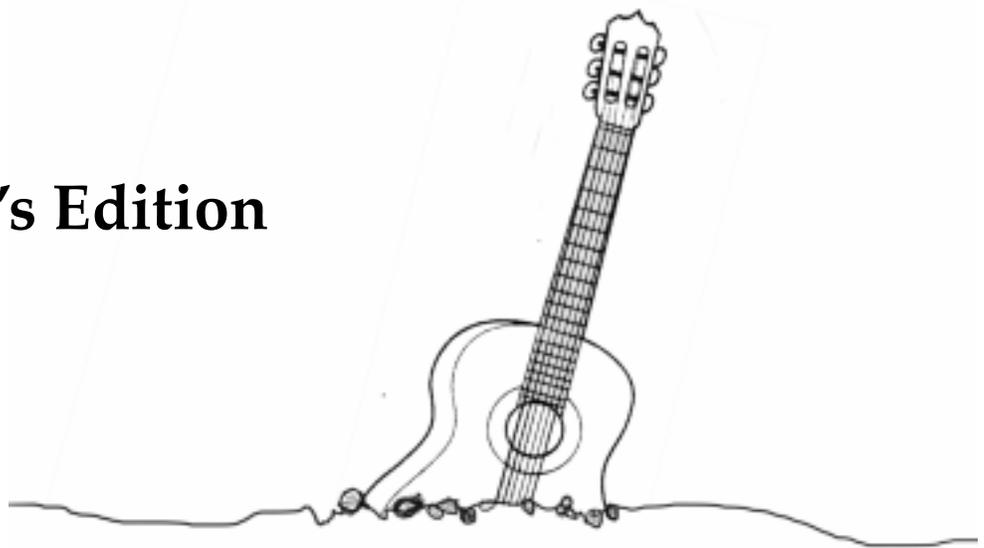


The Grounded Guitar

A Learning Guide for Guitar

Teacher's Edition



by Peter John Honan

The Grounded Guitar

A Learning Guide for Guitar in the Classroom

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Teaching guitar in the classroom is becoming more and more popular in today's schools. It is the world's most popular musical instrument and is found in every country in the world and in every musical style. Music is more accessible to young people through electronic media and the Internet so it is a bigger part of their lives than ever before. A class for guitar can be a powerful way to reach students who may not otherwise be motivated about attending school. These are students who do not identify with the traditional school setting but seek their refuge and inspiration from music. A guitar class can oftentimes be an incentive for these students to come to school and give them a sense of belonging that they may not otherwise have.

Guitar classes are popping up more and more in schools but teachers assigned to teach them are discovering that there are no books written for the classroom guitar teacher. Plus the guitar books on the general market run through the same tired formula of teaching the guitar while teaching how to read music, something that even most professional guitarists never do.

While learning to read music is not necessary to play guitar, learning music theory is. Music theory involves learning the concepts of notes, sharps, flats, scales, keys, intervals, chords, triads and melody and harmony. This book covers all of these concepts without the need to learn music notation.

The Organization of the High School Guitar Classroom

A teacher can only hope for certain things when assigned to teach a high school guitar class. One can hope for guitars. I taught guitar for my first year and a half with no guitars provided by the school. If the school provides guitars, one also hopes that they are of

adequate quality. If the school does not provide enough guitars, the students must bring their own or YOU must bring your own. One can also hope for a secure room to keep whatever guitars you have safe from theft.

One extremely useful thing to have in a guitar class is a wireless microphone. Unless you sing opera, you will find it very difficult to be heard over 30 plinking guitars. As a teacher I have found the most exhausting thing to do is having to yell to be heard for five hours a day and a wireless microphone is a great preserver of your energy and your voice.

One other thing that is extremely useful in a guitar class, especially if you use this book, is a small portable, electronic keyboard. It doesn't have to be fancy, just something that students can see and hear while the teacher plays very basic notes and scales. I set mine up vertically on top of a pull-down map so everyone can see it while I would illustrate something in the book. This is a powerful learning tool since students can see AND hear what the book is talking about.

It's important to remember that the book works best when the students can *hear* what the book is talking about. The book is not meant to be read like an English class reading assignment but should be supplemented by examples played by the teacher or somebody able to play them.

The Grading of High School Guitar Students

The first thing you will notice about any high school guitar class is the range of skill levels and the range of musical styles that your students prefer. These make it very challenging to get up and lecture in front of the class on any one topic without boring the half of the class that already knows it and mystifying the other half who don't know what your talking about. The musical theory that you present on whiteboard or the overhead must be related to live musical examples that you or someone else is playing.

Hopefully your class objectives emphasize performance skills so the students with the highest grades are those who actually put on a quality performance for an audience. You will find that these students will be a small minority of your students, so you must find other ways to evaluate these students besides simply failing them. While worksheets and multiple-choice tests are a necessary evil in public education, there are other ways to grade guitar students, such as random surveys of the class to record just who is actually *playing* their guitars, and the awarding of points to those who are. The awarding of extra credit points for those who bring their packets and guitars to class is another way to award effort and not just raw talent. The grading of guitar students remains a very subjective task despite all efforts to formalize it. This was brought home to me one time when I found that some of my best players were getting Fs.

Successful guitar playing involves a complex and highly collaborative interaction between the brain, ears and fingers and you will find that some of the best players have well developed ears and fingers, however their brains, meaning their knowledge of even basic music

theory is totally lacking. Despite this, they are able to be entertaining guitar players. Your main task as a guitar teacher is to develop each of these three things—the ear, the fingers and the brain and to get them working together playing the guitar. Fortunately this book is filled with activities and exercises that will help you develop each of these three things in isolation or together.

The Guitar Course Outline on page viii is useful for planning course objectives and activities. There is more information on each of the Outline components below.

Oral Component. Although most guitar classes are electives, they can usually be structured to include enough reading and written activities to satisfy most performance standards in effect in most schools today. However, the main objective of the class should be to prepare students to *perform*. The class should not be a dreary exercise of reading and doing worksheets everyday. A good first week activity is to allow volunteers to perform in front of the class. You will probably get a few students willing to do this, but the majority of the class, even the good guitar players will be too timid to do this.

The Music Reviews activity is an excellent writing activity since students get a chance to write about a performer or group or song that they are truly passionate about. This activity is also beneficial to the teacher since it gives insights into the types of music students enjoy and allows modification of lessons accordingly.

Music Literacy This component will depend on the type of class you have. If the majority of the class expresses a desire to learn the classical guitar or jazz guitar, you will want to emphasize the reading of music in your curriculum. An excellent book for this is Classic Guitar Technique by Aaron Shearer. However if your class is like most guitar classes, the students will want to learn styles of music that do not require the ability to read music. However they still need an understanding of basic music theory, which this book is meant to cover.

Performance Skills This should be the focus of your class. You will probably have a few students who are accomplished at this. However, as mentioned earlier I have discovered that many of these students will turn out during grading as “F” students since they will not read or write or do worksheets, but rather simply want to play the guitar all period. Besides trying to persuade them that reading, writing and worksheets will make them better guitar players, you can have an extra credit component in your grading system that will assign them extra credit points for their performance skills. This way, the hard working students who do the assignments and the worksheets but can’t play the guitar are not penalized for their lack of performance skills.

Extra Credit Depending on the motivational level of your class, the bringing of the book or any written materials can be rewarded with extra credit. Hopefully, you will be provided with a guitar for each student. Unfortunately, guitar classes in many schools are merely dumping grounds for students who could not be put in any other elective class. They have no interest or desire to learn guitar and don’t get much out of the class. Consequently, some guitar classes may have upwards of 40 students, requiring two students to share one guitar, not an ideal situation. If this is your situation, you can award extra credit for students who bring their own guitars.

Requiring students to bring their own guitars is usually not a good idea. Many students are from socio-economic backgrounds that make the owning and bringing of a guitar to school difficult if not impossible. If you do give students extra credit for bringing their guitars, emphasize that you cannot be held responsible for them since guitars are highly prized by thieves.

Electric Guitars The use of electric guitars in your guitar class will greatly increase its popularity. Given their choice, most students would prefer to play an electric guitar over an acoustic one. However, electric guitars pose problems that the guitar teacher must be ready to deal with.

The most obvious problem is the volume level of most electrics. One electric guitar plugged into an amplifier will easily drown out 30 acoustic guitars in your classroom. If those 30 acoustic guitar students cannot hear their playing, then it is not a good learning environment. Then if you have three students playing their electric guitars, the problem is only multiplied. There are several solutions to this problem.

- 1) Most guitar amps have headphone attachments that allow the electric guitarist to practice in private.
- 2) Students can bring their electric guitars and amps outside if it would not disturb surrounding classes.
- 3) Students can play in a separate acoustically isolated room, if one is available.
- 4) Students can play their electric guitars without being plugged into an amplifier.
- 5) Setting aside a day such as Friday, or a time such as the last 5 or 10 minutes of class, when students can play electric guitars.

What is NOT a solution are students promising to *keep it turned down low* since they rarely do.

Teachers often will bring their own electric guitars and amps for students to use. However they must remember that students can be hard on equipment and that it can be vulnerable to theft.

Suggestions for Grading

The following is a suggested breakdown of a guitar students' total grade.

Tests and quizzes	30%
Mastery of Basic Chords	20%
Practice Habits	20%
Book Exercises	20%
Music Reviews	10%

Tests and Quizzes

- 1) A quiz on the parts of the guitar on page 27. Make Figure i an overhead and have students fill out scantrons. This will save time and paper.
- 2) A quiz on the 1st, 3rd, and 5th positions and the complete fingerboard on page 25. You can fill in numbers for the letters for each position and have students fill in the correct letter for the appropriate number. (see Figure iii as an example of this for the 3rd position.) Making it an overhead saves copying.

Mastery of Basic Chords- Students are verbally given one of the chords on page 23. They must be able to finger and play the chord correctly. They are given a certain number of points for each chord they play correctly.

Practice Habits- Rewards those students that aren't great players but try hard and don't waste time. At random times during class when students should be practicing, the teacher gives points to students who are on task.

Book Exercises- There are 52 Exercises in the book. Some are fill in the blank and others are performance related and grading them can be challenging and subjective. A teacher needs to keep in mind that there is a huge amount of trial and error in mastering the guitar and that effort should be rewarded above all else.

Music Reviews- These can be due on the last school day of each month. They should be typed and it is helpful if there is a computer in the class to complete their reviews on.

Suggested Class Schedule

First 10-15 minutes: Students get their guitars, practice tuning them, practice warm-up exercises. Then have an assignment on the board that students can work on. During this time, teacher is taking attendance, awarding points to students who are on task, and preparing the lesson for the day.

Second 15-20 minutes: Teacher will cover material from the book, approximately one to two pages a day. Its critical that the teacher play or have someone else play material from the book so students can hear examples of what they are reading about in the book.

Third 15-20 minutes: Students should be given an exercise to practice on their own. Teacher should take this time to work one-on-one with students who need help.

The last 5 minutes or so should be devoted to putting away all guitars.

Guitar Course Outline

Beginning/Intermediate

Students will be introduced to the study of instrumental music as they learn standard performance practices on the guitar. Students will be provided the opportunity to participate in solo and ensemble performance activities. Areas of instruction will include instrument care, techniques and fundamentals of musicianship, tone production, proper posture, and music literacy (reading and writing music).

Class Requirements

Oral Component This would be satisfied in one of two ways. 1) an individual or group performance or 2) an oral presentation about either a song, musical collection, musical performer or musical style. Minimum length: 5 minutes.

Music Reviews This could be a review of either a CD, an individual song, or an individual musician or group. There will be one due on the last school day of each month. Minimum length: 2 paragraphs.

Internet Research Assignment This would be an individual or group research assignment on a subject related to the guitar. This could include a brand or make of guitar, a musical style, a musical trend, a technology related to music, or a musician or music group. Minimum length: 2 pages.

Music Literacy This is the ability to read and write music in both traditional notation and guitar tablature. This involves being able to identify musical notes on a treble clef staff and playing the corresponding note on the guitar. A working knowledge of guitar tablature, which is a simpler form of music notation is also required. Also required is the understanding of basic music theory which includes scales, keys, intervals, chords, melody and harmony

Performance Skills This is the ability to play various chords, melodies, rhythms and finger picking patterns at a steady tempo.

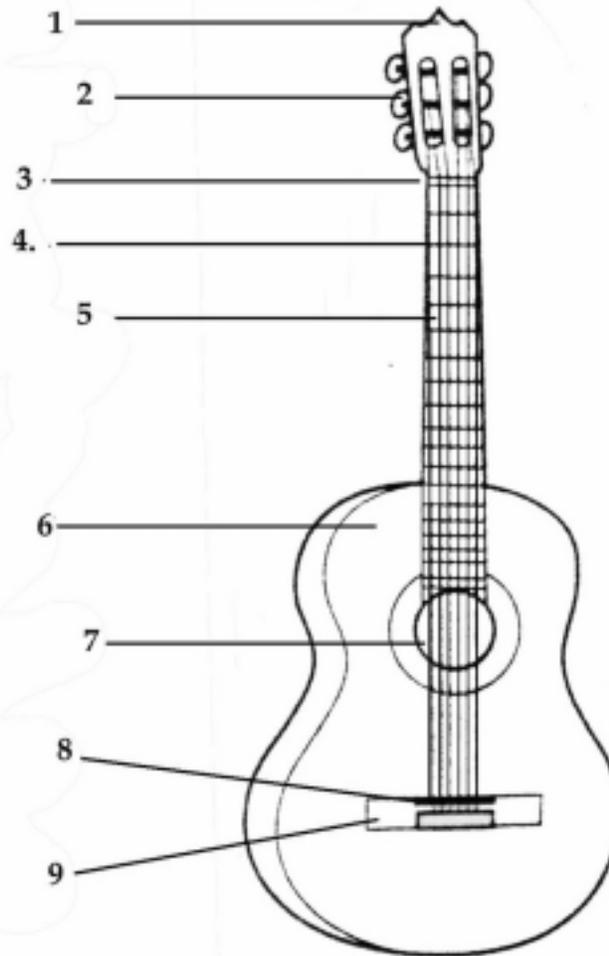
Extra Credit Students can turn in up to two music reviews of live music performances outside the classroom. The review must focus on; type of guitar(s) used, method of playing (pick or fingers), style of playing and audience reaction to the musical performance. Minimum length: 1 page.

All written assignments must be typed.

Figure i

Quiz on the Parts of the Guitar

- a. soundhole
- b. body
- c. nut
- d. head
- e. bridge
- ab. fingerboard
- ac. tuning keys
- ad. frets
- ae. saddle



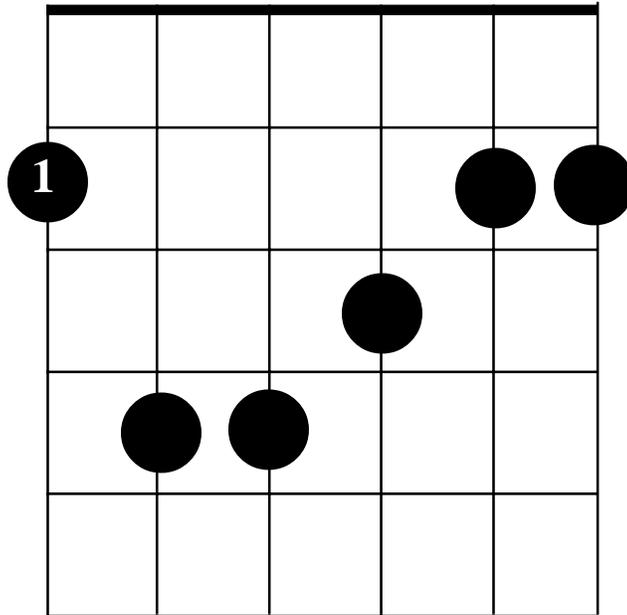
Major Bar Code Labeling Activity

Figure ii

Identify the chord letter. Then label the number and letter of each note of the chord

Note Letter — — — — — —
Note Number — — — — — —

Chord
Letter__



Note Letter — — — —
Note Number — — — —

Chord
Letter__

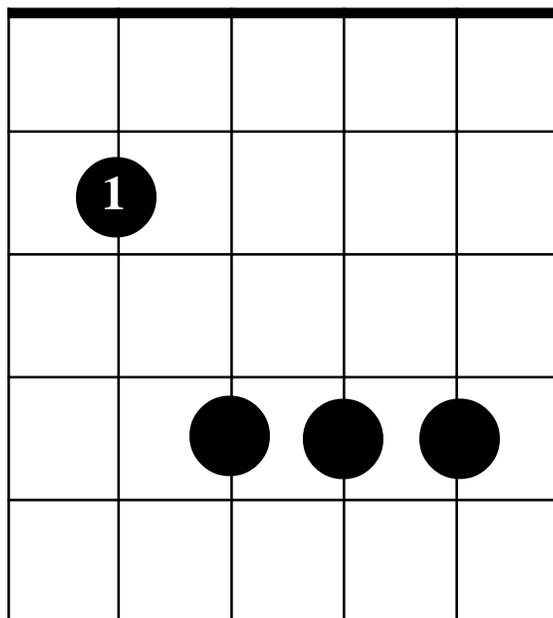
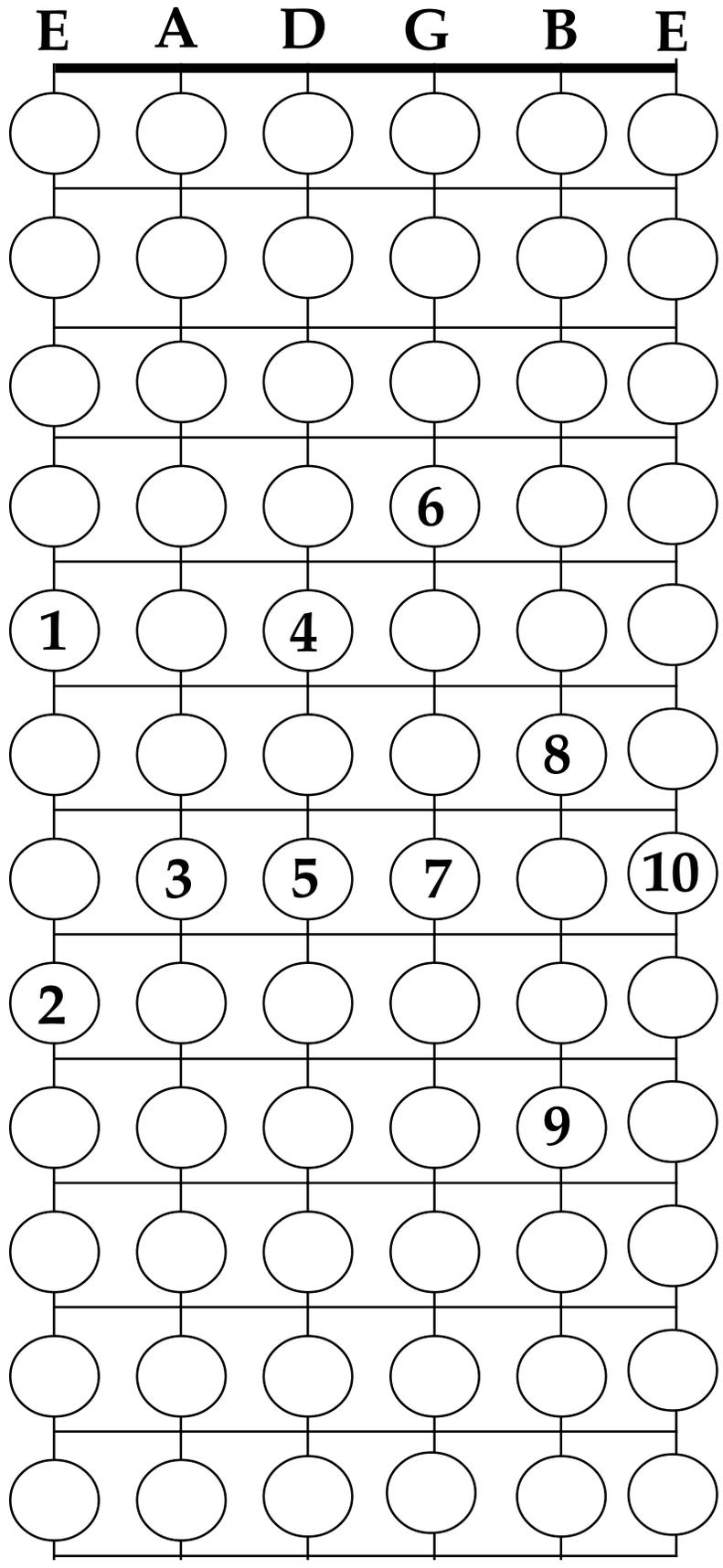


Figure iii

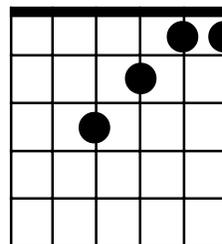
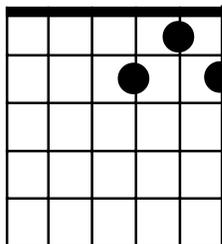
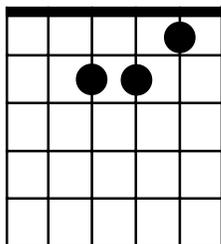


Identify the chord letter. Then label the number and letter of each note of the chord

Chord Letter

Note Letter

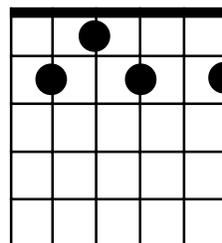
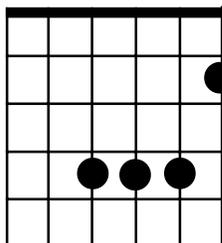
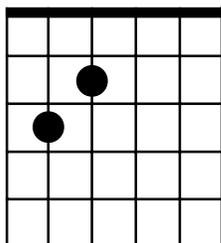
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Chord Letter

Note Letter

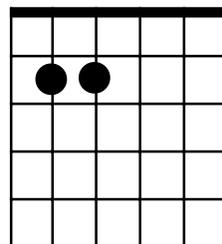
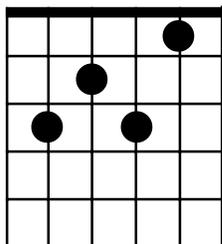
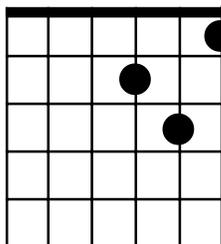
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Chord Letter

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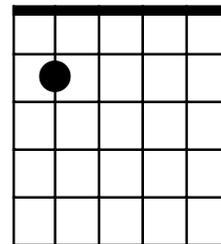
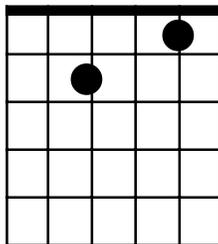
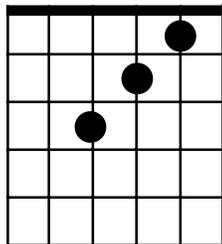


Identify the chord letter. Then label the number and letter of each note of the chord

Chord Letter _____

Note Letter -----

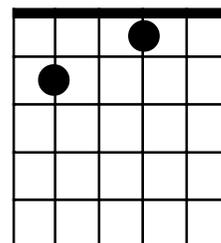
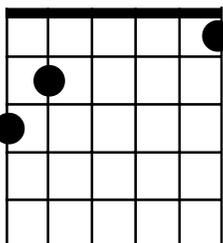
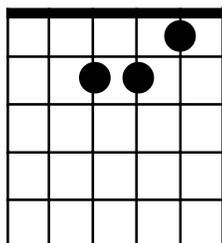
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Chord Letter _____

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Chord Letter _____

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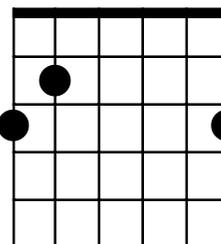
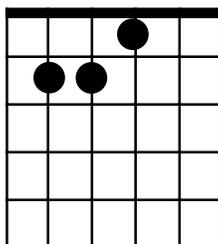
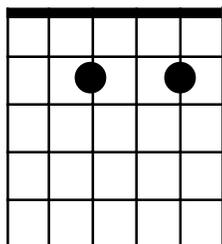
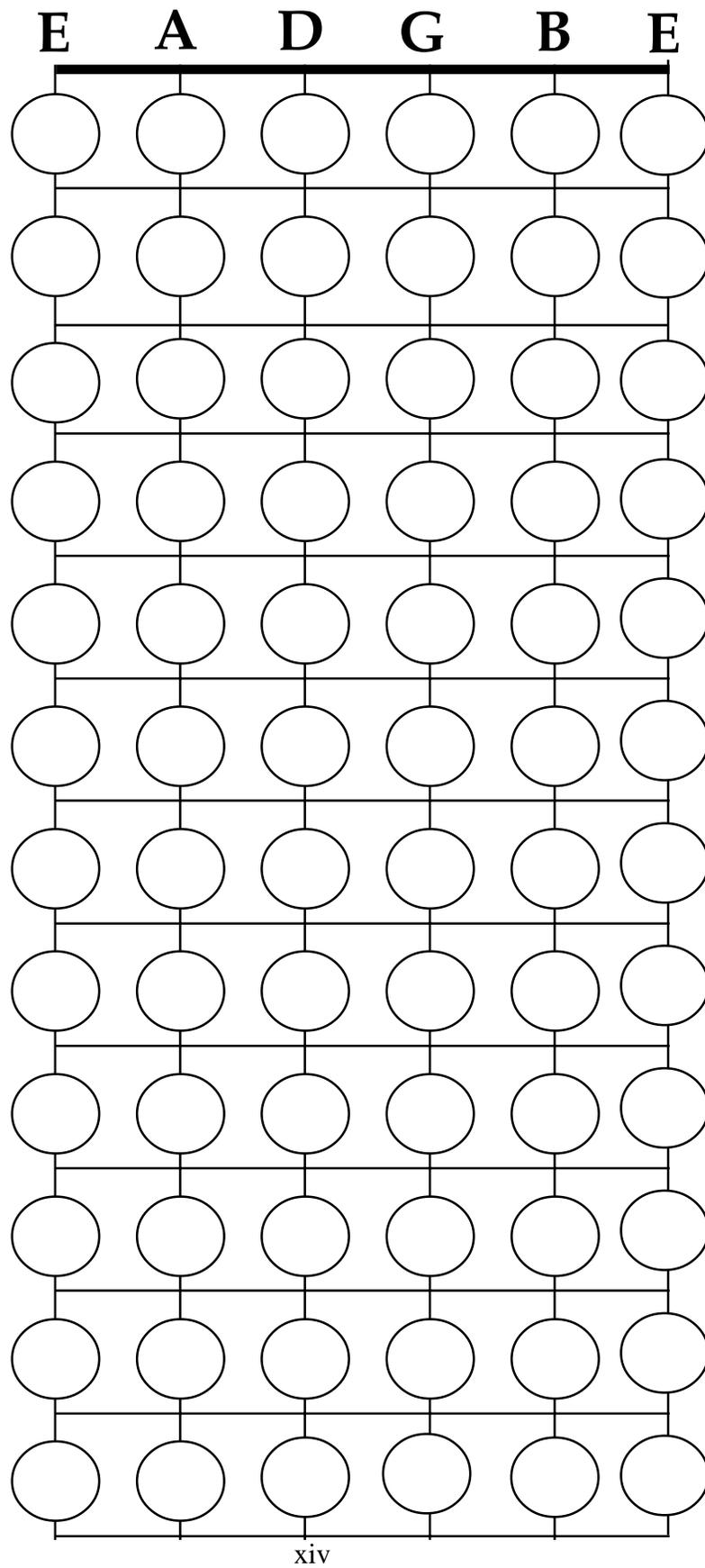


Figure vi



The Grounded Guitar

**A Learning Guide for Guitar
in the Classroom**



by Peter John Honan

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The Grounded Guitar

A Learning Guide for Guitar in the Classroom

by Peter John Honan

Introduction

This book was written with one goal in mind— to produce a guitar book that would provide a modern and relevant curriculum for high school guitar classes. The guitar is by far the world's most popular musical instrument, but there are no instructional manuals that adequately prepare the young guitarist of today to perform today's music. This book was written to fill that void.

This book is unique in that it addresses one huge problem with almost all guitar books. Virtually every one of them starts out by teaching you how to play guitar AND read music. Reading music was a form of musical communication that was developed centuries ago when there were no radios, tape recorders, cassette players or computers, so the only way to preserve a record of any kind of music was to write it down. Evolving technology allowed music to be preserved electronically and to be reproduced without the need of a human performer. Reading music is necessary to play some styles such as classical guitar and some forms of jazz guitar, but the reality is that most working guitarists do not read music but rely on electronic forms of musical communication

This book will avoid teaching music notation since it is a skill that most guitarists never use. It will make no mention of the staff, treble clefs or quarter or eighth notes. Music theory will be taught without any need to learn music notation. This is an acknowledgement of how people learn to play the guitar *anyway*. The musical staff will be replaced by the piano keyboard as the main visual aid for understanding the concept of notes, sharps, flats, scales, keys, intervals, chords, triads and melody and harmony. This book will attempt to give some structure to the haphazard way that most guitarists learn to play by having to work around the barrier of having to learn to read music.

Why The Guitar Is So Popular

The guitar has been in its present form for roughly 200 years. One can go to any country in the world and find guitar players. It is a potent symbol of American and Western culture that has replaced the native musical instruments in popularity in numerous Third World countries. The guitar has a place in virtually every musical *style*. Something that cannot be said for any other instrument except perhaps the piano. More than one billion dollars of guitars and guitar equipment was sold in the U.S. in 2002. Guitar music awakens the whole gamut of human emotions and touches our soul and spirit like nothing else.

But how does the guitar do this? To answer this we must think about what any art form such as music is meant to do. All art merely reflects life and life's experiences. Any art form merely gives us another view of life through its own unique mirror. Art reflects life and in that reflection gives us a better understanding of life and how to live it.

To understand the art of guitar, we must think about what inspired musicians to create the music they created. I think you could say that most of them were imitating the sounds they heard and their music was an artistic interpretation of those sounds. Therefore, up until the Industrial Age, all musicians were inspired by the sounds of nature-- animals, the elements, the trees, the earth, the wind and the waters.

All of this changed with the Industrial Age and the rise of the machine. The machine made a new sound across the land, the sound of factories and engines and levers and gears and trains and cars and airplanes. One particular kind of machine fell into the hands of a large number of young people mainly in the United States in the 1950s. That machine meant freedom and status to those young people and they yearned for music that imitated and reflected that machine and its sound. So along came Chuck Berry, with songs such as *Maybelline* and *No Particular Place to Go*. In Chuck Berry's hands, the sound of an electric guitar was a pretty good musical interpretation of the internal combustion engine. And so it goes, art imitates life yet again.

The Secret to Successful Guitar Playing

Successful guitar playing involves a complex and highly collaborative interaction between the brain, ears and fingers and you will find that some of the best players have well developed ears and fingers but their brains, meaning their knowledge of even basic music theory is totally lacking, but despite this they are able to be entertaining guitar players. Every guitar player has to develop each of these three things. Fortunately this book is filled with activities and exercises that will help you develop each of these three things in isolation or together.

Developing the Ear

Learning to tune the guitar is one of the most challenging thing for beginners. I once knew a community college teacher who would have everyone line up with their guitars and tune each one for them. Tuning a guitar before you play it is obviously important, but when 25% of your class time is taken up with tuning, it begins to be counter productive. Guitar tuning is something you want to come back to after you are on your way with exercises developing finger dexterity and musical knowledge. Tell your students to *practice* tuning their guitar when they first get hold of it, but don't spend the whole period tuning it if it doesn't sound right. The finger dexterity exercises that are performed after tuning practice do not require a tuned guitar to be effective. Electronic tuners are fine to use but can become a crutch if not used correctly. If you cannot tune by ear you will never develop into a competent guitar player.

Developing the Fingers

I have a theory that 50% of musical ability is genetic and 50% is learned. Beginning students sometimes ask me how long it takes to get to be a good guitar player and I always tell them everyone is different. Then I ask them if anyone in their family sings or plays an instrument. The more family members they have that play an instrument, the greater their chances of having innate musical ability. This nature/nurture ratio is especially apparent when students work on developing their finger dexterity. I have observed two students with identical motivation and practice habits with one taking 5 minutes to learn a chromatic scale with the other one taking 5 weeks. As a teacher you want to be able to make rough estimates of how much of a students abilities are innate and how much have been learned and modify your teaching strategies accordingly.

Developing Musical Intelligence

This is the one area that will take up most of your time and the area to which most of this book is devoted to. Teaching musical intelligence ranges from teaching the almost mystical process of musical improvisation to teaching the rote memorization of notes and chords. Learning to play the guitar is like building a multistory building. The foundation is knowing where all the notes and chords are on a guitar fretboard, which is achieved through rote memorization. The next level is applying this knowledge to playing melodies and songs, then the ability to play melodies and songs with other musicians, then the ability to create your own melodies and songs, then, ultimately, the ability to get other musicians to play your melodies and songs. The ideal guitar player progresses through these stages one after the other.

Sound and Music

All sounds are vibrations that cause changes in air pressure that our ears can detect. Most sound is made up of random and chaotic sequences of frequencies we more commonly call *noise*. However when you have one or a very small number of frequencies you have a musical *tone* or *note*. The guitar creates musical tones or notes by the vibrations of its strings. The frequency of these are measured in vibrations per second or *hertz*. The guitar can produce a range of frequencies from about 80 hertz to over 1000 hertz.

The Octave

The most important concept to learn about frequencies is that of the octave. When two notes are separated by a factor of two, the distance between them is said to be an octave. For example if you double a frequency of an A note at 440 hertz, you will have another A note at 880 hertz, one octave higher. If you took that same 440 hertz A note and cut it in half, you would have another A note at 220 hertz that would be an octave lower. The intro to the old classic rock song *My Sharona* is an example of the octave interval.

The Interval

An interval is simply the distance between two notes. Different cultures and different musical styles have divided up the octave into different sequences of intervals. These sequences of intervals are known as *scales*. The 3 scales we will focus on in this book are the major scale, the minor scale, and the blues scale. These are the most commonly used scales and will be taught with the aid of a piano keyboard. This avoids confusion since a musical note can be played in one and only one place on a piano keyboard while a specific musical note can be played in many places on the guitar. Once a musical concept has been illustrated on a piano keyboard, it will be transferred to a guitar fingerboard.

The Piano Keyboard

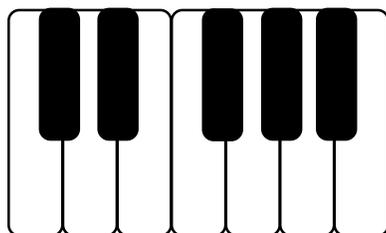
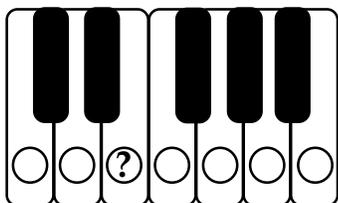


Figure 1. Piano Keys

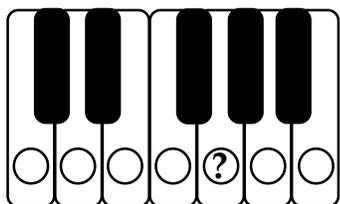
The piano keyboard has divided up an octave into 12 separate notes. Looking at the piano keyboard above, you will notice that seven of them are white and five are black. If you labeled the white notes from left to right they would be C, D, E, F, G, A and B.

Notice that the C is located to the left of the two black notes, the F is located to the left of the three black notes etc, etc, so any white note can be identified by its position relative to the black notes.

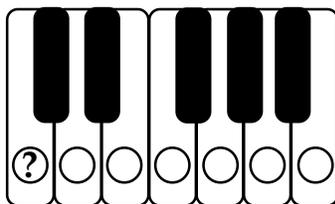
Exercise 1 Label the following notes without looking at the keyboard diagram on page 9.



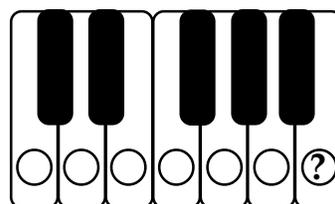
1. E



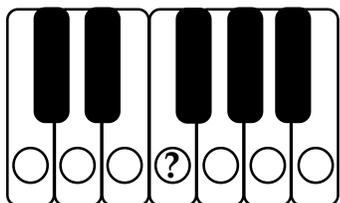
2. G



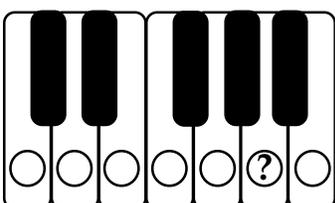
3. C



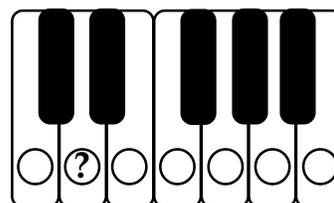
4. B



5. F



6. A



7. D

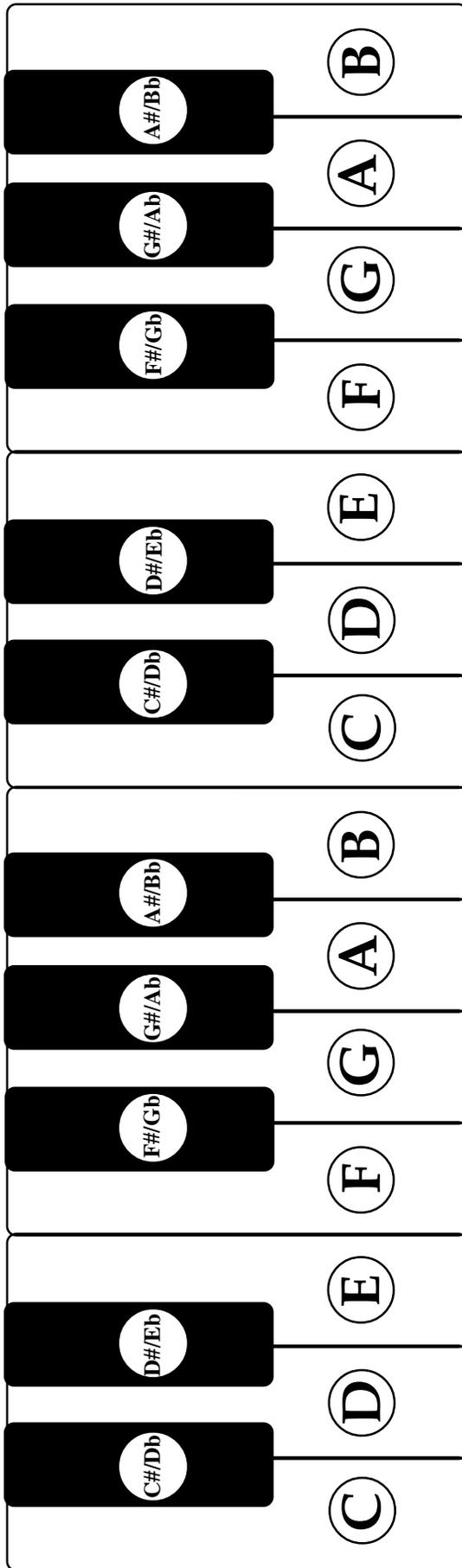


Figure 2.
Piano Keyboard covering two octaves.

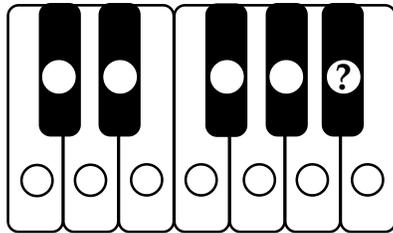
Sharp and Flats

The notes have names too but to understand these names you have to know what sharps and flats are.

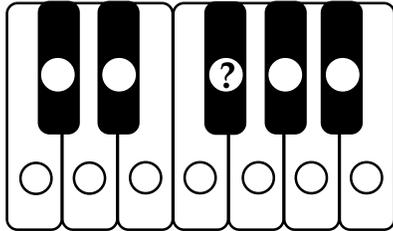
If you start at any white key of the piano and play the note immediately to the right of it, you are playing the sharp of that note. For example, if you play the black note to the right of the C, that note is called C sharp, or C#. Conversely, if you start at any white note and play the note immediately to the left of it, you are playing the flat of that note. For example, if you play the black note to the left of the G, that note is called G flat, or Gb. So sharps look like little tic-tac-toes and flats look like small bs.

Exercise 2 Identify the following sharps;

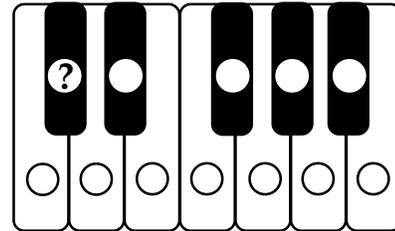
1. A#



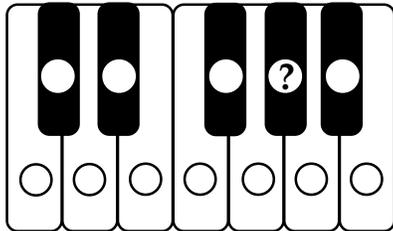
2. F#



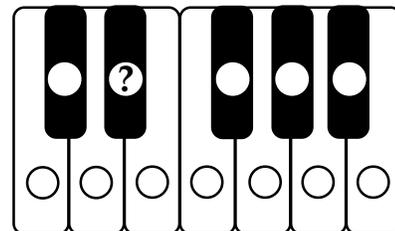
3. C#



4. G#

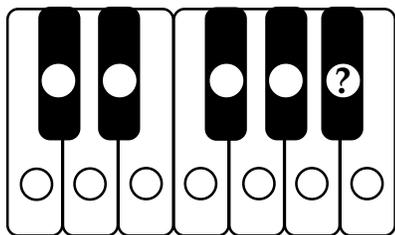


5. D#

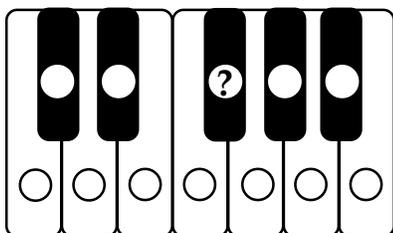


Exercise 3 Identify the following flats

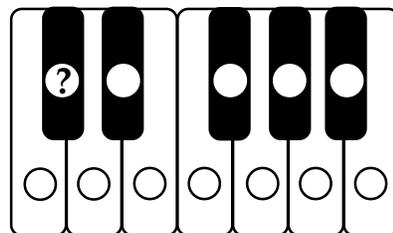
1. Bb



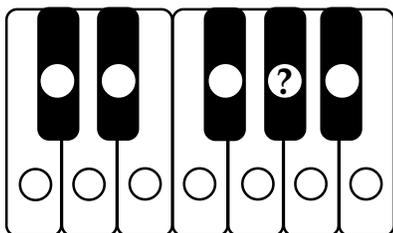
2. Gb



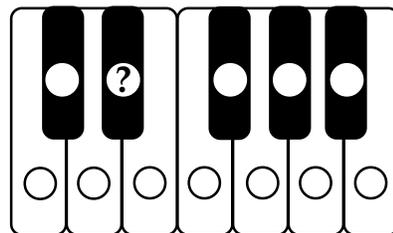
3. Db



4. Ab



5. Eb



By now you may have noticed one confusing thing. Each black note has two names! The C# is also Db, the D# is also Eb etc, etc. To know whether each note is called a sharp or a flat you must understand the concept of a musical *key*, and to understand musical keys, we have to go back to music *scales*.

Music Scales

As mentioned earlier, a musical octave is divided into 7 white notes and 5 black notes, giving a total of 12 separate notes. But it turns out that most musical songs don't use all 12 notes. If you want to know what a song that *does* use all 12 notes sound like, you can listen to a classical composer named Arnold Schoenberg who wrote a kind of music called *Twelve-tone* music. The music does sound, let us say, different and not the kind of music most people would like to play. So a scale is a way to cut down on the number of different notes played so the music has a less chaotic and directionless sound.

Basically a scale is a sequence of intervals. The major scale, the minor scale and the blues scale are all groups of intervals that divide up the octave in different ways. We are going to describe these ways in terms of *half-steps*. There are also things called whole-steps but we are going to leave them out of the discussion for the sake of simplicity. You can think of the piano keyboard as steps on a flight of stairs and scales as ways to choose what steps or notes to play and which ones to leave out. To count half-steps we would start at a given note and each note to the right, either white or black, is a half-step.

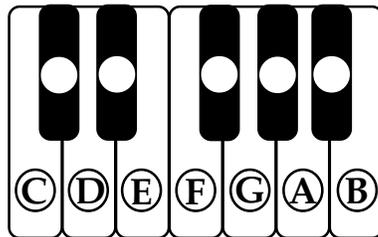
The Major Scale

To construct a major scale, pick a note to start at and count the following numbers of half-steps to get the notes you would play in that major scale.

Major Scale- 2+2+1+2+2+2

Let's try that starting with the C note and see what notes we come up with. Two half steps from C gives us D. Two half steps from D gives us E. One half-step from E gives us F. Two half-steps from F gives us G. Two half-steps from G gives us A. Two half-steps from A gives us B.

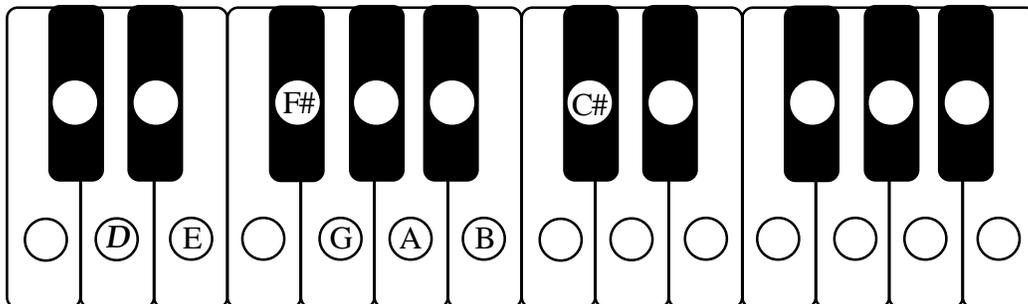
Figure 3.
Major scale in
the key of C.



Since you started with the C note, we have just identified the notes in the *key* of C Major. If you play the notes of any major scale, it has a certain sound that will enable you to distinguish it from other scales. You also noticed that the key of C has no black keys, that is, no sharps or flats. However, all other keys have one or more sharps or flats.

Exercise 4. Identify the notes in the key of D. Cross out the intervals as you write each letter. After you have done these exercises, get your teacher or another student to play the scale that you have written. You want to start associating the sound of the scale with what you have on paper.

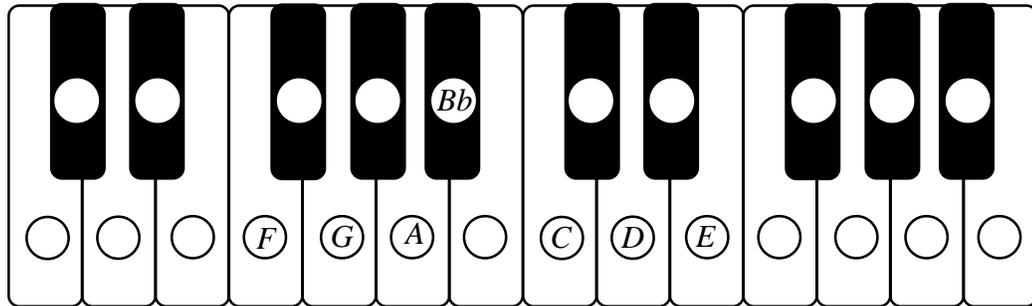
Major Scale- 2+2+1+2+2+2



You may have wondered whether the 3rd note of the key of D was an F# or Gb. Well if it was a Gb, then the letter G would appear twice in the key of D, which is a no-no, so it is an F#

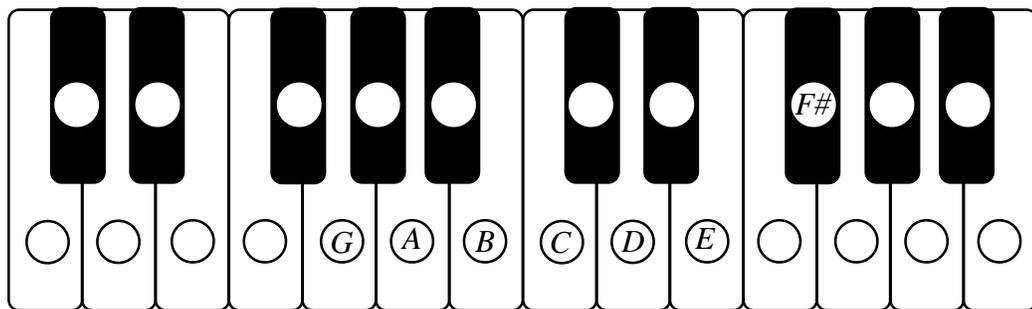
Exercise 5. Identify the notes of the key of F Major. Cross out the intervals as you write each letter.

Major Scale- 2+2+1+2+2+2



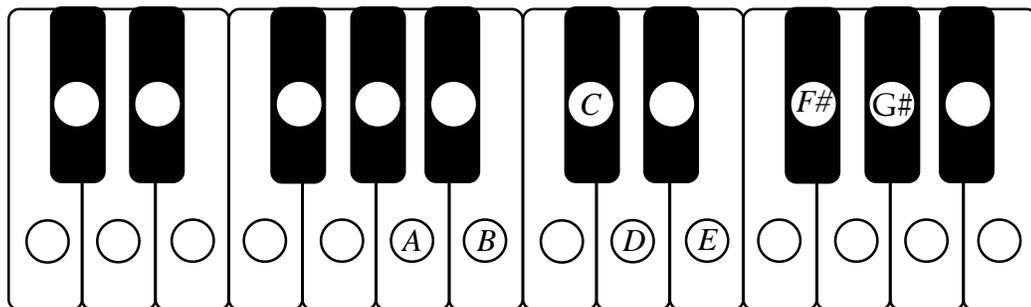
Exercise 6. Identify the notes of the key of G Major. Cross out the intervals as you write each letter.

Major Scale- 2+2+1+2+2+2



Exercise 7. Identify the notes of the key of A Major. Cross out the intervals as you write each letter.

Major Scale- 2+2+1+2+2+2



A Musical Focus

Musical keys provide a type of musical focus. A major scale picks 7 notes out of the 12 available to create music because songs made with the 7 notes of the major scale sound more structured and pleasing to the ear. Major scales are used in pop, folk and country music. Understanding of musical scales and keys will oftentimes enable a guitarist to perform with other musicians with little or no rehearsal.

The Minor Scale

The minor scale is often used when you want to write a sad song about pain or loss or grief. To make a minor scale, you would pick a note to start at and count the following numbers of half-steps to get the notes you would play in that minor scale.

Minor Scale- 2+1+2+2+1+2

Let's try that starting with the A note and see what notes we come up with. 2 half steps from A gives us B, 1 half step from B gives us C, 2 half-steps from C gives us D, 2 half-steps from D gives us E, 1 half-step from E gives us F, and 2 half-steps from F gives us G (see below)

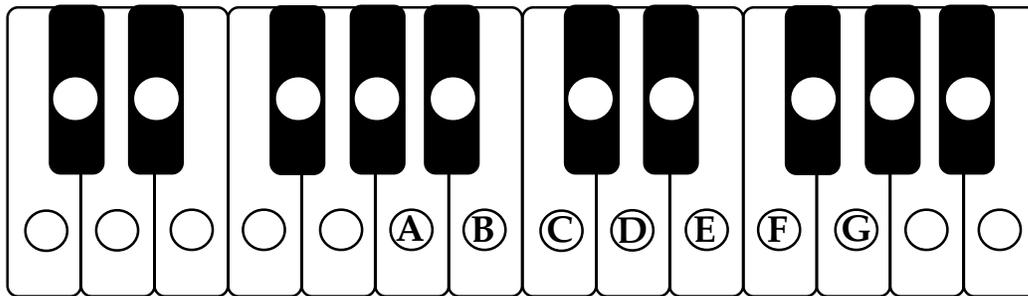


Figure 4. Minor scale in the key of A Minor.

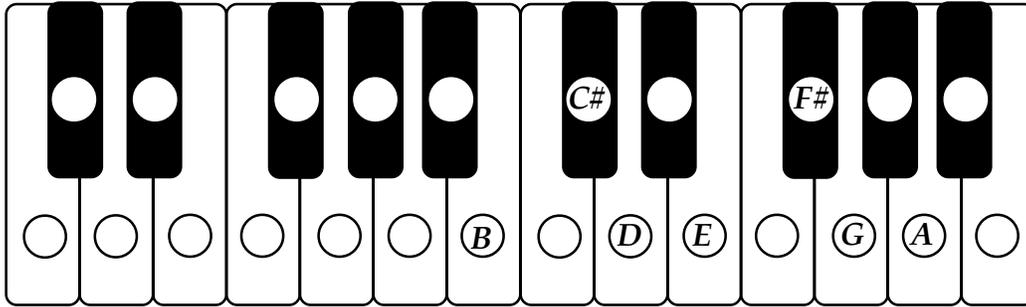
Since you started with the A note, we have just identified the notes in the *key* of A minor. If you play the notes of any minor scale, it has a certain sound that will enable you to distinguish it from other scales. You should be able to tell a minor scale from a major scale just by the sound. Also notice that like the key of C major, the key of A minor has no black keys, that is no sharps or flats. Therefore, the key of A minor is the *relative minor* to the key of C major. Every major key has a relative minor key and vice versa. They are related because they have the same number of sharps or flats. This is important because many popular songs start out in a major key, then switch to the relative minor to add variety to it. Songs that do this include the Eagles' *Desperado*, Billie Holiday's *God Bless the Child*, Arlo Guthrie's *City of New Orleans*, Carole King's *So Far Away* and many others. The relative minor key to any major key can be found by counting 3 half-steps *down* from the note of the major key. For example, if you started from the C note and counted 3 half-steps down from it, you would end up on the A note. Therefore, the A minor scale is the relative minor to the C major scale.

Exercise 8. Using the above method, identify the relative majors and minors to the following keys.

1. The ____ minor scale is the relative minor to the D major scale.
2. The ____ minor scale is the relative minor to the G major scale.
3. The ____ major scale is the relative major to the D minor scale.
4. The ____ major scale is the relative major to the A minor scale.

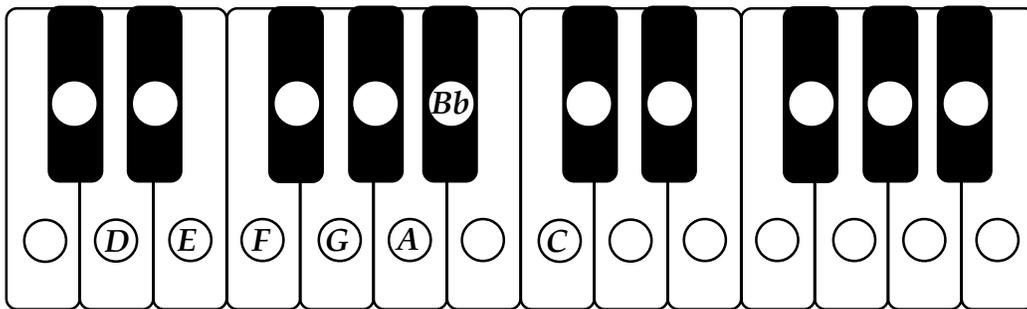
Exercise 9. Identify the notes of the key of B minor. Cross out the intervals as you write each letter.

Minor Scale- 2+1+2+2+1+2



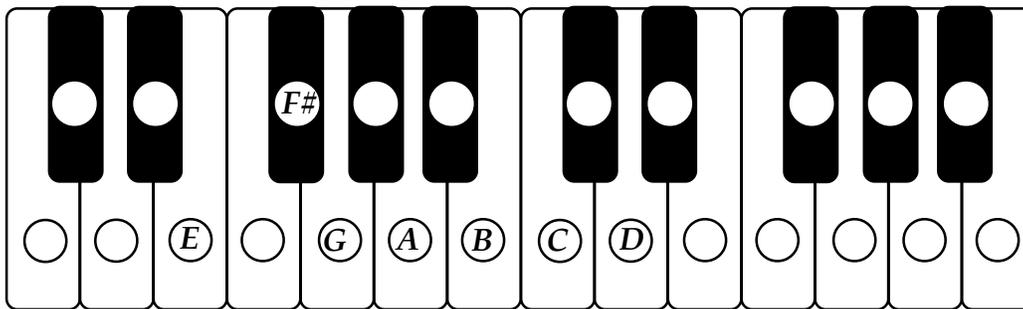
Exercise 10. Identify the notes of the key of D minor. Cross out the intervals as you write each letter.

Minor Scale- 2+1+2+2+1+2



Exercise 11. Identify the notes of the key of E Minor. Cross out the intervals as you write each letter.

Minor Scale- 2+1+2+2+1+2



Notice that the 3 minor keys you have just written out in Exercises 9 to 11 are the relative minor keys to the major keys you wrote out in Exercises 4 to 6. Relative major and minor keys contain the same notes, but they are organized in a different way to give them their unique sound.

After you have done these exercises, get your teacher or another student to play the scales that you have written. Again, you want to start to be able to recognize the sound of major and minor scales, as well as being able to write them out on paper. You want to start getting your ear and your brain working together to get an integrated understanding of how music works.

The Blues Scale

Africans who were kidnapped from Africa and brought to America to work as slaves brought their music with them. Over time, some of that music evolved into what is known as the *blues*. After almost 300 years of development, the blues were used by musicians like Chuck Berry and Elvis Presley to create a new musical style called rock and roll. Rock and roll took America by storm in the early 1950s. But in reality it was just the blues played at a faster tempo with lyrics about what American teenagers cared about then which was romance and cars. Rock and roll has evolved into several subgenres since then such as hard rock, soft rock, grunge, punk, alternative, metal and others. But most of them still rely on what are known as blues *progressions*, which we will talk about later, and blues *scales*, which we will talk about now.

Like the major and minor scale, to construct a blues scale, you would pick a letter to start at and count the following numbers of half-steps to get the notes you would play in that blues scale.

Blues Scale- 3+2+1+1+3

Let's try that starting with the A note and see what notes we come up with. Three half steps from A gives us C, 2 half steps from C gives us D, 1 half-step from C gives us D, 1 half-step from D gives us D#, 1 half-step from D# gives us E, and 3 half-steps from E gives us G (see below).

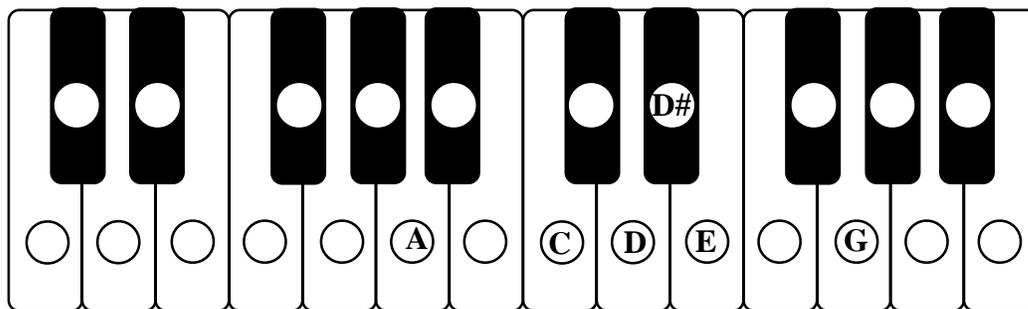
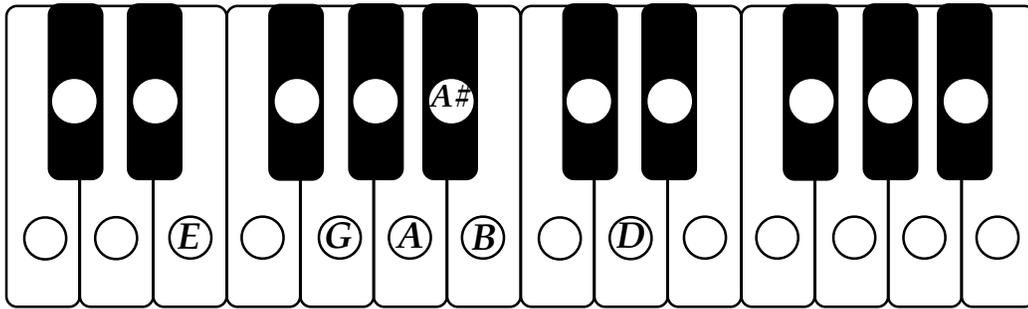


Figure 5. Notes of the A blues scale.

With blues scales you can't avoid having the same letter in a key. For example, D and D# in the blues key of A, so the sharp is used in naming notes and not flats in most cases.

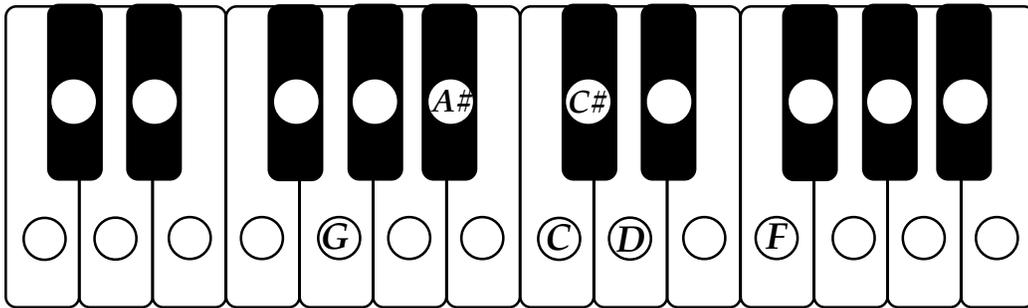
Exercise 12. Identify the notes of the E Blues Scale. Cross out the intervals as you write each letter.

Blues Scale- 3+2+1+1+3



Exercise 13. Identify the notes of the G Blues Scale. Cross out the intervals as you write each letter.

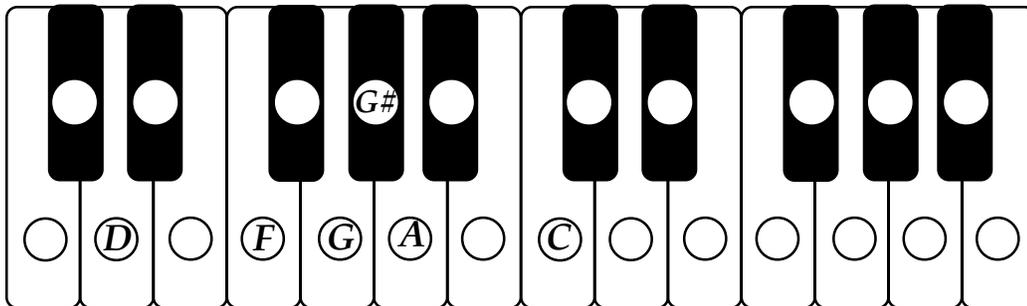
Blues Scale- 3+2+1+1+3



F

Exercise 14. Identify the notes of the key of the D Blues Scale. Cross out the intervals as you write each letter.

Blues Scale- 3+2+1+1+3



Again it is important to play or have your teacher or classmate play these blues after you've written them down and understand how they are made. You will learn to play these scales on the guitar very soon and it will be much easier to play if you understand where they're coming from.

Learning to play the blues has a special advantage to guitarists since it can help to break the ice when playing with other musicians for the first time. What invariably happens when you go to play with other musicians for the first time is that *they* don't know *your* stuff and *you* don't know *their* stuff but *everybody* knows the blues and you can have hours of fun playing the blues with people you've never played music with before.

Extra Credit Exercise 15. Listen to the Dick Dale song "Miserlou." Write out the half-step sequence to the scale used.

$$\underline{1} + \underline{3} + \underline{1} + \underline{2} + \underline{1} + \underline{3}$$

Now that you understand where the notes of a major scale come from you can use that information to make music on the guitar.

The Major Scale Chart

The Major Scale Chart lists all the notes in all the major scales on one page. Each horizontal row lists the notes of a particular key. The first letter of the row indicates what key that row is. For example, the first letter in the first row is A, so the notes in that row are the notes in the key of A. Notice that each vertical column begins with a number. These numbers are important because they show intervals and relationships between the different notes of the key. It is a powerful tool for understanding the mechanics of music. It will help you to figure out what it is about your favorite music that *makes* it your favorite music. It will make it easier for you to create your own music, and it will enable you to change the key that a song is written in, a process called *transposition*, which is something every guitarist will have to do at some point or another.

Although there are Minor Scale Charts and Blues Scale Charts, we will stick to using the Major Scale Chart. Information about the minor and blues scales can be found fairly easily on a Major Scale Chart and it's just much simpler to have all of your scale information on one page. The first thing the Major Scale Chart will help us understand are *chords*

Chords

The guitar is unlike most musical instruments in that you can play more than one note at a time on it. So the question arises as to what groups of notes can I play at the same time? The answer is that over the years, musicians have found groups of notes that sound good when they're played together on a piano or guitar. These groups of notes are called chords.

Like keys, scales and notes, chords are identified by a letter. At this point confusion may be setting in because you might hear the letter C and not know whether I'm talking about a C scale, the key of C, the note C or the C chord. This kind of confusion is common so make sure you are clear about what the letter is referring to before continuing. The 3 types of chords we will learn about now are major chords, minor chords and seventh chords.

Major Chords

Any major chord in any key is made up of three numbers found at the top of the Major Scale Chart-the 1, the 3, and the 5. For example, the notes of the A major chord are the 1-A, the 3-C#, and the 5-E.

Figure 6.

MAJOR SCALE CHART

1	2	3	4	5	6	7	8	9	10	11	12	13
A	B	C#	D	E	F#	G#	A	B	C#	D	E	F#
Ab	Bb	C	Db	Eb	F	G	Ab	Bb	C	Db	Eb	
B	C#	D#	E	F#	G#	A#	B	C#	D#	E	F#	G#
Bb	C	D	Eb	F	G	A	Bb	C	D	Eb	F	G
C	D	E	F	G	A	B	C	D	E	F	G	A
C#	D#	E#	F#	G#	A#	B#	C#	D#	E#	F#	G#	A#
D	E	F#	G	A	B	C#	D	E	F#	G	A	B
Db	Eb	F	Gb	Ab	Bb	C	Db	Eb	F	Gb	Ab	Bb
E	F#	G#	A	B	C#	D#	E	F#	G#	A	B	C#
Eb	F	G	Ab	Bb	C	D	Eb	F	G	Ab	Bb	C
F	G	A	Bb	C	D	E	F	G	A	Bb	C	D
F#	G#	A#	B	C#	D#	E#	F#	G#	A#	B	C#	D#
G	A	B	C	D	E	F#	G	A	B	C	D	E
Gb	Ab	Bb	Cb	Db	Eb	F	Gb	Ab	Bb	Cb	Db	Eb

So playing the notes A, C# and E together would make an A major chord. Looking further down the Major Scale Chart, the notes to the C major chord and the 1-C, the 3-E, and the 5-G. So playing the notes C, E and G would make a C chord.

Why do these notes go together? To answer this, we have to go back to page 9 and review frequencies and hertz. Using a C major chord as an example, if you were to analyze the frequencies of the 3 notes of the C chords, C, E and G, you will find that they are vibrating back and forth at a ratio of 4, 5 and 6. In other words for every 4 times the C note vibrates back and forth, the E note vibrates back and forth 5 times and the G note vibrates back and forth 6 times. The human ear is an amazing mathematical decoder of sounds and can hear this simple ratio and automatically identify what it is. If you played notes arbitrarily on either a piano or guitar you may have ratios of, say 465 to 789 to 931. The human ear would find these high ratios to be very unpleasant.

Exercise 16. Use the Major Scale Chart to find the answers to the following questions.

1. The 3 notes of the A major chord are 1. A 3. C# 5. E
2. The 3 notes of the Bb major chord are 1. Bb 3. D 5. F
3. The 3 notes of the D major chord are 1. D 3. F# 5. A
4. The 3 notes of the G major chord are 1. G 3. B 5. D

Minor Chords

Minor chords are the same as major chords excepts for one difference, the 3rd is flatted, meaning that you first find the 3 note on the Major Scale Chart and go down 1 half-step on the piano keyboard to find the note that is the flatted third. So using the example of the A major chord, the 3 is C#, so to find the 3 of an A minor chord you would simply go down one half-step from C#, which would be a C. Therefore the 3 notes of the A minor chord are A, C and E.

Exercise 17. Use the Major Scale Chart to find the answers to the following questions.

1. The 3 notes of the D minor chord are 1. D b3. F 5. A
2. The 3 notes of the E minor chord are 1. E b3. G 5. B
3. The 3 notes of the B minor chord are 1. B b3. D 5. F#
4. The 3 notes of the G minor chord are 1. G b3. Bb 5. D

Again, minor scales and chords have a sad, melancholic quality and are used to convey those emotions in music.

Seventh Chords

While minor and major chords are made up of 3 notes, the 1, 3, and the 5-seventh chords add one more note, the seventh. However, like the 3rd in a minor chord, the seventh in a seventh chord is flatted. So looking at the A scale on the Major Scale Chart, the A seventh chord is made up of the 1-the A note, the 3-the C# note, the 5-the E note, and the flatted seventh. This would be a G note, since the original seventh is G sharp and when you flat a sharp it becomes the original note. (G# becomes a regular G note). So the four notes of an A seventh chord are A, C#, E, and G.

Exercise 18. Use the Major Scale Chart to find the answers to the following questions.

1. The 4 notes of the G seventh chord are 1. G 3. B 5. D b7. F
2. The 3 notes of the C seventh chord are 1. C 3. E 5. G b7. Bb
3. The 3 notes of the D seventh chord are 1. D 3. F# 5. A b7. C
4. The 3 notes of the E seventh chord are 1. E 3. G# 5. B b7. D

These numbers are important because they show intervals and relationships between the different notes of the key. Understanding these intervals and relationships is useful for analyzing and playing your favorite band's music and for creating your own music.

Major Scale Chart Exercise 19.

Find the numbers of the notes of the following scales

- 1.
2. What if the fifth note in the key of F? C
3. What is the third note in the key of C#? E#
4. What is the seventh note in the key of Ab? G
5. What is the eighth note in the key of G? G
6. What is the fourth note in the key of A? D
What is the eleventh note in the key of Gb? Cb

Minor and Major Seventh Chords

You have learned that there are major chords and minor chords and seventh chords but we mentioned earlier that there are also *minor seventh* and *major seventh* chords. To understand these we must first review major, minor and seventh chords.

Major Chords 1 3 5
Minor Chords 1 b3 5
Seventh Chords 1 3 5 b7

Minor seventh chords differ from seventh chords only in that the 3rd is flatted. In major seventh chords, the seventh is *not* flatted. So to summarize all five forms;

Major Chords 1 3 5
Minor Chords 1 b3 5
Seventh Chords 1 3 5 b7
Minor Seventh Chord 1 b3 5 b7
Major Seventh Chord 1 3 5 7

Exercise 20.

1. The notes of the E Maj7 chord are 1. E 3. G# 5. B 7. D#
2. The notes of the Dm7 chord are 1. D b3. F 5. A b7. C
3. The notes of the C7 chord are 1. C 3. E 5. G b7. Bb
4. The notes of the Bm chord are 1. B b3. D 5. F#
5. The notes of the G chord are 1. G 3. B 5. D

The Basic Chords

On page 23, I have included the 20 chords that are used most often in guitar music. The single letters by themselves are major chords, so the A, C, D, G, E, F and B are the major chords. The letter followed by the number 7 are seventh chords, so the A7 is the A Seventh chord, the B7 is the B Seventh chord, etc., etc. The letter followed by a small “m” signifies a minor chord, so the Am in an A Minor, the Dm is a D Minor, and the Em is an E Minor. The chords on the bottom row are minor seventh chords and major seventh chords. We will talk about those later in the book.

Exercise 21. Basic Chords Review

1. How many major chords are there on the Basic Chords Chart on page 23? 7
2. How many minor chords are there on the Basic Chords Chart on page 23? 3
3. How many seventh chords are there on the Basic Chords Chart on page 23? 6

How To Read the Basic Chords Chart

The rectangular grids you see on page 23 are called *chord diagrams* and they tell guitarists where to put their fingers when they want to play certain chords. All that is required to play most guitar music is the words to a song, or its *lyrics*, and the chords that are played on a guitar, along with the lyrics. Most guitar music is just the lyrics to a song and the chord letters written above them. Once a guitarist has memorized these basic chords, he or she can play literally thousands of songs. So let’s talk about how to decipher these chord diagrams.

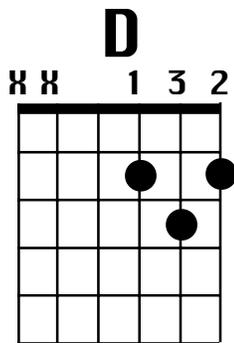


Figure 7. D Chord Diagram

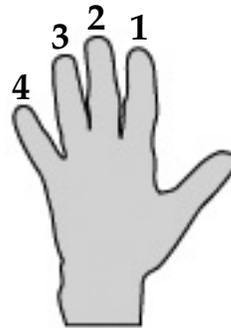


Figure 8. The Left Hand

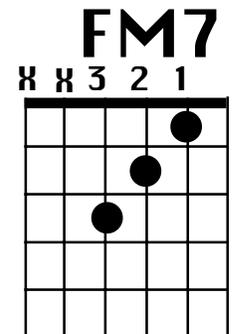
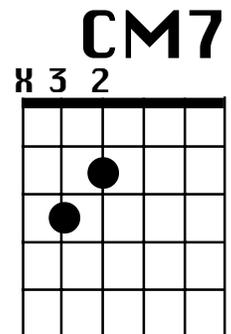
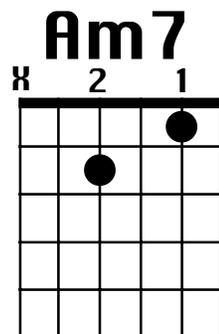
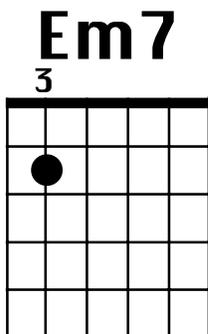
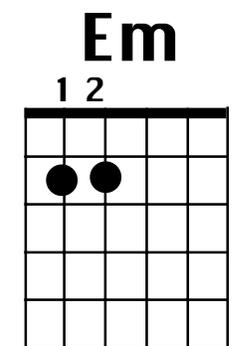
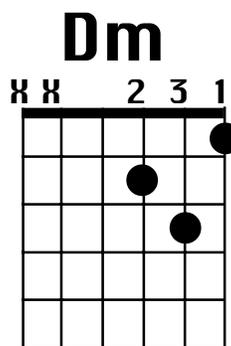
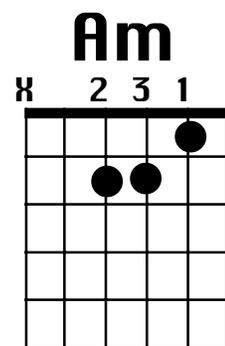
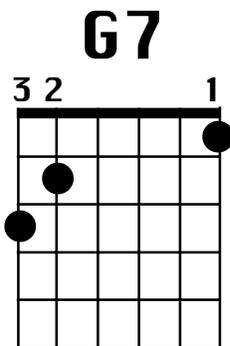
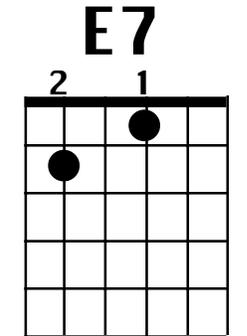
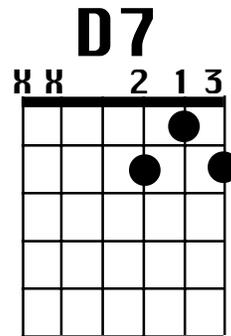
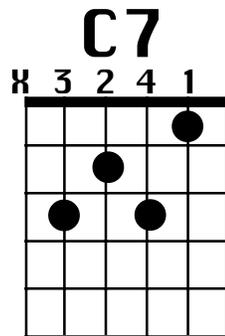
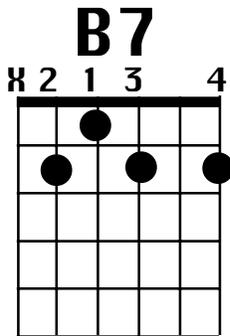
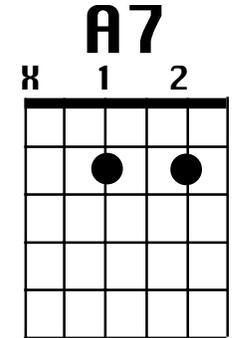
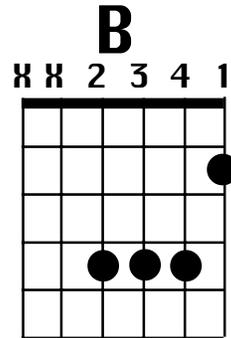
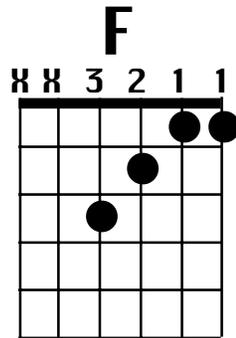
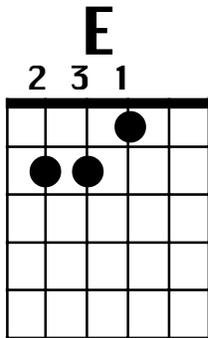
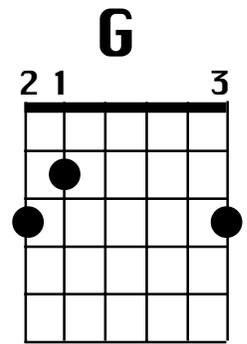
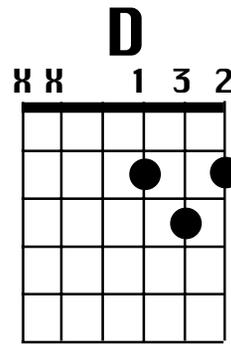
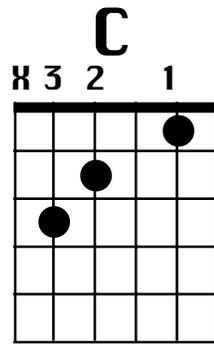
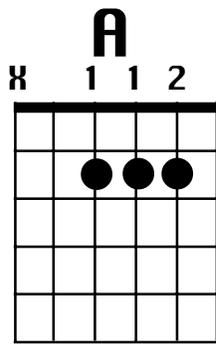
The vertical lines are the strings of the guitar. The horizontal lines are the frets. The x’s indicate the strings you don’t play when playing the chord. The black dots show where you put your fingers to play that chord. The numbers above the chord diagram show which fingers are used to press down on that string. One means the index finger, 2 the middle finger, 3, the ring finger, and 4, the pinky.

Exercise 22. Chord Practice

Practice fingering each of the chords on page 23. When you think you have your fingers in the right place, strum the strings with your right hand to see how they sound. If you’re having trouble fingering the chords, start with the chords at the bottom of the page and work your way up. This is where the fingers need to learn what your brain already knows.

Figure 9.

THE BASIC CHORDS



The Fingerboard

Now that you know all about scales and notes, it's time to learn where they are on the guitar. This is called rote learning--much like learning multiplication tables or the state capitols or the U.S. Presidents, in which you just memorize information. It's not a lot of fun but unfortunately there's no way around it.

Study page 27- Fingerboard Note Chart You will notice that there are 6 fingerboard diagrams. These are similar to the Chord Diagrams but the Fingerboard Diagrams do not diagram chords, but notes.. You will notice that each fingerboard has circles on the frets and that some circles have letters and some are empty. The letters are notes that correspond to the white keys of the piano, the blank circles are the sharp and flat notes. They are left blank to keep the diagrams simple and uncluttered. You will memorize the letters first, and the sharps and flats later.

Five or the six fingerboards are labeled Position, First through Fifth. This means that these are five positions to play the C major scale. You will remember that the notes of the C Major scale have no sharps or flats so it is the simplest scale to learn. You will also notice that each position has overlapping notes with the positions around it. So, because of this overlapping you could cover all of the notes of the fingerboard with only 3 positions, the First, Third and Fifth. You will study one Position per week, starting with the First.

The Notes of the Open Strings

Now is a good time to learn the names of the open strings. Looking at Figure 10, you will notice that they are lettered E, A, D, G, B and E. The fact that both the top and bottom strings are E strings confuses some people. Just remember that the E string on the left is the fat string and the E string on the right is the skinny string. A silly little saying that will help you remember the string letters is *Eddie Ate Dynamite, Good Bye Eddie*.

Figure 10.
Open string
notes.

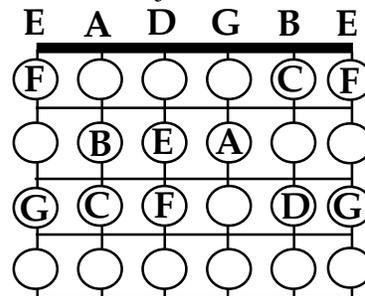
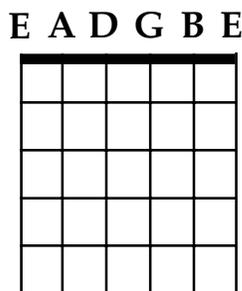


Figure 11 _First position notes.

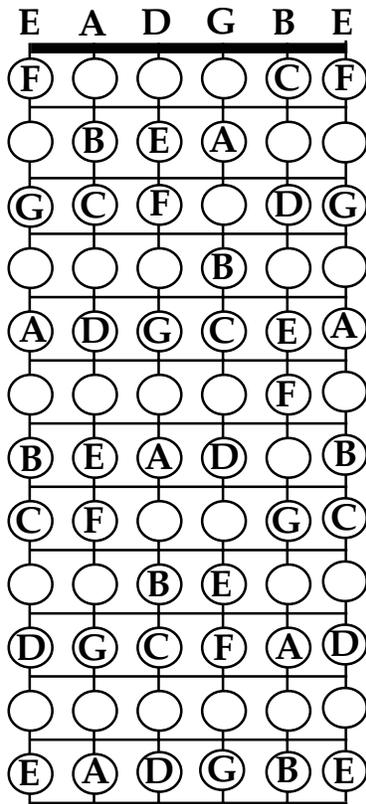
Exercise 23. Play the lettered notes of the First Position from the lowest to highest and then from highest to lowest. Say the letter of the note as you play it.

First Position Notes

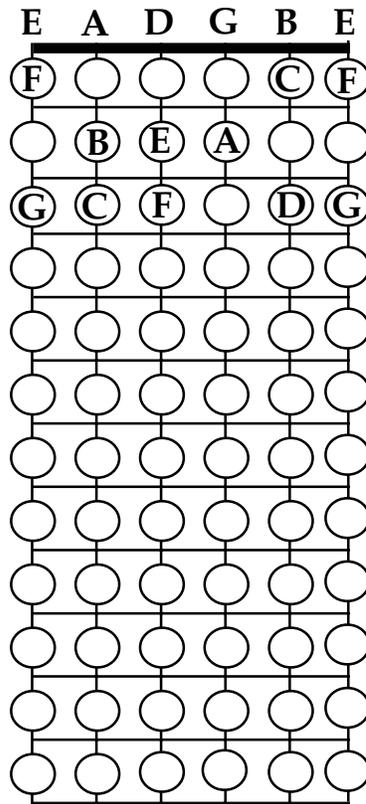
Exercise 24. Turn to page 26. Spell out the indicated words by finding the letters from the First Position Note Chart

Fingerboard Note Chart

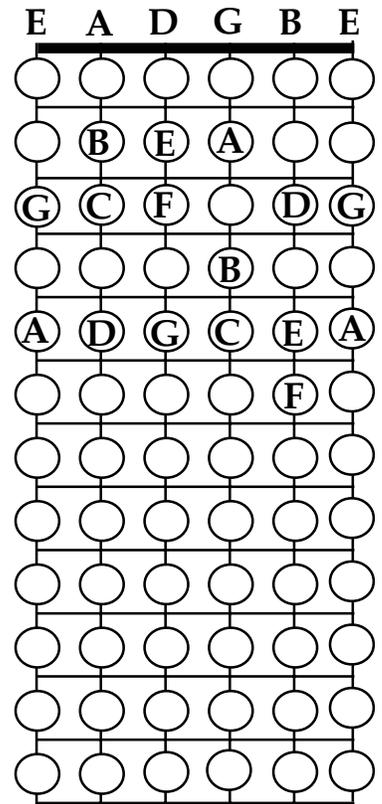
Figure 12



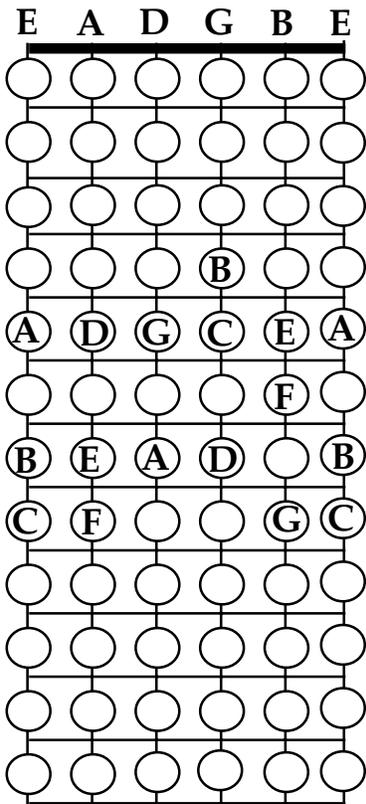
FIRST POSITION



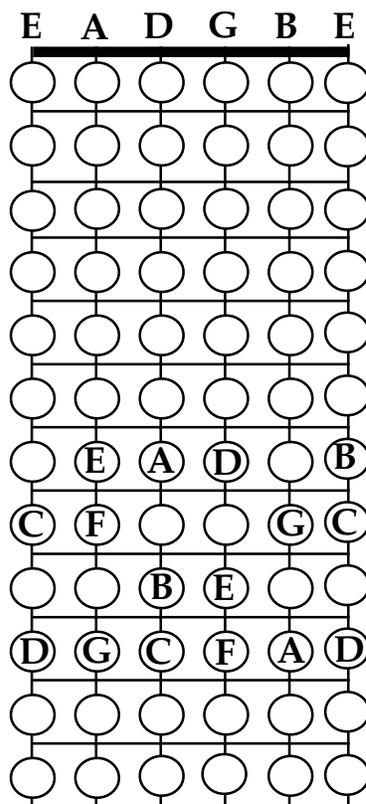
SECOND POSITION



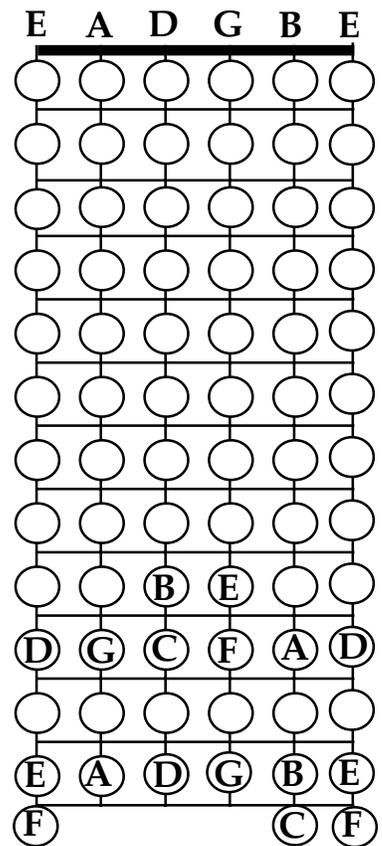
THIRD POSITION



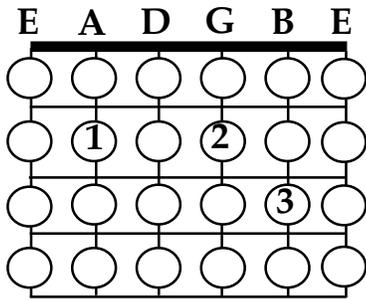
FOURTH POSITION



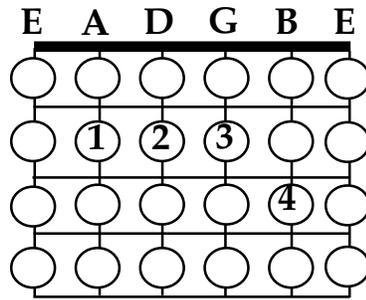
FIFTH POSITION



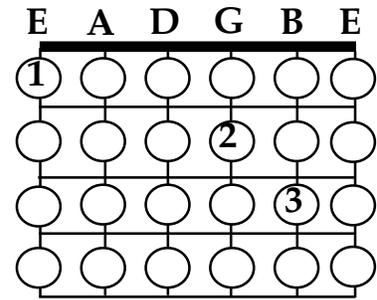
Exercise 25 Using the First Position Note Chart on page 27, write out the word that is spelled out by the notes indicated.



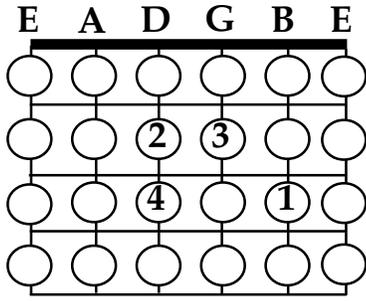
1. B A D



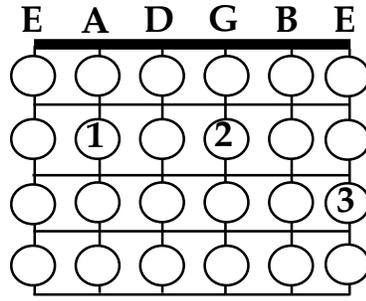
2. B E A D



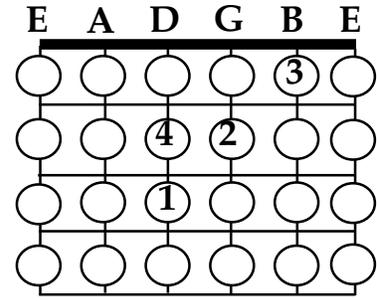
3. F A D



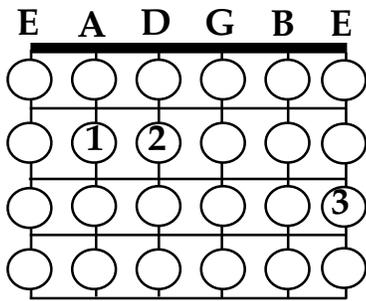
4. D E A D



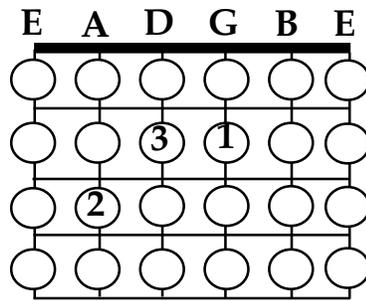
5. B A G



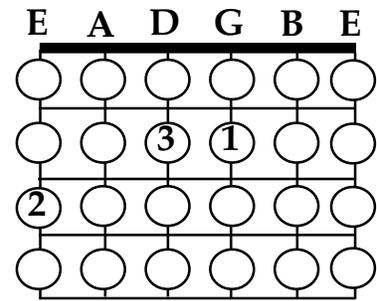
6. F A C E



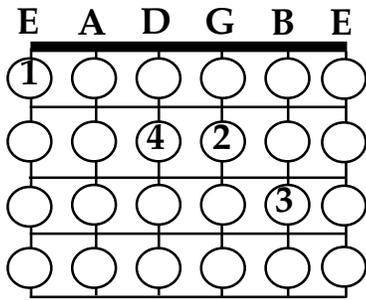
7. B E G



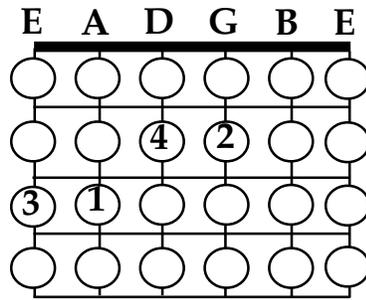
8. A C E



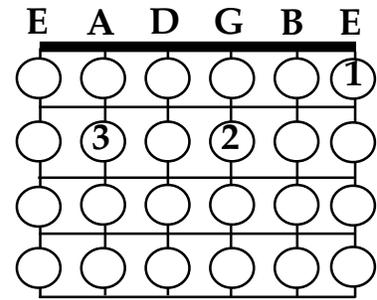
9. A G E



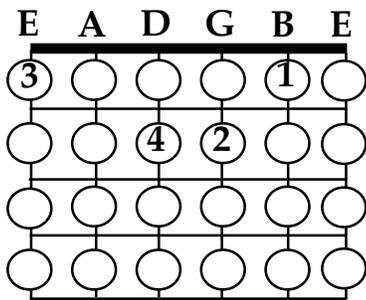
10. F A D E



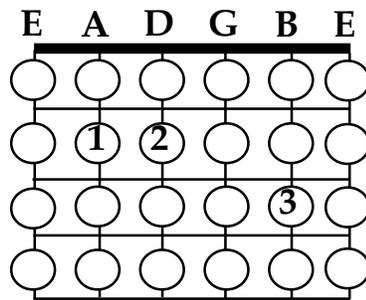
11. C A G E



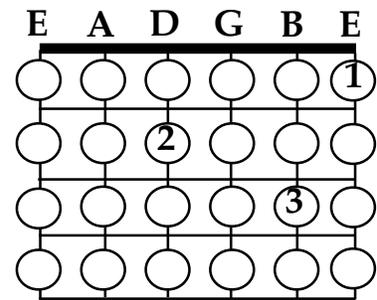
12. F A B



10. C A F E



14. B E D



15. F E D

Anatomy of the Guitar

Now is a good time to study the anatomy of an acoustic guitar, as opposed to electric guitars, which we will study later.

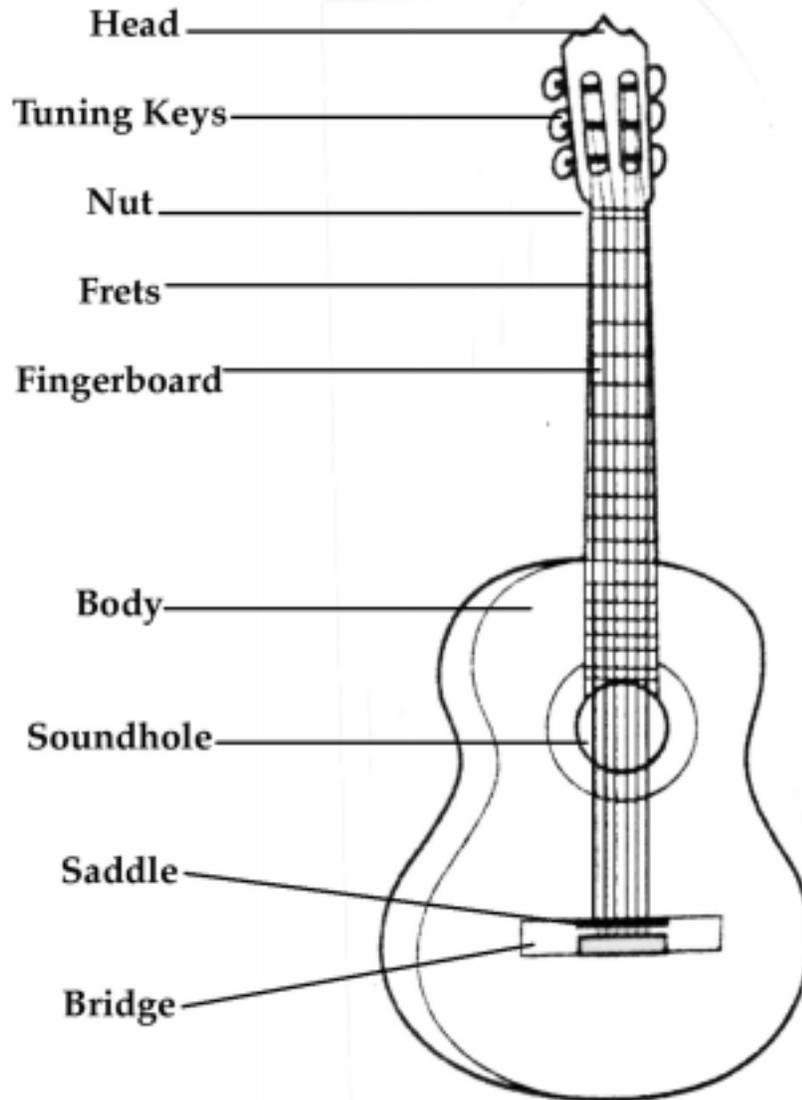


Figure 13

Study Figure 13 carefully. Your teacher will be giving you a quiz on the guitar requiring you to name its various parts.

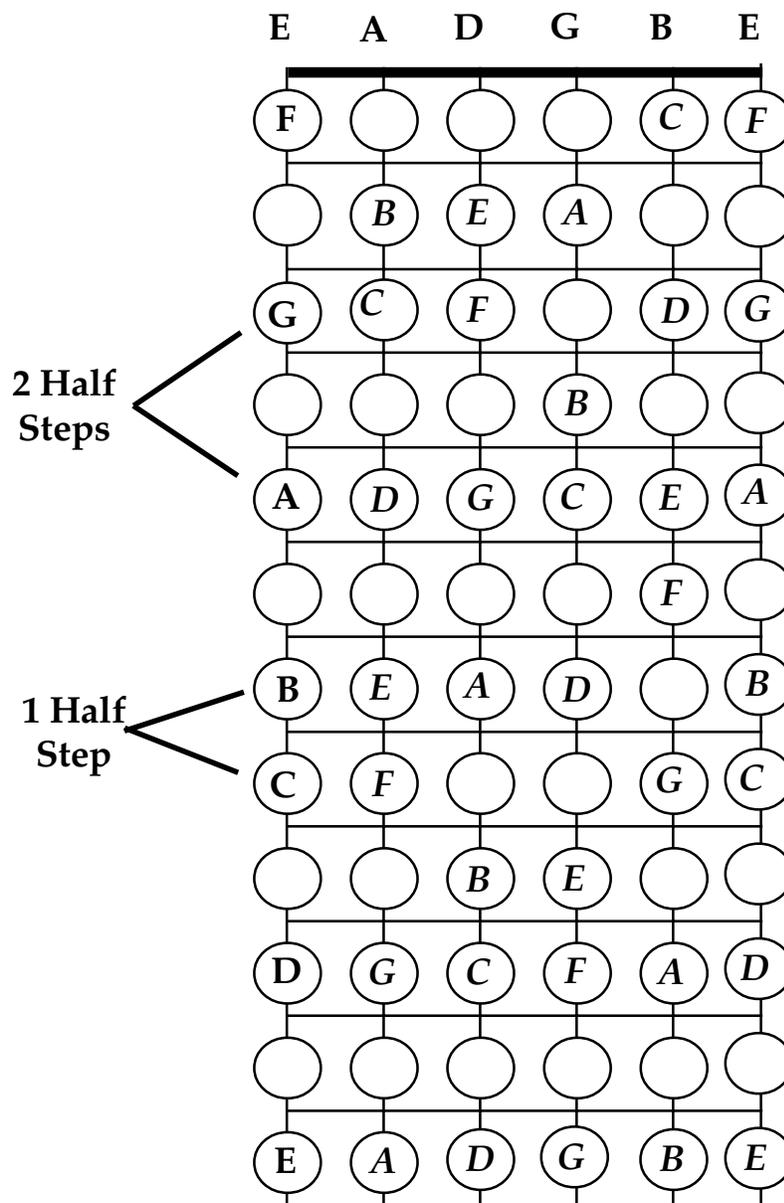
Learning the Rest of the Fingerboard

There is a quick and simple way to learn the notes of the entire fingerboard. But to do it, we must review half steps and the major scale. You will recall from page 12 that there are 2 half-steps between A and B, C and D, D and E, and G and A, *but* there is only 1 half-step between B and C, and E and F. Knowing this, we can take a blank fingerboard and label all of the notes just as easy as saying your ABC's.

We start by labeling the open strings E, A, D, G, B, E from left to right. Then we start labeling the notes down each string leaving a space (a sharp or flat) between all the letters except B and C, and E and F. The first string would look like this. (see Figure 26)

Exercise 26. Finish labeling the fingerboard.

Figure 14



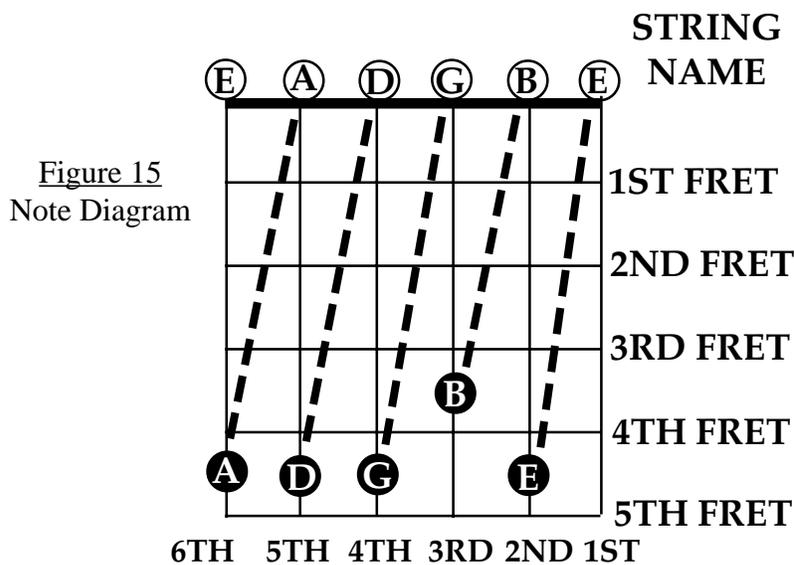
Tuning

Now is a good time to talk about tuning. There are many ways to tune a guitar. The electronic guitar tuners are very fast and convenient and enable one to tune in a noisy environment. However they can become a crutch because if you cannot tune a guitar by ear, you will never be able to become a competent guitar player. If you already use a tuner to tune, tune one string electronically, the low or the high E string, then tune the rest of the strings by ear.

Tuning a Guitar To Itself

If you don't have anything to tune the guitar to, such as an electronic tuner, or piano or pitchpipe, you can tune a guitar to itself. To tune a guitar to itself, you pick one of the six strings, usually the high or low E string, and assume it is in tune, then tune the other strings to the one you are assuming is in tune.

So let's say you assume the 6th string, the E string on the left, is in tune. Then you have to tune the string next to it, the A string. Looking at the fingerboard chart you just made, you will notice that the 5th fret of the E string is also an A, so that if you played the two A's together, they should sound the same. If they don't, you need to adjust the A string until they do. Follow the same procedure with the D string, find the D note on the A string and tune it until they sound the same. When you finish doing this with each string, you will notice a relationship between the strings that is shown in Figure 15.



It is important that the first thing you do when you get your guitar at the beginning of class is to tune your guitar or *practice* tuning your guitar. Tuning a guitar involves training your hands and ears to work very closely together and this skill will only develop over time. There are some people who can almost instantly learn to tune a guitar, but most of us develop the skill slowly.

Guitar Tablature

Guitar tablature is a simple method of writing music for the guitar. It is made up of six lines with each line representing the strings of a guitar starting with the top line representing the high E string, (the skinny one). By placing numbers on the lines you can mark what notes to play. See Figure 16.

Figure 16 Guitar Tablature

1st String	High E			0
2nd String	B		9	0
3rd String	G		10	1
4th String	D	5		2
5th String	A			2
6th String	Low E			0

4th string, 5th fret 2nd string, 9th fret and 3rd string, 10th fret played together open E chord

Exercise 28 Tablature Practice. Fill in the tablature numbers for the following chords. See E as an example

E	A	B7	Am
2 3 1	X 1 1 2	X 2 1 3 4	X 2 3 1
0	0	2	0
0	2	0	1
1	2	2	2
2	2	1	2
2	0	2	0
0			

Exercise 28 (continued)

Guitar tablature has an advantage over standard music notation in that it is simple to learn and use. Its one disadvantage is that it can tell you what note to play, but not how long to play it, like standard music notation can. So if you want to use tablature to learn a song, you need to be familiar with the song. CAUTION. DO NOT confuse the tablature numbers with the numbers of the Major Scale Chart! They are two completely different things.

Rock Lead Techniques

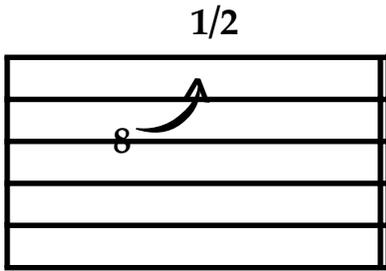
There are two roles for the guitar in most musical styles. One is that of rhythm guitar, in which a guitarist plays chords that will back up and support the singer or other instruments in the group. The other is lead guitar, in which a guitarist makes up or *improvises* melodies or what are called *leads*. The guitar is unique in that a guitarist can do different things to a note once he has played it. These are called rock lead techniques and give the guitar its unique appeal. There are 6 of these and these are shown in Figure 17 on page 32.

Exercise 29 Practice each effect and think of examples of each in famous rock and roll songs.

Exercise 30 Effects Quiz

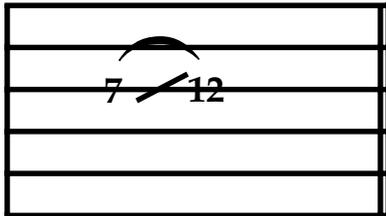
Your teacher will play each of the effects. Mark the letter of each on a scantron or the space below

- | | |
|--------------|---------|
| a. bend | 1. ____ |
| b. slide | 2. ____ |
| c. vibrato | 3. ____ |
| d. hammer-on | 4. ____ |
| e. pull-off | 5. ____ |
| f. trill | 6. ____ |



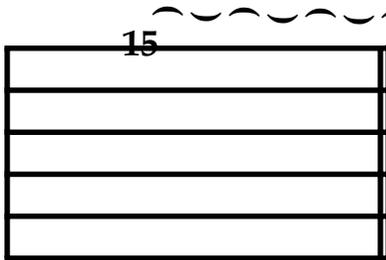
Bend

Strike the note and bend up either 1 or 2 half-steps



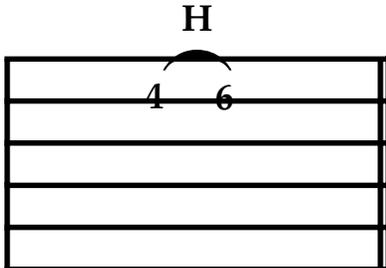
Slide

Strike the first note then move the same left-hand finger up to the second note.



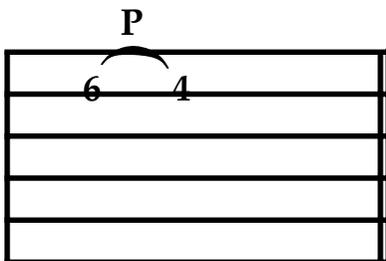
Vibrato

The string is vibrated by rapidly bending and unbending the string.



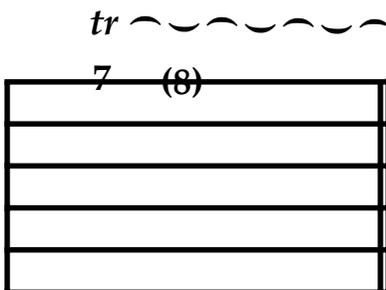
Hammer-On

Strike the lower note, then pretend another finger is a hammer and have it come down on the other note so it sounds without picking it.



Pull-Off

This is the hammer-on in reverse.



Trill

Rapid hammers-on and pull-offs between the two notes indicated.

Learning to Improvise

We will now begin putting all of this together through the use of the style of music called the *blues*. It is useful for beginners because it is simple and easy to learn, very structured and, most important of all, sounds so *cool*.

Chord Charts

Chord charts are useful because they demonstrate which chords to play for a given song. We will learn about the blues and chord charts by using a 12-bar blues format.

Put your hand over your heart. What do you feel? Right, a heartbeat. Your heart is squeezing out a steady beat one beat after another. All music has its own beat, or rhythm. One of the reasons for music's universality is that musical rhythms are an imitation of the beating of our own hearts. These beats are usually divided into either even or odd groupings.

These groupings of beats are called measures or *bars*, and the 12-bar blues has 12 of these bars with each bar containing four beats.

The Roman Numeral System

The Roman numeral system is a way to identify the chords you would play in any key. The Roman numerals refer to the numbers found at the top of the Major Scale Chart on page 21. For example, the 12-bar blues always starts out with the Roman numeral I, which would be the A chord in the key of A, or the E chord in the key of E, or the G chord in the key of G. By using the Roman numerals, you can play the 12-bar blues or any chord progression in any key. Figure 18 on page 34 is a chord chart of a 12-bar blues.

Notice that the 12-bar blues can be played with just three chords, the I chord, the IV chord, and the V chord. And you can perform a complete song with just two guitar players, one playing rhythm, and the other playing lead. The chord chart tells the rhythm guitarist what chords to play and the lead guitarist what to play. Next, you will learn about playing lead using a blues scale.



Figure 18

12-Bar Blues

1. (Bar number)

2.

3.

4.

I	IV	I	I

5.

6.

7.

8.

IV	IV	I	I

9.

10.

11.

12.

V	IV	I	I (V)

Figure 19 12-bar tablature chart

A

D

A

A

D

D

A

A

E

D

A

A

Improvising with the Blues Scale

The blues scale in Figure 20 is the most commonly used one. This particular one is in the key of A, but the pattern can be used in any key. At first play the notes from the lowest to highest and then back down again as shown in Figure 20. Countless numbers of rock and roll songs were made using blues scales.

Figure 20 “A” Blues Scale

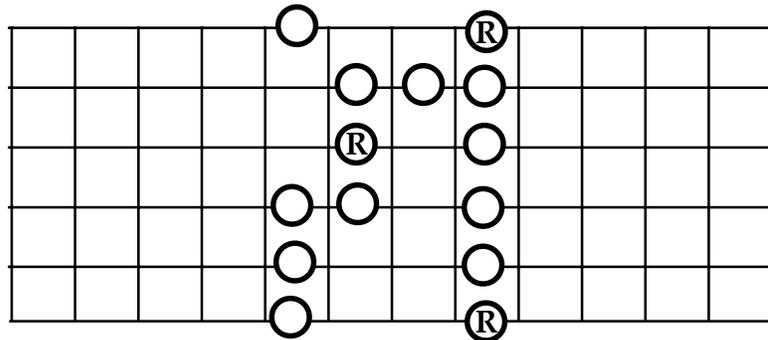
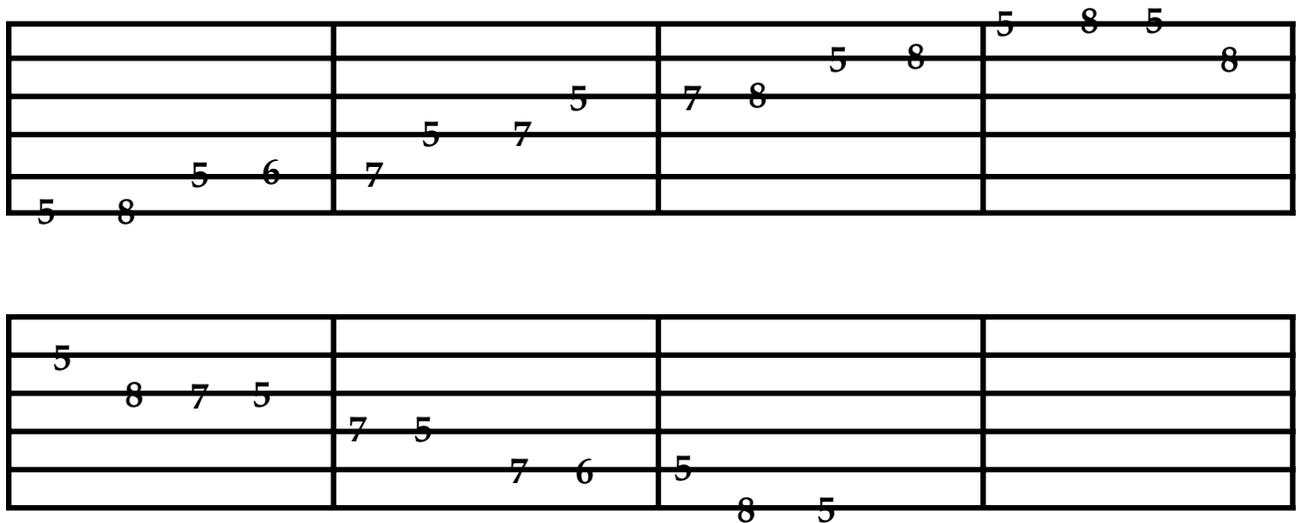


Figure 21 Tab version of Figure 1, played from lowest note to highest and then back down.



The following exercises are meant to help you with developing the ability to improvise and play lead guitar. The most important thing to good improvisation is not being able to play a lot of notes but to be able to *hear* what you're playing with a critical ear. While you're learning to improvise, you should be constantly evaluating what you're playing. If you play something that sounds bad, you have to think to yourself; "I won't play *that* again," and if you play something that sounds good, you have to catalogue and file it away in your musical memory and call it up when you have a chance to play it again.

The thing that holds so many aspiring guitarists back is fear. They are so afraid of sounding bad and playing the wrong notes that they don't play at all, or they sit in their bedrooms and play to themselves their whole lives. Don't let this happen to you. When you achieve the ability to play even simple progressions and leads, you need to team up with other musicians and play in public as much as possible. Play at school during break and at lunch-time and at your friend's house and at parties and at birthdays and at the beach and at the park. Your playing will draw other guitarists to you like a magnet and they will have their own music that that they will share and you can learn from. This is how most guitarists learn how to play, not from a teacher or a book or videos or the Internet but from other musicians.

Exercise 31. Radio Listening Exercise

Make sure your guitar is in tune and turn on the radio and attempt to play along with the songs that you hear. If you don't have any luck with one station, try another. Almost all famous guitarists did this to improve their playing while they were learning. It's hard at first, but over time you will get better and better at it.

Exercise 32. Write down the chords for the 12-bar blues in the key of A in Figure 19 on page 37. The first bar is done for you.

Exercise 33. With someone playing the 12-bar blues chords on page 34, attempt to play lead guitar over the chord changes using the A Blues Scale on page 35.

Exercise 34. If you don't have anyone to play the 12-bar blues, you can record the chord progression on a tape recorder, a camcorder or a computer with recording software on it, then play it back and practice playing lead. This is a great way to get better since you can do it over and over again until it comes out right and you don't have anyone hearing any bad notes you might play.

Exercise 35. Practice writing down some of your favorite solos or riffs in guitar tablature.

Exercise 36. Practice writing down some of your *own* solos or riffs in guitar tablature.

Blues Scales Covering the Entire Fingerboard

Page 37 shows all the blues scales in the key of A. Diagrams 2-6 shows five different places you can play a blues scale, and Figure 1 shows all five positions combined. You will notice that Diagram 4 is the same as the Blues Scale on page 37. Each diagram shows a different way to play the same scale. The R stands for root, or the 1 note in the scale. For example, the root note in the key of A is A. The root note in the key of E is E etc, etc. This is important because if you know all of the positions and if you know where all the notes of the fingerboard are and you know what key the song you're playing is in, this is all the musical knowledge you will need to be able to play lead to any blues or rock and roll songs ever written. This is the learned half of musical ability that was discussed on page 6. The other half is your inbred musical talent that will take this knowledge and use it like a tool to create great sounding music.

Blues Scales

Key of A

Figure 22

Diagram 1

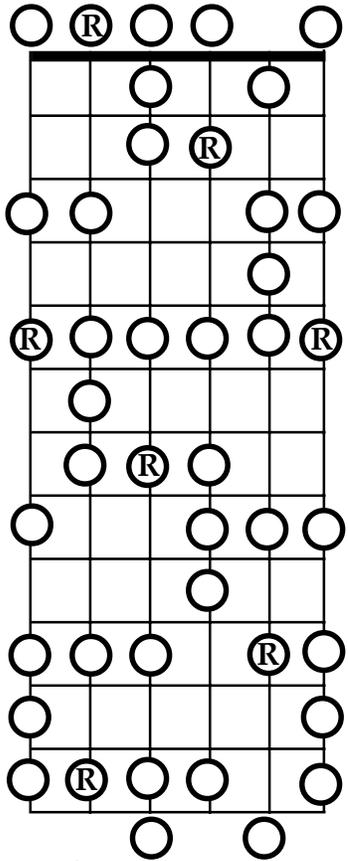


Diagram 2

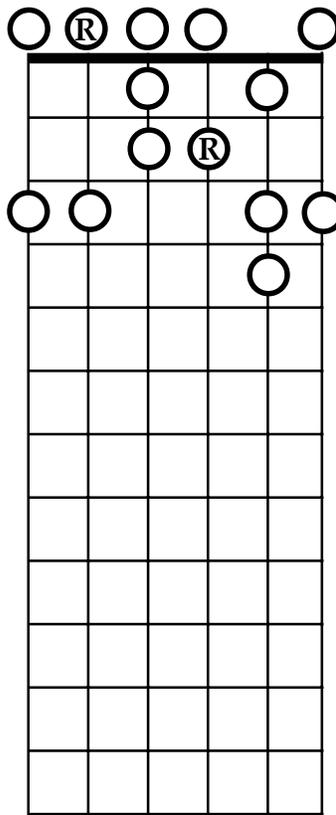


Diagram 3

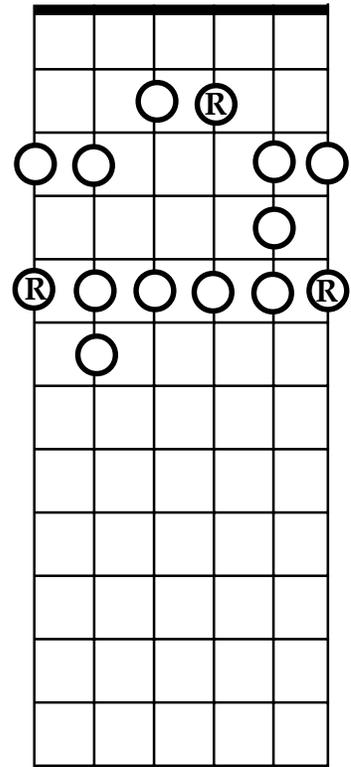


Diagram 4

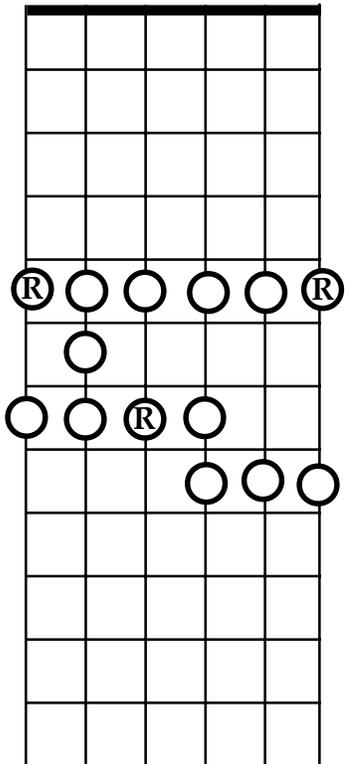


Diagram 5

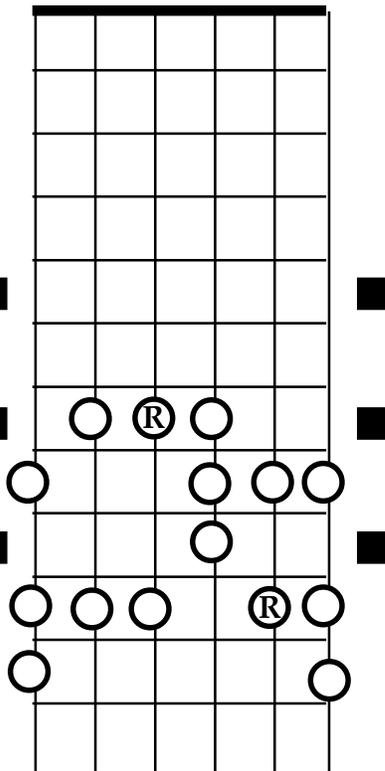
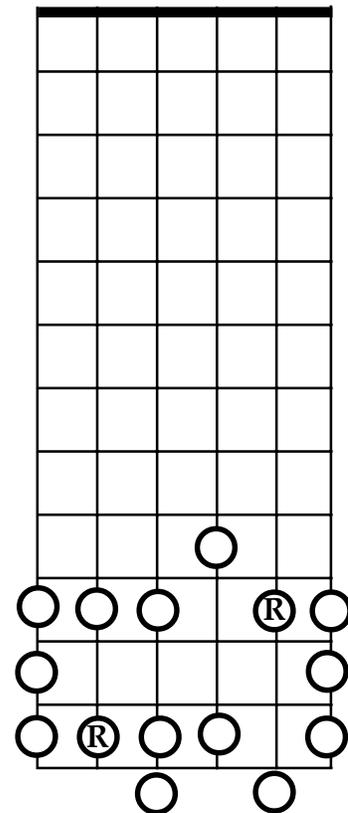


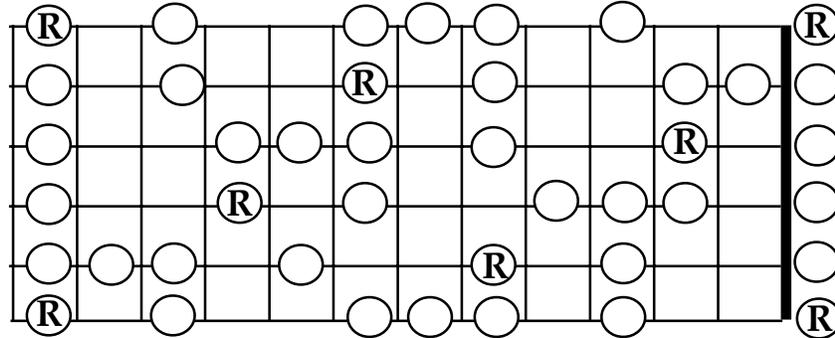
Diagram 6



Exercise 37. Diagrams 2-6 on page 37 each show a different place to play an A Blues Scale. On Diagram 1, mark the notes in Diagrams 2, 4 and 6 Mark the notes in Diagram 2 with a 2, the notes in Diagram 4 with a 4 etc.

Exercise 38. Play each of the 3 blues scales you have just labeled. You should be able to tell just by their sound whether you did it right or not.

Exercise 39 Another common musical key for the blues is E. Fill out a Note Diagram for the key of E like the one for the key of A in Diagram 1 on page 37. Start by labeling all the E notes with R for Root and figure out the other five notes in the blues key of E using the half-step formula on page 16 and labeling those other five notes on the fingerboard with circles.



The Random Chord Method

The blues have a very structured form which is useful to beginners who can use it for a foundation for learning to improvise. However that structure can become confining over time. To allow more freedom, the Random Chord Method is a good method to experiment with different chord progressions and to practice writing and playing chord charts. The Random Chord Method works as follows;

- 1) Get 20 index cards and write one of the basic chords listed on page 23 on each of them.
- 2) Shuffle them thoroughly and pick a card and write down the card above a bar on a chord chart like the one on page 34.
- 3) Replace the card and shuffle thoroughly again.
- 4) Repeat steps 2 and 3 until you have written a chord above each bar. It's okay if you repeat letters.
- 5) Play the chord progression you have come up with. Start out using 4 downstrokes per bar.

Exercise 40. Use the random chord method to fill out the following chord chart.

The Circle of Fifths

Exercise 41. Make The Circle of Fifths

Procedure:

1) Fill in the following key letters on Figure 23 starting with the key of C. Using the piano keyboard, count 7 half-steps from each key letter to find the next key letter. Any black notes will be labeled as flats. The last key letter should be 7 half-steps below C.

2) Turn to the Major Scale Chart on page 19. Cover up all the letters in columns 8-13. Then count and write down the number of sharps or flats in each of the keys. For example, the key of C has no sharps or flats, so you would write 0 for sharps and zero for flats.

Congratulations, you have just created the Circle of Fifths, a useful tool to understanding key signature relationships. A fifth, or more precisely-- a perfect fifth is an interval of 7 half-steps and the circle of fifths shows how closely related 2 keys are. The closer they are on the wheel, the more closely related they are because they share more of the same notes. For example, the key of C and the key of G share all of the same notes excepts F and F#.

Exercise 42 Minor Key Relationships

The circle of fifths also applies to minor keys. As mentioned on page 12, you can find any related minor key by counting three half-steps down from the major key. For example, to find the related minor key to the key of C Major, just count three half-steps down from the C note on a piano keyboard, which would give you the A note. So the key of A Minor is the relative minor to the key of C Major. Answer #37 to #48 by filling in the relative minor keys to the major keys. The minor key letters are usually written in lower case.

The Circle of Fifths also tells us the three primary chords of any key. The three primary chords are simply the I, IV and V chords that we talked about in the section about the 12-bar blues on page 34..

Exercise 43. Finding Primary Chords

Procedure:

- 1) Assume that the key letters are chord letters
- 2) The other two primary chords are the ones to the left and right of the chord letter.

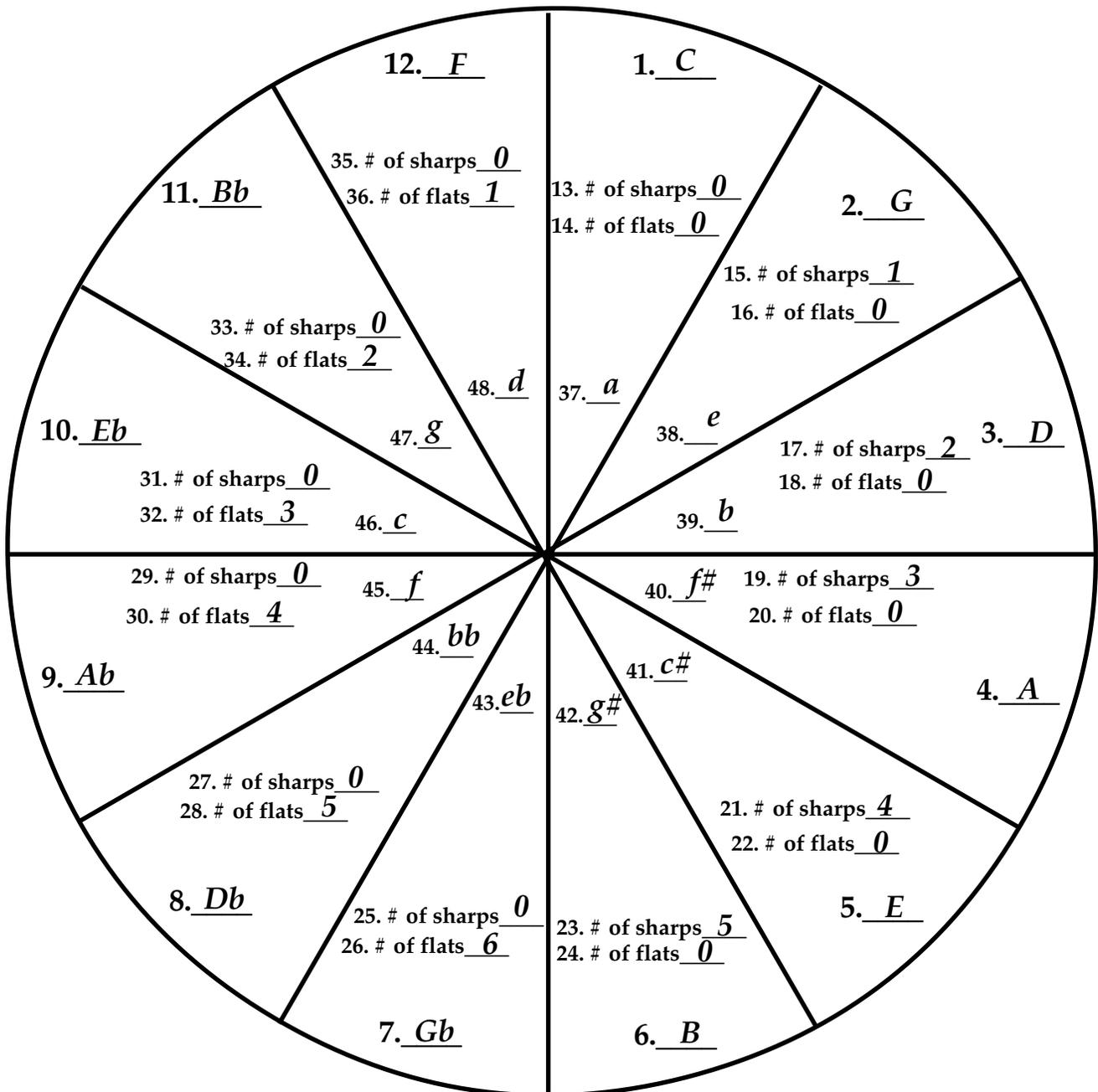
Example; The primary chords to the key of C are 1. C 2. F and 3. G

Find the primary chords in the following keys.

1. key of G *G, C, D*
2. key of A *A, D, E*
3. key of Ab *Ab, Eb, Db*
4. key of F *F, C, Bb*

The more you play, the more you will remember these primary chords and the more they will come naturally to you. This comes in handy in the following scenario; you are in a situation where you are called upon to play lead to a rhythm guitarist playing a chord progression you have never heard before. You could ask him what key he is playing in but he probably won't know. The three chords he's playing the most are probably the three primary chords and knowing the three primary chords will tell you the key he is playing in. Knowing the key he is playing in will tell you the scales you can use to improvise.

Figure 23 The Circle of Fifths



Power Chords

Power chords are used in music styles such as metal, punk and grunge and are a simpler version of the chords we studied earlier. Power chords are sometimes written as G5 or E5 meaning that a G5 chord is made up of two notes, the G, and the 5 of the G scale, which is D (see Page 19, Major Scale Chart.) So a G5 power chord is made up of two notes, the G and the D and is usually played with the fingering showed in Figure 24 and 25.

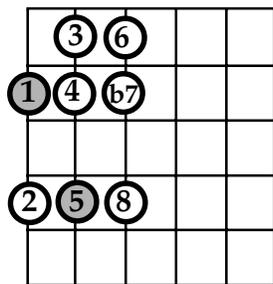


Figure 24

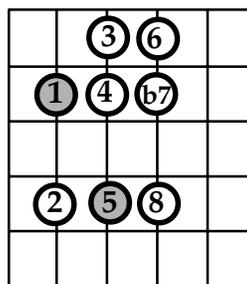


Figure 25

Power chords are what you use to get that raunchy, rock and roll sound that gets so many people hooked on metal and punk and grunge music. The sound is a musical reflection of the mechanized, electromechanical world that young people find themselves surrounded by.

Exercise 44

Write down the following four power chords in tablature form (D5, F5, A5, C5)

D5	F5	A5	C5
7	10	7	10
5	8	5	8

Exercise 45 Write the two notes to the following power chords.

1. Bb5 Bb , F
2. E5 E , B
3. A5 A , E
4. F#5 F# , C#

Bb Bb Bb Bb

The Bass Guitar

The bass guitar is the same as a regular guitar except that it does not have the top two strings E and B. It also has thicker strings so the remaining strings are tuned an octave lower. You can not only *hear* the notes of a bass guitar but you can also *feel* them. Because of this, bass players have a larger effect on the overall sound of a band than any other instrument, so knowing what notes to play on the bass is especially important.

Although many modern bass players play with a pick, to get that bassy bass sound you need to play with your fingers. And while it is possible to play chords on a bass guitar, it usually doesn't sound very good. So what the bass guitarist has to do to play along with a guitarist who *is* playing chords, is to play the notes of that chord one at a time, one after the other.

Chord Notes on the Bass

First, a review of the chord numbers of major, minor and seventh chords.

Major Chords 1 3 5
Minor Chords 1 b3 5
Seventh Chords 1 3 5 b7

Secondly, we must find these notes on a major scale . If we take the diagram four scale on page 25 and number the notes, you will come up with the following;

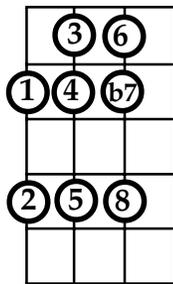


Figure 26

So if the guitarist was playing a major scale, you could play the 1, 3 and 5 notes here as in. Fig. 27.

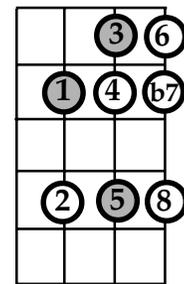


Figure 27

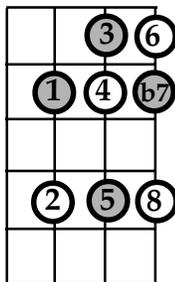


Figure 28

And if he were playing a seventh chord, you could also play the flatted seventh note as in Figure 28.

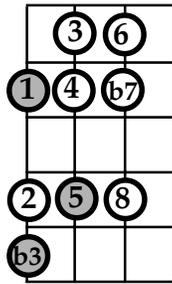


Figure 29

The minor chord has a flatted 3rd so there are two ways to play it. (Figures 29 and 30)

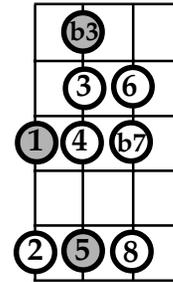


Figure 30

Playing the Root

The simplest way to begin playing the bass is to play the 1 note with each chord. For example, if the guitarist is playing a C chord, you would play the C note. If the guitarist is playing an A minor chord, you would play the A note, if the guitarist is playing a D7 chord, you would play the D note, etc, etc.

Exercise 46.

Play the root note for the chords to the twelve bar blues chord chart (Figure 19 on page 34.) Play it several times until you are comfortable with it. You can always get away with simply playing the root note to the chords of any song. You won't sound *bad*, but you won't sound *good* either. As a beginner you can simply play the roots until you build your confidence, but you want to start adding the rest of the notes as soon as you can.



Exercise 47

Write the tablature numbers that would show the notes you would play for the 12-bar blues on page 34 . Write the tablature numbers to reflect the following sequence 1, 3, 5, b7. DO NOT confuse the tablature numbers with the scale numbers. They are two completely different things.

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		7	
	7	6	8
7	6	8	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

		5	
	5	4	7
5	4	7	5

Exercise 48

Write the tablature numbers that would show the notes you would play for the blues in the key of G. Write the tablature numbers to reflect the following sequence 1, 3, 5, b7. DO NOT confuse the tablature numbers with the scale numbers. They are two completely different things.

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

		5	
	5	4	7
5	4	7	3

		3	
	3	2	5
3	2	5	3

		3	
	3	2	5
3	2	5	3

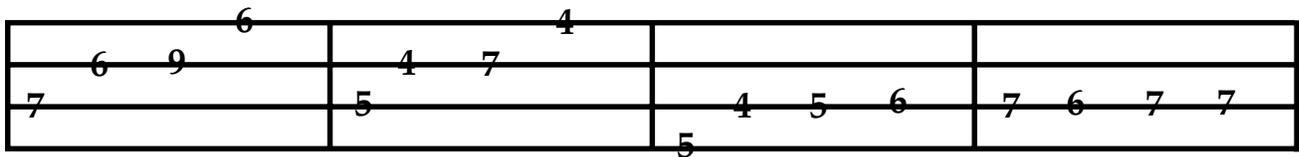
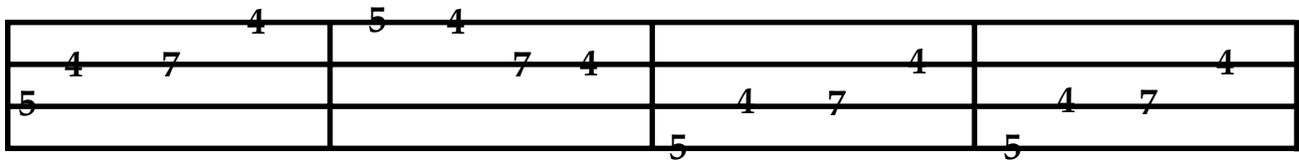
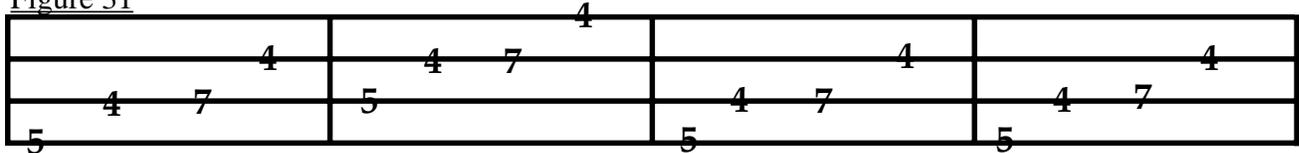
		3	
	3	2	5
3	2	5	3

Exercise 49

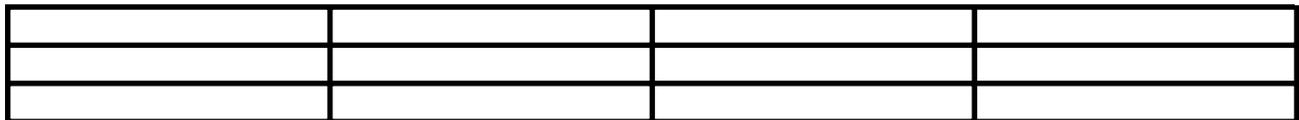
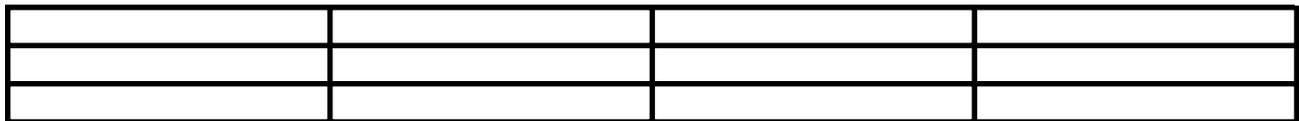
Have the teacher or a classmate play the chords for Exercise 47 and 48 while you play the bass parts you have written out.

When playing the blues bass, it is common to add the 6th note to the bass line. The following shows an example of this.

Figure 31



Blank Practice Tablature Sheet



Singing and Vocals

If you've made it this far, then you are about ready to form a band and begin playing in public. You find another guitar and bass player, and then you find a drummer and think you're on your way. But then you realize you need a singer, or in technical terms, a vocalist. The hardest member to find in a band is a vocalist for several reasons. The first is that many otherwise good singers are too shy and inhibited. The second is that most people don't understand that the voice is a musical instrument that must be practiced and developed just like any other. A singer in a rock and roll band has a special challenge in that the guitars are usually played at such a high volume that the singer usually can't be heard even with a microphone, so rock and roll singers had to develop a screaming style of singing to be heard. Lessons on how to develop the musical instrument called the human voice is beyond the scope of this book. But an excellent place to start is a high school or community college choir class. Choir classes don't teach how to sing rock and roll but they do teach the basics of how to develop a singing voice which you can apply to any style of music. Hardly anyone thinks they are good singers, even people who are. So it's important if you do want to become a singer to withhold your judgement on your singing until you have taken time to develop your vocal musical instrument.

Transposition

When a guitarist develops the ability to play music with others, and this applies to all musical styles, he or she will sometimes find it necessary to change the musical key that a particular song is in. This is usually done to accommodate the singer, who needs a key change to fit the range of their voice to that particular song, but sometimes it's done to accommodate the guitarist by using chords that sound better for that particular song. Many song books designed for guitar are written by piano players for the piano. So guitarists wanting to learn a song from such books have to convert guitar music arranged for piano back to music that can be played on the guitar! This usually involves transposing the song into a key that can be more easily played on the guitar. Let's go through the transposition process to see how this works.

Step One Determine what key a song is written in and what key you want to change it to.

First, the key of a song is *usually* the letter of the chord that begins and ends with. If you're changing the key so the chords will be easier to play, the keys of G, D or A will have the easiest chords for beginning guitar players. If you're changing the key to accommodate a singer, first have the singer sing the first few bars of the song in its original key. Second you take an in-tune guitar and play on the guitar the first few notes that he is singing. The First Position on page 25 is the best place to do this

Third, you need to determine the *number* of the note that the song begins on. For example, if the original key is Eb, and the first note of the song is a G, it starts on the 3rd of whatever key it's sung in. Fourth, you have the singer sing the song in its original key *a cappella*, which means by himself, the way he would sing it if it were up to him. Secondly, you take an in tune guitar and play on the guitar the first few notes that he is singing in order to determine the first note of the song in the key that the singer feels is best for him. Once you know that note, determine what key that note is the 3rd of and that will be the key you want to change to. Continuing our example, if that first note is E, you know the key is C since E is the 3rd of the key of C (see Major Scale Chart, p. 19).

Step Two The Mechanics of Changing From One Key to the Other

Write the notes of the two keys, the beginning key first, and the ending key directly below it, along with the numbers of each note above the keys (Figure 31)

	1	2	3	4	5	6	7
key of Eb	<i>Eb</i>	<i>F</i>	<i>G</i>	<i>Ab</i>	<i>Bb</i>	<i>C</i>	<i>D</i>
key of C	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>A</i>	<i>B</i>

Figure 31

Take your lyric or chord sheet and a pencil (not a pen since you might need to change the key again!), and cross out the old chord. In this case, the chord in the key of Eb and write down the chord found directly below it from Figure 31. Remember that you are only changing the chord letter. Major chords will remain major chords, minor chords will remain minor chords and seventh chords will remain seventh chords, only the letter changes when you transpose.

Exercise 50

The first line of the following song has been transposed. Finish transposing the second line and answer #1-6 by filling in the chords for the new key. Fill in Figure 31 before you begin.

<i>CM7</i>	<i>Gm7</i>	<i>C7</i>
<i>EbM7</i>	<i>Bbm7</i>	<i>Eb7</i>
<i>FM7</i>		
<i>AbM7</i>		

<i>Fm7</i>	<i>Bb7</i>	<i>CM7</i>	<i>Am7</i>	<i>Dm7</i>	<i>G7</i>
<i>Abm7</i>	<i>Db7</i>	<i>EbM7</i>	<i>Cm7</i>	<i>Fm7</i>	<i>Bb7</i>

1. *Fm7* 2. *Bb7* 3. *CM7* 4. *Am7* 5. *Dm7* 6. *G7*

Exercise 51

Transpose the following song "A Gift to Give" from the key of C to the key of G.

	1	2	3	4	5	6	7
key of C	C	D	E	F	G	A	B
key of G	G	A	B	C	D	E	F#

A Gift To Give

~~G~~ ~~A~~ ~~Em~~ ~~Am~~
~~C~~ ~~D~~ ~~Am~~

If I had a gift to give, I would give it.

~~G~~ ~~A~~ ~~Em~~ ~~Am~~
~~C~~ ~~D~~ ~~Am~~

If I knew a word to say, I would say it.

~~G~~ ~~A~~ ~~Em~~ ~~Am~~
~~C~~ ~~D~~ ~~Am~~

If I had a song to sing, I would sing it.

~~G~~ ~~A~~ ~~C~~ ~~D~~
~~C~~ ~~D~~ ~~F~~ ~~G~~

But I don't know the gift or the word or the song to make

~~Em~~ ~~Am~~
~~Am~~

you mine.

Exercise 52 Internet Song Lyrics Assignment

Many bands publish the lyrics to their songs on their website. Use an Internet search engine to find the lyrics to one of your favorite songs with the chord symbols included. Cut and paste them into a word processing program so they look like the song in Exercise 51 above. Print it out and turn it into your teacher.

