2torial #0917:

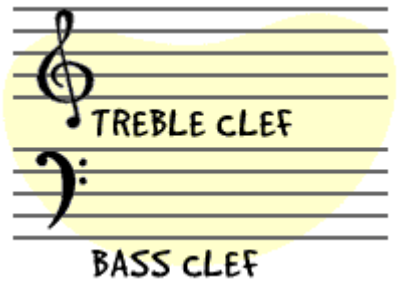
Learn2 Read Music

Step 1: Learn the names of notes and clefs

In modern, standardized music, there are seven note names which correspond with the first seven letters of the alphabet: A, B, C, D, E, F and G.

If you play or sing the notes in order, beginning with A, you would restart with "A" after "G," only at a higher pitch. For example: **A**, B, C, D, E, F, G, **A**, B, C and so on. Eight notes in a row (in this case, from "A" to "A") are called an **octave**.

Since notes can range in tone from a deep bass (very low) to a high soprano, they're separated in written music by two different clefs: treble and bass.



As a general rule, notes that follow a treble clef range from mid-level up to very high in tone. Notes that follow a bass clef range from mid-level down to the lowest of tones.

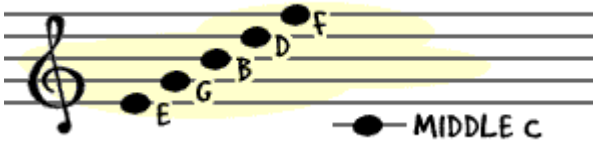
NOTE: There is also a "C" clef, which is sometimes used for cello, tenor trombone, bassoon and viola. However, we'll only be discussing the treble and bass clefs.

Go 2 ——→ Step 2

Step 2: Find where the notes fall on staves

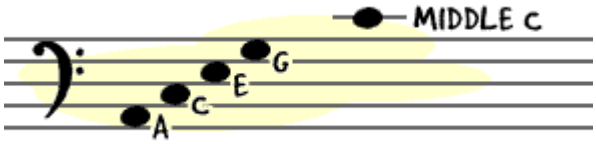
Each clef has a stave. Staves are made up of five lines and four spaces. Each line and space represents where a particular note will fall.

The treble stave. Starting from bottom to top, the lines on the treble stave read: E, G, B, D, F (one note for each line). A well-known way of remembering this is to say "**E**very **G**ood **B**oy **D**oes **F**ine" or "**E**very **G**ood **B**oy **D**eserves **F**udge," depending on if you're into chocolate or not. The spaces in between the lines follow the same order, and the notes are F, A, C, E, respectively.



Note how the treble clef, also called a G clef, encircles the G line. This is a good way to remember where notes fall, too.

The bass stave. Starting from bottom to top, the bass stave is: A, C, E, G (one note for each space rather than each line). A popular way to remember this is to say "**A**ll **C**ars **E**at **G**as" or "**A**ll **C**ows **E**at **G**rass." The corresponding lines from bottom to top are G, B, D, F, A, respectively.



Note that the bass clef, also called the F clef, has dots surrounding the F line.

In most written music, the treble and bass staves appear concurrently on the page, with the treble stave above the bass stave, separated by an open space (like the illustration in Step 1). This is because the treble and bass lines are played simultaneously but written separately. On a keyboard, for example, the bass line is played with the left hand and the treble is played with the right.

Short lines that appear with notes written above or below a stave are called **ledger lines**. For example, middle C (the key that falls approximately in the center of a piano) appears on the first ledger line below a treble stave, or the first ledger line above a bass stave (see the two diagrams above). Ledger lines correspond with the main stave lines. The higher a note falls on a stave (or above), the higher its pitch will be.

When two or more notes are written and played as a single unit, they're called **chords**.

Go 2 → Step 3

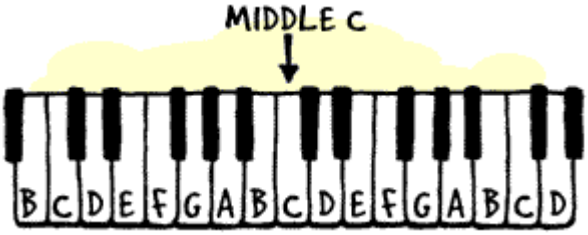
Learn2 Read Music

Step 3: Find where the notes fall on a keyboard

On a keyboard, the white keys are the "natural" notes, and the black keys are the "sharp" and "flat" notes. Naturals, sharps and flats are discussed further in Step 6.

Middle C, discussed in Step 2, is a natural (white) key, and is approximately the center key of a piano, which has 88 keys. Some keyboards and organs have less than 88 keys, but the same basic rule applies.

As you'll notice (especially if you're looking at a keyboard), not all notes have sharps or flats (there's no C or F flat, nor is there B or E sharp).



Go 2 → Step 4

Learn2 Read Music

Step 4: Understand note length

There are various types of notes, each of which is held for a different length of time. The way a note appears indicates how many beats it should last.

In most music:

 Whole notes last four beats.

 Half notes last two beats.

 Quarter notes last one beat.

Any note shorter than a quarter note has one or more "hooks" to indicate its length. Each hook cuts the note's length in half.

 Eighth notes (one hook) last one-half beat.

 Sixteenth notes (two hooks) last one-quarter beat.

These continue on to thirty-second and sixty-fourth notes (with three and four hooks, respectively). If two or more notes requiring hooks appear in a row, they're often connected with "beams." The number of horizontal lines in a beam indicates note length.

 Two eighth notes connected by a beam

Music also has rests, which indicate silent beats. They're counted in the same way as notes, and correspond to the notes they represent.

 Whole note rest

 Half note rest

 Quarter note rest

 Eighth note rest


Sixteenth note rest

and so on...

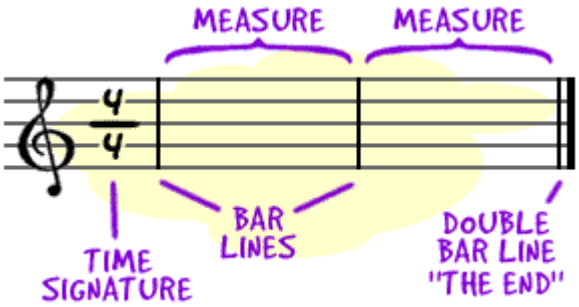
Go 2 ——→ [Step 5]

Learn2 Read Music

Step 5: Understand time signatures

Music usually has two numbers at the beginning, one on top of the other. This is called a time signature. The time signature indicates how many beats there are in a measure (the space between bar lines), as well as what the general pace (rhythm) of a song will be.

Bar lines are vertical lines that intersect the entire stave at regular intervals. The end of a piece of music is indicated by a double bar line.



The top number of a time signature indicates how many beats are in a measure. The bottom number indicates the type of note that makes up each beat.

The most common time signature in popular music is 4/4 (four beats in each measure, and each beat is made up of a quarter note). Sometimes 4/4 time is indicated with a large "C" centered vertically on the stave at its beginning (which stands for "common time").

Go 2 ——→ [Step 6]

Learn2 Read Music

Step 6: Understand key signatures

Natural notes appear by themselves in written music. But sharps and flats have their own symbols:


Sharp

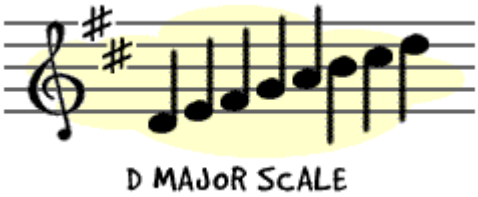

Flat

On a keyboard, a sharp note is the black key that's one note higher than its natural counterpart (the white key). A flat is a black key that's one note lower than its natural counterpart.

When sharps and flats are written into music as needed (next to the notes), they're called accidentals. But sometimes they are shown at the beginning of a stave, right after the clef. In this case, they indicate a **key signature**.

Key signatures show which notes are to be played or sung as sharps or flats throughout the song. So if there's a sharp sign on "F" and one on "C", every "F" and "C" note throughout the song should be played as a sharp. There will be no "F" or "C" natural unless specifically indicated by a natural symbol:


Natural



Key signatures (in this case, D Major) indicate the general tone of a song, as well as where its basic scale begins and ends. For example, a song in the key of D is based on the D Major scale, which begins and ends with "D" -- with "F" and "C" played sharp throughout. However, the same song can be written and played in different keys.

Go 2 ——→ Step 7

Learn2 Read Music

Step 7: Know the common words and symbols

Tempo and volume also play an important role in music. A song's tempo (how fast or slow it should be played) is often written at the beginning in English or Italian. Here are the common terms in both languages:

English	Italian
Very slow	Lento; Largo
Slow	Adagio
Walking pace	Andante
Medium	Moderato
Fast	Allegro
Lively	Vivace
Very fast	Presto; Molto Allegro

Common symbols indicating volume (how loud or soft a song should be played) are as follows:

Symbol	Italian	English
ppp	Pianississimo	As soft as possible
pp	Pianissimo	Very soft
P	Piano	Soft
mp	Mezzo-piano	Moderately soft
m	Mezzo	Medium
mf	Mezzo-forte	Moderately loud
f	Forte	Loud
ff	Fortissimo	Very loud
fff	Fortississimo	As loud as possible
pf	Piu forte	Louder
fp	Fortepiano	Quickly move from loud to soft
	Crescendo	Gradually louder (this symbol will appear over several notes at once)
	Diminuendo	Gradually softer (this symbol will appear over several notes at once)

Additional symbols are used to give music more personality and variety:

Symbol	Meaning

A dot below or above the note indicates it should be played or sung staccato -- shortly with a silent space between it and the next note

A dot after a note or rest means you should add half its original length (so a half note followed by a dot would count as three beats, a whole rest followed by a dot would count for six beats, and so on)

Play or sing strongly

Notes should blend together smoothly

Hold the note

Repeat note once

Repeat the previous bar

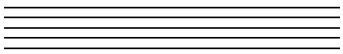
Repeat previous two bars

Repeat section before going on

Once you've perfected these basic steps, you'll be well on your way toward trying something more complex. In the meantime, be patient with yourself. (In other words, put that Rachmaninoff down and stick with something simple for a while.) With enough practice, you'll have taken a significant step toward eventually being able to play, sing or even write any song you want.

Music Theory - Note Reading

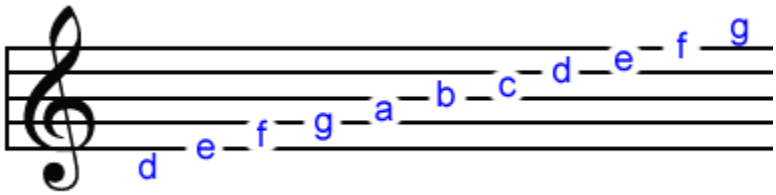
A staff is made up of five horizontal lines and four spaces.

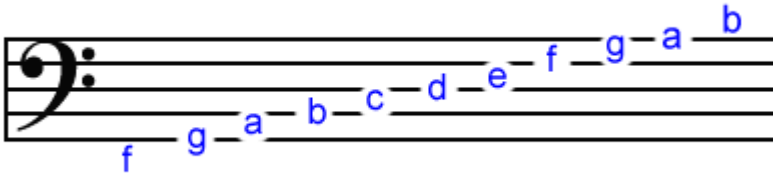


Pitches are named after the first seven letters of the alphabet (A B C D E F G).

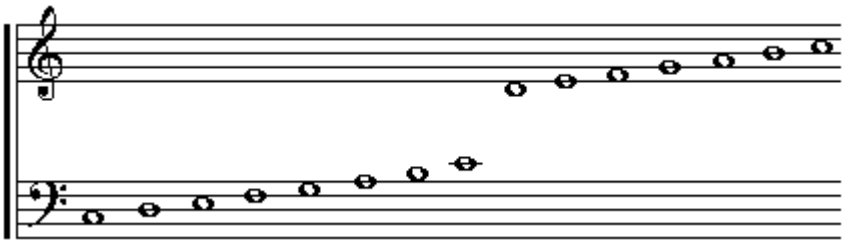
A clef is a musical symbol placed at the beginning of the staff that determines the letter names of the lines and spaces.

The two main clefs are the *treble* and the *bass*:

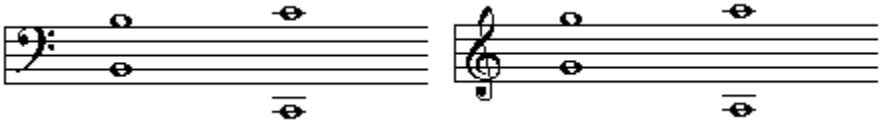




A grand staff is a combination of both the treble and bass clefs connected by a vertical line on the left side of the staves (plural staffs).



Ledger Lines are an extension of the staff. They are additional lines both above and below which are parallel to the staff. Each ledger line contains one note.



Note Values

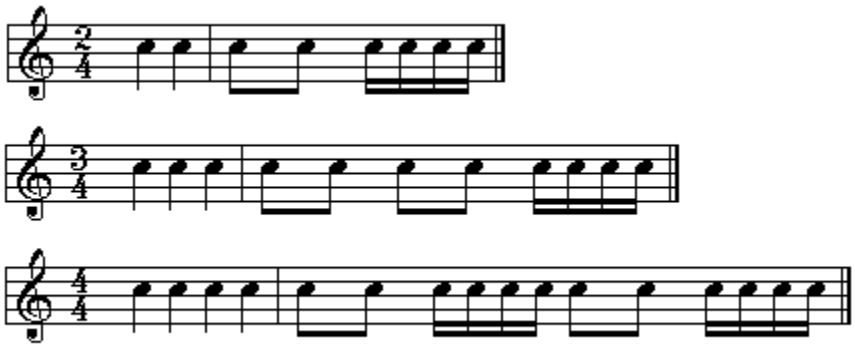
Each note has a specific duration.

Name	Note	Rest
Whole Note		
Half Note		
Quarter Note		
Eighth Note		
Sixteenth Note		

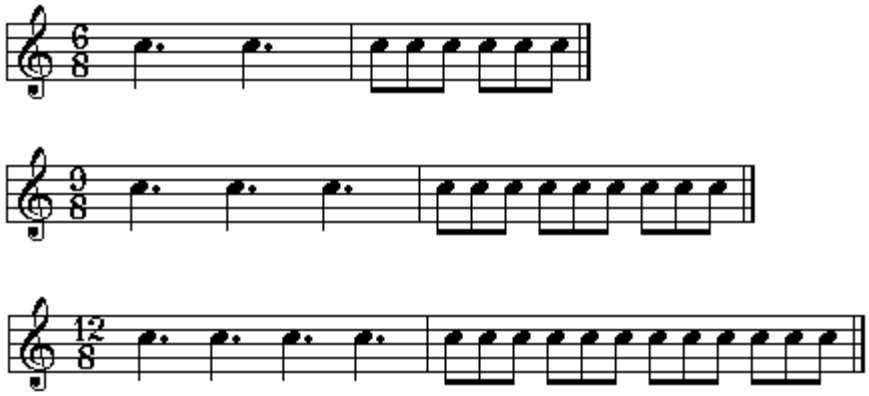
Meter

Meter is the regular recurring pattern of strong and weak beats of equal duration; also known as time. The meter or time signature in a musical composition is indicated by a fraction, and located at the beginning of a piece of music. The lower number of the fraction tells what kind of note receives one beat. The upper number tells how many beats are in a measure.

In Western music there are two types of meter, simple and compoud. In simple meter the upper number is either 2, 3, or 4. Each beat is subdivided by two.



In compound meter the upper number is either 6,9, or 12. Each beat is a dotted note and subdivided into groups of three beats.



Music Theory

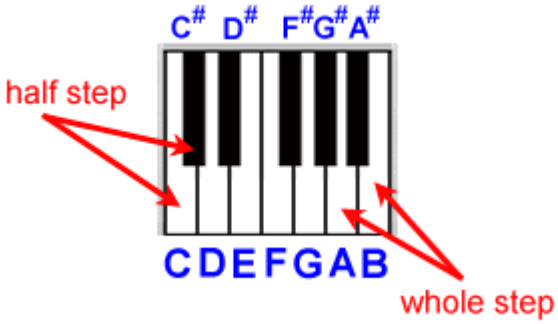
Intervals

An interval is the distance between two notes. Intervals are always counted from the lower note to the higher one, with the lower note being counted as one. Intervals

come in different qualities and size. If the notes are sounded successively, it is a melodic interval. If sounded simultaneously, then it is a harmonic interval.

The smallest interval used in Western music is the half step. A visual representation of a half step would be the distance between a consecutive white and black note on the piano. There are two exceptions to this rule, as two natural half steps occur between the notes E and F, and B and C.

A whole step is the distance between two consecutive white or black keys. It is made up of two half steps.

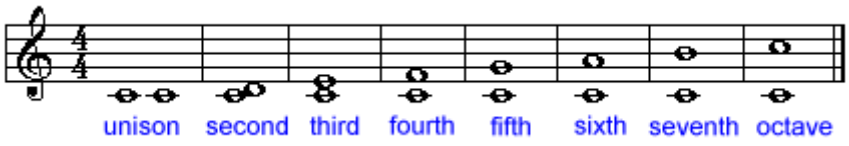


Qualities and Size

Intervals can be described as Major (M), Minor (m), Perfect (P), Augmented (A), and Diminished (d).

Intervals come in various sizes: Unisons, Seconds, Thirds, Fourths, Fifths, Sixths, and Sevenths.

2nds, 3rds, 6ths, and 7ths can be found as Major and Minor.
Unisons, 4ths, 5ths, and Octaves are Perfect. Listen



When a major interval is raised by a half step, it becomes augmented.
When a major interval is lowered by a half step, it becomes minor.
When a major interval is lowered by two half steps, it becomes diminished.

When a minor interval is raised by a half step, it becomes major.
When a minor interval is raised by two half steps, it becomes augmented.
When a minor interval is lowered by a half step, it becomes diminished.

When a perfect interval is raised by a half step, it becomes augmented.
When a perfect interval is lowered by a half step, it becomes diminished.

INVERSIONS OF INTERVALS

Intervals can be inverted, which basically means you turn them upside down. The lower note is raised up an octave so that the top note/bottom note relationship is reversed. The chart below shows the inversions of intervals.

Qualities

- Major becomes Minor
- Minor becomes Major
- Perfect remains Perfect
- Augmented becomes Diminished
- Diminished becomes Augmented

Size

- 2 becomes 7
- 3 becomes 6
- 4 becomes 5
- 5 becomes 4
- 6 becomes 3
- 7 becomes 2

Interval Identification

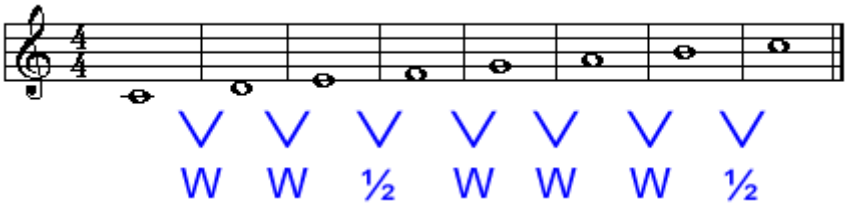
It is important to be able to hear and identify intervals. This is a very important thing for musicians to do. Here is a list of familiar songs that will help you to identify the intervals.

m2- Stormy Weather	m2
M2- Happy Birthday	M2
m3- The Impossible Dream	m3
So Long, Farewell from The Sound of Music	
M3- Halls of Montezuma	M3
P4- Here comes the bride	P4
A4- Maria from West Side Story	A4
P5- Star Wars	P5
Twinkle, Twinkle, Little Star	
M6- NBC theme music	M6
m7- Somewhere from West Side Story	m7
M7- Bali Hai from South Pacific	M7
Octave- Over the rainbow	Oct.

Scales

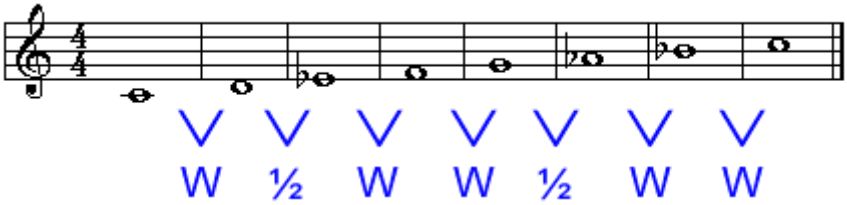
There are many different types of scales. They are the backbone of music.

A major scale is a series of 8 consecutive notes that use the following pattern of half and whole steps: Listen

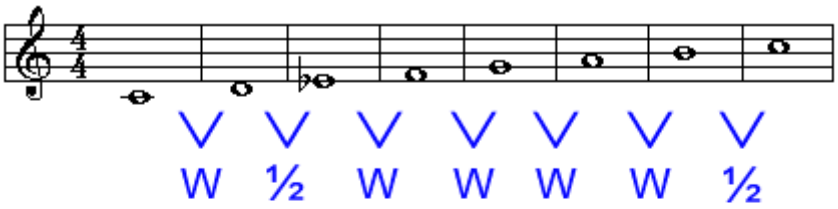


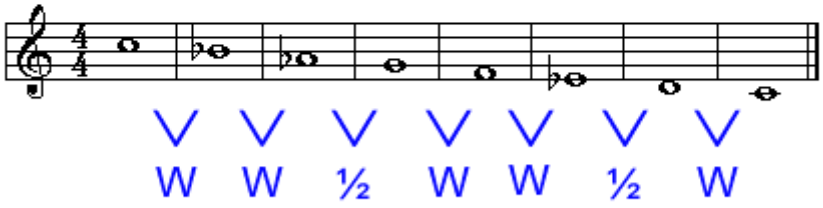
Minor Scales come in three forms: Natural, Melodic, and Harmonic.

Natural Minor scales use the following pattern of half and whole steps: Listen

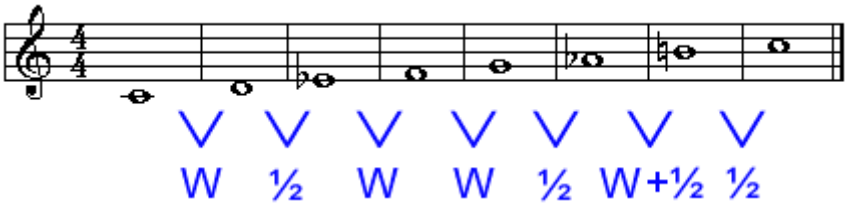


Melodic Minor scales ascend and use the following pattern of half and whole steps. When descending, they do so in the natural minor form. Listen

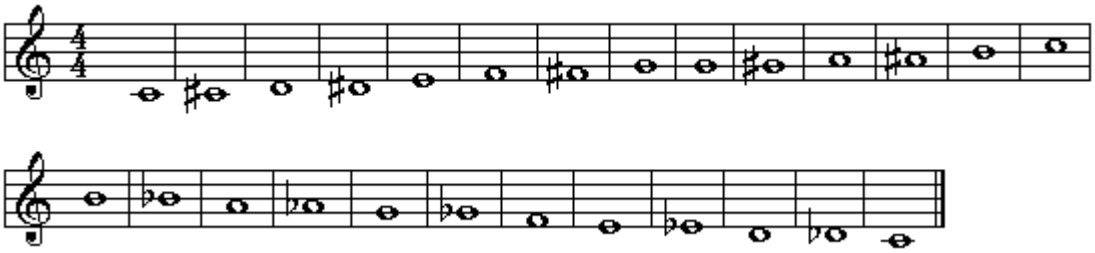




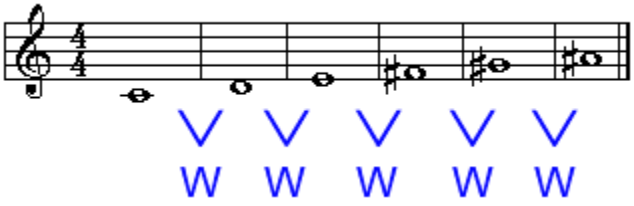
Harmonic Minor scales use the following pattern of half and whole steps: Listen



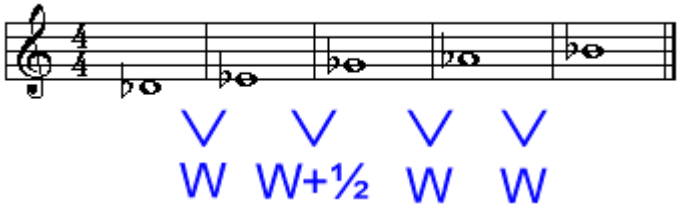
Chromatic Scales are made up entirely of half steps. When ascending, the scale uses sharps, when descending it uses flats.Listen



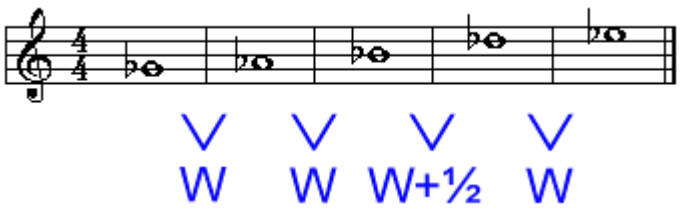
Whole Tone Scales differ from the other scales because it only has 6 tones. It uses the following pattern: Listen



A pentatonic Scale is a five-tone scale, which has its beginning in antiquity. There are traces of this scale in Oriental and American Indian music. This scale does not have a leading tone, which gives the scale it's unique sound. The scale has two forms. The first one uses the group of two black keys followed by three black keys. The pattern is as follows: Listen

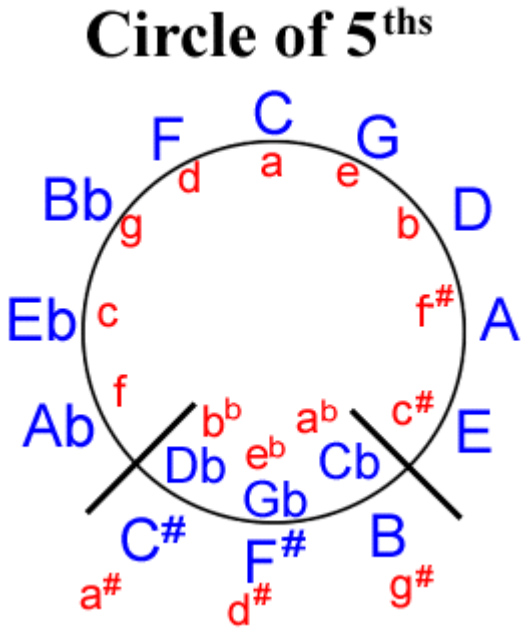


The second one used the group of three black keys followed by two black keys. The pattern is as follows: Listen



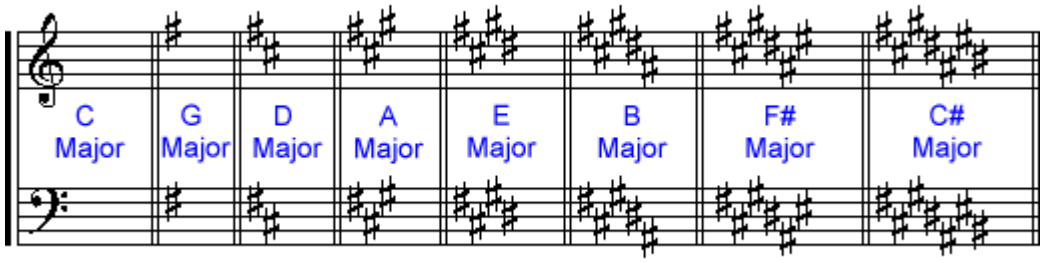
Key Signatures

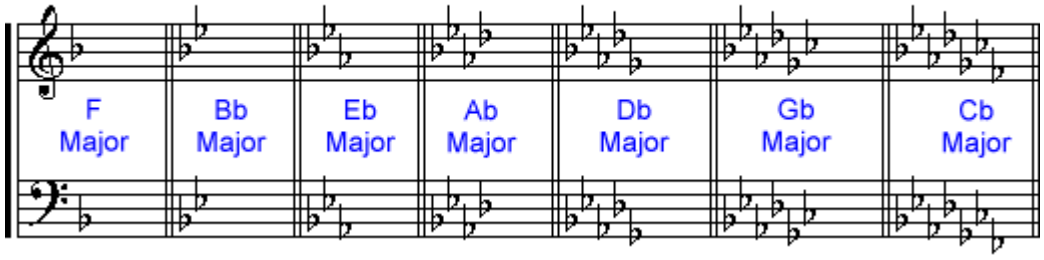
There are 15 major and 15 minor key signatures. The sharps or flats at the beginning of the staff indicate the main tone (diatonic) to which other tones are related.

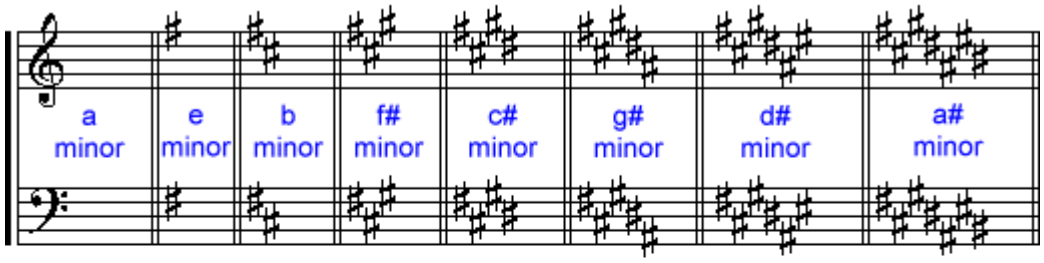


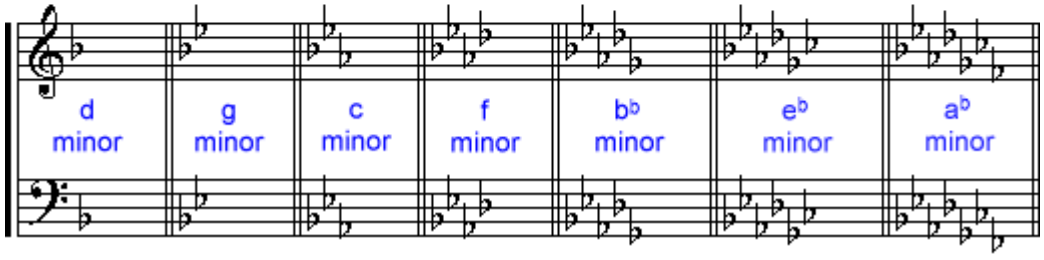
Db-C#, Gb-F#, Cb-B, are enharmonic keys, meaning that they are written differently, but sound the same.

There are 15 major and 15 minor key signatures. The sharps or flats at the beginning of the staff indicate the main tone (diatonic) to which other tones are related.





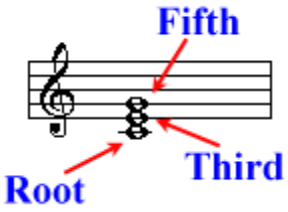




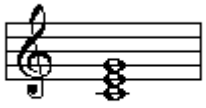
Music Theory - Chords & Symbols

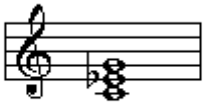
Triad

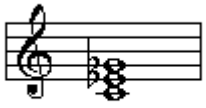
A triad is a group of three notes having a specific construction and relationship to one another. They are constructed on 3 consecutive lines or three consecutive spaces. Each member of the triad is separated by an interval of a third. The triad is composed of a Root, Third, and Fifth.



There are four types of triads: major, minor, diminished and augmented.


Major


minor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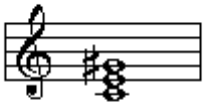
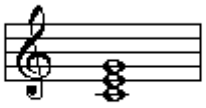

augmented

<u>Inversions of Triads</u>

All triads have three positions that they can be arranged in. The root, 1st inversion, and 2nd inversion.

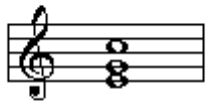
<u>Root Position Triad</u>

If the triad root is in the lowest voice then the triad is in Root Position.


Root

<u>1st Inversion Triad</u>

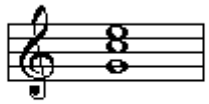
If the third of the triad is in the lowest voice the triad is the 1st inversion.



1st Inversion

2nd Inversion Triad

If the 5th of the triad is in the lowest voice, the triad is in the 2nd inversion.

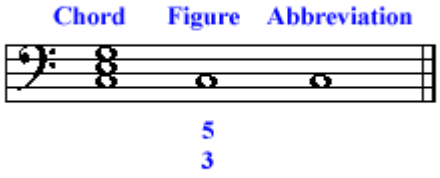


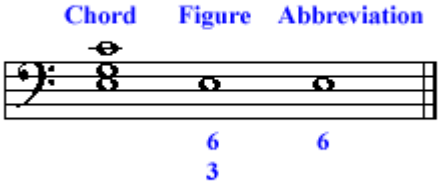
2nd Inversion

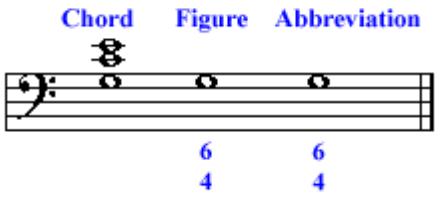
Figured Bass

Figured Bass was developed in the early Baroque period. It was a system of musical shorthand that made the writing of keyboard parts easier. It was customary for the composer to write out the bass line and to place Arabic numerals above or below the figured bass to indicate the harmonies. The keyboard part was called the continuo, which was improvised by the player.

In figured bass the Arabic numerals represent the intervals that sound above a given bass part. Certain abbreviations have become well known.







Alterations

Alterations from the given key signature are indicated by placing an accidental before the Arabic numeral.

An accidental, such as a sharp, flat, or natural that appears by itself under a bass note indicates a triad in root position with the third interval above the bass note sharped, flatted or naturaled.

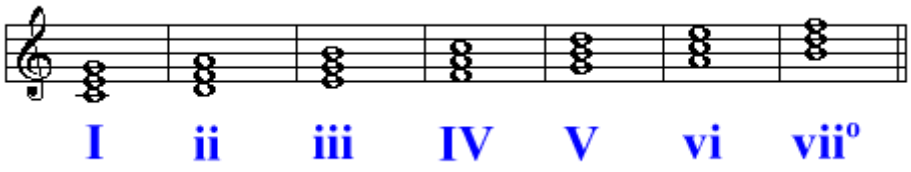
Any sharp, flat, or natural sign beside the Arabic number indicates that this interval above the bass note should be sharped, flatted, or naturaled depending on the symbol.

#6, b6, 6, #6
4 b4

Sometimes, composers used a slash through the Arabic number instead of a sharp. They both mean the same thing.

Roman Numeral Analysis

In the early 1800's, German composers started to use roman numerals to symbolize harmony. Each note in a scale can have a triad or chord built above it. Upper case (Major) and lower case (minor) Roman Numerals are used to indicate the type of chord. I, IV, V are major triads/chords, ii, iii, vi are minor triads/chords, and vii is diminished.



Music Theory - Expression Marks

Tempo

Largo	Very slow
Larghetto	Not as slow as largo
Adagio	Slow, leisurely
Lento	Slow
Moderato	Moderate
Andante	Moving with a moderate tempo
Andantino	Faster than andante
Allegretto	A little slower than allegro
Allegro	Moderately fast
Vivace	Lively, animated, brisk
Presto	Fast, rapid
Prestissimo	Very rapidly

Dynamics

Pianissimo	Very soft
Piano	Soft
Mezzo piano	Moderately soft
Mezzo forte	Moderately loud
Forte	Loud
Fortissimo	Very loud

Crescendo	Increasing in loudness
Decrescendo	decreasing in loudness
Diminuendo	diminishing in loudness

Rinforzando	sudden increase in loudness
Sforzando	play the note with sudden emphasis

Style

Amoroso	tender and affectionate
Animato	animated; lively
Calando	gradually softer and slower
Cantabile	in a singing style
Con Anima	with life and animation
Con Brio	with vigor and spirit
Con Fuoco	with energy or passion
Deciso	decisively
Detache	detached
Dolce	sweetly
Doloroso	sorrowfully
Espressivo	expressively
Furioso	furious
Giocoso	humorous
Grandioso	with grandeur
Grazioso	gracefully
Legato	smooth and connected
Leggiero	lightly
Maestoso	majestically
Marcato	marked and stressed
Marzial	in the style of a march
Morendo	dying away

Perdendosi	dying away
Pesante	heavy
Religioso	religious, solemn
Rubato	taken out of tempo
Semplice	simple
Sempre	always, continuously
Sostenuto	sustained
Soto voce	in an undertone
Staccato	short and detached
Tenuto	sustained, held for full value
Tranquillo	tranquill

Articulation

Staccato	a dot placed above or below a note means to play it short
Slur	a curved line either above or below notes that connects two different pitches that are to be played smoothly
Tie	a curved line either above or below two of the same notes indicating not to attack the second note
Tenuto	a line above or below the note means to play the full value of the note
Accent	an accent placed above or below the note means to emphasise the not
Breath Mark	an apostrophe placed above the staff means to take a breath

Clarity Terms

Assai	very
Con	with
L'istesso tempo	same tempo

Meno	less
Mosso	moved, agitated
Non troppo	not too much
Piu mosso	faster
Poco	little
Poco a poco	little by little
Sempre	always
Simile	in the same manner
Subito	suddenly

The Basics of Reading Music

by Kevin Meixner

Introduction

To better understand how to read music, maybe it is best to first ask ourselves:

What is music exactly?

Well, according to the 1976 edition (okay so I need to update my book collection!) of Funk & Wagnalls Standard Desk Dictionary the definition is:

mu.sic (myoo'zik) *n.* **1.** The art of producing significant arrangements of sounds, usually with reference to rhythm, pitch and tone colour. **3.** A succession or combination of notes, especially if pleasing to the ear.

Man!, don't you just hate it when you look up a definition and you need to look up words the definition uses? Well, I'll try to save you the trouble this time. pitch is the frequency at which a note vibrates, I'll explain this shortly. Tone colour is the type of sound, for example an overdriven electric guitar has a very rough aggressive tone while a flute usually has a soft mellow tone (unless the flute player really sucks I suppose). Rhythm is a measure of the the time frame you play the notes in, but I will explain that later too. For now, let's just say that music is the art of producing significant arrangements of sounds, usually for the purpose of causing emotional responses in people (usually, you want people to like what they hear unless of course you are trying to be the latest punk band and want people to be offended by your sound! To each his own I guess...).

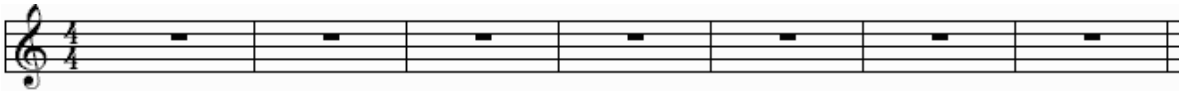
Okay, now back to what we set out to do in the first place, teach you how to read music...

Sound and Pitch in Music

Now that we've established that music is made up of sounds I will explain what a sound actually is:

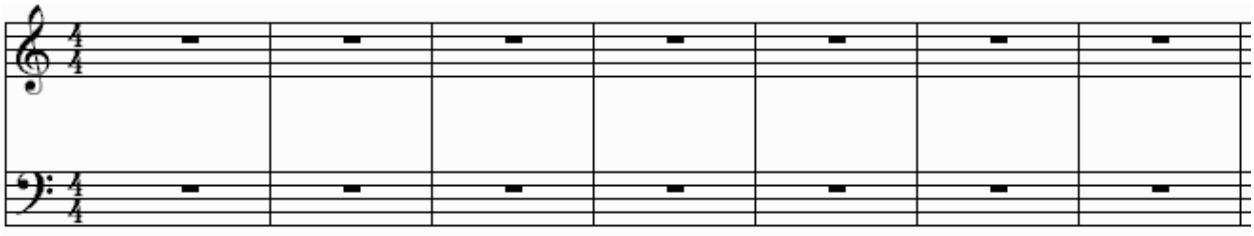
All sounds are caused by the vibrations of air molecules. These waves ("sound waves") of vibrations in air molecules originate from some kind of vibrating object, perhaps a musical instrument or a person's vocal chords. In music we refer to the frequency (how many times the molecules vibrate per second) a note vibrates at as the **pitch** of the note.

In most contemporary sheet music you will see the music will be written on either the treble clef staff:

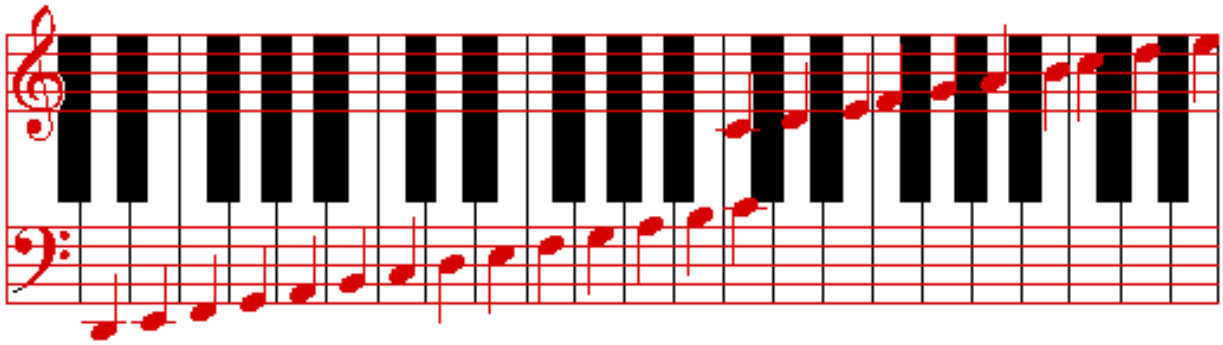


Or the bass clef staff:

As the notes are written closer to the top of these clefs there pitch increases giving them a higher, lighter sound. Conversely, as notes are written closer to the bottom of the clefs the pitch decreases giving them a lower, darker sound. The treble clef contains notes that are higher in pitch than the bass clef and the bass clef contains notes that are lower in pitch than the treble clef. For this reason for some instruments that have a wide range of notes, the piano in particular, you may see these two staffs combined as follows:

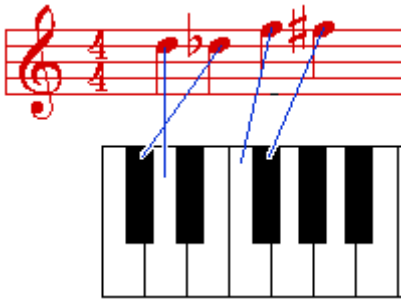


The next image may help you visualize how notes are placed on the staffs in relation to their pitch. It is a picture of a piano keyboard with the clefs and notes written over top:



Notice that as you go from the lower pitch notes on the left of the piano to the higher pitch notes on the right side of the piano the notes are written on the staffs in ascending order. As you can see from the diagram above we sometimes write notes that are below or above the lines on the staff, these

notes appear on extra small lines called ledger lines. You may also notice that there is one note (middle C) which can be written as either one ledger line above the bass clef or as one ledger line below the treble clef. The diagram above shows all of the white notes on the piano written on the staffs, but you are probably wondering about the black notes, how are they written? Well, this can be answered by viewing the diagram below:



(Note: The rhythm in the sound file is slightly different to than the rhythm shown in the picture.)

In music there are notes that we sometimes come across called "Accidentals". So what exactly are these accidentals, you may be asking, the notes I accidentally play by mistake? No, although some musicians might try to use that as an excuse, accidentals are actually notes that are called for you to play in a piece of music which are not in the general key that most of the song is written in.

When you encounter a note in music that has a ♭ to the left of it you play the note immediately left of it on the keyboard. If you encounter a note that has a ♯ in front of it you play the note immediately to the right of it on the keyboard.

Rhythm and Note Durations

There are many different durations of notes, typically you will see the following basic note durations in today's contemporary music:

Whole Note

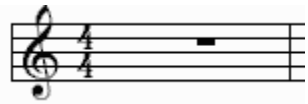
Half Note

Quarter Note

Eigth Note

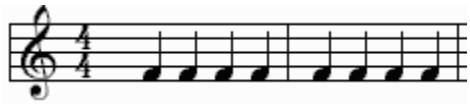
Sixteenth Note

The majority of the contemporary rock and pop music you hear on the radio these days is written in the 4/4 time signature:



The top number tells us how many of the specified notes are in a bar and the bottom number tells us what duration (ie: how long) that specified note is. For example in 4/4 Time the top number tells us there are 4 notes in a bar and the bottom number tells us that each note is 1/4 of the length of the

bar, or more simply put a quarter note. Therefore, we can tell that a song written with a 4/4 time signature is made up of **bars** (musical units a song is divided up into) which contain 4 quarter note long beats. The following picture may help in visualizing this:



(Note: I have added a drum click to empasize the beat and will also do so in some later examples. The drum will be played on every beat with an accent on beat one.)

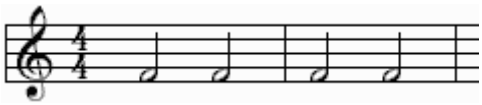
Notice how in each bar (separated by vertical lines) contains exactly four notes and each of these notes is 1/4 of the length of the bar and hence a quarter note.

There are many more possible time signatures but only a few in particular are commonly used in rock and pop music, they are 4/4 (most common music forms: rock, pop, etc.), 6/8 (rock ballad), 2/4 (country/polka) and 3/4 (waltz). For simplicity we will concentrate on the 4/4 time signature for now.

In 4/4 time a whole note would be held for the entire duration of one bar and written as follows:

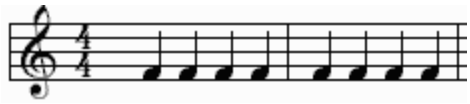
Notice in the diagram above that the whole note is held for the duration of a whole bar, this is where the name "whole note" comes from. To play a whole note you would play it and either count inside your head or tap your foot four times at the **tempo** (speed) of the song. The times you tap your foot or count inside your head must be at even intervals (eg: 1 2 3 4 as opposed to 1 2 3 4 with respect to time).

Half notes in 4/4 time would be held for half of the bar or two of the 4 beats of the bar. Each half note would be played for the duration of half of the bar as follows:



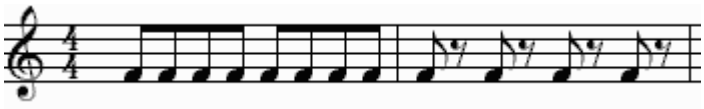
You would either count for two beats before going to the next half note or tap your foot two times in even intervals. For the bars above in 4/4 time you would count: 1 2 during the first half note in the bar and: 3 4 the second half note in the bar.

Quarter notes in 4/4 time would be held for 1/4 of the length of a bar as in the following diagram:



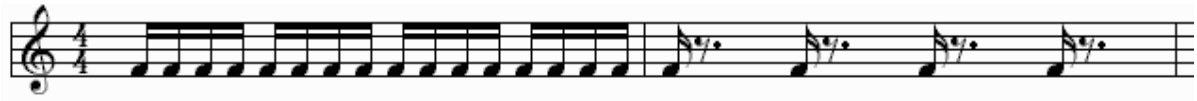
Each quarter note would get one foot tap. The proper way to count quarter notes in 4/4 time is 1 for the 1st quarter note, 2 for the 2nd, 3 for the 3rd and 4 for the 4th.

Eigth notes are half the length of quarter notes and are notated as in the picture below:



In the first bar I put eight eighth notes. In the second bar I have only put four eight notes with eighth **rests** inbetween them. Rests are symbols for when you do not make any sound with your instrument for a certain time. I will explain rest in more detail later but for now just notice how the eight notes in the 2nd bar look a little different when they are not attached to an eight note beside them, this is why I put them alone so you would know that those are also eigth notes. In the first bar the proper way to count the notes is : 1 + 2 + 3 + 4 + which is read as "one and two and three and four and". In the second bar you would still count the same way but you would not make a sound during any of the rests (on the "ands").

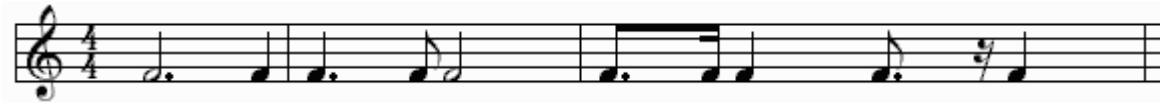
And last, but not least, sixteenth notes are 1/16 of the duration of a bar in 4/4 time and 1/4 of the duration of a quarter note as the following picture shows:



I have put 16 sixteenth notes in the first bar and only 4 in the second bar to show you the two possible ways they might appear. The proper way to count sixteenth notes is by silently saying to yourself inside your head: 1 e + a 2 e + a 3 e + a 4 e + a (spoken as "one eee and aaah two eee and aaah three eee and aaah four eee and aaah"). The second bar would also be counted the same, however, you would only make sounds on the 1, 2, 3 and 4 and would be silent for all of the e's, +'s and a's.

There are actually such things as 32nd notes, 64th notes and 128th notes but these are so extremely rare that I won't explain them in detail. Basically, a 32nd note is 1/32nd of the length of a 4/4 bar, a 64th note is 1/64th, a 128th note is 128th, etc.. I have been playing in various school bands for 13 years and I've only come across one 64th note once, I've never come across a 32nd note and I've only seen one 128th note in a classical piano piece once so you really do not need to worry about these at this point. If you've understood everything up to this point you would probably be able to figure out how to play them properly anyway.

In addition to these basic note durations there are also **dotted notes**. Dotted notes are notes that have a dot placed to the right of them. What this means is that the note is held for an additional duration equal to half of the duration of the note. For example, a dotted half note would be held for 3 beats instead of only two, a dotted quarter note would be held for 1 and a half beats, etc. A picture of some of these dotted notes can be seen in the following picture:



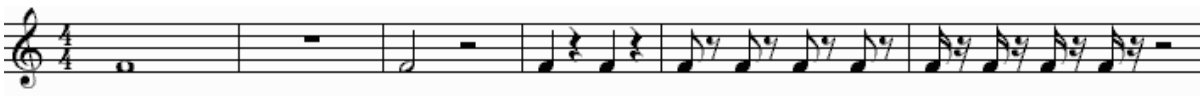
In the first bar in the picture above the first note is a dotted half note and would be held for a count of three beats spoken as "one two three", the last note is a quarter note that falls on the fourth beat of the bar and would be counted as "four".

In the second bar the first note is a dotted quarter and it would be held for the first one and a half beats of the bar on "1 + 2" (spoken "one and two"). The next note is an eigth note that falls in the "+" of 2 (spoken "The And of two"). The next note is a half note which falls on beats 3 and 4 of the second bar.

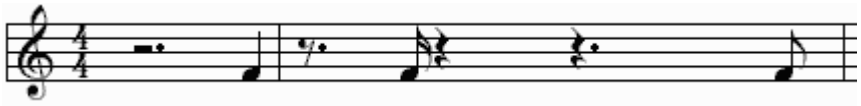
In the third bar the first note is a dotted eigth note which would be held for the duration of 3 sixteenth notes as counted as "1 e +" (spoken "one eee and") and the second sixteenth note falls on the "a" (spoken "aaah"). The third note in the second bar is a quarter note that falls on "2". The third note in bar 2 is another dotted eight note, this note would be counted as "3 e +" and there would be a 16th note duration of silence following it. The next note is a quarter note and falls on "4".

If you have understood everything so far then you are well on your way to being able to read music. If you are a little confused try to reread the parts you don't understand. Remember the most important thing you must learn to do if you want to be in a band is to learn to count music right. If you have no sense of rhythm or at least where the beat is in relation to where the notes you are playing/singing are then it will be impossible to play in a group with other people. Learn to count, I can't stress it's importance enough!

Below you will see some music with rests between the notes, I will alternate notes with rests of the same duration of notes, whole note, whole rest, half note, half rest, quarter note, quarter rest, quarter note, quarter rest, etc..:



There are also dotted rests which just like the dotted notes are held for exactly 1/2 of their duration extra on top of their normal duration (a dotted half rest is held for three beats, a dotted quarter note rest is held for the same duration as three eight notes would be, etc...). Some dotted rests can be seen in the picture below:

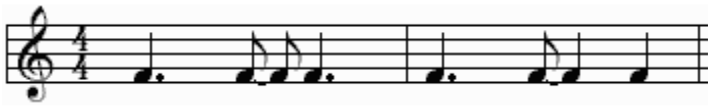


The first rest is a dotted half rest and it would be held for three beats ("1 2 3") and the quarter note in the first bar would fall on beat 4. There would then be silence for the first "1 e +" of the 2nd bar and then there would be a sixteenth note played on the "a" of beat 1. There is then a quarter rest on

"2". Next there is a dotted rest starting on "3" of the 2nd bar which would be held during "3 + 4". The eigth note at the end of the 2nd bar would fall on the "+" of "4" (spoken "the and of four").

In some music you may see these notes in music **tied** together with a curvy line at the top. For example, You may see two eight notes tied together. This means that you would play the two eigth notes without a break (of silence) inbetween, if they both have the same pitch then they would be played as a single quarter note in duration, this is what is called a tie. (note: if these notes had different pitches it would be called a slur).

Some examples of tied notes can be seen in the following picture:



In the picture above the 1st note in the 1st bar is a dotted quarter note which would be held for "1 + 2", the second and third notes are two eight notes which are tied together so they would be played as a quarter note on "+ 3" and the final dotted quarter note in the 1st bar would be played on "+ 4 +". So the bar would be counted for the three notes as: "1 + 2", "+ 3", "+ 4 +". The first note of the 2nd bar is also a dotted quarter and would also be counted as "1 + 2". The second note is an eight note tied to a quarter note so this is equivalent to a the duration of a dotted quarter note and is counted as "+ 3 +". Finally, the last note in the 2nd bar is a quarter note on "4 +".

Well, that's all there is to learn about rhythm in 4/4 time. For a beginner it may be helpful to actually write the words corresponding to the values of the notes in pencil on your sheet music to help you remember how to count the notes properly, especially where complex rhythms are concerned. Even some professional players in orchastras sometimes do this if they come across a really challenging part in a piece of music. The best way to practice reading different rhythms is by **sight-reading** sheet music (sight-reading is the act of trying to read and play a new piece of music you've never seen before) and trying to figure out how to play the rhythms properly. The more you practice reading new music, the better at reading rhythms you'll become. Whatever instrument you play or even if you sing, in music the saying "practice makes perfect" is absolutely true.

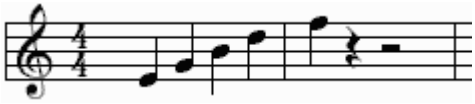
HINT: When you practice, try to concentrate on small sections of a piece one at a time and perfect them first before trying to play a piece from beginning to end. If you can play every section of a musical piece well, then you should be able to play the entire piece from beginning to end well too.

Learning the Names of the Notes

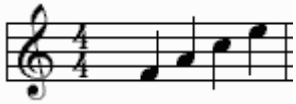
There are only a couple more basic things you will need to know before you begin to attempt to read sheet music. First you need to know the names of the notes, at least it is a good idea to. Notes are named according to their pitch. In the concert pitch scale of C major (the scale which has only the white keys on the piano on it), the scale consists of 8 notes, in ascending order as: C D E F G A B C. If you go above the C at the top the cycle repeats: C D E F G A B C D E F G A B C D E F G A B C, this is also true if you go below the low C in the scale. When you reach a note higher in pitch with the same name as the one you started with, the higher note is said to be an octave above the one you started with. For example, C D E F G A B C, the second C is said to be an octave above the first C. A note that is an octave higher than another note has a frequency that is exactly twice that of the note an octave lower, but we really don't need to worry about that right now. All we need to do is teach you what the names of the notes on the staffs are.

On the treble clef, the notes that fall on the lines in ascending order are E G B D F which can easily be remembered by the phrase "Every Good Boy Deserves Fudge" in which the first letter of the words corresponds to the note name. The empty spaced between the lines in ascending order are F A C E which can easily be remembered since they spell the word "FACE". So if you put them together you get E F G A B C D E for the notes on the treble clef. I will draw a diagram to better illustrate these note names:

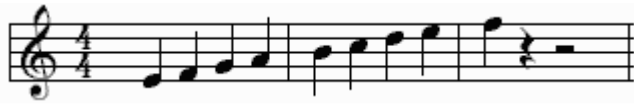
The following notes are from left to right named E G B D F:



The following notes are from left to right named F A C E:

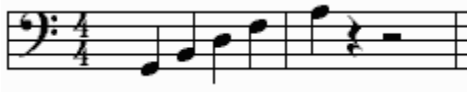


The following picture shows all the notes on the treble clef from left to right named E F G A B C D E F:

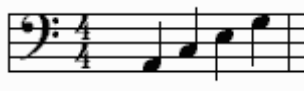


On the bass clef all the notes names are shifted down two notes. The notes on the lines in ascending order are G B D F A which can easily be remembered by the phrase "Good Boys Deserve Fudge Always". The notes in the open spaces are A C E G which can easily be remembered by the phrase "All Cows Eat Grass". Put them together and you have G A B C D E F G A. The diagrams below may better illustrate these note names for the bass clef:

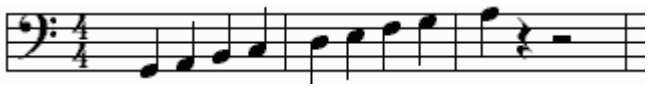
The following notes are from left to right named G B D F A:



The following notes are from left to right named A C E G:

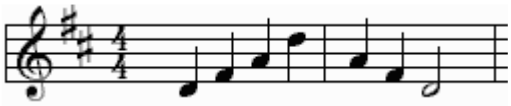


The following picture shows all the notes on the bass clef from left to right named G A B C D E F G A:



Accidentals and Key Changes

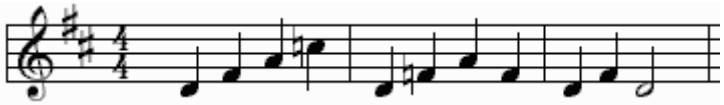
Now the last thing you need to know is that not all songs are written in concert pitch (the key of C major containing all and only the white notes on the piano). The world would be a very boring place musically if all music was written in the same key, I've been to some live performances of local rock bands who played all their songs in the same key and boy does it get boring quick! Most music is written in other keys either for variety or to complement the vocalists singing range, etc.. If a song is written in a different key then some of the notes in the scale will always be played as either a sharp or a flat (those black keys on the piano). If this is the case, the first bar of the song will contain the key signature in which either sharps (indicated by the symbol ♯) will be placed on the notes to be played as the note to the right of the regular white notes, or flats (indicated by the symbol ♭) will be placed on the appropriate lines to indicate which notes should be played as the note to the left of the regular white note. This note will be played as either the sharp or flat note indicated unless otherwise stated beside the note in a later bar of music, but as soon as that bar ends it will go back to being what the key signature specified. But there are only 15 possible key signatures and three of them are merely duplicate ways of notating the same key, so in reality there are only 12 possible keys to play music in. An example of a key signature is shown below:



In the diagram above the sharp sign (♯) appears on the notes of F and C in the key signature. This means that all notes named F must be played as F sharp and all the notes named C must be played as C sharp. So the notes you would play in this piece of music in order would be:

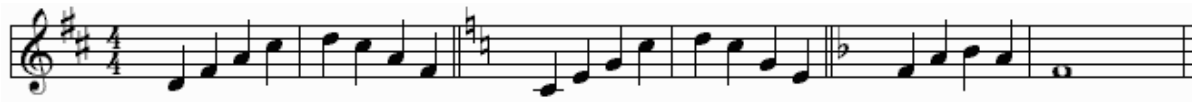
D F# A D A F# D

In pieces of music with key signatures, the notes specified to be played sharp or flat would be played as sharp or flat during the whole musical piece unless they were cancelled out by a natural sign (♮). If a natural sign is encoutered in front of a note then all notes with the same name as that note within that bar would be played as the "natural" white piano notes instead of the sharp or flat ones. However, the notes in the next bar afterwards would be played as the way the key signature specifies. This can be illustrated by the picture below:



In the music above, the notes in the first bar in order from left to right would be played as D F# A C, the notes in the second bar would be played as D F A F and the notes in the third bar would be played as D F# D.

Some musical pieces may have different sections written in different keys. They will start out with a certain key signature indicating what key to play in. Later on in the song, another key signature may be specified, this means that from that point on you play the notes the way that key signature specifies until possibly another key signature is encoutered. The following picture may illustrate this better:



The first two bars are in the key of D where F is played as F# and C is played as C#. The third and fourth bar are in the key of C where all notes are played as naturals (notice how the previous key signature's sharp notes are cancelled out by putting natural signs in the new key signature over those notes) and the fifth and sixth bar are in the key of F where all notes are played naturally except for B which is played as B flat.

So the notes in this piece would be played as:

D F# A C#, D C# A F#, C E G C, D C G E, F A Bb A, F

Well, that's basically all there is to reading pitch and rhythms of notes in music. There are a few things I have left out for simplicity which I will mention in later lessons. This should be enough to get you started at reading pieces of music. Of course music is not simply about pitch and rhythm, there are expressive devises such as dynamics (changes in volume (loudness) of sound), articulations (the style of what types of sound you make) and many more musical devices which I will get to in a later lesson. For now just practice trying to read music and play the right notes and rhythm correctly on your instrument.