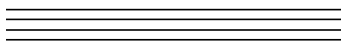


Music Theory

Note Reading

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

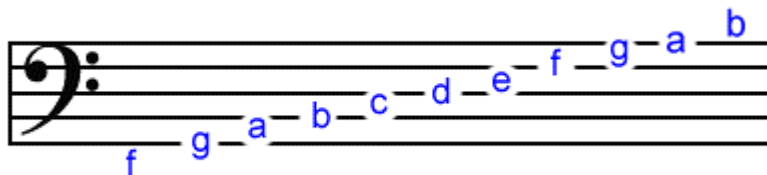
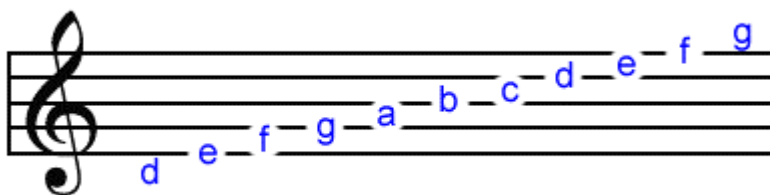


Pitches are named after the first seven letters of the alphabet (A B C D E F G).



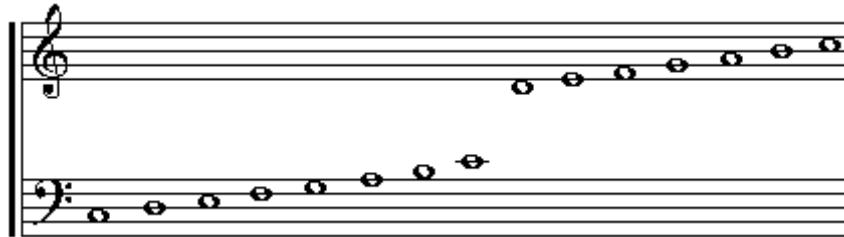
A clef is a musical symbol placed at the beginning of the staff that determines the letter names of the lines and spaces.

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

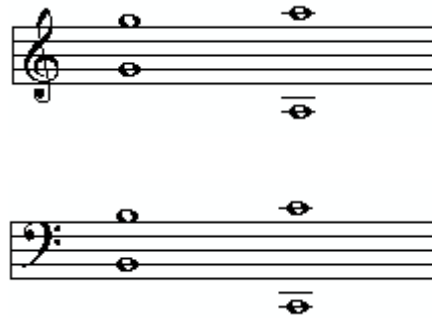


Grand Staff

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 staves).



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 compound. 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.

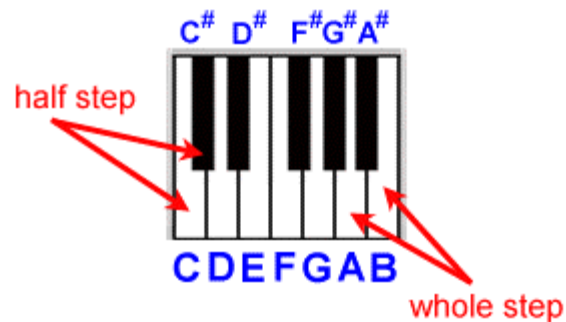


Intervals

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.



Intervals

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.

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:

A musical staff in 4/4 time showing an ascending major scale. The notes are C, D, E, F, G, A, B, C. Below the staff, blue downward-pointing chevrons indicate the intervals between notes: W (whole), W (whole), 1/2 (half), W (whole), W (whole), W (whole), 1/2 (half).

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

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

A musical staff in 4/4 time showing an ascending natural minor scale. The notes are C, D, E-flat, F, G, A, B-flat, C. Below the staff, blue downward-pointing chevrons indicate the intervals: W (whole), 1/2 (half), W (whole), W (whole), 1/2 (half), W (whole), W (whole).

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

A musical staff in 4/4 time showing an ascending melodic minor scale. The notes are C, D, E-flat, F, G, A, B, C. Below the staff, blue downward-pointing chevrons indicate the intervals: W (whole), 1/2 (half), W (whole), W (whole), W (whole), W (whole), 1/2 (half).

A musical staff in 4/4 time showing a descending melodic minor scale. The notes are C, B, A, G, F, E-flat, D, C. Below the staff, blue downward-pointing chevrons indicate the intervals: W (whole), W (whole), 1/2 (half), W (whole), W (whole), 1/2 (half), W (whole).

Scales

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

W 1/2 W W 1/2 W+1/2 1/2

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

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

W W W W W

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 its 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:

W W+1/2 W W

Scales

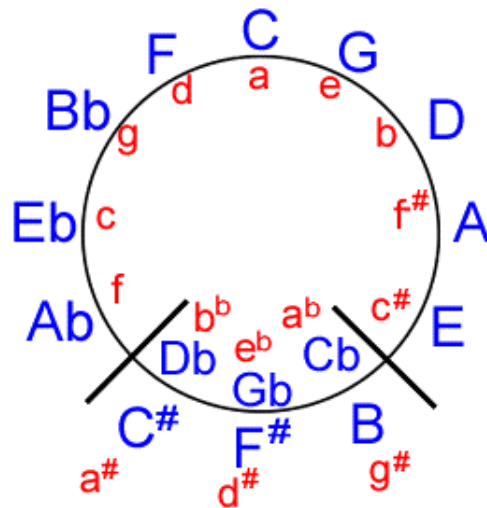
The second **Pentatonic Scale** form uses the group of three black keys followed by two black keys. The pattern is as follows:



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.

Circle of 5^{ths}



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

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.

Major Key Signatures

Diagram showing the major key signatures for C Major, G Major, D Major, A Major, E Major, B Major, F# Major, and C# Major. Each key signature is represented by a treble and bass clef staff with the corresponding sharp or flat symbols. The labels are: C Major, G Major, D Major, A Major, E Major, B Major, F# Major, and C# Major.

Diagram showing the major key signatures for F Major, Bb Major, Eb Major, Ab Major, Db Major, Gb Major, and Cb Major. Each key signature is represented by a treble and bass clef staff with the corresponding flat symbols. The labels are: F Major, Bb Major, Eb Major, Ab Major, Db Major, Gb Major, and Cb Major.

Minor Key Signatures

Diagram showing the minor key signatures for a minor, e minor, b minor, f# minor, c# minor, g# minor, d# minor, and a# minor. Each key signature is represented by a treble and bass clef staff with the corresponding sharp or flat symbols. The labels are: a minor, e minor, b minor, f# minor, c# minor, g# minor, d# minor, and a# minor.

Diagram showing the minor key signatures for d minor, g minor, c minor, f minor, b^b minor, e^b minor, and a^b minor. Each key signature is represented by a treble and bass clef staff with the corresponding flat symbols. The labels are: d minor, g minor, c minor, f minor, b^b minor, e^b minor, and a^b minor.