# A Singer's Reference Guide to Music Theory

Compiled by Paul Infantino

**Time signatures** appear at the beginning of a piece of music music. They are made up of two numbers.



The top number indicates the number of beats per measure.
The bottom number indicates which note will get one beat.



In <sup>4</sup>/<sub>4</sub> time there are four beats in each measure.
The quarter note gets one beat.

In § time there are six beats in each measure
In § time there are six beats in each measure  The eighth note gets one beat.

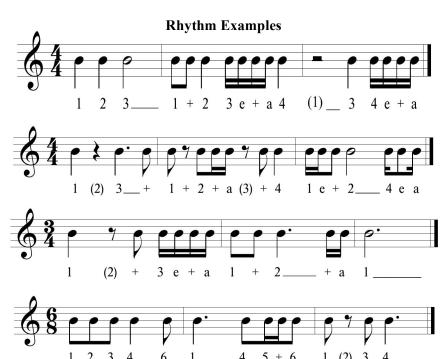
Note/Rest Values for 4/4 Time			
Note	Rest	Name	Rhythmic Value (# of beats)
o	-	Whole	4
0.		Dotted Half	3
0	-	Half	2
<b>J</b> .	₹.	Dotted Quarter	1½
ا	ķ	Quarter	1
	4	Eighth	1/2
A	*/	Sixteenth	1/4

#### **Dotted Notes**

A dot (.) placed to the right of a note increases its rhythmic value by  $\frac{1}{2}$ . For example, in  $\frac{4}{4}$  time:

A quarter note ( ) = 1 beat

A dotted quarter note (  $\frac{1}{2}$ . ) =  $1\frac{1}{2}$  beats



A **half step** is the smallest interval (*distance between pitches*) in Western Music.

❖ Example: The distance between C and C# is a half step. The distance between E and F is a half step.

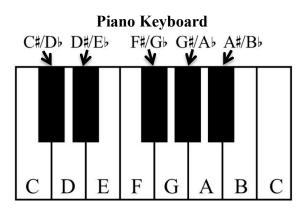
A whole step is equal to two half steps.

*♦Example:* The distance between C and D is a whole step.

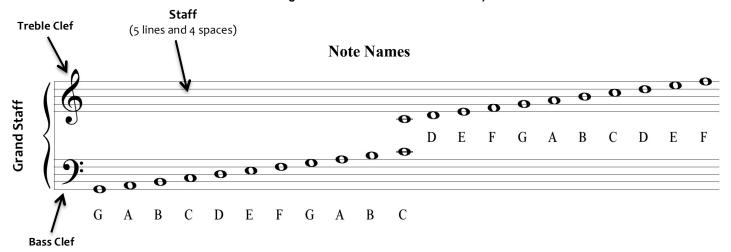
**Sharp** means higher in pitch. A sharp symbol (#) raises a note by a half step.

Flat means lower in pitch. A flat symbol ( b) lowers a note by a half step.

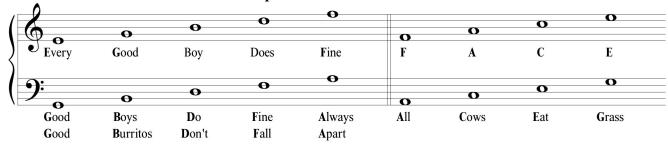
A natural ( 5) cancels out a sharp or flat symbol.



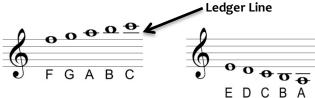
Notes that sound the same but can be named differently are called **enharmonic**. Above, for example, the first black key can be called  $C^{\#}$  or  $D^{D}$ .



## Lines and Spaces for Treble and Bass Staffs



**Ledger Lines** may be used to draw notes that go above or below the normal lines and spaces of the staffs. The note names continue alphabetically both above and below the staff.



# **Key Signatures**

A **key signature** displays the number of sharps or flats that will be found throughout a piece of music. The key signature also reveals the **tonic**, or tonal center point.



Here, the key signature is either **A Major** or **F# Minor**. There are three sharps in the key signature- F#, C#, and G#.

To identify the **minor key signature**: Move two letter names backward in the musical alphabet.

### ABCDEFG

\*\*\*Be sure to include sharps or flats from the major key\*\*\*

#### Examples:

If the major key is G Major, the minor key is E Minor (1 Sharp) If the major key is D Major, the minor key is B Minor (2 Sharps) If the major key is E Major, the minor key is C# Minor (4 Sharps) If the major key is Eb Major, the minor key is C Minor (3 Flats) If the major key is Db Major, the minor key is Bb Minor (5 Flats)

The sharps or flats that appear in a key signature always appear in a certain order.

Order of Sharps:  $\mathbf{F}^{\#}\mathbf{C}^{\#}\mathbf{G}^{\#}\mathbf{D}^{\#}\mathbf{A}^{\#}\mathbf{E}^{\#}\mathbf{B}^{\#}$ 

(Memory Aid: Fat Cats Go Down Alleys Eating Bread)

Order of Flats:  $B^{b}$   $E^{b}$   $A^{b}$   $D^{b}$   $G^{b}$   $C^{b}$   $F^{b}$  (Memory Aid: **BEAD G**um Candy Fruit)



To identify a **major key signature** that uses **sharps**: Go one half step up from the last sharp.



**Ex:** If there are three sharps, they are F#, C#, and G#. *One half step up from G# is A*. The major key is **A Major**.

To identify a **major key signature** that uses **flats**: The second to last flat is the major key.



**Ex:** If there are three flats, they are  $B^b$ ,  $E^b$ , and  $A^b$ . The second to last flat is  $E^b$ . The major key is  $E^b$  Major.

Exception: If there is one flat in the key signature (Bb), the key is F Major.