

Unit 10. Music theory



Jane: Can you give me one more music lesson?

Victor: Sure. What would you like to know?

Jane : I'd like to learn about music language or how to write down music, and read it.

Victor: Music is a sign language. Notes are a part of the language. They show if music sounds are high or low, long or short. The music staff is another part of music language. It is made of five lines. Each line has a name: 1 - E, 2 - G, 3 - B, 4 - D, 5 - F. Each has a name, too: 1 - F, 2 - A, 3 - C, 4 - E. If we put a note on the staff, it gets a name - A, B, C, D, E, F, or G. There is a note on every line and in every space and there notes made with the signs called 'sharps' and 'flats'.

Jane: I read somewhere that in 1817 a Frenchman Sudr introduced a new artificial language. It was based on 7 music notes (sounds). For example "si" (B) meant yes, "do" (C) - no, "re"(D) - and "mi"(E) - or, "do-re" (C-D) - I ... The speech could be played on a musical instrument. But the new language was too difficult to become popular.

Victor: That's interesting.

Jane: And how music can be measured?

Victor: To measure music, we use "measures" .Two bar lines make a box, called a measure. In each measure there is the same number of beats. The top number at the beginning at the beginning of the music tells how many beats are in each measure.

Jane: Beats show the length of notes, do they?

Victor: That's right. A one - beat note is called a quarter note, a two - beat note is called half note, a four - beat note is called a whole note. The beats in music are always even. We can feel two, three, four, or more beats in a group. This is called the meter.

The number of beats felt together is the Meter of a song. Each measure "measures" the beats you feel together. The " time signature" at the beginning of the song tells the meter . The number of beats in each measure.

Jane : What about silent notes or pauses?

Victor: Those signs are called "rests" and they tell us to stop , and be silent they are like music notes. There are other music signs: a "slur" - is a curved line that ties two or more notes together, so that you go smoothly from one note to the next ; a "fermata" shows that the note under the Fermata is held longer than usual, and others. When you use music language, what you say should make sense, just as what you say in English should make sense, just as what you say in English should make sense.

Say if the statement is right or wrong

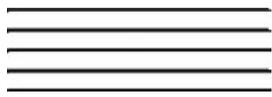
right wrong

The music staff is a part of music language.

Frenchman Sudr invented a new language.

Two bar lines make a box, called a measure.

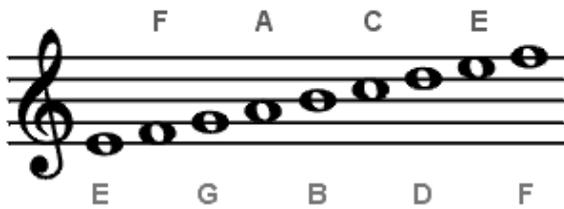
The beats in music are not always even.



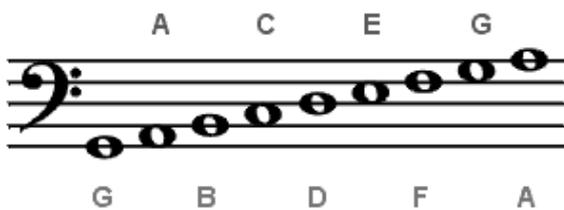
Basic notation:

The system of notation gives musicians the information they need to play music as the composer intended it.

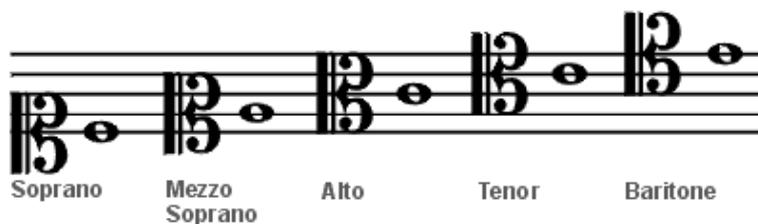
The staff is the basis of written music. It consists of 5 lines with four spaces between them.



This is the treble staff. The treble clef (the large fancy symbol to the far left) shows the musician that the staff is treble. Since it curls around the G line, it is also called a G clef. The treble staff begins with the first line as E. Each successive space and line is the next letter in the musical alphabet. The staff ends with the last line as an F.



This is the bass (pronounced 'base') staff. The bass clef, also known as the F clef because it locates the line known as F, is on the far left. The bass clef uses the same musical alphabet as treble, but the letters start in different places. Instead of an E, the bottom line is a G, and the letters proceed- logically from there.



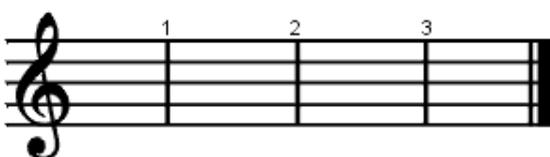
This is a C clef. The C clef can move on the staff, and the center of the symbol is always over C. Depending on where it is, it is given dif- ferent names. The note beside each clef is C.



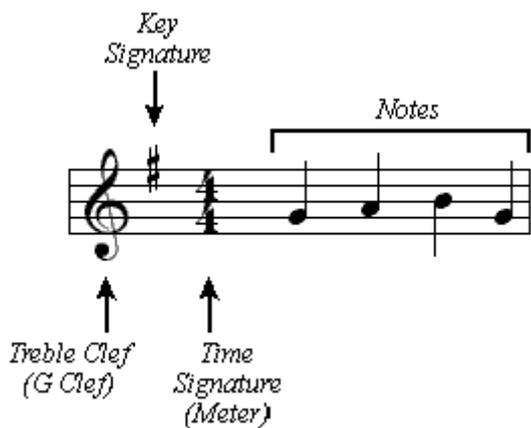
When the bass and treble clef are combined and con- nected by a brace (left) and lines, they become the grand staff. This greatly increases the range of pitches that can be notated, and is often used in piano music, due to the piano's wide range.

Grand staff

Measures

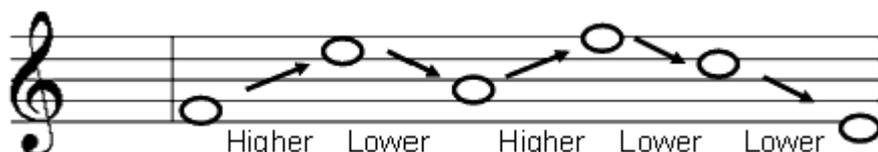


The vertical lines on the staff mark the measures. Measures divide and organize music. The time signature determines how many beats can be in a measure. The thick double bars mark the beginning and ends of a piece of music.



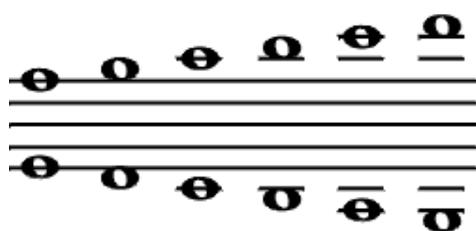
Notes

Different pitches are named by letters. The musical alphabet is, in ascending order by pitch, A, B, C, D, E, F and G. After G, the cycle repeats going back to A. Each line and space on the staff represents a different pitch. The lower on the staff, the lower the pitch of the note.

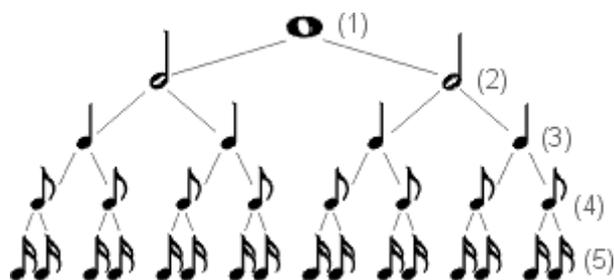


Notes are centered on the lines or in the spaces between the lines. Stems on notes above the middle line trail down from the left of the note. Stems on notes below the middle line stick up on the right of the note. Stems on notes on the line usually go down except when adjacent notes have flags that go up.

Ledger lines



Ledger lines extend above and below the staff, allowing for higher or lower notes to be shown than would otherwise fit on the staff.



Note durations

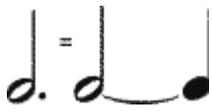
All notes have length. However, the amount of beats they get depends on the time signature.



Sixteenth notes (right) and eighth notes (left) may also look like this. Single sixteenth and eighth notes have flags, many sixteenth and eighth notes combine flags into connecting bars.



Sixteenth notes and eighth notes may also combine together. the combination looks like this picture to the left.



Dotted Notes

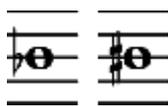
A dot beside a note increases its duration by half its original value. For example, half notes, in 4/4 time, are worth 2 beats. When a dot is placed next to the half note, the duration is increased by one (one being half of the original duration of two) and the resulting duration is three beats. The curved line in the picture above is a tie. Ties connect notes that are the same pitch together to create a sustained note.



Rests are simply places where the musician does not play. Rests have equivalent values to corresponding notes of duration. Thus, there is a whole rest, half rest, quarter rest, etc., just like normal notes. Rests are always located in the same vertical position.

Accidentals

Accidentals modify the pitch of a note by increasing or decreasing it by one half step. Accidentals stay in effect for all notes of the same pitch for the rest of the measure. Accidentals in the very beginning of the music are key signatures.



Flats (left side of the picture) lower the pitch of the note by one half step. Sharps (right side of picture) raise the pitch of the note by one half step.



Naturals cancel out any previous sharps or flats. The pitch returns to normal.



Ties and slurs connect two or more notes together. Ties connect notes of the same pitch, forming essentially one longer note. Slurs smoothly connect notes of different pitch. This means to play the notes without breaks. The first set of notes above exhibit a tie. The second show a slur.

Articulation



Staccato - Means to play the note very short and detached.



Accent - Means to hit the note harder and louder.



Marcato - Almost a combination of staccato and accent, provides a sharp sound.



Tenuto - Hold the note for its full value.



Sforzando - A sudden, strong accent.



Fermata - Hold the note longer, approximately twice its value, or until conducted to stop.

Dynamics

pp

This symbol is pianissimo, it means play very softly.

p

This symbol is piano, it means play softly.

mp

This symbol is mezzo piano, it means play moderately soft.

mf

This symbol is mezzo forte, it means play moderately loud.

f

This symbol is forte, it means play loudly.

ff

This symbol is fortissimo, it means play very loudly.

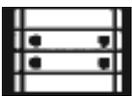


Also abbreviated *Cresc.* or written in as *crescendo*. This sign is the crescendo sign, it means gradually become louder



Also abbreviated as *Decresc.* or written as *decrescendo*, *dim.*, or *diminuendo*. This sign is decrescendo, it means gradually become softer.

Repeats



These are the begin and end repeat signs. When you reach the second, go back to the first and repeat the music. These are often accompanied by first, second and even third endings.

D.S.

This is a directional marking. It means 'Del Signo'. When you see this in music, you must go to the sign (below). This marking may also be accompanied by 'al coda' or 'al fine'. These mean 'Go to the sign, from there go to the coda' and 'Go to the sign, from there go to the end' respectively. Essentially these are big repeat signs.



This is the sign. From here you play to the coda or the end or wherever the Del Signo directs you.



This is the coda sign. It marks when to go to the special ending, or coda. Usually you won't go to the coda until after a *D.S. al coda*.

Time Signatures

The time signatures (also called meter signatures) tell the musician how many beats per measure there are, and what kind of note gets the beat.

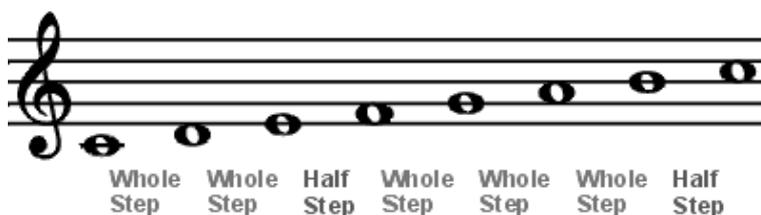
4
4

The top number determines how many beats there are per measure. The bottom number tells what kind of note gets the beat. In this example, 4/4 time, there are 4 beats per measure, and the quarter note (bottom 4) gets the beat. In 3/4 time, the quarter note would still get the beat, but there would only be 3 beats in a measure. In 6/8 time, the eighth note gets the beat, and there are 6 beats to a measure.

The pulse (or meter) is the driving beat in music that we march, feel, dance, clap and conduct to. First find the beat that seems the strongest, then try tapping along to it. Eventually you should be able to tap along with the music, and you will have found the pulse. Listen to the bass line and the rhythm section, as often they play with the pulse.

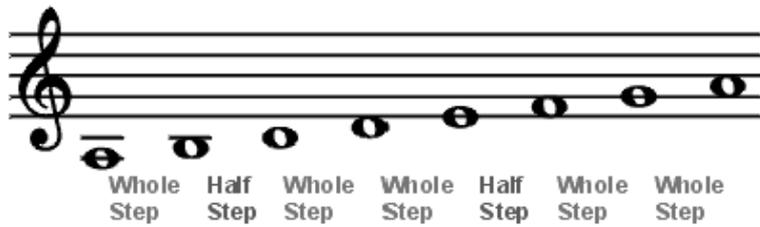
Scales

A scale is a group of pitches (scale degrees) arranged in ascending order. These pitches span an octave. Diatonic scales are scales that include half and whole steps. The first and last note is the tonic. It is the most 'stable' note, or rather the easiest to find. Because of this, diatonic melodies often end on the diatonic note. The other notes in the scale also have names. The second note is the supertonic. The third is the mediant, halfway between the tonic and dominant. The fourth note is the subdominant. The fifth note is the dominant. The submediant is the sixth note. The subtonic is the seventh note in the natural minor scale. The seventh tone of the major, harmonic and melodic minor scales is called the leading tone if it is one half step lower than the tonic.



The major scale

The major scale consists of seven different pitches. There are half steps between the third and fourth and seventh and eighth scale degrees; whole steps exist between all other steps. Below is the C major scale. The pattern of whole and half steps is the same for all major scales. By changing the first note, then using the pattern as a guide, you can construct any major scale.

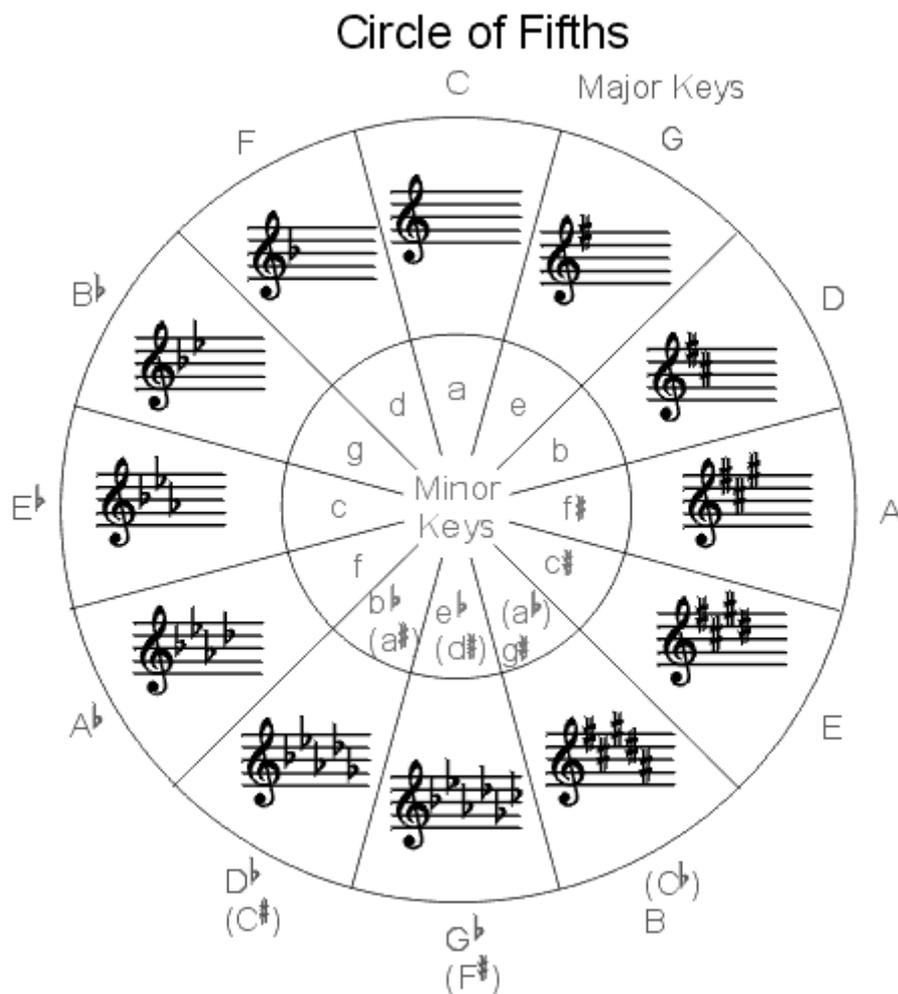


The natural minor scales

These scales have seven different scale degrees. There are half steps between the second and third and the fifth and sixth degrees; whole steps exist between all other steps. Shown below is the A minor scale.

Key Signatures

To help understand and remember key signatures, a chart called the circle of fifths can be used. On the outside are the major key names, separated by fifths. On the inside are the corresponding minor key names. In the middle is the number and position of the sharps or flats.



Practice

Find the English for: нотный стан, диез, бемоль, бекар, такт, доля, целая нота, половинная, четвертная, восьмая, шестнадцатая, пауза, лига, ключ, знаки (при ключе), размер (метр), высота (звука), добавочные линейки, длительности, тактовые черты, ноты с точкой, случайные знаки, знаки артикуляции, знаки динамики, сеньо, фонарь, гаммы, мажор, минор, кварто-квинтовый круг.

1. Fill in the prepositions where necessary:

1. There is a note ... every line and ...every space.
2. The treble staff begins ... the first line as E.
3. The major scale consists ... seven different pitches.
4. The treble clef curls ... the G line.

Top 10 Tips for Instant Improvement

1. Practice Everyday
2. Learn theory and how chords and scales are built instead of just knowing them!
3. Find patterns to help you learn chords and how they change relations and roles in other keys.
4. Learn all major, natural minor, melodic minor, harmonic minor, blues, and pentatonic scales.
5. Take the scales and learn all major, minor, diminished, augmented, and seventh chords. Once you know your scales, you will find it quite easy to convert them into chords.
6. Practice speed (play exercises increasing in speed as you progress!)
7. When listening to songs, try figuring out the chord progressions in your head. Once you have an idea of how the song is played, start transferring your thoughts to the piano. It works!
8. Try to learn as many songs, standards, and hymns as possible (especially, if you're a jazz or gospel musician). Jazz musicians should know as many jazz standards as possible. Gospel musicians must know as many hymnals because you never know when someone wants you to accompany them!
9. Exercise your gift - Show your gift off! Play at church, jazz clubs, festivals, gigs, and more!
10. Never think you know too much. In music, there is never "too much" to learn. Keep your mind and ears open to new techniques!

Active vocabulary:

staff	sharp	flat	measure
bar lines	beats	meter	rests
slur	clef	ledger lines	time signature
accidentals	scales	circle of fifth	repeats

Keys: 1. 1 - on; in; 2 - with ; 3 - of; 4 - around