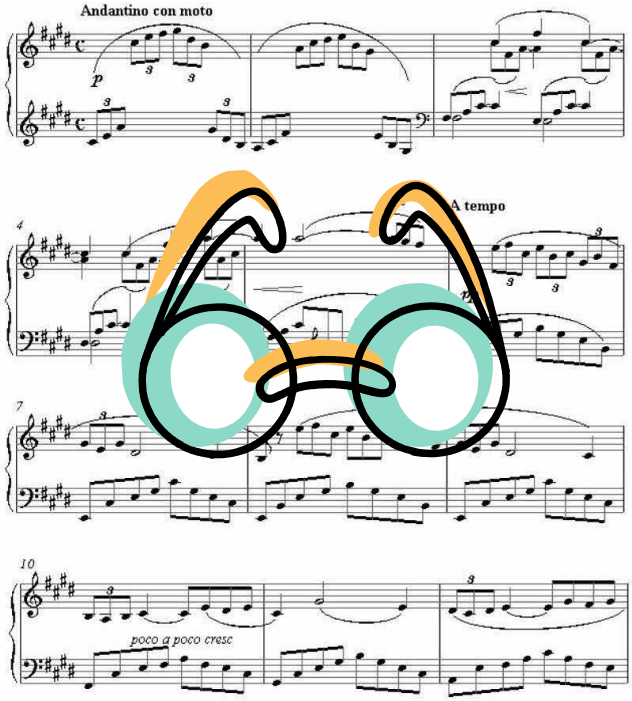
Reading Music

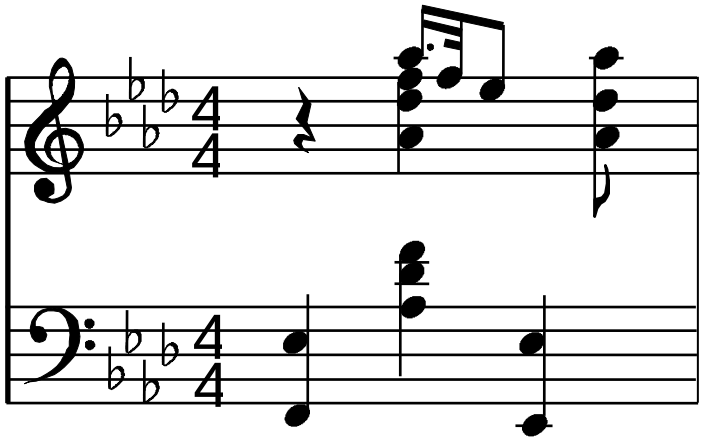


Why Read Music?

Learning to read music is *not* easy.

Standard Music Notation was invented around the year 1030 in Italy by a Benedictine monk named Guido D'Arezzo.

Like any foreign language, it takes years to master, and if you don't use it, you lose it.



Yet despite its complexity and design flaws, Standard Music Notation is a nearly universal language that links musicians of almost every nationality. Learning to read it will open the vast world of written music to your playing enjoyment.

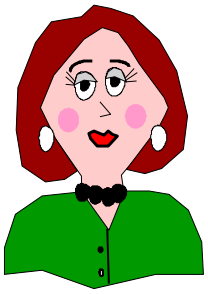
Even if you're accomplished at playing by ear or with lead sheets and chords, some day you may want to play the exact musical arrangements created by renowned and popular composers.

And if you enjoy playing by picture, a basic ability to read music will allow you to convert your favorite sheet music songs into Allcanplay notation. (See the *Converting Songs to Allcanplay* lesson)

Standard Notation Issues

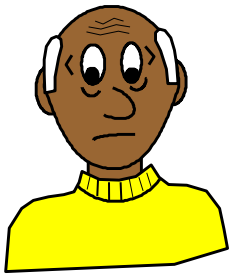
If you've tried to read music, you may identify with some of the following concerns.

Right Hand vs. Left Hand
Music notation for the right hand is easy..."Every Good Boy Does Fine" and "F-A-C-E" help me remember the names of each line and space. But for the life of me, I have trouble remembering the left hand. Why couldn't they have given the left-hand lines and spaces the same letter names as the right?



Ledger Lines
I find it very hard to read notes on those little ledger lines above the Treble or below the Bass Staff. I have to start up from the top Treble line or down from the bottom Bass line to find out the names of these "far out" notes.

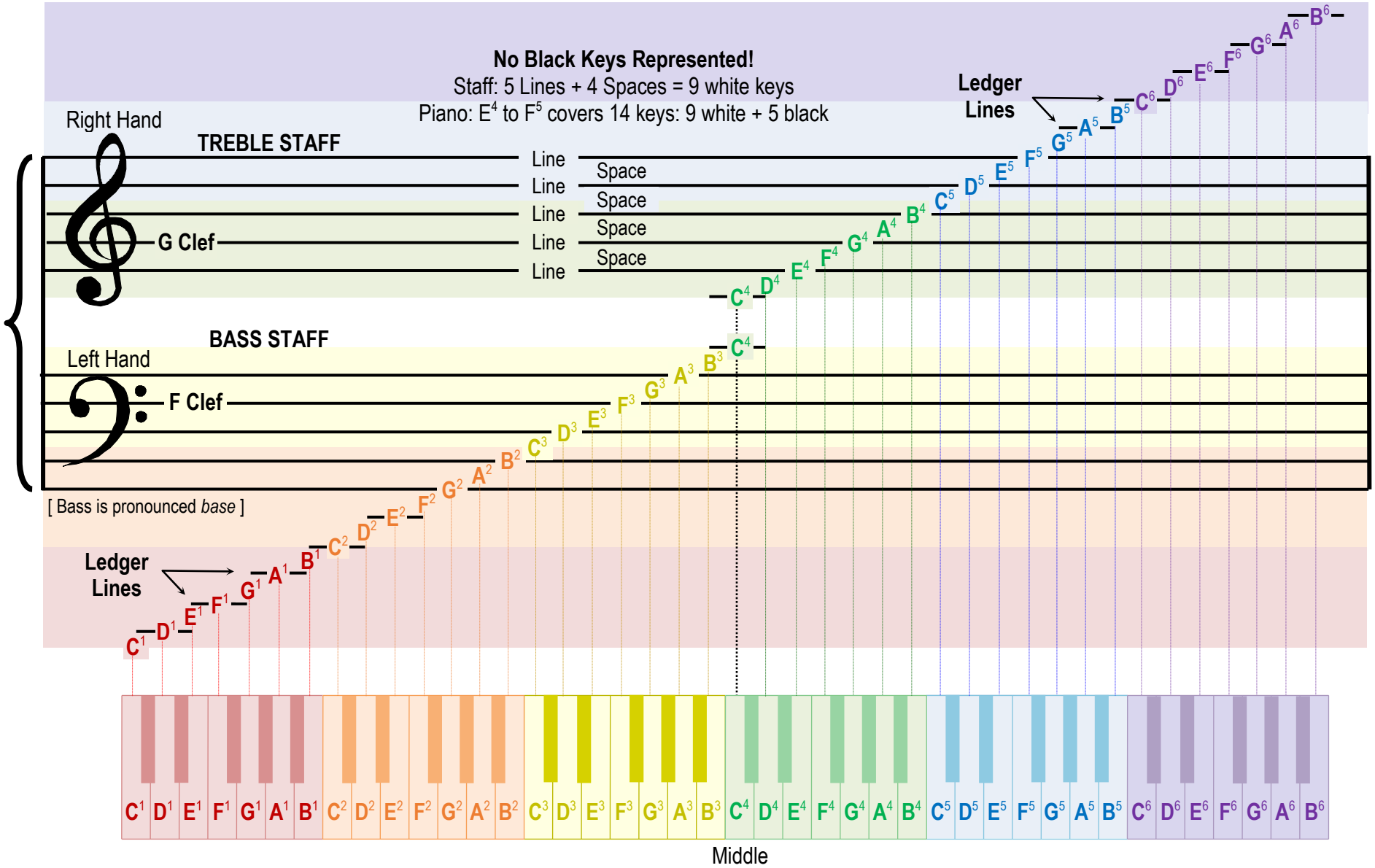
Catchy Sayings
The saying "Every Good Boy Does Fine" helped me learn the lines for the right hand, but now it slows me down. Sometimes I catch myself reciting the whole phrase just to figure out that the top line is F!



Sharps & Flats
I'm okay until they throw in a lot of Sharps and Flats. White keys become black keys, black keys become white keys. It's very confusing! Why do we have to have Sharps and Flats anyway?

The Grand Staff

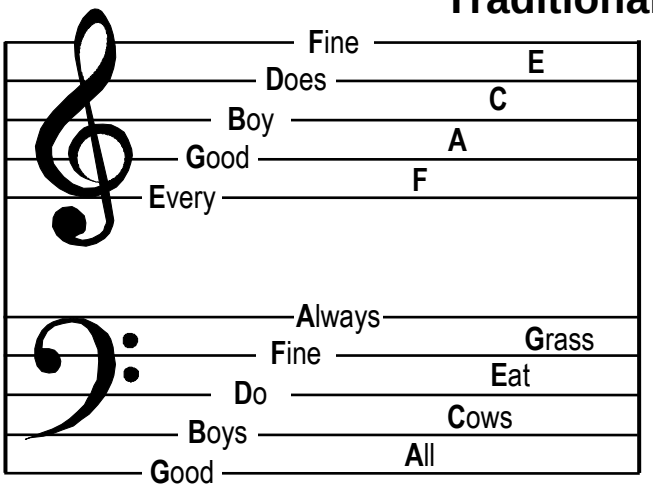
The primary structure of Standard Music Notation is the Grand Staff. It consists of lines and spaces with a Treble Staff marked by a G Clef for right-hand notes and a Bass [base] Staff marked by an F Clef for left-hand notes. Ledger Lines extend the staffs. Because early music didn't include black-note tones, lines and spaces represent *only* the white keys on your keyboard.



Line & Space Memory Hints

Most students learn the names of the lines and spaces through sequential sayings or letters. These help at first but hinder in the long run. The biggest problem is the need or tendency to recite the entire saying each time, similar to having to sing the "a-b-c" alphabet song to know which letter comes next.

Traditional Sayings



Pros

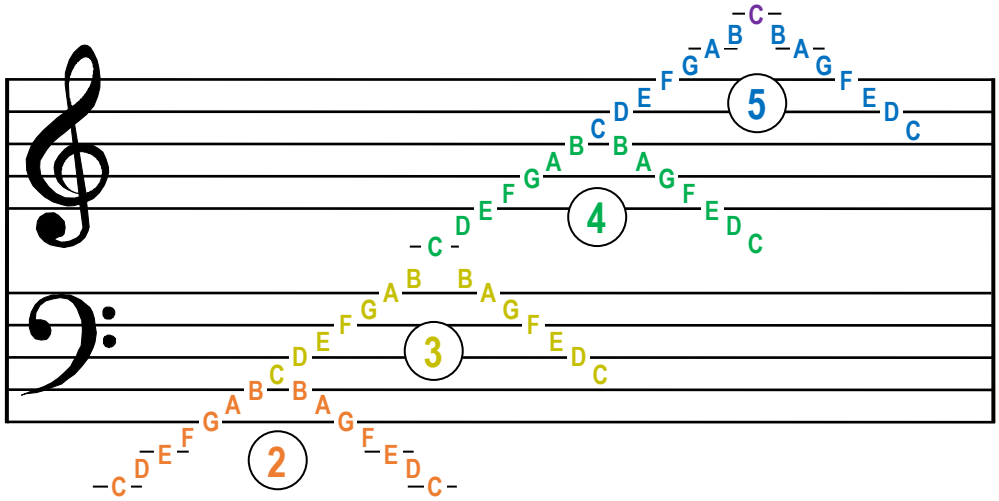
* Sayings, which can vary (Every Good Boy Deserves Food; All Cars Eat Gas…), are catchy and easy to remember.

Cons

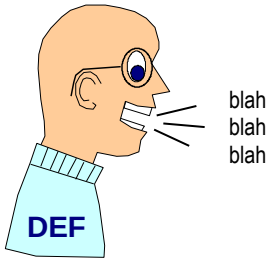
* Four sayings; different for each hand.
* Sayings skip either lines or spaces.
* Sayings do not include ledger lines.
* Tendency or need to recite entire saying to get to the desired line or space.

Octave Sayings

Start at any **C** and recite up or down to the desired line or space.



Going Up
C(see) DEF GAB!



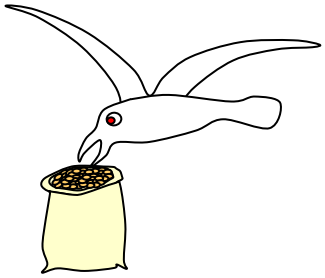
Pros

* Only two sayings; same for each hand.
* Sayings include lines & spaces.
* Sayings include ledger lines.

Cons

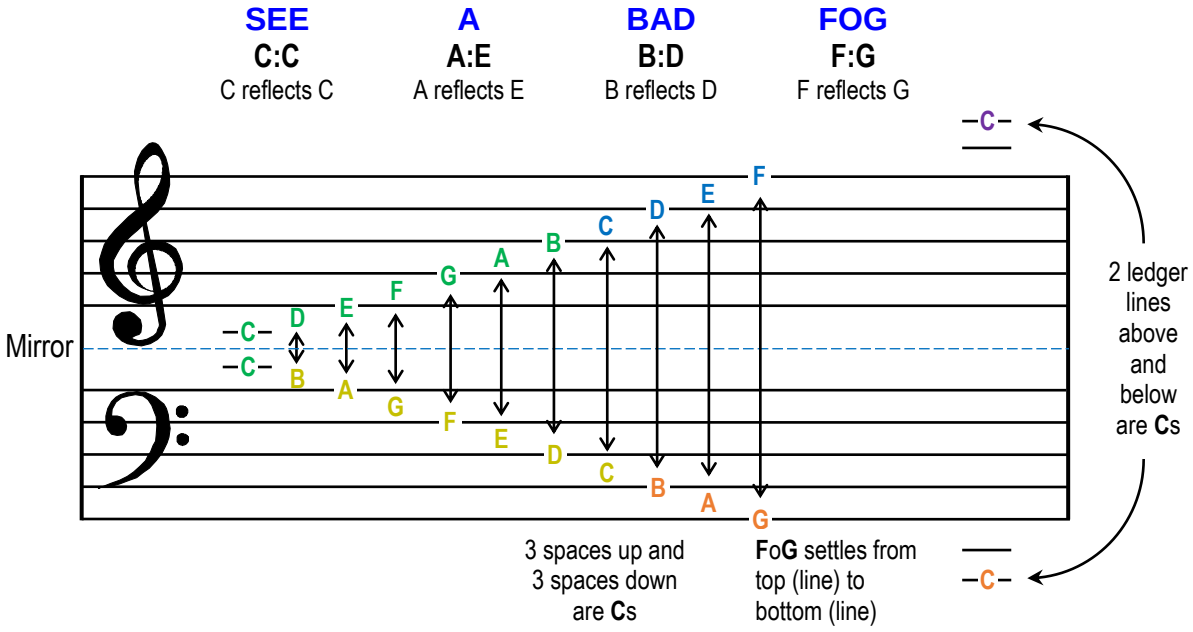
* Tendency or need to recite entire saying to get to the desired line or space.

Going Down
BAG FED C(gull)!



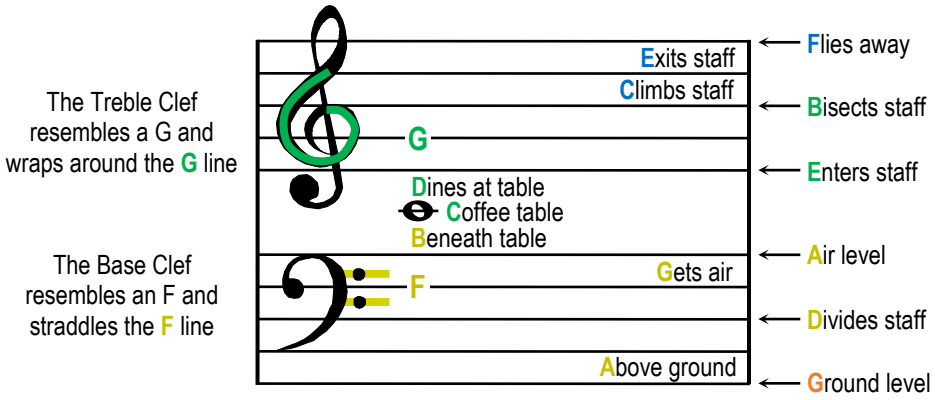
Mirror Notes

If you already know the Treble lines and spaces, Mirror Notes can help you learn the *corresponding* Bass lines and spaces. When you look in a mirror you see a *reverse* image of yourself the same distance into the mirror that you are standing away from it. Likewise, imagine that the notes of the Treble and Bass Staffs "mirror" each other equidistant above or below a mirror in between the staffs.



Story Hints

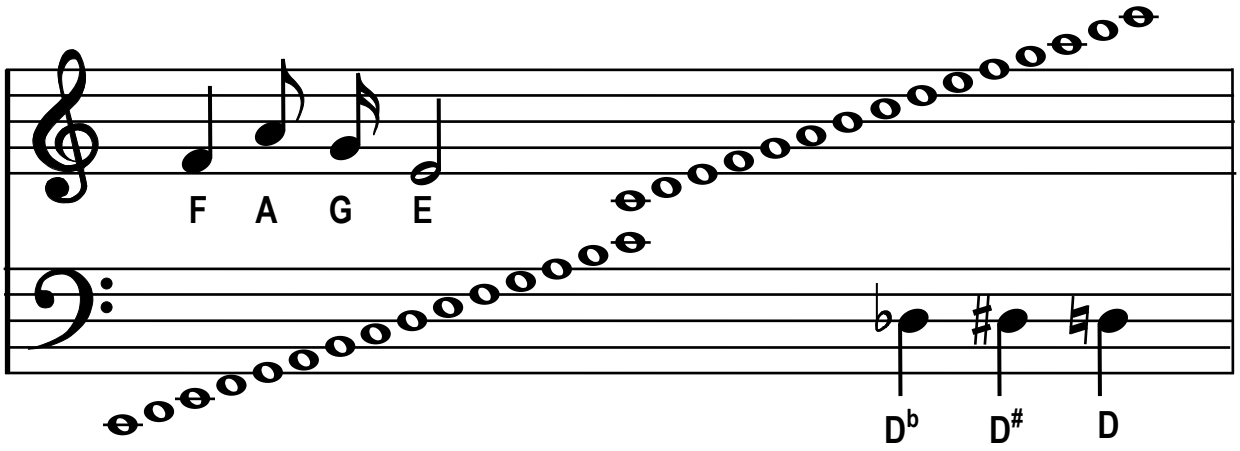
See if you can make up some more!



Hints can help, but the ultimate goal is to be able look at any line or space and immediately know which note it represents.

Notes & Accidentals

Note symbols are placed on lines and spaces to tell us which keys to play.
Note shading and stems determine timing, which we'll cover later.

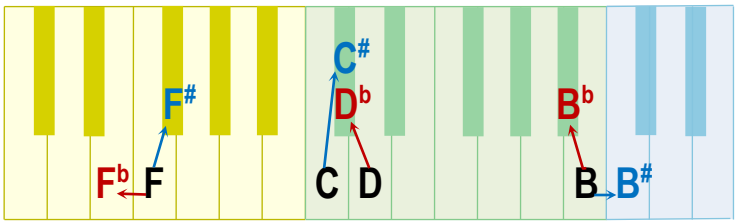


Accidental symbols alter which key is played. Accidentals are needed because there are only 9 lines and spaces for every 14 keys on a piano.

Flat
Play a flatted note one key down to the left on the keyboard.

Natural
Cancels sharp or flat. Play note in its natural position.

Sharp
Play a sharped note one key up to the right on the keyboard.

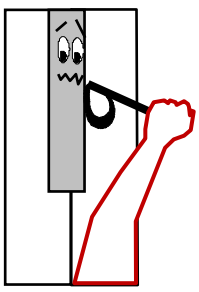


Sharps and Flats typically designate black keys,
but they can also point to certain white keys.
C♭ = B E♯ = F F♭ = E B♯ = C

Each black key has a Sharp name and a Flat name.

BrainAids

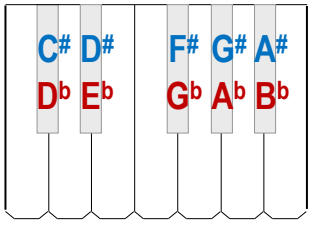
A flat tire goes down



F
Left
b**A**ck
T

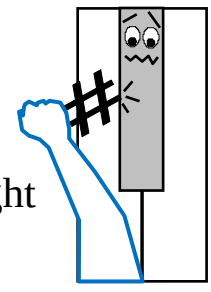
I'm being FLATtened!

Sharp: CD? ForGet About it!



Flat: DE GAB

S
H
A
Right
u**P**



Ouch! That's SHARP!!

BrainAids

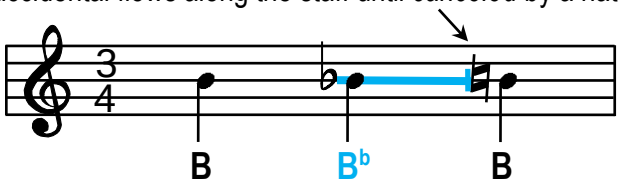
A poked person sits up

Applying Sharps & Flats

There are three rules for applying accidentals to notes in a song, demonstrated below using flats. Sharps and flats are placed *before* the notes on the staff but *after* the letter names of the notes.

To A Single Note

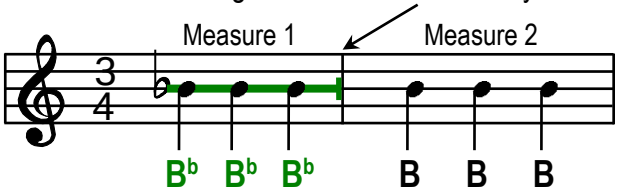
An accidental flows along the staff until *canceled* by a natural.



A flat in front of the **B** note changes it to **B♭**.
A natural sign returns the note to **B**.

To All Notes in a Measure

An accidental flows along the staff until *blocked* by a bar line.

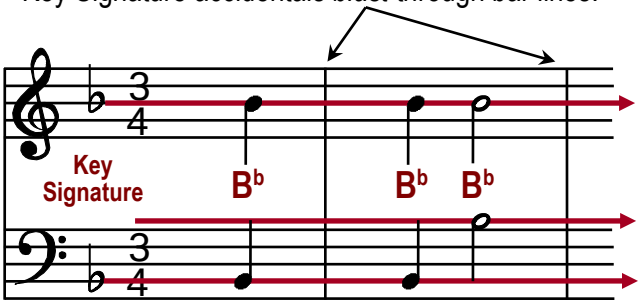


A flat in front of the first **B** note changes it and the following **B**s on that line to **B♭**. The flat is stopped at the bar line and does not continue to the next measure.

Bar lines separate measures, which group notes based on time counts.

To All Notes in a Song

Key Signature accidentals *blast* through bar lines.



Every B on every line or space becomes Bb.

The **Key Signature** consists of sharps or flats placed at the beginning of a song between the Clefs and the Time Signature (e.g., 3/4). These accidentals give us the Key of a song, as in "Play it in the Key of F."

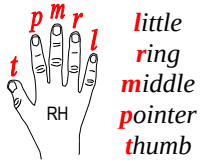
Key Signature accidentals apply to *every* note in *every* measure, including notes on lines and spaces that are *unmarked* in the Key Signature. This is a great time saver for composers since they don't have to place accidentals before each affected note. But it makes it challenging for piano players who haven't memorized the 30 musical keys, so they often end up marking each note themselves to avoid missing a sharp or flat.

To learn which sets of sharps or flats correspond to which Keys, see the *Practical Music Theory* lesson.

The Importance of Timing

Each year thousands of new songs are written and added to the millions of songs that already exist. With only 88 keys on a piano, how is it possible to have so many unique songs?

The answer is TIMING.

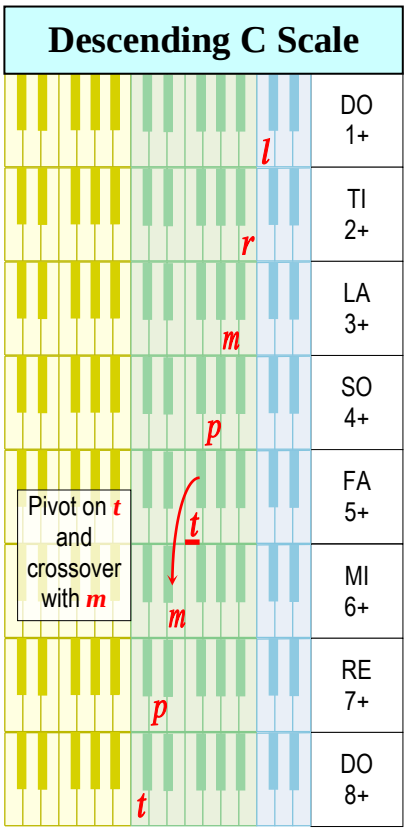


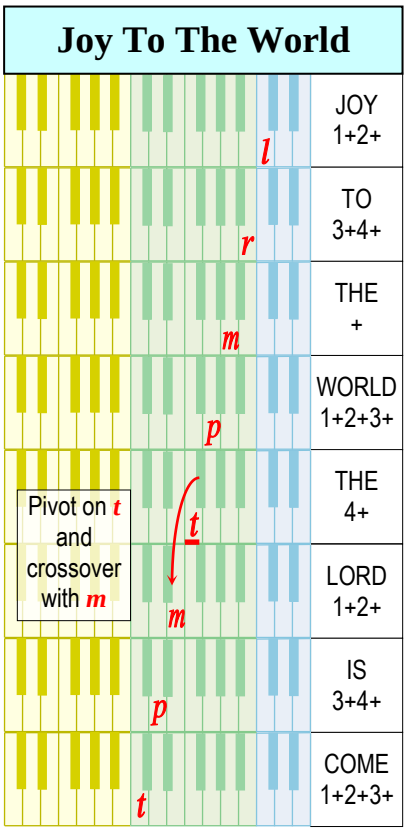
little
ring
middle
pointer
thumb

Play each of the following identical note sequences on your piano.

If you don't know the melodies, count the timing.

[1+] = 1 and





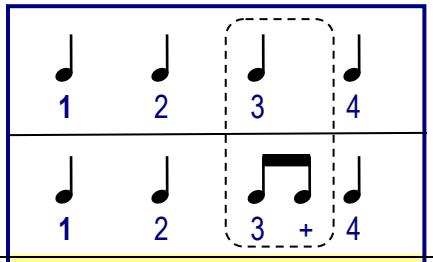
Although their note sequences are identical, the timing makes each melody unique.

And there are infinite ways to alter the timing of this simple sequence.

Counting Time

Traditional Counting
Beat = 1

For half beats, you must insert "+" and speed up your counting pace, which can throw off your rhythm.



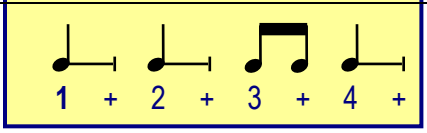
Count: "1 2 3 4"

Count: "1 2 3 and 4"
You must speed up to say "3 and" in the *same* amount of time as you said "3".

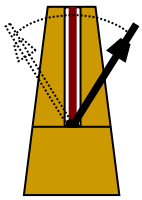
Allcanplay Counting
Beat = 1+

Including "+" eliminates the need to speed up counting for half beats.

Instead, you can count steadily (like a ticking metronome), which makes it easier to keep time and to play and hold notes for their designated time value.



Say a number or "and" with each tick



Keep a constant counting pace

Count: "1 and 2 and 3 and 4 and"
No need to speed up to say "3 and".

The count for a note can start on any number or +.

For notes shorter than a half beat, you *will* need to speed up counting.

Beats, Measures, & Time Signatures

Beat: the basic unit of timing

Measure (or Bar): a group of beats

Bar Lines: used to separate measures

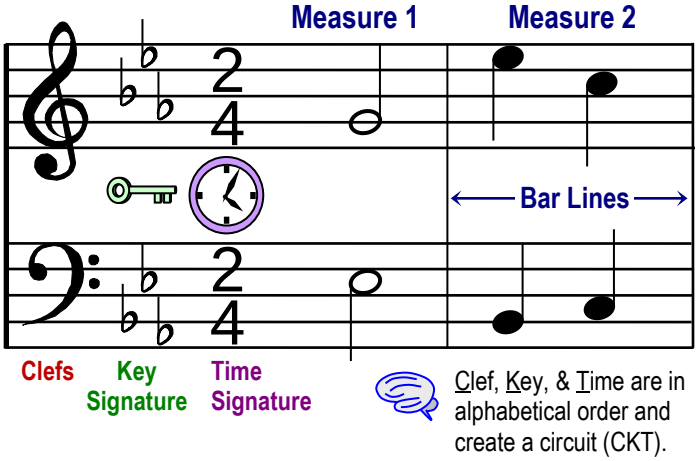
Time Signature: a fraction placed after the Key Signature. The top number tells how many beats are in each measure. The bottom number tells which type of note gets *one* beat.

2/**4** 2 beats per measure (foxtrot, 2-step...)
Quarter note gets one beat (1+)

3/**4** 3 beats per measure (waltz, minuet...)
Quarter note gets one beat (1+)

4/**4** 4 beats per measure (march, rock...)
Quarter note gets one beat (1+)

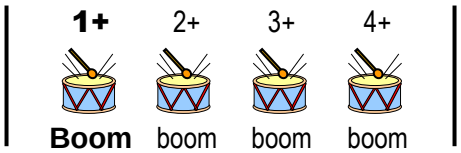
6/**8** 6 beats per measure (fast waltz, minuet...)
Eighth note gets one beat (1+)



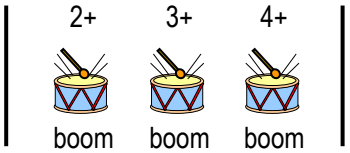
Clef, Key, & Time are in alphabetical order and create a circuit (CKT).

Many Time Signatures are possible: 2/2, 5/4, 9/8....
The symbol **C** denotes 4/4 or Common time.

A **downbeat** is strong and applies only to the **1** count, which is given more emphasis than the other beats so it drives the rhythm.

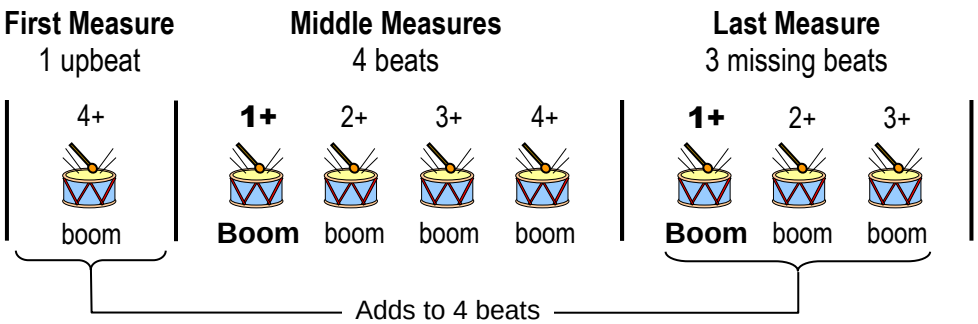


An **upbeat** is weaker and applies to all other beats *but* the **1** count.
Some songs begin on an upbeat.



Equal Beats per Measure

Each measure in a song will have the same number of beats, with this exception:
If the first measure begins on an *upbeat*, the missing beats will be in the *last* measure.



Time Values

The shape and shading of note symbols lets us know how long to hold keys down.
Notes can be solid or hollow and have stems, flags, dots, bars, etc.

Counting in x/4 Time

This table displays the most common time with a quarter note getting one beat. Although the counts shown here all begin with the number 1, a count can start with any number or + depending on a note's place in a measure.

Quarter Note = 1 beat
Traditionally, one beat would be counted with a single word [1]. But to avoid having to speed up for half beats, we count one beat as two words [1 and].

Note times are relative. In x/8 time, an eighth note gets one beat [1+]; a quarter note gets two beats [1+2+], etc.

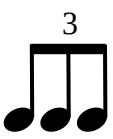
Eighth Note = ½ beat
Count as a single word, either with a number or "and."

Sixteenth Note = ¼ beat
Count as a half word by splitting: 1[wuh•un], 2[too•oo], 3[thre•ee], 4[fo•ur], +[an•da or an•und]

Dotted Note = 1½ time
A dot after a note adds half again as much time as the note itself. (Imagine getting paid time-and-a-half for ●vertime work.)

Joined Notes
When a bar or bars join notes, they are counted the same as if they had flags.

Triplets
A small "3" with three notes means to split the count of *two* of those notes over all three notes. An eighth-note triplet splits the count of 2 eighth notes [1 +] to [1•an•und].

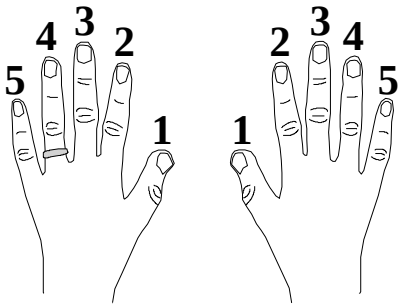
Time Value	Rest	Note	Count x/4 time
Sixteenth			1• or •1 or an• or •nd
Eighth			1 or +
Dotted Eighth			1 an•
Quarter			1+
Dotted Quarter			1+2
Half			1+2+
Dotted Half			1+2+3+
Whole			1+2+3+4+
2 Sixteenths			1• •1
2 Eighths			1 +
Eighth Note Triplet			1 • an • nd

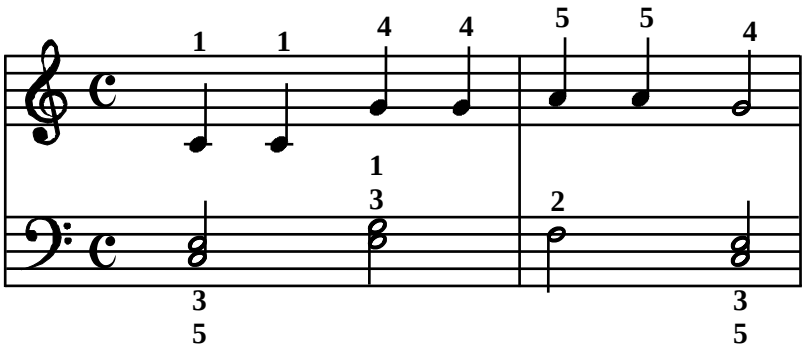
Rests
Rest symbols indicate a period of silence when *no* notes are played. Imagine that the Whole rest is heavier than the Half rest, so its box "sank" below the line.

Stems can also be drawn pointing down, on the *left* of the note body. However, **flags** are always drawn on the *right* side of their stems.

For more time values, including x/8 time, see the *Converting Songs to Allcanplay* lesson.

Finger Numbers

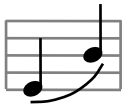




This example shows *every* key with a finger number. Typically only certain keys are numbered, or numbering is omitted completely.

More Note Symbols

Tie
Joins same notes. Play once but hold for the time of both notes.



Slur
Joins different notes. Play notes smoothly as a group.

Staccato
Play quickly with short, separated notes. Imagine popcorn popping.

Duplet
Split the count of 3 notes between 2 notes. Eighth Note Duplet count: [1an da2]

8va 8vb **Octave**
Play notes an octave higher (above) or lower (below) than written.

Fermata
Hold the note beneath this symbol for longer than its normal time count.

Double Sharp
Play the note following this symbol two keys higher.

Double Flat
Play the note following this symbol two keys lower.

Common Time
Alternate Time Signature symbol for 4/4 Time.

Cut Time
Alternate Time Signature symbol for 2/2 Time.

See the *Pedaling* lesson for pedal symbols

Ornament Symbols

Arpeggio
Play a group of notes one at a time quickly and smoothly in order.

Glissando
Slide thumb or finger quickly up or down over one or more octaves.

Ornaments add musical flourishes to embellish songs

Grace Note
Play and blend the small grace note quickly into the adjacent note.

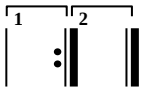
Mordent
Rapidly alternate a note once or twice with the note below or above it.

Trill
Rapidly alternate adjacent notes several times.

Repeat Symbols

Repeat Signs: Play notes between signs again.

Repeat symbols save the composer time and shorten the length of sheet music



Double Ending: Play song through the 1st ending. Play again from the beginning of the song (or from the first Repeat Sign). Skip over the 1st ending and play the 2nd ending.

Da Capo al Coda: Play song to "D.C. al Coda." Play again from the beginning of the song until "To Coda ." Skip intervening notes until " Coda." Play until end.

Da Segno al Coda: Play song to "D.S. al Coda." Play again from the (Segno) symbol until "To Coda ." Skip intervening notes until " Coda." Play until end.

Tempo Terms & Dynamic Symbols

Tempo = Pace of play

Grave	Very Slow
Largo, Lento	Slow
Adagio	Moderately Slow
Andante	Walking Tempo
Allegro	Fast
Vivace	Lively
Presto	Very Fast
Prestissimo	Very Very Fast
Moderato	Moderately
Accel[erando]	Gradually Faster
Rit[ardando]	Gradually Slower

Dynamics = Loudness of play

ppp	Pianississimo	Very Very Soft
pp	Pianissimo	Very Soft
p	Piano	Soft
mp	Mezzo Piano	Medium Soft
mf	Mezzo Forte	Medium Loud
f	Forte	Loud
ff	Fortissimo	Very Loud
fff	Fortississimo	Very Very Loud
	Crescendo	Gradually Louder
	Decrescendo	Gradually Softer
dim.	Diminuendo	Gradually Softer

Consult a Music Dictionary or search online for additional music terms and symbols.