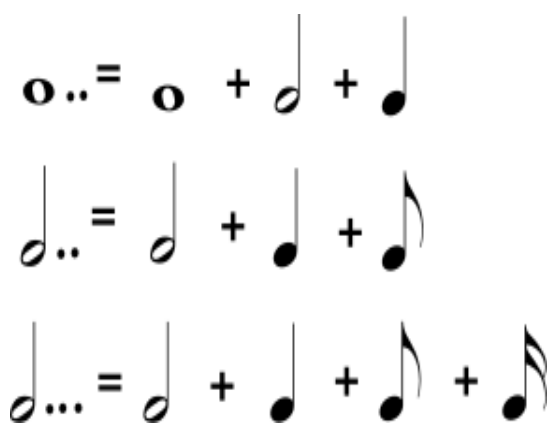
Lesson 13 - Dots after the Note head

If there is a dot immediately following the note head it means that the value of the note is extended by half as much again as the value of the note head.

E.g.

- A semi-breve (4 beats) followed by a dot (i.e. half the 4 beats = 2 beats) would have the length of 6 beats. This would be called a dotted semi-breve. 
- A minim (2 beats) followed by a dot (i.e. half the 2 beats = 1 beat) would have a length of 3 beats. This would be called a dotted minim. 
- A crotchet (1 beat) followed by a dot (i.e. half the 1 beat = half a beat) would have a length of 1½ beats. This would be called a dotted crotchet. 

Be aware: A dot that is someplace other than immediately following the head of the note does not affect the length of the note.



A note may have more than one dot. Each dot adds half the length that the dot before it added.

For example: As shown in the middle example above:

- the first dot after a minim (2 beats) adds a crotchet (1 beat)
 - the second dot would add half of the crotchet i.e. a quaver (half a beat)
- = 2 + 1 + ½ = 3 ½ beats altogether

Lesson 14 - Tied Notes

Tied notes are written with a curved line connecting two notes that are on the same line or the same space in the staff. Notes of any length may be tied together, and more than two notes may be tied together. **The sound they stand for will be a single note that is the length of all the tied notes added together.** Tied notes are also the only way to write a sound that starts in one bar and ends in a different bar.



Be aware: Ties may look like slurs, but they are not the same; a slur connects to notes with different pitches and is a type of articulation.

Lesson 15 - Triplets & Duplets; and various other breakdowns

If you want to divide a note length into anything other than halves or halves of halves e.g. if you want to divide a beat into thirds or fifths, for example - you must write the number of the division over the notes. They can be difficult to perform correctly and are avoided in music for beginners. The only one that is commonly used is **triplets**, which divide a note length into equal thirds.

Duplets work the other way from triplets and use up more time than the 3 notes might use. This is only evident in Compound time music which was covered on Page 16. e.g.

Notes in jazzy-sounding music that has a "swing" beat are often assumed to be triplet rhythms, even when they look like regular divisions; for example, two written quavers notes might sound like a triplet rhythm. In jazz and other popular music styles, a tempo notation that says **swing** usually means that all rhythms should be played as triplets.

Straight means to play the rhythms as written.

Lesson 16 - Tempo

The **tempo** of a piece of music is its speed. There are two ways to specify a tempo. Metronome markings are absolute and specific. Other tempo markings are verbal descriptions which are more relative and subjective. Both types of markings usually appear above the staff, at the beginning of the piece, and then at any spot where the tempo changes. See page 3.

Markings that ask the singer to deviate slightly from the main tempo, such as *ritardando* (or *rit.*) may appear either above or below the staff.

Metronome Markings

Metronome markings are given in beats per minute. They can be estimated using a clock with a second hand, but the easiest way to find them is with a **metronome**, which is a tool that can give a beat-per-minute tempo as a clicking sound.



4 crotchet beats in a bar.
88 crotchet beats per minute.



2 minim beats in a bar.
120 minim beats per minute.



6 quaver beats in a bar.
Often conducted as 2 dotted crotchet beats in a bar.
80 dotted crotchet beats per minute. (see page 16)



6 quaver beats in a bar.
Often conducted as 2 dotted crotchet beats in a bar.
148 quaver beats in a minute =
49 dotted crotchet beats per minute (see page 16)

Tip: If you don't have a watch or metronome, use an estimated guide in your head. I usually say: One alligator, two alligator, three alligator etc. in a steady rhythm, this roughly equals 1 phrase ('one alligator') per second, i.e. 1 beat = 60.

Tempo Terms

A tempo marking that is a word or phrase gives you the composer's idea of **how fast the music should feel**. How fast a piece of music feels depends on several different things, including the texture and complexity of the music, how often the beat gets divided into faster notes, and how fast the beats themselves are (the metronome marking).

Also, the same tempo marking can mean quite different things to different composers; if a metronome marking is not available, the performer should use a knowledge of the music's style and genre, and musical common sense, to decide on the proper tempo. When possible, listening to a professional play the piece can help with tempo decisions, but it is also reasonable for different performers to prefer slightly different tempos for the same piece.

Traditionally, tempo instructions are given in Italian.

Some Common Tempo Markings

- **Grave** - very slow and solemn
- **Largo** - slow and broad, stately
- **Larghetto** - not quite as slow as largo
- **Adagio** - slow , leisurely
- **Lento** - slowly
- **Andante** - literally "walking", a medium slow tempo
- **Moderato** - at a moderate, or medium pace
- **Allegretto** - Not as fast as allegro
- **Allegro** - lively, reasonably fast
- **Vivo, or Vivace** - lively and brisk

- **Presto** - very fast
- **Prestissimo** - very, very fast

These terms, along with a little more Italian, will help you decipher most tempo instructions.

More useful Italian

- **(un) poco** - a little
- **molto** - a lot
- **piu** - more
- **meno** - less
- **mosso** - literally "moved"; motion or movement

Of course, tempo instructions don't have to be given in Italian. Folk, popular, and modern music can give instructions in English or in the composer's language. Tempo indications such as "Not too fast", "With energy", "Calmly", or "March tempo" also give a good idea of how fast the music should feel.

Lesson 17 - Gradual Tempo Changes

If the tempo of a piece of music suddenly changes into a completely different tempo, there will be a new tempo given, usually marked in the same way (metronome tempo, Italian term, etc.) as the original tempo. Gradual changes in the basic tempo are also common in music, though, and these have their own set of terms. These terms often appear below the staff, although writing them above the staff is also allowed.

These terms can also appear with modifiers like *molto* or *un poco*. You may notice that there are quite a few terms for slowing down. Again, the use of these terms will vary from one composer to the next; unless beginning and ending tempo markings are included, the performer must simply use good musical judgement to decide how much to slow down in a particular *ritardando* (rit.) or *rallentando* (rall.).

Gradual Tempo Changes

- **accelerando** - (abbreviated *accel.*) accelerating; getting faster
- **ritardando** - (abbrev. *rit.*) slowing down
- **ritenuto** - (abbrev. *riten.*) slower, hold back
- **rallentando** - (abbrev. *rall.*) gradually slower
- **rubato** - don't be too strict with the rhythm; while keeping the basic tempo, allow the music to gently speed up and relax in ways that emphasize the phrasing
- **poco a poco** - little by little; gradually
- **Tempo I** - ("tempo one" or "tempo primo") back to the original tempo (this instruction usually appears above the staff) Can also be seen as 'a tempo'.

Lesson 18 - Repeats and Other Musical Road Map Signs

Repetition, either exact or with small or large variations, is one of the basic organizing principles of music.

Repeated notes, motifs, phrases, melodies, rhythms, chord progressions, and even entire repeated sections in the overall form, are all very crucial in helping the listener make sense of the music. So, in order to save time, ink, and page turns, common notation has many ways to show that a part of the music should be repeated exactly.

If the repeated part is very small - only one or two bar, for example - the repeat sign will probably look something like this.



Go all the way back to the beginning and repeat once.

For repeated sections of medium length **repeat dots** with or without endings are the most common markings. Dots to the right of a double bar line begin the repeated section; dots to the left of a double bar line end it. If there are no beginning repeat dots, you should go all

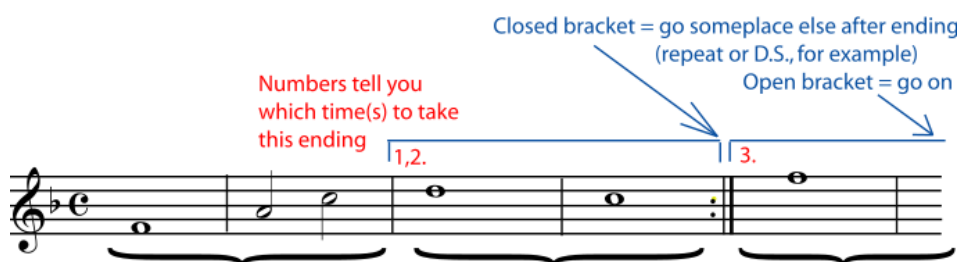


Repeat only the 2 bars between the 2 sets of dots

the way back to the beginning of the music and repeat from there.

It is very common for longer repeated sections of music to be repeated exactly until the last few bars. When this happens, the repeat dots will be put in an **ending**. The bracket over the music shows you which bars to play each time you arrive at that point in the music.

For example, the second time you reach a set of endings, you will **skip the music in all the other endings; play only the bars in the second ending, and then do whatever the second ending directs you to do** (repeat, go on, skip to somewhere else, etc.).





Play these bars every time.

Play these bars and take the repeat the first and second time. Skip these bars on the third time.

Play these bars the third time and go on.

The most common instructions for repeating large sections are traditionally written (or abbreviated) in Italian as shown below:

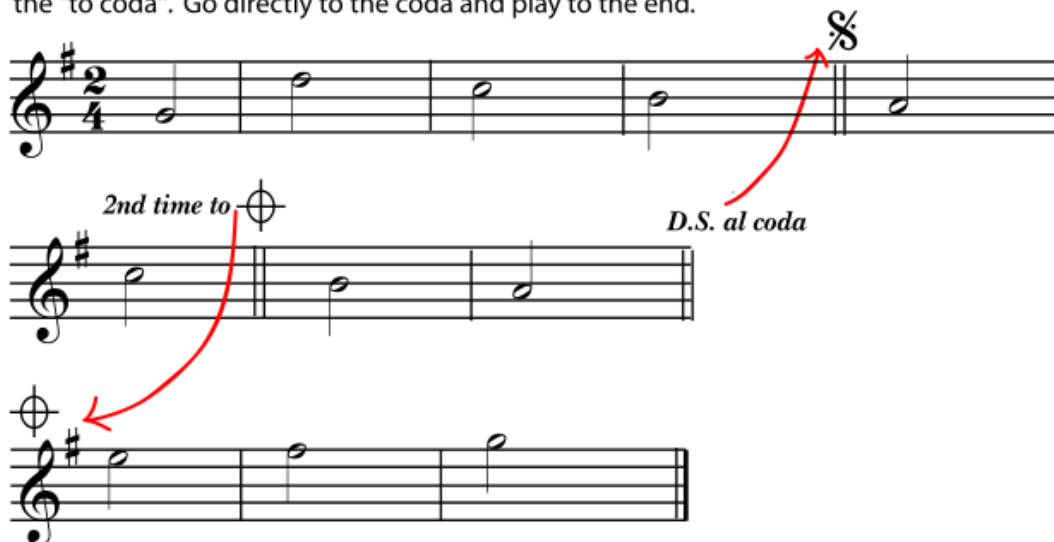
- D.C.** or **da capo** "To the head" - Go back to the very beginning
- D.S.** or **dal segno** "To the sign" - Go back to the sign
- al fine** "To the end" - On the repeat, stop when it says "fine"
- §** Sign
- fine** "End" - On the last time through, stop here
- to**  Go to the coda section
-  Coda section

Example 1:

Play to the D.C., then go back to the beginning and play until you reach "fine", then stop.



Example 2: Play to the D.S., then go back to the sign and play until you find the "to coda". Go directly to the coda and play to the end.



Musical notation for Example 2: Three staves in 2/4 time with a key signature of one sharp. The first staff has a whole note G4, a whole note F4, a whole note G4, and a whole note F4. Above the fourth measure is a sign (§). A red arrow points from the sign to the second staff. The second staff has a double bar line, followed by a whole note G4, a whole note F4, and a whole note G4. Above the first measure is the instruction "2nd time to" and a coda symbol (⊕). A red arrow points from the coda symbol to the third staff. The third staff has a coda symbol (⊕) at the beginning, followed by a whole note G4, a whole note F4, and a whole note G4. Above the second measure is the instruction "D.S. al coda".

Style

Lesson 19 - Dynamics

Dynamics:

Sounds, including music, can be barely audible or loud enough to hurt your ears, or anywhere in between. When they want to talk about the loudness of a sound, scientists and engineers talk about amplitude. Musicians talk about **dynamics**.

The amplitude of a sound is a particular number, usually measured in decibels, but **dynamics are relative**; an orchestra playing *fortissimo* sounds much louder than a single violin playing *fortissimo*.

The exact interpretation of each dynamic marking in a piece of music depends on:

- comparison with other dynamics in that piece
- the typical dynamic range for that instrument or ensemble
- the abilities of the performer(s)
- the traditions of the musical genre being performed
- the acoustics of the performance space

Traditionally, dynamic markings are based on Italian words, although there is nothing wrong with simply writing things like "quietly" or "louder" in the music. *Forte* means loud and *piano* means quiet. The instrument commonly called the "piano" was originally called a "pianoforte" because it could play dynamics, unlike earlier popular keyboard instruments like the harpsichord and spinet.

Typical Dynamic Markings

ppp	pianississimo	very very quiet
pp	pianissimo	very quiet
p	piano	quiet
mp	mezzo piano	medium quiet
m	mezzo	medium
mf	mezzo forte	medium loud
f	forte	loud
ff	fortissimo	very loud
fff	fortississimo	very very loud

When a composer writes a *forte* into a part, followed by a *piano*, the intent is for the music to be loud, and then suddenly quiet.

If the composer wants the change from one dynamic level to another to be gradual, different markings are added.

A *crescendo* (*cresc.*) means "gradually get louder";

a *decrescendo* (*decresc.*) or *diminuendo* (*dim.*) means "gradually get quieter".

Gradual Dynamic Markings

The image shows three musical staves, each with five measures. Each measure contains a single quarter note on a treble clef staff with a common time signature (C).
Staff 1: The notes are on the same pitch. Below the staff, the markings are: *p* (piano), *cresc.* (crescendo), *f* (forte), *decresc.* (decrescendo), and *p* (piano).
Staff 2: The notes are on the same pitch. Below the staff, the markings are: *p* (piano), *cresc.* (crescendo), *f* (forte), *dim.* (diminuendo), and *p* (piano).
Staff 3: The notes are on the same pitch. Below the staff, the markings are: *p* (piano), *f* (forte), and *p* (piano). The markings are connected by lines that taper to show the gradual change in dynamics.

Above are three different ways to write the same thing: start softly (piano), gradually get louder (crescendo) until the music is loud (forte), then gradually get quieter (decrescendo or diminuendo) until it is quiet (piano) again.

Lesson 20 - Common Articulations, Accents, Legato, Slur and more..

The word **articulation** generally refers to how the pieces of something are joined together; for example, how bones are connected to make a skeleton or syllables are connected to make a word. Articulation depends on what is happening at the beginning and end of each segment, as well as in between the segments.

In music, the segments are the individual notes of a **line** in the music. This could be the melodic line, the bass line, or a part of the harmony. The line might be performed by any musician or group of musicians: a singer, a violin section, or a trumpet and saxophone together. In any case, it is a string of notes that follow one after the other and that belong together in the music. The **articulation** is what happens in between the notes. The **attack** - the beginning of a note - and the amount of **space** in between the notes are particularly important.

One marking that we see often in our music is:  The Pause sign

Meaning - hold the note longer than it's normal note length and watch the conductor !

Common Articulations:

Staccato notes are short, with plenty of space between them. Please note that this doesn't mean that the tempo or rhythm goes any faster. The tempo and rhythm are not affected by articulations; the staccato notes sound shorter than written only because of the extra space between them.



'Staccato' may be written into the part or marked with dots above or below the notes.

These staccato crotchets, on the stave above, would sound approximately like the quavers and quaver rests on the stave below.



Legato is the opposite of staccato. The notes are very connected; there is no space between the notes at all. There is, however, still some sort of articulation that causes a slight but definite break between the notes (for example, the violin player's bow changes direction, the guitar player plucks the string again, or the wind player uses the tongue to interrupt the stream of air).



Accents - An accent requires that a note stand out more than the unaccented notes around it. Accents are usually performed by making the accented note, or the beginning of the accented note, louder than the rest of the music. Although this is mostly a quick change in dynamics, it usually affects the articulation of the note, too. The extra loudness of the note often requires a stronger, more definite attack at the beginning of the accented note, and it is emphasized by putting some space before and after the accented notes. The effect of a lot of accented notes in a row may sound marcato (for Marcato - see later article).



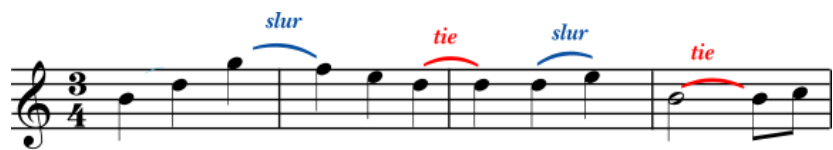
The performance of an accent depends on the style of music, but in general, sforzando and fortepiano accents involve a loud beginning to a longer note. They are usually heavier and longer than caret-type accents, which often rely more on a powerful attack to make a short note louder than the notes around it.

A **slur** is marked by a curved line joining any number of notes. When notes are slurred, only the first note under each slur marking has a definite articulation at the beginning. The rest of the notes are so seamlessly connected that there is no break between the notes. A good example of slurring occurs when a vocalist sings more than one note on the same syllable of text.

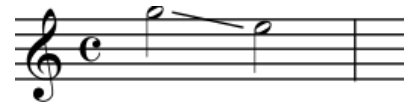


Only the first note under each slur has a definite articulation.

A **tie** looks like a slur, but it is between two notes that are the same pitch. A tie is **not really an articulation marking**. It is included here because it looks like one, which can cause confusion for beginners. When notes are tied together, they are played as if they are one single note that is the length of all the notes that are tied together. (See page 18)

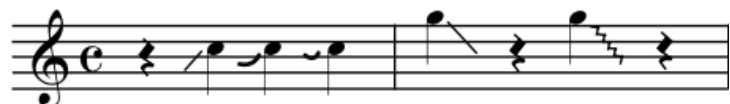


A **portamento** is a smooth glide between the two notes, including all the pitches in between. For some instruments, like violin and trombone, this includes even the pitches in between the written notes. For other instruments, such as guitar, it means sliding through all of the possible notes between the two written pitches.



Although unusual in traditional common notation, a type of portamento that includes only one written pitch can be found in some styles of music, notably jazz, blues, and rock. As the notation suggests, the proper performance of **scoops** and **fall-offs** requires that the portamento begins (in scoops) or ends (in fall-offs) with the slide itself, rather than with a specific note.

Scoops and Fall-offs The notation for scoops and fall-offs has not been standardized, but either one will look something like a portamento or slur with a note on one end only.



Some articulations may be some combination of staccato, legato, and accent.

Marcato, for example means "marked" in the sense of "stressed" or "noticeable". Notes marked *marcato* have enough of an accent and/or enough space between them to make each note seem stressed or set apart. They are usually longer than staccato but shorter than legato. Other notes may be marked with a combination of articulation symbols, for example legato with accents. As always, the best way to perform such notes depends on the instrument and the style of the music.

Some Possible Combination Markings



No articulation !

Plenty of music has no articulation marks at all, or marks on only a few notes.

Often, such music calls for notes that are a little more separate or defined than legato, but still nowhere as short as staccato.

Mostly, though, it is up to the performer to know what is considered proper for a particular piece.

For example, most ballads are sung legato, and most marches are played fairly staccato or marcato, whether they are marked that way or not.

Furthermore, singing or playing a phrase with musicianship often requires knowing which notes of the phrase should be legato, which should be more separate, where to add a little *portamento*, and so on. Confident singers or musicians will decide for themselves! Good articulation comes naturally to the musician who has mastered the instrument and the style of the music.

However, this does not mean I am encouraging all of you to decide for yourself how to sing each note or phrase. Please watch the conductor and all do the same!!!

Vocal Ranges

Lesson 21 - Vocal Ranges

A typical choral arrangement divides women into higher and lower voices and men into higher or lower voices. Most voices can be assigned one of these four ranges, and this gives the composer four vocal lines to work with, which is usually enough.

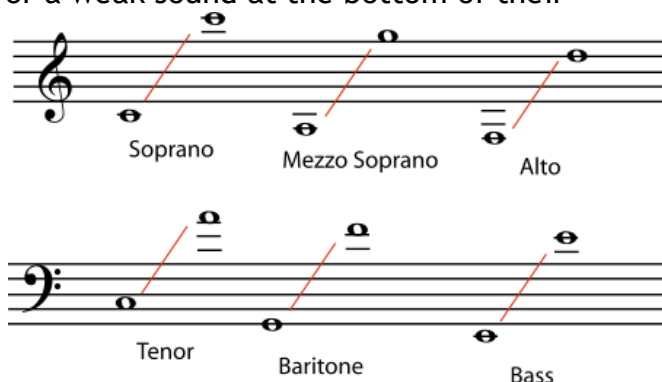
The four main vocal ranges are:

- **Soprano** - A high female (or boy's) voice
- **Alto** - A low female (or boy's) voice
- **Tenor** - A high (adult) male or occasional female voice
- **Bass** - A low (adult) male voice

Arrangements for these four voices are labelled SATB (for Soprano Alto Tenor Bass).

The ranges of the four voices overlap, but singers may find themselves straining or getting an unpleasant sound at the top or a weak sound at the bottom of their ranges.

Although the full ranges of an alto and a soprano may look quite similar, the soprano gets a strong, clear sound on the higher notes, and the alto a strong, clear sound in the lower part of the range.



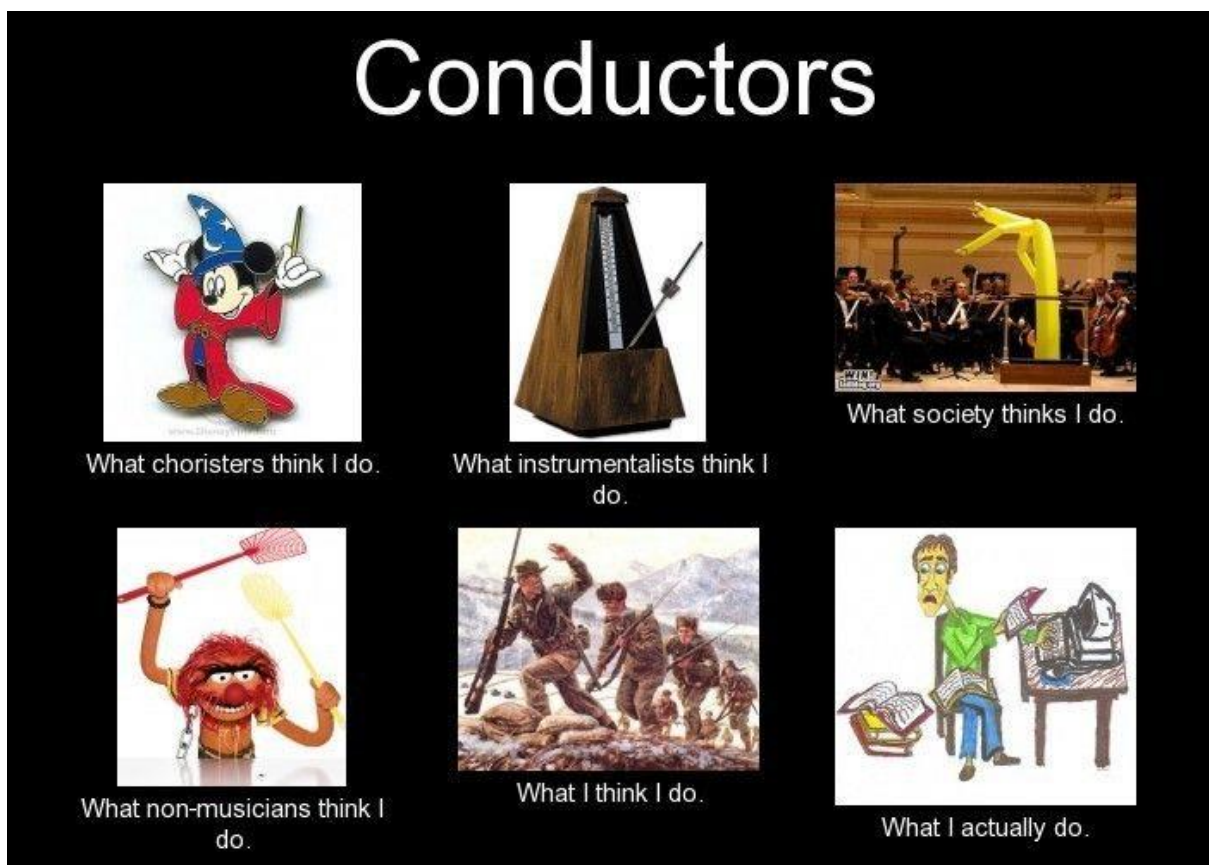
But there are vocalists whose strong, best-sounding range falls in a distinctly different place from any of these four voices. The names for some of these ranges are:

- **Coloratura Soprano** - This is not really a different range from the soprano, but a coloratura soprano has a voice that is unusually high, light, and agile, even for a soprano.
- **Mezzo-soprano** - In between soprano and alto
- **Contralto** - Contralto and alto originally referred to the same voice. But some people today use “contralto” to refer to a female voice that is even lower than a typical alto
- **Countertenor** - A male voice that is unusually high, light, and agile, even for a tenor
- **Baritone** - A male voice that falls in between tenor and bass

Voices are as individual as faces; some altos will have a narrower or wider range or the sweetest and most powerful part of their range in a different place than other altos. These are approximate, average ranges for each voice category.

Conducting

What am I trying to get across to the choir?



MEMES & FUNNY PICS FRABZ.COM

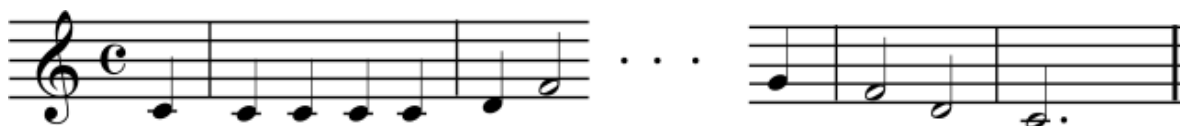
Lesson 22 - Waving my arms around and occasionally shouting numbers

If you have learned the rudiments of music theory in the previous 27 pages you will know about dynamics, counting, note values and pitch, so what else can I tell you now to assist the choir members and Barrie to work as a whole unit with me?

Calling out numbers: these are the actual beats of the bar and if you can learn to orientate your thinking to view bars as a whole, i.e. 1,2,3,4, 1,2,3,4 or 1,2,3, 1,2,3 these numbers will inform you of:

- when to breathe
- when to come in
- the strength of the impact within the bar
i.e. the first beat is always the strongest beat but may not be the first beat of a phrase: e.g. you might be required to come in on the upbeat

E.g. 4,1,2,3,4, 1,2,3,4 ... 1,2,3.



Note: the final bar of the piece matches with the upbeat bar, making a full bar.

Lesson 23 - Conducting the beat

Orchestral patterns are much more defined than my conducting, but essentially I try and follow the same pattern.

However, I do spend more time on 'bringing you in' on a specific beat or half-beat than on the actual beating of the structured time.

The first beat of the bar is the downbeat, it is most important that you come in with the correct consonant of the word you are singing on that downbeat.

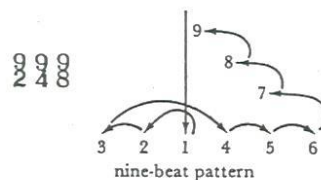
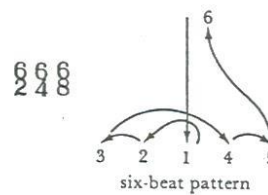
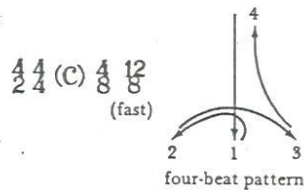
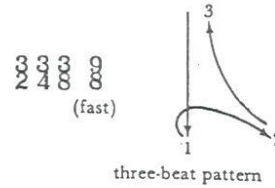
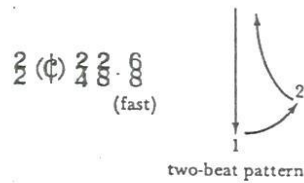
A late entry means that we end up with 2, 3, 62 (!) consonants.

This also applies to the end of words, we need a clean cut ending, especially on Ts, Ds and Ssssss'.

A clean cut ending is so impressive to an audience and tells them when to applaud!!!

Below are diagrams of the traditional conducting patterns. They all give you a clue as to what comes next.

CONDUCTING PATTERNS



Lesson 24 - Idiosyncrasies and gestures:

Various gestures have developed between myself and choir members for the interpretation of the music. They attempt to give various reminders about the next section of singing, the words, whether you should be singing (or not!), and other clues:

1. Little finger and index finger of both hands held out: ***all four parts should be singing!*** Same principal applies to 2 or 3 fingers held out and pointing at certain sections of the choir.
2. Horizontal movement with hand vertical: ***hold note on and don't breath!***
3. Rolling hands around each other in a circle: ***sing it again!***
4. Hands down by my sides: ***you should probably not be singing!***
5. Index finger held horizontally across my lips: ***Hum the next section***
6. My posture tries to give you a clue about the style we are performing, i.e.
 - i. ***military style upright: a march, or, be proud***
7. Pressing hands down towards floor: ***get even quieter***
8. Lifting hands and fingers like calling you closer: ***encouraging more volume***
9. Index finger circling around lips: ***more diction emphasis***
10. Hand over heart: ***sing with feeling/passion/emotion***
11. Fingers pointing to cheekbones/temples: ***you are going flat, lift the pitch***
12. Big cheesy grin: ***Smile, engage with audience, flash your eyes!***

Lesson 25 - Performances - Be 'ALERT'

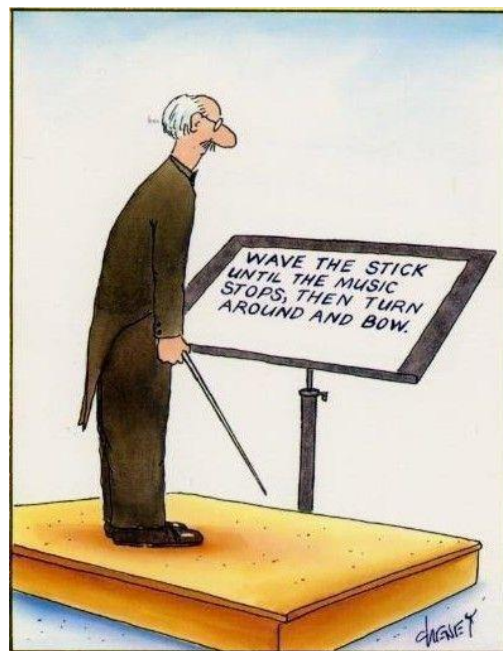
A - Arrive with a feeling of anticipation, a few nerves and excitement. It all helps to give a good start to the concert.

L - Listen to Barrie's musical introduction to each piece - get in the right mood for the song. Listen to each other and other sections of the whole choir.

E - Engage with the audience, be enthusiastic. Make eye contact - with me and the audience.

R - Radiate fun. Remember that from the moment you walk on you are being watched, even the back row is always visible and the audience can see you.

T - Trouble happens: Tuning goes out, timing goes wrong. Trust me, that's what I'm there for - to get you out of trouble!



The End !