

Sound Before Sight: Playing by Ear

Children learn to speak by listening to those around them and by attempting to emulate those speech patterns. Only much later, when they have a grasp of the language do they begin to read and write. Thus, language acquisition precedes symbol systems of language notation. So too, with music, a strong case can be made that beginners should acquire musical skills through aural and visual models first and then learn to read write with notational symbols. With this in mind, this section of the course will deal with musical transmission through aural and visual modeling. Your job is to emulate or copy what you see and hear.

Here are a couple reasons to learning by ear:

- 1) It's one thing to learn how to hold the guitar correctly, how to position your hands, and how to move your fingers to find the correct frets; it's quite another thing to do so while decipher a new symbol system. Learning by ear lessens the cognitive load.
- 2) Listening to the tune in your head (known as "audiation") will guide you when practicing—your ear will tell you if you're playing the piece correctly or not.

When learning to play by ear we usually employ common folk songs because you most likely have them inside your head. This week we will learn *Hot Cross Buns*.

Lesson

Use a finger to string assignment for the plucking hand; place P on 4, I on 3, and M on string 2.

It's important to know that notes can move by step to either the next lower or higher note. All the notes in Hot Cross Buns move by step, like the example below. Play the below example while saying the letter name.

A musical staff in 4/4 time with a treble clef. It consists of two measures separated by a double bar line. The first measure contains four quarter notes on the strings. The second measure contains three quarter notes on the strings. The notes are positioned to show a step-wise melodic line.

Now watch the video of me modelling how to play "Hot Cross Buns". Use your ear—remember that the piece uses only three pitches G (open 3rd string), A (2nd fret 3rd string) and B (open string 2).

ANATOMY OF THE GUITAR

History

The classical guitar, or Spanish Guitar, is an acoustic instrument made of wood, with six nylon strings. Antonio de Torres, a Spanish guitarist, and luthier, was the most important Spanish guitar maker of the late 19th century. Most modern guitars in use today are derivatives of his designs.

Headstock and Tuners

The headstock is located at the end of the guitar neck farthest from the body. The headstock has tuners that adjust the tension of the strings, which in turn affects the pitch. Turning the pegs clockwise will lower the pitch of the string. Turning the pegs counter clockwise will raise the pitch of the string. The tuning pegs furthest from the body of the guitar tune the middle strings - strings 3 & 4. The tuners closest to the body of the guitar tune the outer strings - 1+6.

Nut

The nut of the guitar is a small strip of bone, or other hard material, found at the point where the headstock meets the neck. Its grooves guide the strings onto the fretboard, giving consistent lateral string placement. It is one of the endpoints of the strings' vibrating length.

Fretboard

The fretboard is a piece of wood embedded with metal frets that comprises the top of the neck. The fretboard is flat on classical guitars and slightly curved on acoustic and electric guitars. Fretboards are most commonly made of rosewood, ebony, and maple.

Frets

The frets are the metal strips (usually stainless steel) embedded along the fretboard at exact points in accordance with a specific mathematical formula. Pressing a string against a fret determines the strings' vibrating length and therefore its pitch. The pitch of each consecutive fret is a half-step interval and the distance between the frets gets small as you move up the neck of the guitar. Standard classical guitars have 19 frets and the twelfth fret divides the string exactly into two halves.

Neck

A guitar's frets, fretboard, tuners, headstock, all attached to a long wooden extension, this is the neck of the guitar. The wood used to make the fretboard usually differs from the wood in the rest of the neck. The shape of the neck can also vary, from a gentle "C" curve to a more pronounced "V" curve.

Strings

The guitar has six strings numbered from lowest (closest to the ceiling when in playing position) to highest sounding (closest to the floor when in playing position) 6, 5, 4, 3, 2, 1. From lowest to highest the strings correspond to the letter names E, A, D, G, B, E. The three high pitched strings were originally

made from sheep or cow intestine, while the three bass strings are made of a silk thread core wound with gut. Since the development of nylon guitar strings, by Albert Augustine the three treble strings are a single nylon filament, while the three bass strings are made of a core of fine nylon threadlike filaments wound with silver plated bronze or copper wire. Please devise an acronym to remember the letters names of the strings.

Scale

The "scale", or string length is the maximum vibrating length of a string and determines the range of tones that string can produce. The typical classical guitar has a scale of 650 mm.

Tuning

There are a number of free apps which can be downloaded onto smart phones which allow you to tune your instrument. Guitar Tuna might seem to be the best one on the market presently. Please make sure you have it downloaded on your phone and begin to tune your guitar with it.

Body

The body of the guitar is a major determinant in the overall sound quality and consists of several parts.

Upper Bout

Is the smaller rounded part of the body closest to the fretboard.

Lower Bout

Is the larger rounded part of the body which is furthest from the fretboard. Waist Is the curved area located between the upper and lower bouts.

Bridge

The Bridge holds the strings in place on the body. The main purpose of the bridge is to transfer the vibration from the strings to the soundboard, which vibrates the air inside of the guitar, thereby amplifying the sound produced by the strings.

Saddle

The saddle of a guitar refers to the part of the bridge that physically supports the strings. It is typically one piece on acoustic guitars. The saddle's basic purpose is to provide the end point for the string's vibration at the correct location for proper intonation, and to transfer the vibrations through the bridge into the soundboard of the guitar. Saddles are typically made of plastic or bone.

Soundboard

The guitar top, or soundboard, is a finely crafted and engineered element made of spruce or cedar. This thin piece of wood is often only 2 or 3 mm thick. The soundboard is the dominant factor in determining

the sound quality of an instrument. The majority of the instrument's sound is heard through the vibration of the guitar top as the energy of the vibrating strings is transferred to it. Check out Willie Nelson guitar "Trigger" for a soundboard that has been well used.

Sound Hole

The body of an acoustic guitar has a hole through which sound projects. This is usually a round hole in the sound board of the guitar, directly under the strings. Air inside the body vibrates as the guitar top and body is vibrated by the strings, and the response of the air cavity at different frequencies.

Rosette

The decorative display around the sound hole. Builders traditionally inlay this with fancy roses. This part of the guitar often highlights the builder's personal artistic style.

THE FOUR PRINCIPLES OF EFFICIENT MUSCLE FUNCTION

The four principles of efficient muscle function are as follows.

1 Muscular alignment:

Muscles function most efficiently only when naturally aligned with their base and joint attachments. Natural alignment provides the most direct pull of the muscles that control your back, wrist, and finger joints. Notice this principle at work the next time you pick up your guitar case.

2 Mid-range function of joints:

Muscles function most efficiently only when the joints they control are operated within their midrange of movement. Midrange positioning and movement provides optimum leverage to the muscles involved. Notice this principle at work the next time you pick up your favorite beverage. These first two principles refer specifically to positioning of the body whereas the last two principles refer to the movement of the body.

3 Uniform direction of joint movement:

Muscles function most efficiently only when all three joints of a finger or the thumb are either flexed or extended together, in contrast to flexing one joint while extending another. Simultaneous extension or flexion simplifies coordination of the muscles. This motion can best be illustrated by simply scratching your arm.

4 Follow-through:

Muscles function most efficiently only when there is sufficient follow through to avoid a build-up of counterproductive tension. Sufficient follow-through means that, once a movement has been initiated, no intentional restraint is applied to the movement. This principle can be seen in action during a golf swing, or a slap shot in hockey. (Shearer, pg.10)

Conclusion - When playing the guitar, you can't always fully conform to these principles. You can, however, establish a basic technique that takes advantage of the movements and positions that cause the least counterproductive tension. Thus, the Principles of Efficient Muscle Function give you objective standards for recognizing these positions and movements.

THE SEATING POSITION

Positioning the guitar is the foundation of your technical development. You need to establish a position that is effective and enables you to avoid counterproductive tension. Your general aim is to hold the guitar in the most effective, comfortable, and secure position, providing free access to the strings and to the full range of the guitar.

The chair: To begin with, bring your bottom forward to the edge of the chair on which you are seated. This will allow your legs freedom of movement and will also allow for better circulation of blood. In proper playing position the lower bout of the guitar will often be lower than that of the seat of the chair.

Left leg

The left leg should extend directly from the hip and should be parallel with the upper torso. It is the foundational support that the guitar rests on.

Right leg

The right leg and foot should extend approximately 45 degrees to the right. The tibia should be at a right angle to the floor.

Spine

For your position to be comfortable, your back muscles should be in alignment. Imagine that you have a string attached to the top of your head that is pulling gently upwards. Think tall and allow your spine to elongate toward the ceiling.

Shoulders

Your shoulders should be relaxed and symmetrical.

Footrest

Place the footrest directly in front of the left leg and place the left foot on the footrest. Your Tibia should be at right angle to the floor and your femur should be at least parallel to the floor - preferably, it should be on an slight upward incline away from the body. This will ensure that the guitar does not slide off of the leg.

FOUR POINTS OF CONTACT

Now we will introduce the guitar into the seating position. In proper playing position the guitar will contact the body at 4 points.

- 1) The waist of the guitar rests on the **left inner thigh**.
- 2) the lower bout of the guitar will contact the **right inner thigh**.
- 3) the back rim of the upper bout will rest on the sternum or the **chest bone**.
- 4) the most important point of contact will be with **right forearm**.

The right forearm will hold the guitar in place and will rest midway between the wrist and the elbow on the front rim of the lower bout of the guitar. Picture an imaginary line proceeding upward from the bridge; this is approximately where the forearm should be placed. Those with larger limbs will be further away from the sound hole; those with shorter limbs the position will be closer to the sound hole. This is the basic positioning for playing the guitar.

TERMS & SYMBOLS

Right hand fingers

When reading a musical score, right hand fingers and thumb are always identified by the first letter of their Spanish name. The thumb (pulgar) is indicated by the letter P, index (indice) by the letter I, middle finger (medio) by the letter M, ring finger (annular) by the letter A and the small finger (chico) is identified by the letter C. Thus, you will notice the letters P, I, M, A, C throughout musical scores to indicate right hand fingering.

Midway position

When referring to the midway position of a joint, we mean the approximate midpoint between the comfortable limits of flexion and extension. Imagine picking up a can of your favorite beverage. The fingers will most likely be in their comfortable mid-way position when doing so.

Midrange movement

When referring to the midrange movement of a joint, we mean approximately the middle two quarters of the range between the comfortable limits of flexion and extension.

Arch

When referring to arch we mean the result of flexion at your wrist joint.

Alignment

When referring to alignment, we mean the alignment of your wrist with your hand and forearm.

Deviation

When referring to deviation we mean the sideways curvature of your wrist to either the right or left.

Tilt

When referring to the tilt of your hand we mean the orientation of your hand and fingers to the strings, resulting from the counterclockwise rotation of your forearm. These terms are important for understanding how to position your body when playing guitar.

RIGHT HAND POSITIONING

It's difficult to overemphasize the importance of right-hand positioning. It directly effects your development and coordination. When learning to position your right hand your aims are as follows. Your aims are as follows

- 1 To position your wrist according to the principle of muscular alignment
- 2 To position the knuckles and middle joints of your fingers in their midway position
- 3 To establish the most effective tilt of your hand. (Shearer, pg. 35)

Alignment

To position your wrist, do the following. Align the side of the I knuckle with the side of your wrist and forearm. Notice that this aligns the m knuckle with the center of your wrist and forearm, and the A knuckle with its side of the wrist and forearm.

Midway position of wrist and knuckles

Now you need to determine the midway position of your wrist and knuckle joints: To do so hold your right hand away from the guitar. Relax your finger joints as much as possible. Flex and extend your wrist to its comfortable limits. Notice that, when your wrist is fully flexed, your fingers become almost completely extended; and, when your wrist is fully extended, your fingers become almost completely flexed. Now, arch your wrist in its midway position, so that your finger joints also assume their comfortable midway position. Now place your forearm in playing position, midway between the wrist and the elbow and above the bridge. Place P on 3 outside the sound hole and just above the rosette, I on 2, and M on 1. In proper playing the position of the middle knuckle of each finger should be directly above the string on which it rests. There should be enough room to allow for 3 fingers to go between the guitar and your wrist.

Tilt of the hand

With your wrist aligned, and your wrist and knuckles in their mid-range position, place p on 4, I on 3, M on 2 and A on 1. Now tilt your hand counter clockwise by slightly rotating your forearm. Do this until the tip and middle segments of A are approximately vertical to the plane of the soundboard. With the A finger vertical to the soundboard you will notice that the tip and middle segments of M finger will be slightly tilted to the left, and those of I finger even more so to the left. This is done to accommodate for the difference in size of fingers. (Sheare.pg. 35)

Point of contact

The point of contact (POC) is the place where the plucking hand finger meets the string. The finger should contact the string on the left side of the nail exactly where the flesh and nail meet. Press your finger into the string for several seconds then look at the indents in your fingertips. This is the place where you should always play from. Professional guitarists use nails to create a loud dynamic, a refined tone and for greater articulation, if you have them please use them.

Finger to string assignment (or “fixed finger positioning”)

For the first 2 levels of this course we will be using a strict fixed finger right hand position in which each finger is assigned a to a specific string. This “finger to string assignment” will be indicated at the beginning of each piece or exercise and will provide security and predictability for the right hand. Sometimes the thumb will be placed on string 4, and at other times P will be placed on string 3.

RIGHT HAND MOVEMENT

Right-hand movement involves two principles of efficient muscle function: Uniform Direction of Joint Movement and Follow Through.

Movement of p (“Pulgar” in Spanish, “Thumb” in English) finger

Now that your forearm is resting midway between the wrist and elbow above the bridge, your hand and forearm are aligned, your wrist and fingers in their midrange position and your hand slightly tilted counter clockwise, we are ready to play with p finger. Place P on 3 directly above the rosette, I on 2 and m on 1, now flex the tip and wrist joints together while keeping your hand and wrist steady. P finger should proceed in a downward direction and come to rest on the tip of I finger. Beware of making a circular motion with P, instead, extend and flex the thumb as directly as possible.

Movement of i (index) finger

We will now talk about the movement of I finger. Place your fingers on the guitar using a finger to string assignment with P on 3. With the finger contacting the string where the nail and the flesh meet, flex I finger and follow through, past the thumb, and into the palm of the hand. Follow through far enough so that you touch the palm of your hand. When flexing, the fingers should proceed in a straight line towards the elbow so that the tendons do not have to go around a corner. The finger should strike the string on an oblique angle - “sidewise” along the string. Striking the string at this angle will activate the mid-range frequencies of the string and create a full-bodied, mellow tone.

Movement of m (middle) finger

Now we're going to talk about the movement of M finger. Hold your right hand up and away from the guitar and make an L with your thumb and index fingers. While maintaining the L, wave your other three fingers. Now place your fingers on the strings using a fixed finger position with P on 3. Flex m finger from the large knuckle, past I finger and into the palm of the hand. Similar to the waving exercise, the inactive fingers - A (anular or “ring” finger) and C (“chico” or small finger), should also follow through into the palm of the hand in sympathetic movement with M finger.

LEFT HAND TRAINING

Although the right and left hand perform different movements when playing the guitar both function according to the same muscular principles. When beginning left hand study your aims are as follows.

- 1) To maintain the natural alignment of the wrist and forearm.
- 2) To position your wrist and finger joints within their midrange of movement and your forearm within its midrange of rotation.

Thumb positioning

The left hand thumb should be placed vertically, going “up and down” in the center, or upper 1/3, of the back of the neck directly opposite fingers 1 and 2. The thumb has two important functions.

- 1 To provide balance and stability to the hand.
- 2 To add pressure when fretting through flexion.

Be sure to apply the minimum pressure needed to produce a clear tone when fretting. Avoid unnecessary tension in your left hand and forearm.

The fingers – We use the letters of the alphabet to indicate right hand fingers when playing the guitar and numbers to indicate left hand fingers. Index finger is 1, middle finger 2, ring finger 3 and the small finger is 4. The left-hand thumb receives no number because it does not fret the guitar.

With your wrist in its mid-range position, the hand and forearm naturally aligned, and the forearm in its mid-range of rotation, the left-hand fingers will now be in there most advantageous position; extending lengthwise along the fingerboard. Similar to the right hand, the left-hand fingers will maintain a fixed finger to fret assignment—one finger per fret.

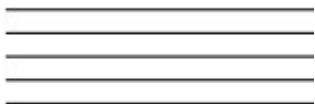
To begin fretting, carefully placing the tip of finger 1, just behind the first fret on string 1. Depress the string firmly through a balance of pressure between the thumb and finger. Alternately, sound the first finger and then the open string. Continue to do this using the finger 2 on fret 2, finger 3 on fret 3, and finger 4 on fret 4. Be sure to maintaining a steady hand and do not let the tip joints collapse. When lifting the fingers from the frets, raise them only a minimum distance.

Basics of Music Notation

PITCHES

Within the Western music tradition music has generally been transmitted in two ways, 1) through ear, (modeling and emulation), or 2) through a symbol system of musical notation. We will talk about learning by ear in another video, but for this video we will deal with issues surrounding how to read and play from standard musical notation.

OK... here is a music staff.



You will notice that there are 5 lines and 4 spaces in the staff. The lines and spaces are numbered from bottom to top.

Lines	Spaces
5	4
4	3
3	2
2	1
1	

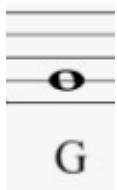
Symbols that look like this () are placed on the staff. These symbols represent pitches on the guitar. In other words, these symbols tell you where to play a particular note—what string and fret to play. For instance, the symbol/note found in the second line indicates to play string three open (not fretted). String six is closest to the ceiling when the guitar is in playing position—string 1 is closest to the ground.



Numbers are often placed beside or above a note, indicating what fret to play (we'll talk about fretted notes shortly). For instance, the below note has a zero beside it indicating to play string three open.



Each note also has a letter name. The note we've been discussing is called G.



This week we will learn to play three open strings—string 4 (D), string 3 (G) and string 2 (B)

Play the following exercise using only open strings. Place your right-hand thumb (P) on string 4, index finger (i) on string 3, and middle finger (m) on string two. This is a fixed finger position; one finger per string.

Ex. 11

A handwritten musical example consisting of a single staff in common time. The staff begins with a clef, followed by a 'C' indicating common time, and a key signature of one sharp. It contains a repeating pattern of eighth notes: a quarter note followed by a dotted half note. This pattern repeats six times. The word "etc." is written at the end of the staff.

FRETTING

We will learn to fret one note this week. Before proceeding, carefully review “Left Hand Training” in the technique tab for this week.

Remember the following:

Circled numbers, ① ② ③ ④ ⑤ ⑥, indicate strings.

Uncircled numbers, 1, 2, 3, 4, indicate left-hand fingers. A zero indicates that no left-hand finger is used.

Roman numerals, I through XIX, indicate frets.

Form the note A by pressing ③ (third string) against II (second fret) with 2 (left-hand finger). Keep your fingertip very close to the fret.

A musical staff is shown with a treble clef at the top. The fourth line of the staff has a small black dot on it. Below the staff, the letter "A" is centered. To the right of the staff, there are four empty square boxes arranged horizontally. Above each box is a Roman numeral: "I" above the first box, "II" above the second, "III" above the third, and "IV" above the fourth.

Visualizing Notes on the Fingerboard

Begin by watching the fingerboard and your finger positions as you play each note. Then close your eyes and continue to play and say the letter names of each note aloud. Visualize your finger movements as you play—aim to see each movement in your mind's eye. Repeat each of the four exercises in the following example until you can play them accurately and confidently.



RHYTHM

Rhythm is music's pattern in time; the duration that notes are held for.

APPLICATION

Begin by tapping your foot roughly once per second. This is called the beat. The beat is the basis for all other rhythms. Now clap your hands in time with your foot. You are now clapping quarter notes. Quarter notes (see below) have a stem and black head. Quarter notes represent one full beat. This is the most basic rhythm.



Eight notes subdivide the beat in two. Clap twice for each beat of your foot. You are now clapping eight note rhythms. The foot taps the beat (quarter notes) while your hands clapping eight notes. Eight notes are usually grouped together in two's or four's.



Clap the following rhythm. Before beginning establish a steady beat with your foot. Then begin to clap the rhythms.



MUSICAL EXPRESSION - DYNAMICS

Like the volume of a voice in a conversation (or a good argument...), volume in music convey emotional import. A soft sound may convey a sense of intimacy or introversion while a loud boisterous sound can convey joy or exuberance.

We'll learn to play with three volume levels this week—soft (piano in Italian, or simply "P"), medium (mezzo forte in Italian, or "MF"), and loud (Forte in Italian, or simply "F"). Think of dynamics like the volume control on your stereo; piano is around 3, mezzo forte is around 5, and forte is around 8.

APPLICATION

Begin by placing your thumb on string 4. Pluck the string until you producing a medium sounding volume. This is your standard "baseline" volume (mezzo forte, or MF). This baseline volume is important because it provides you room to get either louder or softer. To play quietly, loosen the tip joints of finger that is plucking (the thumb in this case). Imagine that the joints are soft and flexible, like "jello". Now play string 4 softly (piano, or "P") and see how quite you can get. Once you're happy with your soft sound go back to your medium level and play a few notes. Now, to play loudly (forte, or "F") make the tip joints more rigid and firm—do not let the joints collapse backwards when striking the string. Play string four loudly (Forte). Now play the same exercise on string 3 with Index finger. Finally play string 2 with m finger in a similar manner.

Physiological Principles

PRODUCTIVE AND COUNTERPRODUCTIVE TENSION

Muscular exertion is essential for all body positioning and movement, and so, when beginning to play the guitar we need to address how your muscles work most efficiently. Muscular tension can be either productive or counterproductive. ***Productive tension*** is the minimum muscular exertion needed to play the guitar. It signals that your muscles are coordinating efficiently and harmoniously. ***Counterproductive*** tension is excessive muscular exertion which impedes guitar playing. It signals that your muscles are not properly coordinating. The four principles of efficient muscle function, which we will learn, describe how muscles function with the least exertion, accomplishing the most work with the least tension.

Before introducing the principles, we need to define two terms.

EXTENSION: At any finger or thumb joint, extension is movement away from the palm. The extensor muscles control extension.

Flexion: At any finger joint, flexion is the movement toward the palm. At any thumb joint, flexion is movement toward the opposite side of the palm. The flexor muscles control flexion.

THE FOUR PRINCIPLES OF EFFICIENT MUSCLE FUNCTION

The four principles of efficient muscle function are as follows.

1 Muscular alignment:

Muscles function most efficiently only when naturally aligned with their base and joint attachments. Natural alignment provides the most direct pull of the muscles that control your back, wrist, and finger joints. Notice this principle at work the next time you pick up your guitar case.

2 Mid-range function of joints:

Muscles function most efficiently only when the joints they control are operated within their midrange of movement. Midrange positioning and movement provides optimum leverage to the muscles involved. Notice this principle at work the next time you pick up your favorite beverage. These first two principles refer specifically to positioning of the body whereas the last two principles refer to the movement of the body.

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Muscles function most efficiently only when all three joints of a finger or the thumb are either flexed or extended together, in contrast to flexing one joint while extending another. Simultaneous extension or flexion simplifies coordination of the muscles. This motion can best be illustrated by simply scratching your arm.

4 Follow-through:

Muscles function most efficiently only when there is sufficient followthrough to avoid a build-up of counterproductive tension. Sufficient follow-through means that, once a movement has been initiated, no intentional restraint is applied to the movement. This principle can be seen in action during a golf swing, or a slap shot in hockey. (Shearer, pg.10)

Conclusion - When playing the guitar, you can't always fully conform to these principles. You can, however, establish a basic technique that takes advantage of the movements and positions that cause the least counterproductive tension. Thus, the Principles of Efficient Muscle Function give you objective standards for recognizing these positions and movements.

THE FIVE WAYS THE GUITAR CAN MOVE – REFINING THE POSITION

From this basic position, we will learn to adjust the position of the guitar so as to provide maximum advantage for both hands. Adjusting the position of the guitar will be different for each individual as this **depends on the overall physical build of the performer**. Before you can begin to adjust the position of your guitar, you will need to understand the five ways in which the guitar can move.

- 1 The guitar headstock can move **forward or backward**.
- 2 The guitar can **rotate**.
- 3 The **angle of the neck** can be adjusted by raising or lowering the headstock.
- 4 The guitar can move **up or down** in relation to the torso.
- 5 The guitar can move **left or right** in relation to the torso.

RIGHT AND LEFT HAND POSITION CHECKS

To position the guitar effectively and securely, you must find a playing position that provides free access to the strings with your right hand, and to the full range of the fingerboard with your left. To identify if your guitar position needs adjusting we use the following two position checks.

Right-Hand Position Check

To check that the right hand is in a good position do the following: Moving only from the elbow, swing your forearm up and down, carrying your hand across all six strings, like when strumming the guitar.

Left-hand Position Check:

To check for a correct left hand position, do the following:

Place the first finger of your left hand across the first fret. Then move your left hand to place the tip of your forth finger at the 19th fret.

Your aim with both of these checks is to find an overall position in which your right hand can swing freely across the strings without being impeded by the rim of the guitar, and which gives your left hand the most comfortable access to the full range of the fretboard.

When carrying out these adjustments, notice that what is comfortable for one hand will not be the most comfortable for the other. Thus, you should aim for a compromise, finding a position that gives equal advantage to both hands.

1) MOVING THE GUITAR HEAD FORWARD OR BACKWARD

Right Hand:

When moving the guitar head forward notice that this adjustment strongly effects the comfortable movement of your right forearm on the rim of the guitar. Your arm will be less impeded when the guitar head is positioned relatively far forward.

Left Hand:

Notice that positioning the guitar head far forward, however, is awkward for your left hand – to place your finger across the 1st fret, you must strain your wrist past its comfortable range of flexion.

The Compromise:

In general, therefore you should place the guitar head only slightly forward. Those with larger limbs will need to position the headstock more forward and those with smaller limbs will need to position the guitar headstock more backwards. This is done to provide a comfortable mid-range position for the fretting hand arm.

2 ROTATION OF THE GUITAR

Right Hand: When rotating the guitar, notice that this strongly affects the comfortable movement of the forearm on the rim of the guitar. Your arm will be less impeded when the guitar is tilted relatively far out on your thigh.

Left Hand: Notice that tilting the guitar far out on your thigh, however, is awkward for your left hand – to place your finger across the first fret you must strain your wrist past its comfortable range of flexion. Your left hand is positioned most comfortably when the guitar is tilted inward on your thigh.

The Compromise:

In general, therefore, the guitar should be rotated on a slight angle, with the bottom slightly outward so that only the upper rim leans against your chest, providing equal advantage for both hands. When the guitar is in a correct playing position, a triangle will be formed between the chest, the femur and the back of the guitar.

3 RAISING OR LOWERING THE HEADSTOCK

Right Hand:

Raising or lowering the headstock has little effect on right hand comfort. Concentrate mainly on the left hand position check when making this adjustment.

Left Hand: Notice that your left hand moves most comfortably when the guitar is positioned relatively high. Avoid placing the guitar head too low – to place your finger across the 1st fret, you would need to twist your forearm to the limit of its counter clockwise rotation.

The neck of the guitar should be roughly at 45-degree angle to the floor. In general, the tuners of the guitar should be at about eye height when looking to the left.

4 RAISING OR LOWERING THE GUITAR IN RELATION TO THE TORSO

Right Hand: Raising or lowering the guitar in relation to the torso has little effect on right hand comfort. Concentrate mainly on left hand position check when making this adjustment.

Left Hand: This adjustment strongly affects your ability to comfortably reach the high frets. Your left hand moves most comfortably when the guitar is positioned relatively high in relation to the torso. To achieve this position, you may need to elevate the entire guitar by adjusting the footrest. You should be able to reach the 19th fret without having to dip your left shoulder.

5 MOVING THE GUITAR LEFT OR RIGHT IN RELATION TO THE TORSO

The guitar should be positioned neither to the left nor to the right of the body, but instead, should be centrally located, with the upper bout being below the chin. This will allow for equal advantage to both hands.

Theory: Notation, Expression, Rhythm (Week 1)

This week we will learn two new fretted notes and how to read by step, skip and leaps. New expressive elements include gradually getting loud (crescendo) and soft (decrescendo) how to gradually slow down the tempo (ritard and poco ritard), when to go back to the regular tempo (a tempo) to create breathing room in music.

NOTES

TWO NEW NOTES ON B STRING (STRING 2)

This week we will learn to play two new fretted notes on string 2. C note is played on string 2, at the first fret with finger 1.



The D note is played on string 2 at the third fret with either finger 3 or finger 4.



Finger 3 may be better for those with larger hands. Finger 4 may be better for those with smaller hands. Either finger 3 or 4 is acceptable.

5 NOTE G SCALE

When we add these two new notes to the three notes we learned last week we can play a small scale (musical ladder). Play this scale from memory. Play four times on each note. Say the finger numbers, say the fret numbers, say the letter names. Mark the fret and string number below each note i.e., first note 3/0 (string 3, fret 0).

A musical staff with five horizontal lines. It contains eight notes: a quarter note on the fifth line, a eighth note on the fourth line, a quarter note on the third line, a eighth note on the second line, a quarter note on the first line, a eighth note on the second line, a quarter note on the third line, and a eighth note on the fourth line. The eighth notes are grouped by vertical bar lines. The first note is marked with a blue circle on the staff line, indicating it is the starting point of the scale.

STEPS

The distance from one note to the next nearest note is called a step. They are two letter names away from each other (i.e., b, a). All notes in the above scale are the distance of a step. steps can be higher



or lower



And must be from a line to a space



Or a space to a line



SKIPS

Notes can also skip from one to another. Skipped notes can ascend or descend. Skips are the distance of three letter names away from each other (i.e., b, d); we say that they are a 3rd away from each other.

Skips are seen as being from a line to a line



or space to a space.



Notice that a note is missing between each of the above examples.

Draw some skips on the staff below. Use the above four types of skips (line to line, space to space, ascending, descending). Label each note as follows

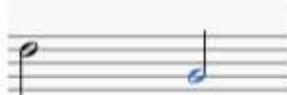


LEAPS

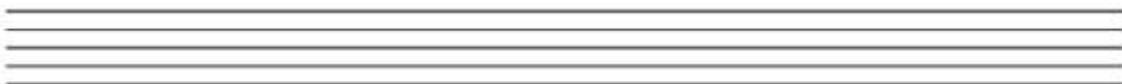
When 2 notes are larger than a skip we call it a leap. This is the a leap of a fourth (four letter names apart; D-A)



This is the leap of a fifth (five letter names apart, D-G).



Draw some leaps on the staff below in a similar manner to the above. Label each note as well.



CONCLUSION

Each of your pieces this week will use only these five notes. Aim to become comfortable with steps and skips.

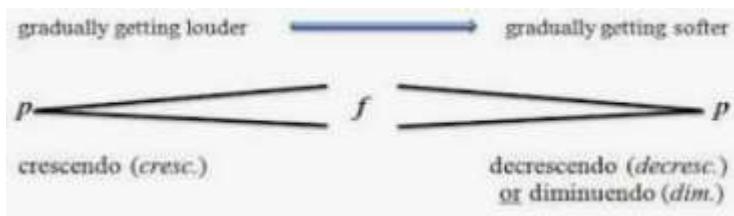
Online Resource

Finally, go to www.musictheory.net. Go to exercises. Go to note identification. Go to the gear in the top right and set the range to what you would like. Also go to the fretboard note identification section in exercises. Go to the gear in the top right and mess around with the settings. Set it to 0-4 fret positions and strings 2 and 3. Now guess the notes.

EXPRESSION

CRESCENDO AND DECRESCENDO: Gradually playing louder or softer

Last week we learned about dynamics—playing soft (Piano), medium (Mezzo Forte), and loud (Forte). This week we will learn how to play softly, gradually get louder, and then return to playing soft again. In music we call these crescendos and decrescendos (see below). You can see below the symbols indicating that you should gradually play louder and then gradually play softer. These symbols are like the “greater than” and “less than” symbols used in mathematics. The greater than symbol means to gradually play louder and the less than symbol means to play softer. To practice crescendos and decrescendos, begin by choosing an open string. Play the string softly and gradually build the volume over the course of roughly 8 notes. Then gradually get quiet over the course of 8 notes. The first and last notes of the exercise should be the quietest. The notes in the middle should be the loudest. the last note in the exercise should be the quietest of all. This will make it interesting for your listener and will draw them into the music.



Phrases: Phrases in music are similar to sentences in language. Musical phrases have a beginning and a conclusion and convey a single musical idea. Most musical phrases are either 2 or 4 measures (bars) long. Many times, musical phrases contain the dynamic shaping that we just learned—begin soft, gradually get louder, then returning to soft again. This is known as an “arch type phrase”. You will notice two “arch type phrases” in this week’s performance submission piece, “Dance of the Downward Skip”.

RITARD (Ritardando, abbreviation Rit...)

Another common way to create expressive in music is by gradually decreasing the speed (tempo) at section endings. Slowing down the tempo prompts your listener that you are coming to the conclusion of a musical section or idea. The Italian term for this is Ritardando, or often “Rit” for short. To slow down the tempo think of driving a car. When you see a stop sign you don’t just hammer on the brakes – you gently come to a nice stop. The same idea applies to ritardando – it’s a gentle slowing-down, not an abrupt one. An excellent way to slow down the tempo is by saying a four-syllable word aloud with each beat of your foot. Take the word “mo -

tor-cy-cle” for instance. Begin to slow down the rate at which you say the word and you will notice that the tempo will slow down smoothly.

The musical notation shows a single staff in common time (indicated by a '4' over a '4') with a treble clef. The first measure consists of four eighth notes followed by a quarter note. The second measure consists of three eighth notes followed by a quarter note. The third measure consists of four eighth notes followed by a quarter note. The fourth measure consists of three eighth notes followed by a quarter note. Above the staff, the text "The second string 'B'" is written, and a large number '2' is enclosed in a square box above the first note of the first measure.

Rit.....

When this is comfortable then try adding a decrescendo as well. This is often how pieces of music end.

The musical notation is identical to the previous example, showing four measures of eighth and quarter notes on the second string. A red diagonal line descends from the top of the staff towards the bottom, indicating a decrescendo. Below the staff, the text "Rit." is written, followed by a horizontal line with a dotted pattern, indicating a ritardando.

POCO RITARD

Sometimes you'll be given more direction, like “poco rit.”, which is saying “just a little slow-down”, so that would be an even gentler slow-down. This often occurs at the midway point in a piece. You will notice a poco Ritard at the midway point in this week's performance piece “Dance of the Downward Skip”.

A TEMPO

The other term we'll look at today is ‘*a tempo*’. This means ‘the original tempo’ or speed. You will see “*a tempo*” most often after a *ritard*. When you see “*a tempo*” return to the previous tempo that you were playing at before slowing down. You can see an “*a tempo*” in this week's performance piece right after the Poco Ritard.

BALANCE

Balance in music refers to which notes should be played loud and which should be played soft. The guitar is able to play a melody and an accompaniment at the same time. The melody is the “tune” or the part you would sing or hum and is very important for this reason. The accompaniment is less important, is often rhythmic, and therefore should be played quieter. You can see how this works when you look at

this weeks performance piece “Dance of the Downward Skip”. The low D note is the accompaniment part or voice. It should be played quietly. The upper notes (everything that is not a low D note) is the melody. Play these notes loudly. When the accompaniment is played quiet and the melody played loud we say there is a “good balance” between the parts.

M.M. ♩ = 116

Piano

The musical notation consists of two staves. The top staff shows a continuous series of eighth notes on the D line, with a dynamic marking of p (piano) above the notes. The bottom staff shows a melody consisting of eighth notes on the A line, C line, and E line, with a dynamic marking of f (forte) above the notes. Red lines are drawn across both staves to indicate the relationship between the notes on the same vertical level.

Theory: Notation, Expression, Rhythm - Week 2 (

Performance Piece: Valse Facile

Valse: This week's piece is a waltz. A Waltz is a dance form that has 3 counts/beats per measure.

Time Signature

Time signatures indicate how many beats are in each measure. Because waltzes have 3 beats/counts per measure we use a $\frac{3}{4}$ time signature. The top number of the time signature tells us there are 3 beats per bar, the bottom tells us that each beat is a quarter note.

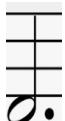


Dotted Half Note Rhythm

Half notes are counted for 2 beats.



Dotted half notes are counted for 3 beats.



Valse Facile has many dotted half notes. Pluck the note and allow it to ring for 3 counts.

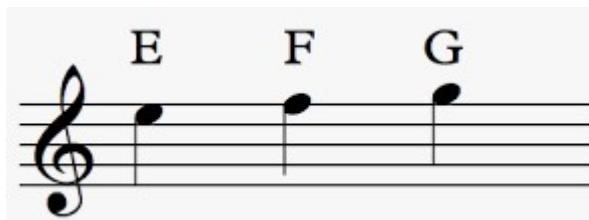
Groove and Accenting

To create a convincing dance groove, it is important to stress, or accent the first beat of each measure. Accent beat one but keep beats 2 and 3 quieter.

New Left-Hand Notes

This week we will learn 3 new notes on string 1.

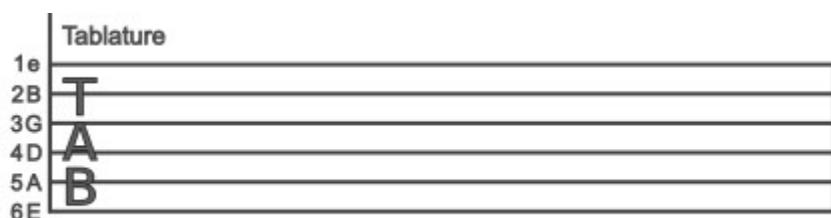
- E note is played open (no fret)
- F note is played at fret 1 (finger 1)
- G note is played at fret 3 (finger 3 or 4)



Tablature (TAB)

Tablature (or tab for short) is a form of musical notation indicating instrument fingering rather than musical pitches. Tablature was common during the Renaissance and Baroque eras and is commonly used today in notating many forms of popular music.

The six strings of the guitar are represented by the six horizontal lines. The top line represents the high E string of the guitar and the bottom line represents the low E string of the guitar. This can seem a bit counterintuitive to some people so just remember that the top line is the thinnest string, the one closest to the ground when in playing position.



Here are this weeks 3 new notes written in both standard and TAB notation

A comparison of standard notation and TAB notation for the three new notes. The top part shows standard notation with a treble clef, a '4' time signature, and a bass clef with a '8'. It has three measures: the first measure has an open note above the staff and a '0' below the staff; the second measure has a note at fret 1 above the staff and a '1' below the staff; the third measure has a note at fret 3 above the staff and a '3' below the staff. The bottom part shows TAB notation with six horizontal lines representing the strings. It has three measures: the first measure has a 'T' above the staff and a '0' below the staff; the second measure has an 'A' above the staff and a '1' below the staff; the third measure has a 'B' above the staff and a '3' below the staff.

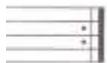
Weekly Performance Piece

Valse Facile

Musical Structure

A Section (measures 1-16)

Music has a formal structure, an architectural design. The A section of “Valse Facile” is 16 measures long. It consists of two 8 measure phrases - an antecedent and a consequent phrase. The less conclusive sounding phrase (first 8 measures) is the “antecedent phrase”, the more conclusive sounding phrase (last 8 measures) is the “consequent phrase”. Think of these two phrases as a kind of question and answer. The dynamic shape of A section is the same as last week even though it is twice the length. Play line 1 softly; play line 2 with a long crescendo. Play lines 3 loudly; play line 4 with a long decrescendo. I’ve indicated this in the score. At the end of A section there are repeat dots.



The double dots indicate that you should play the entire section again. To save time, ignore the repeat dots and continue on to B section when submitting your weekly video submission.

B section (measures 17-24)

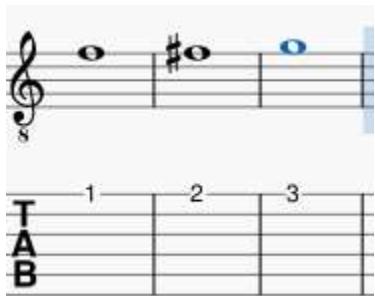
B section is a series of short, 2 measure phrases that form a sequence—a restatement of a musical idea at a higher or lower pitch. Notice that each 2-measure sequence gets louder and more intense. Imagine your friend tells you something but you did not pay attention. Your friend tells you again—more forcefully this time. When they tell you a third time they will do so even louder. Think of this analogy as you play this section. The last phrase in this section is 4 measures long and gets gradually quieter.

A1 Section (measures 25-32)

The last 2 lines of the piece return to the original A section theme, however it ends differently, bringing the piece to a finale conclusion. Start this section soft and crescendo to the two new high notes—F# and high G.

Sharps (#)

This piece has two new notes on string 1. The F# on fret 2, and G note on fret 3. Each note that we have learned in the class so far has been a natural note (i.e., A, B, C, etc.). This week we'll look at sharp notes. A sharp symbol (#) placed directly before a note means to play the note one fret higher (closer to the sound hole). In the below example the first note (F) is played at fret 1 of string 1. The second note (F#) is played at fret 2 with finger 2. And the third note (G) is played at fret 3 with either finger 3 or 4.



Key Signature

To make music easier to read composers often include Key Signatures. A key signature consists of either sharps (#) or flats (b) placed at the beginning of a piece of music.



These sharps indicate what notes are to be played sharp **for the entire piece**. As was mentioned, sharp notes (#) are played one fret higher than natural notes. This week's piece, "Vals Facile" has a Key Signature with one sharp (F#). Thus, all F's in the piece (hint... there is only one!) are to be played at the 2nd fret of string one with finger 2.

New Right-Hand Note

This week's performance piece also uses one new right-hand finger. "A" finger (annular finger) is played on string 1 (when the F# note is played—see measure 30). The right-hand finger for the piece should be: p on string 4, I on string 3, m on string 2, and a on string 1.

Rests:

A rest is a symbol indicating the absence of sound. Each rest corresponds to a specific time value (i.e., how long the silence should last). The symbol on the below right is a quarter note rest. It equals 1 beat of rest. It is extremely important to note that at this stage of your development you will not be required to play rests literally—that would require a very sophisticated technique. Instead, allow notes with rests to simply ring on and do not attempt to stop them from ringing (see below example).



Two Separate Voices:

Last week I asked you to imagine that there were two different voices (musical lines) in the piece—the melody (the tune) and the accompaniment (string 4, d note). "Dance of the Downward Skip" did not explicitly indicate two voices in the music; I had to draw your attention to this fact. Valse Facile, however, clearly indicates separate voices in the score. This is indicated by the directions of note stems. Melody notes have stems going upward, accompaniment notes have stems going downward. Most importantly, be aware that each part has three beats of their own and that they overlap with one another.

A musical score for 'Valse Facile'. At the top left, it says 'A Section' and 'J.= 58-76'. The score consists of two staves. The top staff is labeled 'Piano' and has a treble clef. The bottom staff has a bass clef. Both staves are in common time (indicated by a '4'). The top staff (Voice 1) has upward-pointing stems. The bottom staff (Voice 2) has downward-pointing stems. Red arrows point to the stems of notes in both voices. Above the staffs, it says 'voice 1, three counts. Voice 2, three counts'. In the middle of the score, it says 'Crescendo.....'.

The top voice is written and played as follows.

A musical staff showing four measures of music for the top voice. The staff has a treble clef and is in common time. The music consists of eighth-note pairs with stems pointing upwards. The first measure starts with a dotted half note. The second measure starts with a dotted half note. The third measure starts with a dotted half note. The fourth measure starts with a dotted half note.

And the bottom voice is written and played as follows.



Writing music this way is more precise, but it also may be more confusion.

You may find it is easier to read the piece this way—like last week's piece.



Balance

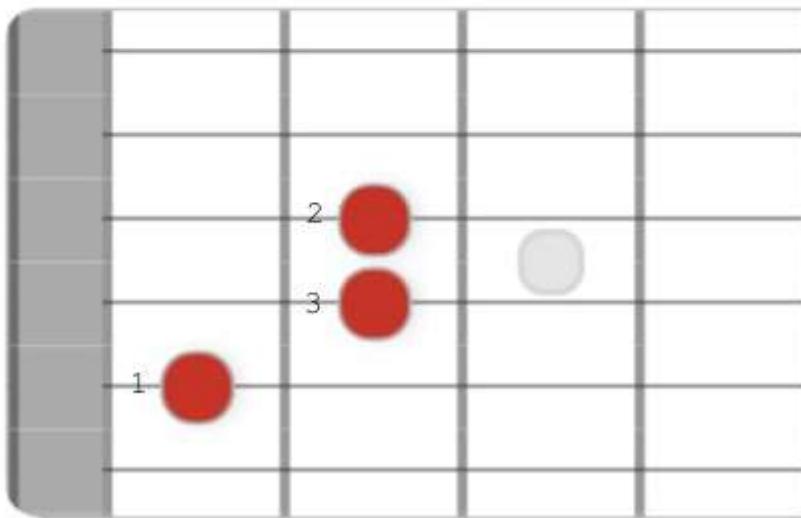
The bass notes (string 4, D note) is the accompaniment in this piece. Playing the upper melody notes loudly and the bass notes quietly for a proper balance between the two voices.

Watch the video recorded peer model and try to emulate what she does.

Chord Diagrams

Each week we will learn a new chord and a new strumming pattern. Over time we will string these chords together to create chord progressions – the basis of popular music songs. Generally speaking, we do not read chords using standard music notation, we use diagrams and letter names. Please look at the diagram below.

a minor



Hold your guitar in playing position. The dark horizontal line at the bottom of the graph represents string 1 - closest to the floor. The dark horizontal line at the top represents string 6 – closest to the ceiling. The dark portion on the left-hand side represent the nut of the guitar – closest to the tuners. The vertical lines represent the frets of the guitar. The red dots represent your fretting hand fingers. The numbers beside the red dots indicate what finger to use when fretting. Finger 1 is your index finger, finger 4 is your small finger. The thumb is not used when fretting.

Fretting

A word about fretting. Place your fingers on the tip of the finger, snug the finger up to the fret, apply pressure will the thumb on the back of the guitar. Now play each string a couple times from lowest to highest. Check the quality of sound. Is it clean or is it muffled?

- 1 Reasons for muffled notes.
- 2 Finger is not directly behind the fret.
- 3 Not enough pressure is being applied.
- 4 A finger on a lower string is draped over a higher string and is muting it.

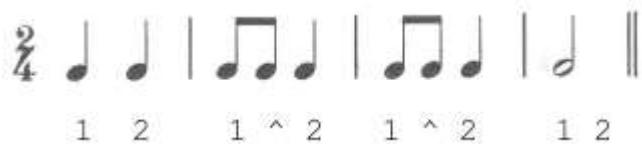
Strumming

Notes we pluck, chords we strum. There are many ways to strum a chord. Let's look at some common ways to strum.

- 1 Make a fist. Flick the fingers like you are trying to get something off them
- 2 Use your thumb only
- 3 Use the whole forearm
- 4 Use fingers going down and thumb going up
- 5 Use a guitar pick

Chord Strumming Patterns

Tap and clap the following rhythms away from the guitar. Now put your guitar in playing position. Using only open strings strum the following rhythmic pattern. Tap your foot to establish the beat. Strum all the strings downward (toward the ground) on the beat and upward on the rhythms in between the beat.



Principles of String Crossing

String crossing is the technique of shifting your right hand across the strings to maintain the optimum position of your fingers. In i and m alternation, for example, i should always maintain a sufficiently flexed position at its middle joint to achieve maximum leverage — m will function in a slightly more flexed position. Thus, when i moves to an adjacent string, you must shift your hand across the strings to maintain the optimum position of i. Secure string crossing is essential for executing rapid and accurate scales. In fact, a lack of speed or fluency in playing scales can often be traced to faulty string-crossing technique.

String crossing can be done in various ways — not all of them equally secure and efficient. As a result, students are often confused about how to execute string crossing. Thus, you need to evaluate the possible ways in which string crossing can be executed:

- 1) moving only from the elbow
- 2) moving simultaneously from the shoulder and elbow
- 3) flexing or extending the wrist
- 4) deviating the wrist to the right or left
- 5) extending or flexing the middle and knuckle joints beyond their optimum playing positions
- 6) various combinations of the above

By applying the Principles of Efficient Muscle Function, you can determine which of these possibilities is the most secure and efficient way to execute string crossing.

Deviating your wrist from its advantageous position contradicts the Muscular Alignment Principle — this eliminates the fourth possibility. Flexing or extending your finger joints or wrist contradicts the Midrange Principle — this eliminates the third and fifth possibilities.

Now consider the remaining possibilities:

- 1) moving only from the elbow
- 2) moving from the shoulder and elbow.

Like every other aspect of guitar technique, string crossing should be done as simply as possible. Since moving from the elbow alone involves only one joint, it's simpler than moving from the shoulder and elbow. Thus, as a basic technique, string crossing should be done by moving only from the elbow.

? WHAT ABOUT CHANGE OF
CROSSING ANGLE AT FF

To alter tone color, advanced guitarists will use subtle shoulder movements in their string-crossing technique. For now, however, you should aim to establish a secure basic technique which you can carry out by habit. String crossing only from your elbow gives you a secure basis from which you can depart when necessary.

Playing Scale Passages Involving ③, ②, and ①

Playing notes on two adjacent strings presents few problems — you use m on the higher string and i on the lower string, and your right hand never changes position. Passages involving three strings, however, require special consideration.

For example, observe the following scale passage:

Ex. 18

String cross here

Ex. 18

i i m m (i) m m m m m i i (m) i i

G D A

There are two right-hand shifts: one between the second and third measures, and one between the sixth and seventh measures. In the upward shift, you must lower your hand and forearm the distance of one string — i then sounds D (Re) on ②, and m sounds E (Mi) on ①. In the downward shift, you must raise your hand and forearm the distance of one string — m then sounds B (Ti) on ②, and i sounds A (La) on ③.

As Ex. 18 illustrates, you shouldn't use the same finger to sound consecutive notes on adjacent strings. For accuracy and ease, you should use m to reach the higher string and i to reach the lower string.

"Chimes is a duet. A duet is when two musicians play together at once. You will play part 1 for this weeks video submission. Play along with the provided video recording. Please ignore the repeat dots

String Cross

Chimes

Duet No. 17 A.H.

This is part 1 → **A SECTION**

This is part 2 → **Part 1**

Part 2 → **Al section**

Finger to string assignment till the end. m on 1, i on 2 **B section**

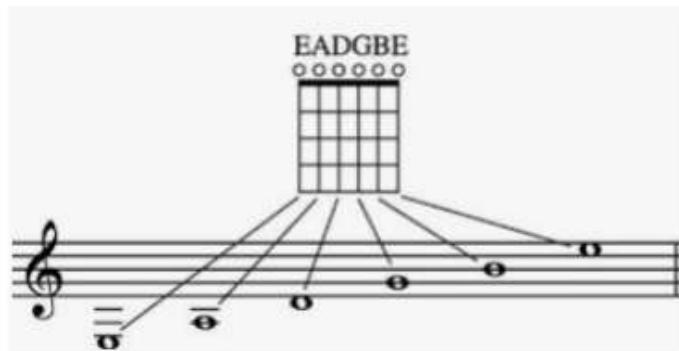
Ritard.....

LEDGER LINES

The guitar has notes that extend beyond the range of the music staff, we must extend the staff to accommodate for the range of the guitar. We do this by adding extra lines above and below the staff called *ledger lines*.

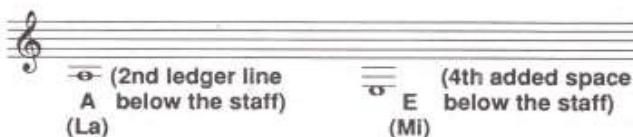


Here is a chart showing the notes on the staff that represent the open 6 strings of the guitar. Reading from left to right we have string 6, 5, 4, 3, 2, 1. ~~This week.~~ These are the only notes that we will be working with this week.



Place *i*, *m*, *a* fingers on strings 3, 2, 1 while playing the below exercise.

The Open Fifth and Sixth Strings



Using *p*, practice the following examples. Carefully observe the rhythms, and solfège the notes as you play. To stabilize your hand, place the tips of *i* and *m* on ② and ③.

Ex. 19a

Performance Piece: Exercise 13 - Alternation and String Crossing

Be sure to have this week's performance piece "Exercise 13 in front of you as you read through this lesson

In order to play faster and smoother we need to graduate from the comfortable fixed finger position that we have learned over the past several weeks to right hand alternation of i & m fingers on one string. To begin developing this technique, place p on 4, i on 3, and m on 2. Now alternate m & i on strings 2 & 3 like this.



Now, bring m finger down to string 3. To do so you will need to flex m finger more than usual to accommodate for the difference in size between the two fingers. Play the following exercise.

Now a longer version

Strive for exact reciprocation between i & m fingers.

Now you are alternating on one string!

Combining String Crosses and Alternation – Eliminate the Left-Hand Fretted Notes

Our new piece this week (Exercise 13) combines both alternation and string crosses in a very minimal way. Let's explore where this happens and make some exercises to develop these aspects.

There are 5 examples of string crossing in this piece.

1) measure one has a string cross

To make this passage easier, eliminate the left hand fretted notes and focus exclusively on the plucking hand fingers. With the fretted notes eliminated the example looks like this.

A musical staff with five notes. The first note is labeled 'i'. The second note is labeled 'm'. The third note is labeled '(i)' and is circled in red. The fourth note is labeled 'm'. The fifth note is labeled 'a'. The notes are represented by black dots on the staff.

Remember to string cross on the third note. The final two notes are played m to a. Play this above pattern from memory while focusing on your right-hand fingers. When comfortable, gradually add the fretted left-hand notes.

2) The second string crossing is at the end of line one.

A musical staff with five notes. The first note is labeled 'm'. The second note is labeled 'i'. The third note is labeled '(m)' and is circled in red. The fourth note is labeled 'i'. The fifth note is labeled 'm'. The notes are represented by black dots on the staff.

3) With the left hand fretted notes removed the example looks like this. Remember to cross strings on the fourth note.

A musical staff with five notes. The first note is labeled 'm'. The second note is labeled 'i'. The third note is labeled '(m)' and is circled in red. The fourth note is labeled 'i'. The fifth note is labeled 'm'. Below the staff is a blue horizontal bar. Under the fourth note is a blue bracket. The notes are represented by black dots on the staff.

ALTERNATION

Up to this point we have only used a fixed finger to string assignment in the right hand. However, to gain speed and fluency in scale passages it's necessary to begin alternating fingers on one string. To begin with, place P on 4, i on 3, and m on 2. Now begin to alternate i and m, on 3 and 2, focus on exact reciprocation of the two fingers: as I flexes, m returns—as m flexes i returns. Now play the same exercise except this time move m finger to the same string as i finger (string 3). To accommodate for the fact that m finger is longer than i you will need to put m in a slightly more flexed position when alternating on the same string. Once again, the primary function of alternation is to increased speed and rhythmic evenness.

STRING CROSSING

Good right-hand positioning requires that the middle knuckle of each finger be directly above the string which it plays. What happens when we need to reach strings which are not directly accessible when using a finger to string assignment? In this case we employ a technique called “string crossing”. String crossing requires that you move your entire forearm, hand and fingers from one fixed position to another. To do so, maintain your alignment and move the entire forearm from the elbow so that the fingers are placed over the strings which they are required to play.

As a preliminary exercise do the following. Pinch string 1 with i and p fingers, then string cross from the elbow and pinch string 2. Continue in like manner until you reach 6. Then complete the same action ascending until you reach string 1 again. Notice that this is a similar motion to strumming. When on string 1 the hand will be closer to the bridge, when on string 6 the hand will be closer to the sound-hole. Once you are comfortable with string crossing in this manner, then alternate 3 or 4 times per string as you string cross. Remember that the middle knuckle should be directly above each string being played.

Theory: Notation, Rhythm, Expression, Week 3

This week we will explore the topics of right-hand string crossing and alternation. Be sure to have the sheet music for exercise 18, from this week's "Technique" tab in front of you as you read through this lesson.

String Crossing – Key Points

- 1) The middle knuckle must be above the string which it is playing to allow for sufficient follow through. If the knuckle is not above the strings which it is playing the finger will strike the lower string when following through.
- 2) We must often play strings out of reach of our fixed finger position.
- 3) When playing string 2 to 1, we should always use i finger to m.



When playing from string 3 to 2 we should also use I finger to m.



We do this because the longer finger (m) reaches out to the string further away while the shorter finger (i) plays the closer string. Thus we base our technique on the way the fingers naturally and most advantageously fit on the guitar strings.

- 4) We must scan ahead in the sheet music to see when a string cross is approaching. We string cross a note in advance of when it is needed. You can see this principle at work in the scale (exercise 18, pg. 39, measure 3) from the Techniques tab this week. We string cross on the D note so we can play the following note (e, on string 1) with m finger.

A musical staff showing a scale. The first three notes are played with the i finger. The fourth note, a D note, is circled in red and has a green arrow pointing to the m finger, indicating a string cross. The fifth note is played with the i finger again. This illustrates the concept of string crossing on the same string.

On the descend portion of the scale we string cross on the open b string (string 2) so we can play the following note (a. on string 3) with i finger.

A musical staff showing a scale. The first three notes are played with the i finger. The fourth note, an a note on string 3, is circled in red and has a green arrow pointing to the m finger, indicating a string cross. The fifth note is played with the i finger again. This illustrates the concept of string crossing between strings.

String Crossing is also present in this week's duet "Chimes". There are 4 string crosses in A section of Chimes. Each string cross is circled in red (the rest of the piece is in fixed finger positioning with m on 1, and i on 2 throughout).

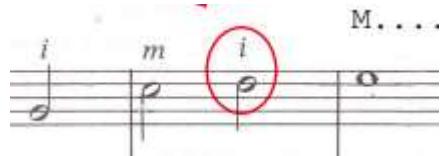
The first example come in measure 1-2



An excellent exercise is to remove the left hand pitches from an example when first beginning to string crossing. In this example we would have the following.



The second example comes in measure 3



If we removed the left-hand pitches from this example we have the following.



These exact same string crosses appear again in measures 2-3 of A1 section of the piece. When playing this piece please ignore the repeat dots.

Once again, the purpose of string crossing is 1) to allow the middle knuckle to remain above the string being plucked and 2) to access more strings than would be allowed for using a fixed finger position.

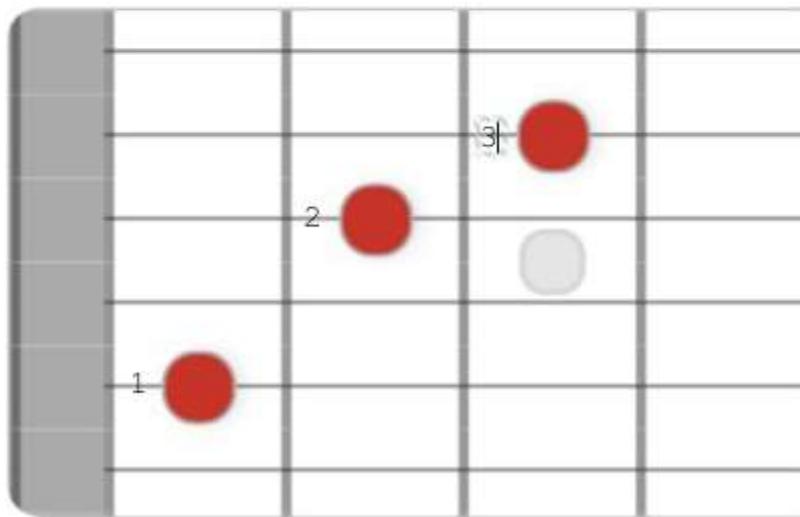
Bass Notes

This week's performance piece introduces 2 new open string notes bass notes on string 5 & 6; these are played with the thumb. Play example 19a (See this week's Technique tab). Keep the plucking hand fingers on strings 3, 2, 1 for stability. Remember to pluck the thumb down toward the ground; not away from the guitar in a circular motion. Be sure to count the rhythms or say the letter names aloud.

Chords

This week we will introduce the c chord. It looks like this.

C Major



You will recall that 6 horizontal lines represent the 6 guitar strings. The lowest line represent string 1, the highest string 6. The vertical lines represent the frets and the grey bar on the left represent the end of the nut of the guitar. The red dots represent the fingers, i.e., finger 1 plays on string 2 at fret 1, finger 2 plays string 4 on fret 2, and finger 3 plays string 5 on fret 3. You will notice that two of the fingers from the C chord are used in the a minor chord, which brings us nicely to the topic of pivot fingers.

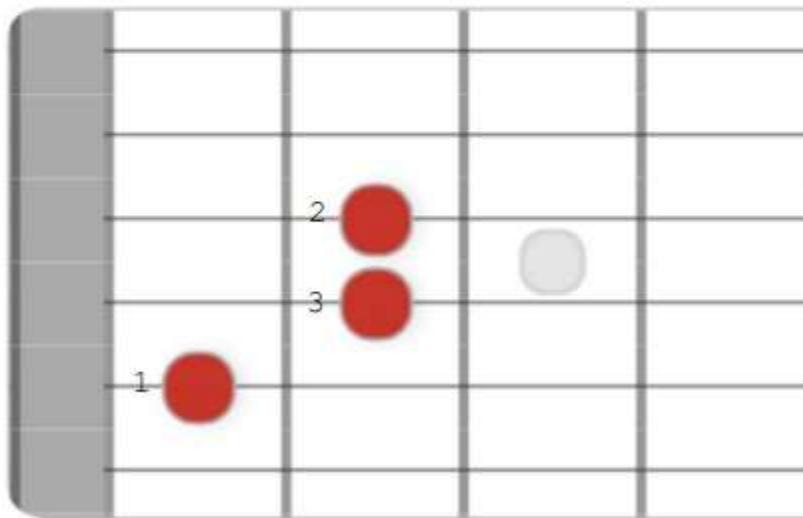
PIVOT FINGERS

Pivot fingers are fingers that stay in place on the same string and fret when exchanging from one chord to another. For instance, finger 1 & 2 stay constant between the two chords. This provides stability when moving from one chord to another. Leave the fingers fret and do not lift them, only move finger 3. Try strumming the c chord to the following rhythm.

19 $\frac{2}{4}$ ♩ ♩ | ♩ ♩ | ♩ ♩ | ♩ ||

Now, try playing the c chord and hold it for 4 beats then change to a minor chord; focus on staying on the beat and not getting behind. Next hold each chord for 3 beats. Then 2 beats. Finally change chords on every beat without losing the beat; you may need to slow down the tempo (speed).

a minor



Finally, try repeating the following rhythm and change chords each time you go back to the beginning of the rhythm. Go slow enough that you do not lose a beat.

$\frac{2}{4}$ ♩ ♩ | ♩ ♩ | ♩ ♩ | ♩ ||

Lesson: Week 5, Simple Dialogue, by Shawn Bell

Once again, this week you should begin by performing sections of the piece using separate hands. This is done in order to reduce the cognitive load.

A section

Notice that line 1 & 2 are the same except for the dynamic levels. Play only the bass notes with the right hand.

The musical score shows two staves. The top staff is labeled "ion" and has a tempo of 144-168 BPM. The bottom staff is labeled "Forte". The score consists of eight measures. In each measure, there are two bass notes: one on the first beat and one on the third beat. The first note in each measure is marked with a dynamic "m" (mezzo-forte). The second note is marked with a dynamic "i" (pianissimo). Measures 1 and 2 are identical. Measures 3 through 8 show a repeating pattern of two bass notes per measure, with the first note being "m" and the second being "i". A red box highlights the bass notes in measures 3 through 8.

Play the left hand upper voice notes only, so no sound is created. We say that these are “ghost notes”.

The musical score shows two staves. The top staff is labeled "ion" and has a tempo of 144-168 BPM. The bottom staff is labeled "Forte". The score consists of eight measures. In each measure, there are two upper voice notes: one on the first beat and one on the third beat. The first note in each measure is marked with a dynamic "m" (mezzo-forte). The second note is marked with a dynamic "i" (pianissimo). Measures 1 and 2 are identical. Measures 3 through 8 show a repeating pattern of two upper voice notes per measure, with the first note being "m" and the second being "i". A red box highlights the upper voice notes in measures 3 through 8.

Play the right hand upper voice with only the right hand (use only open strings, remove the fretting fingers)

Line 1 measures 1 & 2

A musical score for two staves. The top staff is blank. The bottom staff is in treble clef and has a tempo of 144-168 BPM. It contains two measures of music. Each measure has two notes: a quarter note on the first beat and another quarter note on the third beat. The notes are positioned on the first and third lines of the staff.

Line 1 measures 3 & 4

A musical score for two staves. The top staff has a red "X" over the first note of the first measure. The bottom staff is in treble clef and has a tempo of 144-168 BPM. It contains two measures of music. Each measure has two notes: a quarter note on the first beat and another quarter note on the third beat. The notes are positioned on the first and third lines of the staff. The first note of the first measure is crossed out with a red "X".

The first two lines contains a musical echo; a repetition or mimicking of a passage with less force and volume than the original statement. Play the first line loud and the second line soft.

Continue in this manner exploring correct alternation of plucking hand fingers and correct string crosses throughout the remainder of the piece.

There are four, two-bar phrases beginning at measure 9. Each of these phrases descends in a sequential manner until measure 16.

A musical score for a bowed instrument, likely cello or bass. The score consists of two staves. The top staff starts at measure 9 and ends at measure 10. The bottom staff starts at measure 13 and ends at measure 16. Measure 9 is labeled "B Sec." and has a forte dynamic. Measure 10 is labeled "Mezzo Forte". Measure 13 is labeled "Mezzo Piano". Measure 16 is labeled "Piano poco rit.". Measures 10 and 16 are enclosed in red boxes. Measures 9 and 13 are also enclosed in red boxes.

To highlight this downward sequence, I have added a decreasing dynamic pattern - from Forte, mezzo forte, mezzo piano to piano. See if you can get quieter with each 2 bar phrase.

A musical score for a bowed instrument, likely cello or bass. The score consists of two staves. The top staff starts at measure 9 and ends at measure 10. The bottom staff starts at measure 13 and ends at measure 16. Measure 9 is labeled "B Sec.". Measure 10 is labeled "Mezzo Forte". Measure 13 is labeled "Mezzo Piano". Measure 16 is labeled "Piano poco rit.". The dynamics for each 2-bar phrase are highlighted with red boxes: "Forte" for measure 9, "Mezzo Forte" for measure 10, "Mezzo Piano" for measure 13, and "Piano poco rit." for measure 16.

The last two measures of the final phrase of B section contains a poco ritard. Poco translates as “small”, and ritard means to slow down. Thus, we have a small slowing down to conclude the B section.

The last phrase also contains a G sharp note on string three. Remember that a sharp note raises a note 1 fret. G note is usually played on open string 3, so the G sharp note is played at the fret one of string 3. Sharp notes remain sharp only for the measure in which they are found.

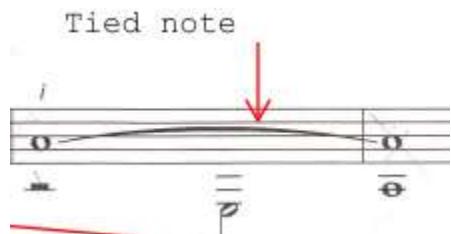
At the return to the theme, in measure 17, we see an *a tempo* sign.



This means to return to the original tempo after the poco ritard.

At the end of measure 22, and to accommodate plucking from string one to string three, it is recommended that you pluck with a to I fingers.

To finish the piece off there is a tied note on the high A note



A **tie** is a curved line between two notes that joins their time values together so that they are played as if they were one note. Do not play the second note, instead, let it continue to ring out.

As always, begin slowly as you practice until you are comfortable.

F# - Key Signatures – G major Scale

Sharps (#)

When a sharp symbol (#) is placed before a note it indicates that the note is to be played one fret higher. In the example below F is played at fret 1 of string 1. The second note – F# is to be played at the fret 2 of string 1 with finger 2.



Key Signature

In musical notation, a key signature is a set of sharp (#) symbols placed together on the staff.



Key signatures are generally written immediately after the clef at the beginning of a line of musical notation. They indicate what notes are to be played sharp (or flat) for the duration of the piece. Sharp notes (#) are played one fret higher than normal. ~~This week's piece has one sharp (F#) in the key signature. Thus, all F's in the piece (hint... there is only one!) are to be played at the 2nd fret of string one with finger 2.~~

New Left-Hand Notes

This ~~piece~~ scale has two new notes on string 1. The F#, which we have discussed above,



played on string 1, fret 2, finger 2,

and the high G note



Played on string one, fret 3, finger 3

Play the following scale using strict right-hand alternation

G Major

The image shows three staves of musical notation for the G Major scale. The first staff starts with a treble clef, a common time signature, and a key signature of one sharp (F#). Fingerings are indicated above the notes: 0, 2, 0, 1, 4, 0, 2, 4, 0, 2, 0. Muting is indicated by a 'p' below the notes: G, A, B, C, D, E, F#, G, p, p, p, i. The second staff continues with fingerings 1, 3, 0, 2, 3, 2 and muting i, m, m, m, m, m. The third staff concludes with fingerings 0, 3, 1, 0, 2, 0 and muting m, i, i, i, p, p.

ALTERNATION

Up to this point we have only used a fixed finger to string assignment in the right hand. However, to gain speed and fluency in scale passages it's necessary to begin alternating fingers on one string. To begin with, place P on 4, I on 3, and m on 2. Now begin to alternate I and M, on 3 and 2, focus on exact reciprocation of the two fingers. Now bring finger m finger down to string 3 and alternate as before. To accommodate for the fact that M finger is longer than I you will need to put M in a slightly more flexed position when alternating on the same string. Once again, the primary function of alternation is to increased speed and rhythmic evenness.

STRING CROSSING

Good right hand positioning requires that the middle knuckle of each finger be directly above the string which it plays. What happens when we need to reach strings which are not directly accessible when using a finger to string assignment? In this case we employ a technique called "string crossing". String crossing requires that you move your entire forearm, hand and fingers from one fixed position to another. To do so, we maintain our alignment and move the entire forearm from the elbow so that the fingers are placed over the strings which they are required to play.

As a preliminary exercise do the following. Pinch 1 with i and p, then string cross from the elbow and do the same thing on 2, then on 3, and so on, until you reach 6. Now do the same thing ascending until you reach string 1. You will notice that this is a similar motion to strumming. On string 1 the hand will be closer to the bridge, and on string 6 the hand will be closer to the sound-hole. Once you are comfortable with this, then begin alternating fingers on one string in groups of 3 or 4 and do this on all strings. Remember that the middle knuckle should be directly above each string being played.

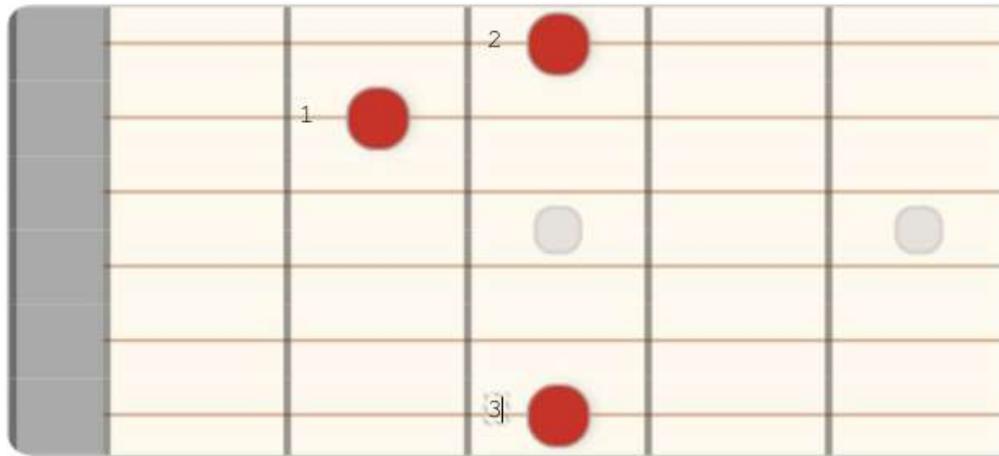
SCALES

Scales are an integral part of learning to play an instrument. Like warm-ups and stretches for an athlete, scales warm up the muscles, focus the mind and refine technique. Scales are played in two manners:

- 1) Tremolando: which is four times per note.
- 2) Diatonic: which is once per note.

During the early part of this class tremolando and diatonic scales will be played using a fixed finger position. In the latter part of the class scales will be performed using alternation and string crossing.

G Chord



Please review the a minor to C chord exchange from last week.

This week we will play the G chord. Always finger new chords from the lowest string to the highest string

Application – Play the G chord with the following strum patterns.

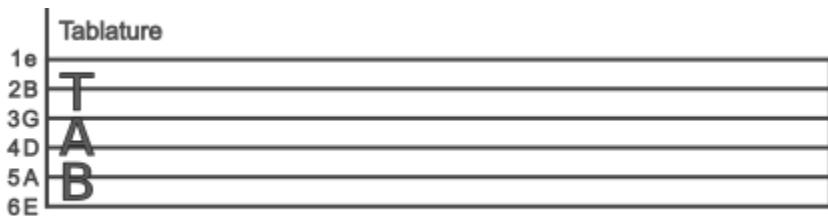
19 $\frac{2}{4}$ $\downarrow \uparrow | \downarrow \uparrow \downarrow \uparrow | \downarrow \uparrow \downarrow \uparrow \downarrow \uparrow | \downarrow \quad \|$

30 $\frac{3}{4}$ $\downarrow \downarrow \uparrow \uparrow | \downarrow \downarrow \uparrow \uparrow | \downarrow \quad \downarrow \quad \|$

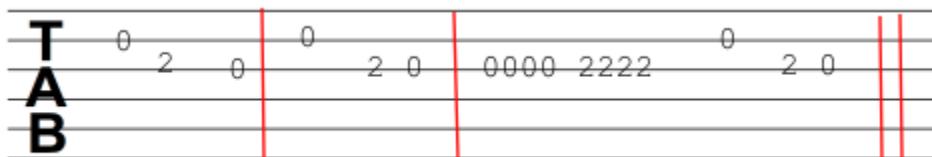
Modeling: Tablature Week 4

Tablature (or tab for short) is a form of musical notation indicating instrument fingering rather than musical pitches. Tablature was common during the Renaissance and Baroque eras, and is commonly used today in notating many forms of music.

The six strings of the guitar are represented by the six horizontal lines of the Tab. The top line represents the high E string of the guitar and the bottom line represents the low E string of the guitar. This can seem a bit counterintuitive to some people so just remember that the top line is the thinnest string and you will be good to go.



The numbers you will see on a piece of tablature represent the frets you are supposed to put your fingers on. You read these numbers from left to right just like you would read a book. Here is one of the first pieces that you learned. Can you guess what it is?



I would like you to learn the first riff (a short repeated phrase in popular music) of an old song called “wipe out”. This will help you to establish the new technique of alternation.

We will learn the final riff of the piece next week.

This Week's Piece - Three New Topics

New E note on String 4

At the end of this weeks' piece three notes are played at once. The middle note is new, it is played on string 4 at fret 2 with finger 2. The high note (a) is usually played with finger 2 on string 3, however, here it is played with finger 3. Think of this as an a- chord without string 2.



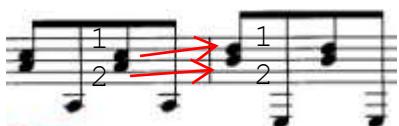
B & D notes on string 2 & 3

This piece asks you to play the B & D notes at the same time in measures 3, 6, and 14. We have always played these two notes on string 2. How do we play B & D notes at the same time when they are on the same string; it's not possible? To do so we maintain finger 3 on the second string (D note) and play the B note **on string three at fret 4** —I'll unpack the logic of this next week. In measure two to three do the following: leave finger 3 fretted on fret 3 as a pivot finger, then use finger 4 to play the B note on string 3 at fret 4. This requires you to stretch finger 4 slightly to reach.



Guide Fingers

The other two examples where this occurs (measures 6 and 14) simply use fingers 1 & 2 and shift up two frets to arrive at the B & D notes. We refer to these as "Guide Fingers" because they remain on the strings and 'guide' to a new position. In this case from fret 1 & 2 (A & C) to fret 3 & 4 (B & D).



Finally, one new low note is used in measure 12. The low C note is fretted on string 5 at fret 3 with finger 3. This measure is best to be thought of as a C chord (although we do not pluck all of the notes in the chord).



Beginning Free-Stroke: Sounding Two Notes Simultaneously

CORRECT FREE-STROKE POSITION

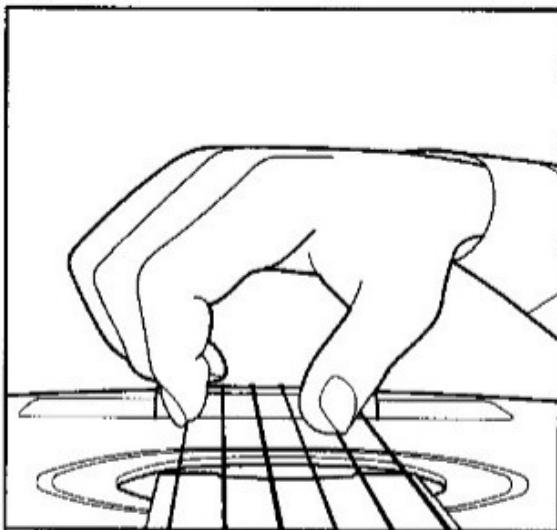


Figure 33A

INCORRECT FREE-STROKE POSITION

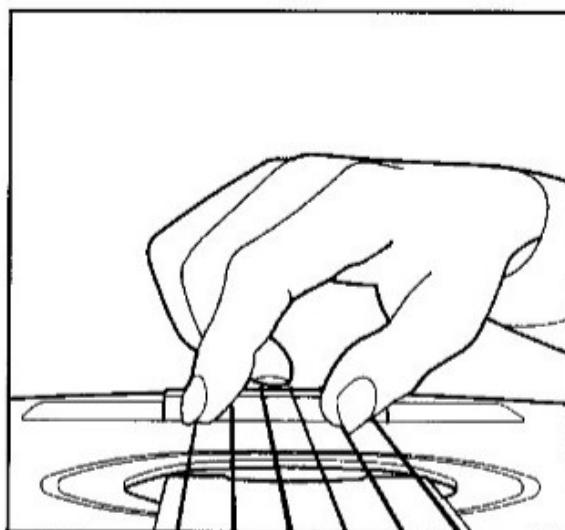


Figure 33B

Your aims for developing free-stroke with your fingers are as follows:

- 1) To keep the middle fingers flexed and the tip joints sufficiently firm for the fingers to clear the lower adjacent strings.
- 2) To move and follow through mainly from the middle joints, with a slight follow-through at the knuckles.

Begin by sounding ③ and ② simultaneously with i-m as follows:

- Position your hand and finger joints as though aiming to sound ① with i rest-stroke. Place p against ⑤ to steady your hand.
- While maintaining your hand position, flex the middle joints of m and i into prepared-stroke positions against ② and ③ respectively. Keep a and c somewhat more flexed than m and i.
- Flex firmly at the middle and knuckle joints to sound ② and ③. Flex more from the middle joints than from the knuckles, and keep the tip joints of both fingers quite firm. Follow through to the comfortable limit of i-m flexion. For now, exaggerate the follow-through of a and c, with c perhaps curling to touch your palm — this will help you establish the habit of flexing c along with a.
- Extend your fingers as directly as possible to prepare the next stroke. Avoid a complex circular motion.

TIP JOINT CONSIDERATIONS

At the instant your finger sounds a string, you may find that the resistance of the string tends to push the tip joint into a hyperextended position.[†] You should learn to avoid this. *Always maintain enough firmness in the tip joint to avoid its being displaced by the resistance of the string.*

Maintaining sufficient firmness in the tip joint offers the following advantages:

- 1) It gives you a more secure feeling of digging into the string,
- 2) It helps the finger to cleat the adjacent lower string
- 3) It improves the brightness and clarity of your tone.

In the following example, there are three different pairs of notes — you should identify them by solfeging each note and naming each left-hand finger. Repeat until you can clearly see in your mind's eye the location and left-hand formation of each pair of notes on the fingerboard. Before playing, you should be able to read and visualize the complete example (solfeging the top note of each note pair) at a slow and steady tempo. Then carefully play the example, solfeging the top note as you play.

Ex. 24

This Weeks Performance Submission Piece: **Alternation of P & IM**

For this weeks performance piece; *Study in a-*, you will alternate im and p. Your aims for developing im and p alternation are as follows.

- 1) To extend and prepare P as you sound the strings with im, and to extend im as you sound the string with P.
- 2) To keep your right hand and arm properly positioned and steady as you sound the strigs.

As you practice this week's piece, *Study in a-*, remember the following. Move your fingers and P simultaneously, flexing one while extending the other. Any delay will impede fluency and speed. Practice the following pattern to establish this technique..

This weeks' piece requires that you string cross with IM fingers. Practice the following pattern.

Tone Production

When the guitar is well played, perhaps its most attractive characteristic is its tone. Tone production, however, is also one of the most problematic areas of guitar study. Poorly trained students produce a poor tone which is immediately evident during performance. Since your overall aim is to avoid anything which will hinder your effectiveness as a performer, you need to approach tone production with special care.

While a wide range of tone color is possible on the classic guitar, this range of tone color isn't your present concern. Rather, you should aim to develop an optimum basic tone which, through training, you can produce by habit. This basic tone will eventually be your point of departure for using the guitar's full range of color.

Principles of Tone Production

The quality and power of your tone depend on the following 3 principle:

1) TONE PERCEPTION: The tone you produce reflects the tone you perceive as desirable. You'll develop your perception by critically listening to yourself and others. Full-bodied, mellow, and warm are more desirable qualities—thin, hollow, and metallic are less desirable in general.

2) NAIL CONDITION AND USE: Your tone depends on both the condition of your nails and how you use them.

3) TOUCH AND MOVEMENT: Your tone depends on how your thumb or finger contacts the string. And on the direction and force of its movement when sounding the string:

- a. The left tip and nail of the thumb or finger must be placed firmly against the string the instant prior to sounding the string.
- b. Movement must be sufficiently firm to drive the string obliquely inward at the instant of the stroke. Thumb or finger movement must not be deflected by the string's tension.

Tone Quality and Your Nails

You should begin using your nails as soon as they've grown to an adequate length for effective shaping. Sounding the strings with the nails requires different finger movements from those used when sounding the strings without the nails. By using your nails from the beginning of right-hand study, you'll avoid forming habits which must eventually be replaced.

A tone is produced at the precise instant the string departs from your nail. *How gradually or abruptly this departure occurs is a crucial element of tone production.* The departure of the string from your nail is affected by three main factors:

- 1) the movement of your thumb or finger
- 2) the shape of your nail
- 3) the position of your right hand — this is determined by the following:

Nail Position and Shape which Cause a Gradual Departure of the String from the Nail. These yield a mellow and full-bodied tone:

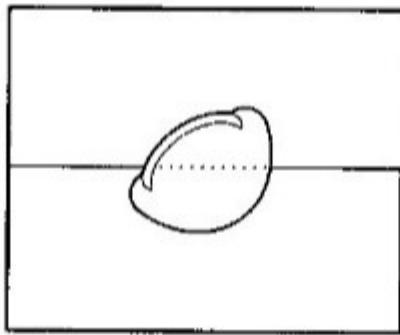


Figure 9A: (Viewed from above, sighting down along the length of the finger toward the string.) The more perpendicular the nail rim is to the string, the more gradual is the departure of the string from the nail.⁷

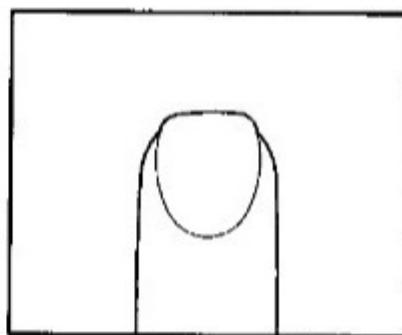


Figure 9B: The more the nail is shaped to a level plane, the more gradual is the departure of the string from the nail.

Nail Position and Shape Which Cause an Abrupt Departure of the String from the Nail. These yield a bright and clear tone:

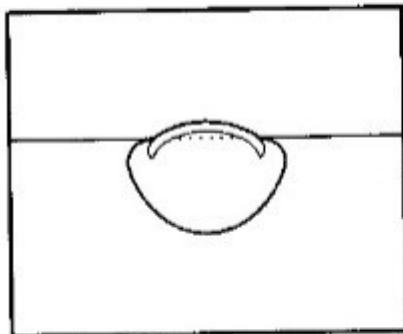


Figure 10A: (Viewed from above.) The more parallel the nail rim is to the string, the more abrupt is the departure of the string from the nail.

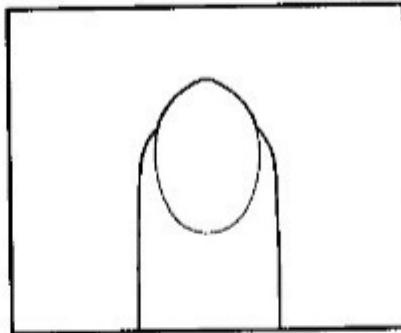


Figure 10B: The more the nail is shaped to a point, the more abrupt is the departure of the string from the nail.

In filing the nails, one of the first questions that comes up is how long they should be. The nails work best when they are filed neither too long nor too short, that is, short enough to avoid catching and long enough to provide the right amount of resistance and to strike the strings when the fingers are moving quickly. The usual recommendation is that the nails, when seen from the back side, should be about one-sixteenth of an inch above the flesh (Figure 6-1). The thumbnail is usually somewhat longer—about one-eighth of an inch (Figure 6-2).

Figure 6-1 Suggested fingernail length

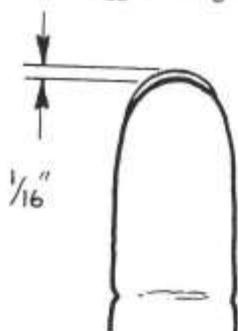
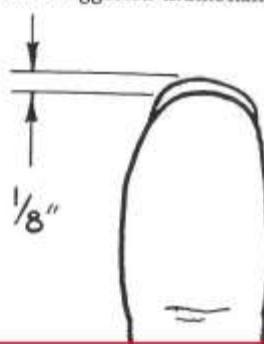


Figure 6-2 Suggested thumbnail length



A general principle in shaping the nails is to avoid irregularities and sharp peaks. Most nails should have *slightly rounded* surfaces that more or less follow the contour of the fingertip. The slightly rounded shape allows the nail to pass over the string with just the right amount of resistance. When “planting” or placing a properly rounded nail on the string (see “Planting the Fingers,” Chapter 5), it touches the string on its left side and at the end of the stroke it releases easily from about the middle of the nail (Figure 6-3).

Many players make the mistake of leaving a sharp peak somewhere on the nail. Thinking that the nail will go across the string more easily, they often file down the left side (the normal playing side) of the nail too much, thus leaving too much of a peak in the middle of the nail. However, with the left side too short and a peak in the middle that is even a bit too sharp, the nail often tends to snag even more. This is because the stroke begins at a rather low point on the left side of the nail. Thus, before the nail can release from the string, it has to ride up a relatively long way to its peak. If the peak is too high, the nail may hook very badly. The general remedy for the problem is to let the left edge of the nail grow somewhat longer and to file the peak down so that the top edge is slightly rounded. (Some nails work best when the top edge looks almost flat.)

Not all nails will work with the slightly rounded shape just described. Nevertheless, even if the nail requires an angled shape in order to function properly (see Figure 6-10), the corners should be slightly rounded to prevent snagging and bad tone.

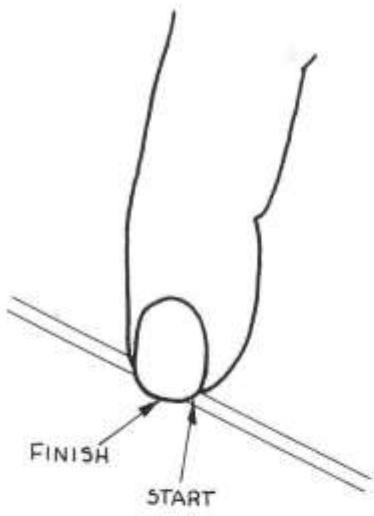
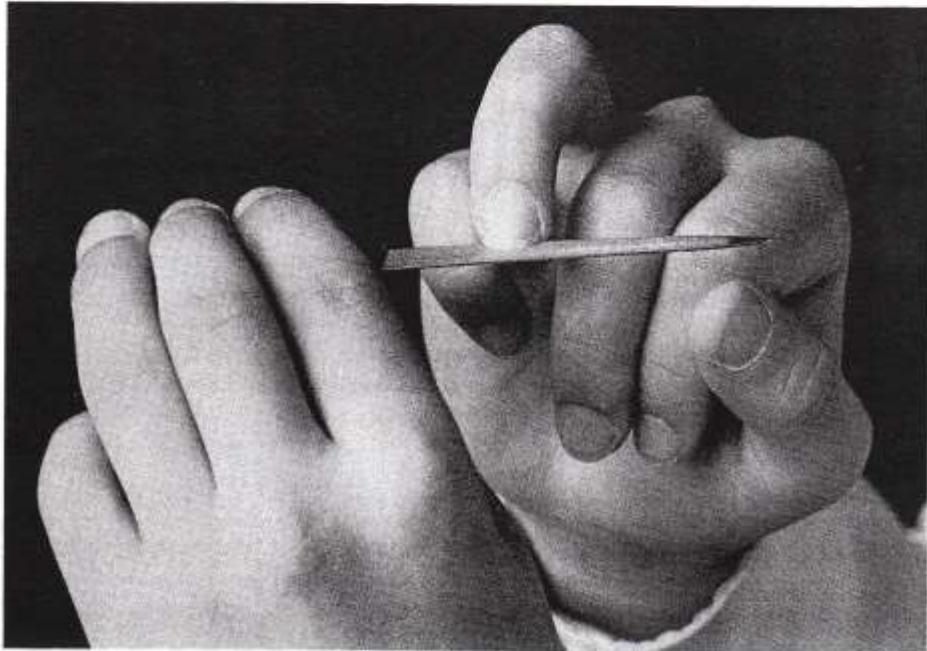


Figure 6-3 Placement of the nail and fingertip on the string

Since each player's nails are unique, the exact way of filing them will vary. Also, since each individual nail may have a slightly different contour, it will have to be filed a bit differently from the others. In any case, you can start the rough shaping process by holding the file firmly in the left hand and placing the nail against the file as shown in Figure 6-4.

Figure 6-4 Nail-filing technique



The Prepared Stroke

Before you can confidently sound a string with a smooth and continuous motion, you must first acquire habits of accuracy and security. The prepared-stroke is the most efficient way to acquire these habits.

In the prepared-stroke, you pause to place the tip and nail against the string as precisely as possible. As a right-hand training technique, the prepared-stroke offers the following advantages:

- A) It ensures accurate and firm placement of the tip and nail against the string.
- B) It gives and increased feeling of security
- C) It speeds your progress toward being able to accurately and securely move P or your fingers in a continuous motion.

Sympathetic Movement

When you flex or extend one finger, the adjacent finger tends to move in the same direction. This is called *sympathetic movement*, and it's extremely useful in playing the guitar. In sympathetic movement, adjacent fingers can move in the same direction either simultaneously or successively. Simultaneous movement and successive movement are very similar — only the timing between the two is different.

Sympathetic flexion or extension of your fingers is a further instance of the Uniform Direction of Joint Movement Principle. This principle applies not only to joints of an individual finger, but also to the same joints of adjacent fingers.

In guitar playing, sympathetic movement requires a high degree of timing and control. When effectively developed, sympathetic movement is a powerful aid for the rapid and continuous sounding of successive strings (arpeggios, for example). For now, however, you should concentrate on gaining coordination and control. Defer considerations of speed until you've developed secure habits of movement through the prepared-stroke — this will give you a secure basis for developing fluency and speed.

PIM Arpeggio

Your aims in establishing the pim movement form are as follows:

To sound strings 5, 3, 2 in succession with p, I, m (prepared stroke)

To achieve controlled timing of the sympathetic movement between i and m.

Do the following:

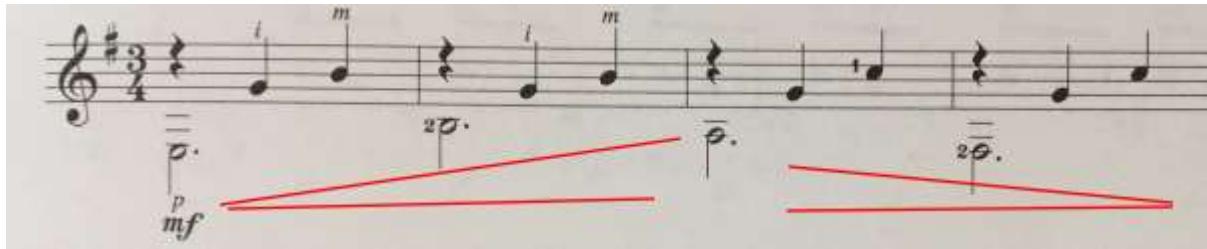
- Place p against ⑤ with i-m(a-c) flexed above the strings.**
- Sound ⑤ with p while extending and preparing i-m on ③-②.**
- Sound ③ with I, flexing mainly at the middle joint. This naturally exerts a pull on m which increases as i follows through; flex m sympathetically with i to sound ② while simultaneously extending and preparing p. Notice that i always remains more flexed than m during both flexion and extension.**

In other words:

- 1) As p sounds its string and follows through, the fingers extend and prepare.
- 2) i sounds its string and begins to follow through.
- 3) As m(a-c) moves sympathetically with i to sound its string, p extends and prepares for its next stroke.

PIM'S Etude LESSON - Chords and Arpeggios (Broken Chords)

A chord is a group of notes (usually three or more) that are sounded together—played solidly. However, chords can also be played in a broken manner—successively, one note following another. When played this way they are called **ARPEGGIO**. For instance, try playing the first four measures of this week's performance submission piece “pim’s” PIM—which is an arpeggio. The second finger plays string 5 fret two in measure two. The second finger plays string 6, fret two in measure four.



Now try playing the same four measures in a solid manner. Making chord solid chords from arpeggio pieces is a powerful way to memorize the left-hand chords. Break this week's piece into four measure section and practice them as solid chords.

Divide the piece into four measure phrases and practice in a similar manner.

BALANCE

In order to create a proper balance between the bass melody and the upper note accompaniment it is crucial that you elevate the bass voice above the accompaniment. A practice technique to help you with this is to eliminate the upper notes and play only the low bass note in each measure.

RIGHT HAND CHOREOGRAPHY

Be sure to watch the video from the technique section this week and practice playing the piece with the right-hand choreography described there.

HOT CROSS BUNS

This week we will learn to play Hot Cross Buns in two different keys. The first three notes will be E, D, and C. Watch the following video to learn this by ear

Musical notation and tablature for the first three notes of Hot Cross Buns. The notation shows a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. The tablature shows the strings from top to bottom: G, B, D, A, E, and B. The notes correspond to the strings: G (open), B (2), D (0), and A (3). The tablature is labeled with T, A, and B.

The second key that we will play in uses the following three notes.

Musical notation and tablature for the second set of notes in Hot Cross Buns. The notation shows a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. The tablature shows the strings from top to bottom: G, B, D, A, E, and B. The notes correspond to the strings: G (open), B (2), D (0), and A (3). The tablature is labeled with T, A, and B.

Once you have played Hot Cross Buns from memory in both above keys you will have a good grasp of the lower notes on the guitar. These notes comprise most of the bass notes in this week's submission piece PIM'S Etude.

Musical notation and tablature for the complete melody of Hot Cross Buns. The notation shows a treble clef, a key signature of one sharp (F#), and a time signature of 3/4. The tablature shows the strings from top to bottom: G, B, D, A, E, and B. The notes correspond to the strings: G (open), B (2), D (0), A (3), G (open), B (2), D (0), and A (3). The tablature is labeled with T, A, and B.

This week we will learn the remaining natural notes in first position. Natural notes are the notes A, B, C, D, E, F, and G represented by the white keys on the keyboard of a piano. Notes in first position refer to those notes located on the first 4 frets of the guitar. Play the following scale ascending and descending with alternating IM fingers. The diagram below is a visualization of the scale.

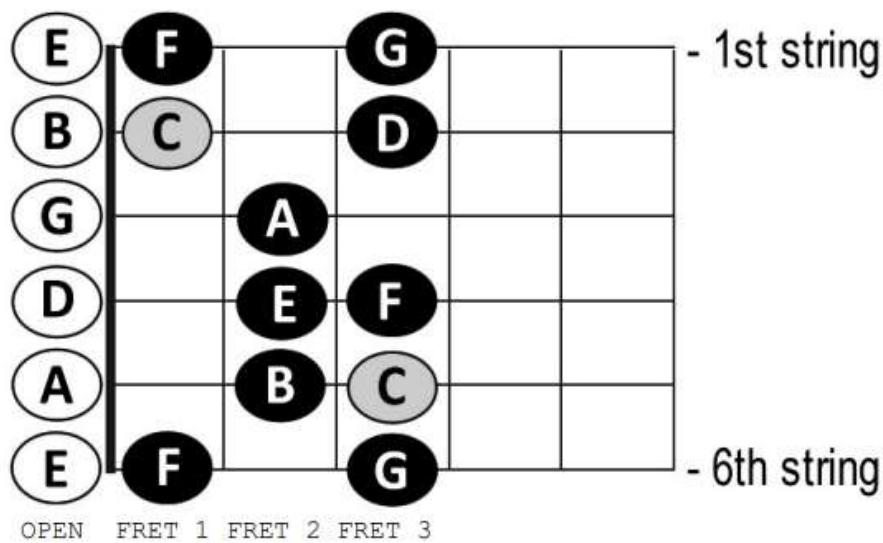
The Natural Notes of the First Position

Open Strings Notes "on" the Staff Lines Notes "on" the Staff Spaces

E A D G B E E G B D F F A C E

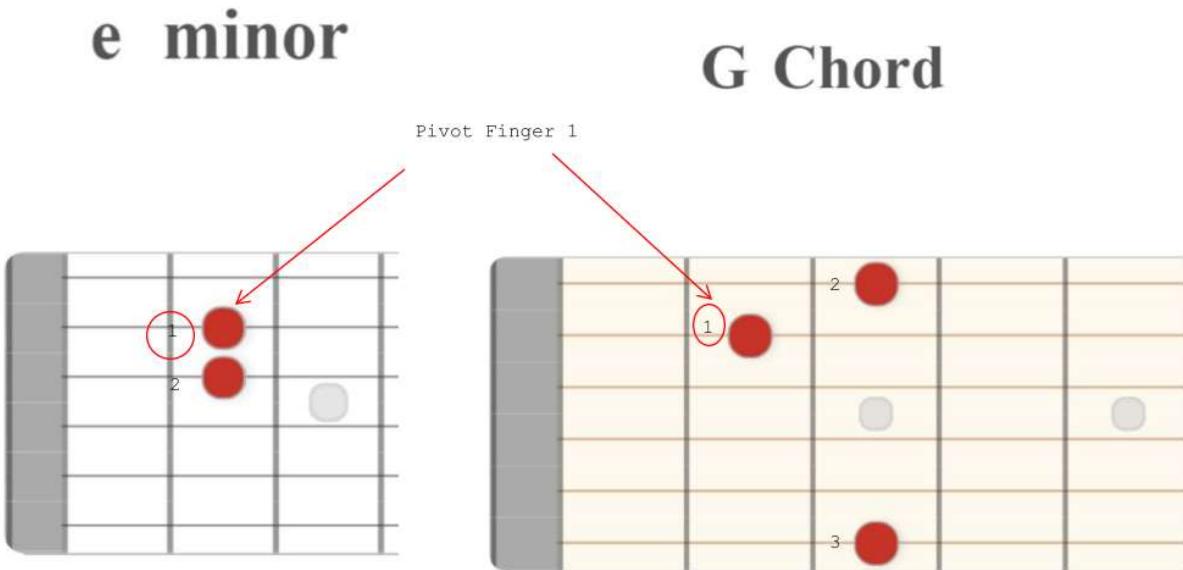
"Every Good Boy Does Fine" These notes spell "FACE"

"Eddie Ate Dynamite, Good Bye Eddie"



CHORDS week 3

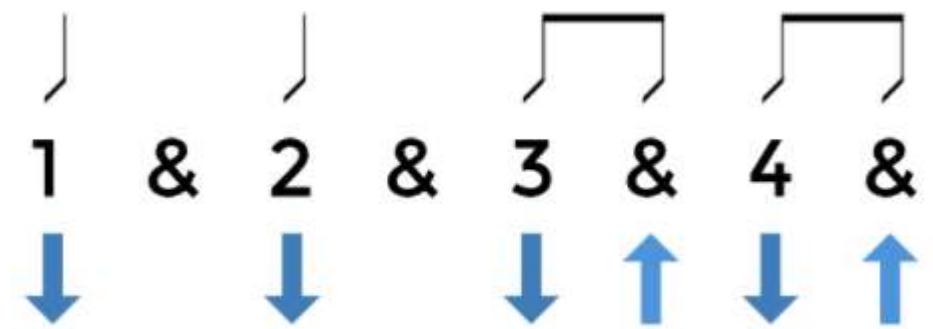
This week we look at the e minor chord. We will also change from the e minor chord to the G chord.



Finger 1 in the fretting hand is a pivot finger between the two chords. When changing chords leave finger one fretted and do not lift it.

E minor chord is played with finger 1 & 2. Strum the e minor chord once and hold for a count of 4. Then, on beat 1 strum the G chord. Play again, but only count to 3. Continue in this manner until you can change chords counting only 1 beat, and without losing a beat.

After you are comfortable doing this try playing the following strum pattern going back and forth from e minor to G. Leave out the final eight note in the pattern when you initially try this. Doing so will give you some extra time to get to the new chord. After the chord exchange feels comfortable then add the final eight note back into the pattern.



Beginning Free-Stroke Alternation: P, I, M, I

~~When you began training individual fingers, you learned that the rest-stroke yielded a quicker feeling of security for your right hand (p. 50). During your early development this is true — considerations of right-hand stability make the rest-stroke easier and more secure. By now, however, you should be reasonably secure with both the rest-stroke and free-stroke. The considerations of right-hand stability which initially made the rest-stroke easier no longer apply. Thus, you'll begin alternation training with the free-stroke.~~

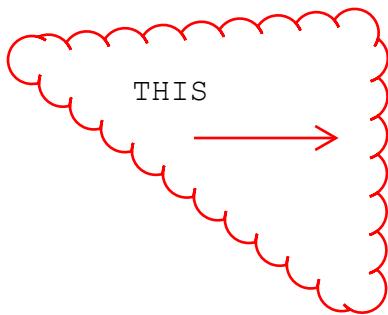
~~Because of the different reaches of i and m, alternation is best begun on adjacent strings by adding one opposed movement with i to the already secure p, i, m figure. This results in the p, i, m, i movement form. P, i, m, i consists of one opposed movement and one sympathetic movement of the fingers:~~

- a) After sounding its string, i extends as m flexes — this is the opposed movement.
- b) As m begins its follow-through and i sounds its string the second time, i flexes with m — this is the sympathetic movement.

Your aims in beginning free-stroke alternation are as follows:

- To ensure that, at the instant i moves in one direction, m moves in the other.
- To emphasize security rather than speed.

Proceed as follows:



- 1) Begin with the familiar p, i, m movement sounding (5), (3), (2), except now extend and prepare i on (3) as m flexes to sound (2).
- 2) While following through with m, again sound (3) with i and simultaneously extend and place p against (5). I-m (and a-c) should remain flexed.
- 3)

- 4) While sounding ⑤ with p, lead with m(a-c) to extend and place i-m on their respective strings. This begins another cycle of p, i, m, i.

f Good

2 2 2 2 2 2 2

If, during flexion you touch an adjacent lower string (most often this occurs with i), one of the following may be the cause:

- You're not beginning the movement with the middle joint (and perhaps the tip joint) sufficiently flexed.
- You're not sufficiently flexing the middle joint.
- You're not keeping the tip joint sufficiently firm at the instant of the stroke.

When you can execute p, i, m, i with reasonable accuracy, practice slowly and evenly while counting "1, &, 2, &." Practice at a tempo which allows you to maintain a smooth and accurate flow of movement.

Try to produce a full-bodied, clear, and somewhat mellow tone. If your tone is thin or too bright, flex with less firmness at the tip joint. If your tone is weak and unclear, flex with more firmness at the tip joint. Remember, you must apply sufficient power to deflect the string inward with the nail rim.

Experiment with all aspects of tone production to determine your best nail shape, the most effective tip and nail placement against the string, and the most effective direction and force of finger movement. Discover the joint positions which give greatest strength and fluency. Constantly strive for maximum ease and security.

When you can securely execute p, i, m, i, practice p, i, a-m, i and p, i-m, a, i-m in a similar manner. You'll find exercises and musical examples for these movement forms in *Part Two*, pp. 77 – 80, 83, and 85 – 86.

You'll begin alternation by playing the p, i, m, i arpeggio. P, i, m, i contains one opposed movement followed by one sympathetic movement:

- As m flexes to sound its string, i extends to prepare on its string — this is the opposed (alternation) movement.
- As m follows through, i flexes to sound its string — this is the sympathetic movement.

Carefully practice this arpeggio until you can execute it with reasonable fluency:



Learn each measure as a block chord before adding the arpeggio. Here is a small hint. There are only 4 chords in the example.

P,I,M,I Etude I

A. S.

Solo No. 14

A musical score for Solo No. 14. It consists of two staves of music. The top staff is in 6/8 time and the bottom staff is in 3/8 time. Both staves use a treble clef. The music is composed of eighth and sixteenth note patterns.

A continuation of the musical score from the previous page. It consists of two staves of music. The top staff is in 6/8 time and the bottom staff is in 3/8 time. Both staves use a treble clef. The music is composed of eighth and sixteenth note patterns.

Four Strings Simultaneously with P-I-M-A

The previous consideration of emphasizing the sound produced by a still applies (see p. 62). Thus, you should flex p-i-m relatively gently and carefully emphasize a's firm placement, flexion, and follow-through.

Begin by isolating and practicing this technique — perhaps on open strings. When you feel reasonably secure, you can further develop this technique by playing simple music consisting largely of chords in which the highest note must be emphasized. Developing the independence and control of a takes time, but it's essential if you're to become a proficient guitarist. Here again, the prepared-stroke will prove invaluable.

Prelude no. 9, Block Chords

Notice the B note move to C and remains while the G note moves to A in the first 3 measures

Composer
J.S. Bach

only one note changes from chord to chord. Be sure to maintain the note(s) from the previous bar (i.e., pivot fingers)

P, I, M, A, M, I

#1

Prepare p on ⑤ and i-m-a on ③, ②, ①.

Sound ⑤ with p, followed by ③ with i.

As i follows through, flex m sympathetically with i to sound ②.

Flex a to sound ① while simultaneously preparing i-m on ③ and ②.

As a follows through, flex m sympathetically with a to sound ②.

Flex i sympathetically with m to sound ③ while simultaneously preparing p on ⑤.

Flex p to sound ⑤ while simultaneously preparing i-m-a on ③, ②, ①.

As always, c should move with a.

Sequential Preparation

Keep the same choreography of finger movement and placement yet prepare each finger in succession.

Continuity Stroke

Finally, remove the overt preparation from the choreography

CHORDS – A,D,E Wild Thing

This Week we will learn the A major, D major, and E major chords. Previous chord exchanges we have explored have used the left-hand stabilizing device known as the “pivot finger” in which a finger remains in the same position for two consecutive chords. This week we will learn a new left-hand technique known as a “guide finger” and the popular 1960’s song “Wild Thing” to do so.

The guide finger is an important stabilizing device used for both single note melodies (see Wipe Out) and chords progressions. A guide finger is simply a finger that keeps in contact with the string while shifting either to a new chord or position. Maintaining contact with the string does not mean that you have to press down, in fact, you only have to touch the string very lightly as your finger moves, because the movement needs to be silent. Once you have played the first chord and you are ready to use the guide finger to move to the next chord, do the following:

- 1) lift all fingers except the guide finger. For the guide finger release the pressure on the string, maintaining just a small amount so there is contact with the string.
- 2) Shift the guide finger along the string and apply pressure again when it is in the new position.
- 3) Place fingers in the new chord shape and apply pressure.

The above directions may be shortened to the following saying: lift-shift-place.

A to D chord: Guide Finger 3

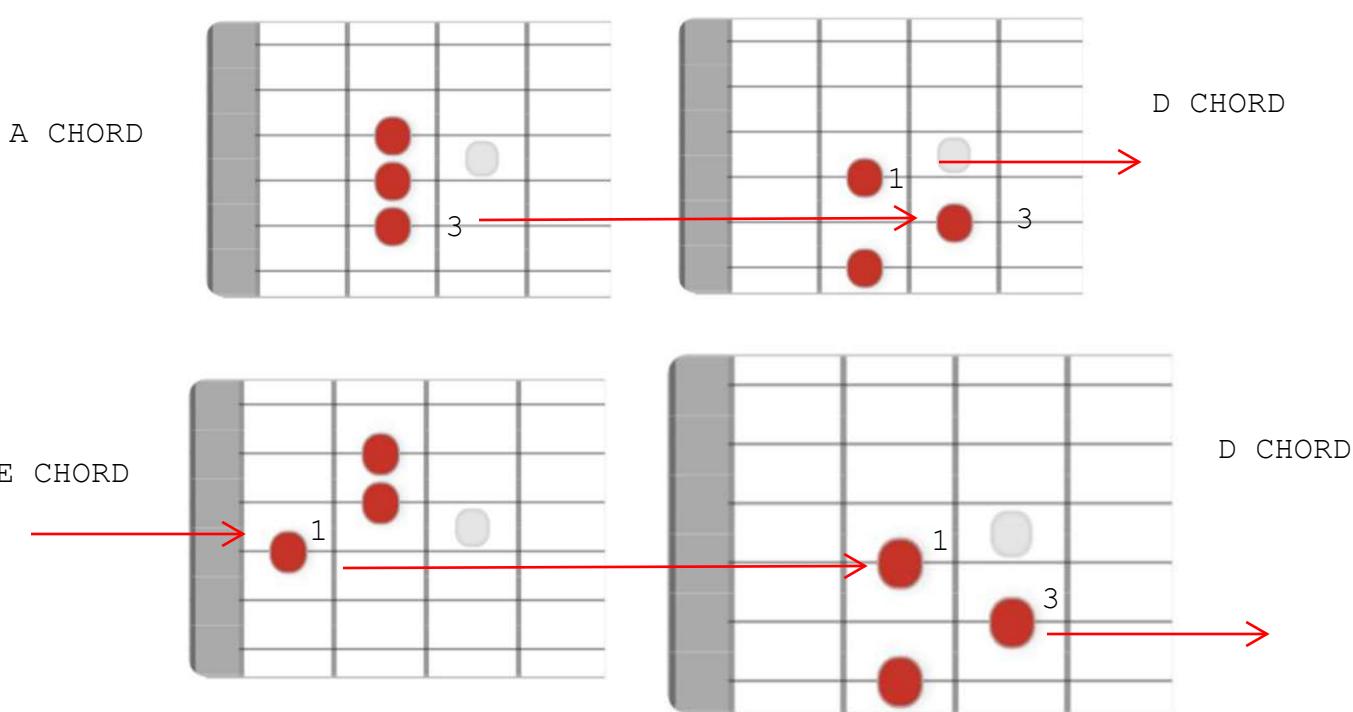
Strum Pattern: 1 2 3 + 4

D to E chord: Guide Finger 1

v v ^ v

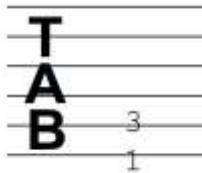
E to D chord: Guide Finger 1

D to A chord: Guide Finger 3



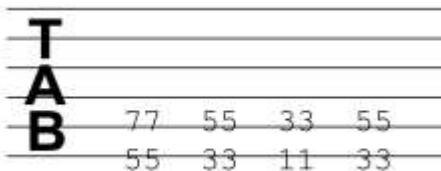
Wild Thing – the Troggs - Lesson

Power chords are a key element of many styles of rock, especially heavy metal and punk rock. Power chords contain only two notes and always have the same shape. Place finger 1 on string 6 at fret 1. Place finger 3 on string 5 at fret 3. Pluck with either I & m, p & I fingers or with a pick. Remember to play both notes simultaneously.

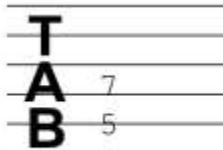


(*TAB Remember, the lowest line represents string 6 and the highest line represents string 1. Numbers represent frets)

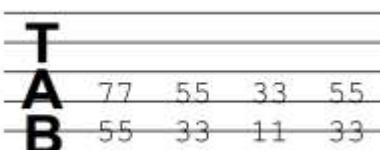
These chords can be played in parallel motion as well. Just release the pressure, keep the fingers on the strings, then move to the next fret; in other words, they are guide fingers.



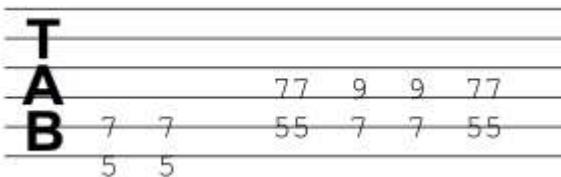
You can also play power chords beginning on string 5, like this chord.



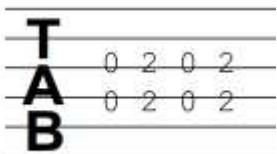
Transpose the above exercise to string 5, like this.



“Wild Thing” has some power chords starting on string 6 and some power chords starting on string 5. Here is how the main riff goes.



The second section of the piece uses diads (like Smoke on the water) and goes like this.



Be sure to use fingers 2 & 3 to fret at the second fret and to listen to and to play along with the piece. Play these two sections for your performance submission this week

*NB. You can also play this piece using regular chords. They would go like this.

A A, DD, E E, DD.

Guitar

T
A
B

On Point Lesson

This week's piece utilizes the right-hand techniques of plucking two notes at once (diads) and arpeggios, rhythmic accenting and balancing the volume between melody and harmony. The left hand has several chord shapes that we will learn.

A Section Right Hand

The right hand uses a fixed finger position with a pattern that remains the same for the first 8 measures (A section). Practice the following with either muted or open strings.

Ex. 1 right hand alone.

As p flexes im prepared, as im flexes p prepares. You should hear only the bass note ringing or the upper diads if performed correctly—there should be no overlap between the two. Place returning fingers at the exact POC (point of contact) each time – on the left side where the flesh and the nail meet. Remember to follow through generously into the palm of the hand with im; try to touch the palm when following through.

Ex. 1

Ex 2. Place A finger in its powerful midrange position. This will mean that I&M fingers will be slightly more flexed than usual. Prepare all fingers, then flex ma (and c). as ma follows through into the palm of the hand flex I finger in sympathetic movement. Finally flex p finger to conclude. Apart from the timing this should feel very similar to plucking a solid block chord.

Ex. 2

A Section Left Hand

Exercise 3 includes all the left-hand chord shapes for A section. Practice the fretting these left-hand chord shapes without pluck the notes (only the left-hand fretting). Keep the fingers curved and the tip joints at right angle to the fret board as much as possible. Be sure to use finger 3 on the F# note and finger 4 on the high G note for ease of execution. The melody is in the top voice of the two notes. Try to pop the top note out more than the lower note (if possible) to balance the melody and harmonic aspects. In other words, play the top note louder than the bottom note.

The image shows musical notation and a guitar fretboard diagram. The notation consists of six measures of music on a staff. The first measure has a bass note (G) and a treble note (B). The second measure has a bass note (D) and a treble note (F#). The third measure has a bass note (D) and a treble note (G). The fourth measure has a bass note (A) and a treble note (C#). The fifth measure has a bass note (A) and a treble note (C#). The sixth measure has a bass note (E) and a treble note (B). Below the notation is a guitar neck diagram with six strings and twelve frets. The strings are numbered 0, 2, 2, 0, 1, 1, 0 from bottom to top. The frets are numbered 0, 1, 2, 3, 3, 0 from left to right. The notes in the music correspond to the chords on the fretboard: (G, B), (D, F#), (D, G), (A, C#), (A, C#), (E, B).

Be sure to keep the left-hand chords fretted and ringing out all the time for a smoothly connected performance.

B Section

Right-hand

Package Preparation. Measures 9-16 uses the pima arpeggio which we learned last week. Practice the right hand only preparing ima as a package (all fingers at once). When p flexes follow through in sympathetic movement with ima (and c).

Sequential Preparation. During sequential preparation, one finger flexes and the next finger prepares. We try maintain the same overall larger choreography of movement learned when preparing as a package. Do the following:

- As p flexes I prepares
- As I flexes m prepares
- As m flexes a prepares
- As a flexes p prepares

Continuity Stroke. The continuity stroke is the final way that we practice an arpeggio. The previous practice techniques of preparing the right-hand fingers are simply that - practice techniques to develop the coordinated movement of the fingers. When performing a piece, we use the continuity stroke. Using the continuity stroke allows the notes to ring on and not to be cut short. Do the following: keep the choreography of finger movements learned through the prepared stroke and sequential preparation and do not prepare any of the fingers. Think of this as

taking the training wheels of the bicycle. Now that you have the movement learned you can play without preparation of the notes,

Syncopation

Generally speaking, rhythmic accenting occurs on the beat. the strongest accent usually occurs on beat 1. When there are 4 beats per measure the pattern of accenting is as follows: strong-weak-medium-weak. When there are 2 beats per measure—such as in this week's performance piece *on Point*—the accenting is Strong-weak. This accenting of the beat gives music it's forward momentum and propulsion, it's rhythmic pulse. With syncopation however, there is a displacement of this regular accenting pattern. Syncopation has rhythmic accenting placed on the “off” beat. You can hear this most readily when listening to musical genres such as reggae, ska, and polka.

During the B section (measures 9-15) the composer asks you to accent the bass note after beat two and before the next beat. You should count it thus, 1 & 2 & 1 2 & 1 & 2 & ect. The thumb is a strong digit so accenting with it should pose few problems. As an exercise, try playing a pima arpeggio on the top 4 open strings while accenting the thumb - like this.

The image contains two parts of musical notation. The top part is standard staff notation on a five-line staff, showing a sequence of eighth notes. The bottom part is a tablature for a six-string guitar, showing the frets and strings. Both parts show a repeating pattern of three measures. In the first measure, the first string is muted (0). In the second measure, the first string is muted (0) and the third string is played. In the third measure, the first string is muted (0) and the second string is played. The tablature shows '0' above the first string in all three measures, indicating it should be muted.

Chords and Legato: For much of the course I have been stressing the importance of playing in a legato fashion. In other words, joining the notes together in a smooth and seamless fashion. This is very difficult to do on the guitar for several reasons. One way to accomplish this smooth connection is to leave the fingers fretted throughout a passage wherever possible. For instance, in lines three and four of this week's piece the A & C notes remain fretted throughout and are lifted only when required to do so in the last measure of each line. In general, let the notes ring out for as long as possible—until another note requires that you remove the finger.

Souviner d Autumn by Iannereli

This week's piece has a moody bass line, is played entirely in second position, ends with a harmonic note, and most importantly, introduces the technique known as "slur"

2nd position

This piece is played entirely in 2nd position in large part because of its reliance on the B power chord and its derivations. The power chord uses finger 1 on string 5, and finger 3 on string 4.

The image shows a musical staff with a treble clef, a key signature of two sharps, and a common time signature. It features a power chord consisting of a B note at the top and an F# note below it. Below the staff is a fretboard diagram with three horizontal lines representing strings. The top line is labeled 'T' (Treble), the middle 'A', and the bottom 'B'. Frets are numbered 1 through 5 from left to right. The B note is shown at fret 4, and the F# note is shown at fret 2. A blue dot on the B string indicates the power chord.

Key signature and sharps

Notice the key signature at the beginning of this piece – it indicates that F and C notes are to be played sharp for the entire piece (one fret higher than usual). For instance, the F note in the power chord pictured above shows the F note played at fret 4 (F#). In a similar manner the C note in measure 10, should be played at fret 2.

Pivot finger 4 on F#

One of the most important aspects of this piece is the use of finger 3 as a pivot finger on fret 4 (F#). With the exception of measure 8, this finger stays fretted for the entire piece. This is a major source of stability and groundedness for the left hand; be sure to use this to your advantage.

To acclimate yourself to playing in position 2, maintaining finger 3 as a pivot note while a bass note melody unfolds beneath it, play the following exercise.

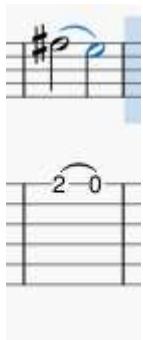
The image shows a musical staff with a bass clef, a common time signature, and a key signature of one sharp. It consists of a series of eighth-note bass notes. Below the staff is a fretboard diagram with three horizontal lines representing strings. The top line is labeled 'T' (Treble), the middle 'A', and the bottom 'B'. Frets are numbered 1 through 5 from left to right. The bass notes are positioned at various frets: 2, 4, 0, 4, 3, 4, 2, 3, 4, 0, 4, 2. A blue dot on the B string at fret 4 indicates the pivot finger 3.

Pivot finger 2 on A#

In addition to the F# pivot finger, finger 2 is used as a pivot finger at fret 3 (A#) during the entirety of line 3. This adds security to the hand as finger 1 engages in a slur on string 2 at fret 2.

Slurs

Slurs are an important part of guitar playing for two reasons: 1) increased speed, and 2) smooth legato note connection. Two notes are required for a slur; the first note is plucked, and the second note is slurred. To slur a note, do the following. Place finger 1 on fret 2 of string 1. Pluck the note and let it ring out, then pull the string down toward the floor until the string releases and is played as an open string, like this...The curved line joining the two notes indicates that the second note should be slurred.



Keep the joints of the finger firm and flex primarily from the middle joint. The second (unplucked) note should be as loud as the first plucked note. The movement of the left-hand finger should be downward toward the ground not outward (away from the string)

Including a pivot finger when enacting the slur (measure 4, F# on string 4) may provide additional challenges. To deal with this potential issue practice the following exercise.



A slur on string two is also present in measure 10 & 12. Two pivot fingers are present during this slur. Practice the following exercise. Remember – we are in second position this exercise uses fingers 3-2-1 in the fretting hand.



Arpeggio - PIMA-MI-MA

This piece has a PIMA-MI-MA arpeggio which is an extension of the arpeggio we used in Prelude no. 9 and should pose only little challenge (note* there is a typo on the last note of measure 1 which indicates to play string two with i finger).

Practice the arpeggio using the methods outlined in the prelude no. 9 lesson using this arpeggio.

Harmonics

Harmonics have a bell-like sound to them and are indicated with a diamond shaped note (see last note of the piece). To play open-string harmonics, place your finger lightly on the string at the 12th fret where the body meets the neck on the classical guitar (see roman numeral XII last measure). Do not press the string down, but just lightly touch the string directly above the fret (this is different than fretting, which requires the finger to be placed just behind the fret). Playing harmonics can be hard at times. The last note of the piece is played at fret 12 on string two. To get comfortable with harmonics try playing them on all 6 strings at fret 12. Generally speaking, harmonics speak more clearly on the lower strings (6-5-4).

Parallel Chords – Syncopation - a minor & E major

SYNCOPATION – Skipping the downbeat and playing on the offbeat. For instance, this rhythm



Can be made more syncopated by adding a tie, like this

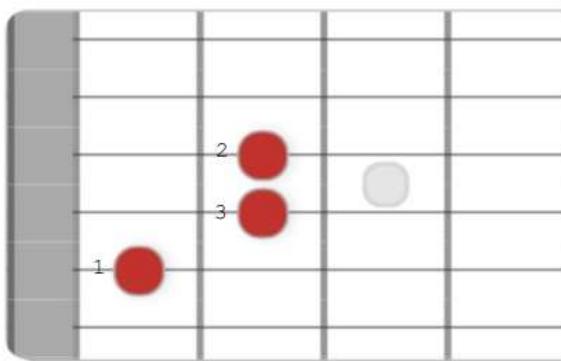


Adding a tied note to beat 1 like this means that we miss the downbeat on 1, and strum upwards, off the beat, twice in a row, like this. We will use this strum pattern for the exercise this week.

CHORDS

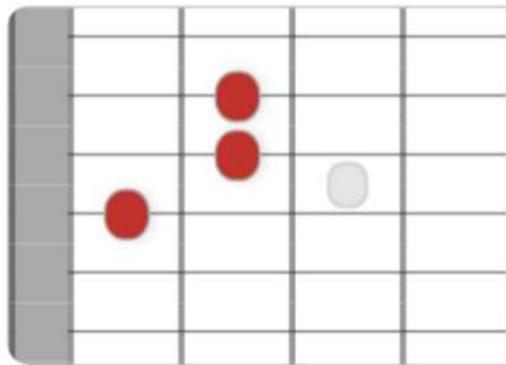
This week we will use the same shape chords – a minor and E major while moving in parallel motion up the neck. The a minor chord will be played at the first and third frets respectively.

a minor



The E major chord—which has the same shape as the a minor chord—will be played at the first second and forth frets respectively.

E Major



You are free to play the chords for as long as you like and at what speed that you like. I would suggest going in stepwise motion and shifting from the a- to E chord at times.

Please find a multi-track recording program that you can use (i.e., Garage Band, Audacity) and record yourself playing these chords. Next week you will record another track with this track (multitracking) improvising with the all-natural note scale that we learned this week.

Notes in the First Position

A musical staff with a treble clef and six strings below it. The strings are labeled from left to right: 6th String (T), 5th String (A), 4th String (B), 3rd String (G), 2nd String (D), and 1st String (E). Above the staff, the notes are labeled: E, F, G, A, B, C, D, E, F, G, A, B, C, D, E, F, G. Below the strings, fingerings are indicated: 6th String (0 1 3), 5th String (0 2 3), 4th String (0 2 3), 3rd String (0 2), 2nd String (0 1 3), and 1st String (0 1 3).

Merry Dance

This piece focuses on the low natural notes played on strings 5 & 6. Each phrase begins with a “low bass run (i.e., measures 1&2) ending quietly each time with a small chord (measures 3&4). Subito Piano means to play suddenly soft. Each of the four phrases is four measures in length. These small chord sections use either and i-m pattern or an i-a pattern. Practice the i-a pattern with m finger moving sympathetically as a flexes. Practice playing only the bass notes with the thumb. Practice the two chord shapes separately.

Use the natural notes scale chart from a couple weeks ago to guide you as you play.

Besides giving you practice in reading lower notes, Solo No. 20 provides further training in alternation between p and i and between i and a.

Merry Dance

S-H

Solo No. 20

M.M. $\text{♩} = 104$

Solo No. 20

M.M. $\text{♩} = 104$

3/8

Subito Piano

Subito Piano

Subito Piano

Rit.... Fine

Pretty Woman – Roy Orbison – Lesson

This piece uses the low three strings on its signature guitar riff. The piece is in second position. Playing position is determined by the fret the first finger plays. Each piece we have learned during the classical guitar section of the course was in first position, ie., finger one played at the first fret. In this piece you will play fret 2 with finger 1, and fret 4 with finger 3. This makes it easier for the left hand fingers. Right hand notes should be played with p, i. m fingering.

Be sure to listen to the piece to gain an aural representation of the piece to guide your playing. For your performance submission please play the following.

[Main riff]

The diagram shows two staves of six strings each (e, b, g, d, a, e) with dashed horizontal lines representing the fretboard. The top staff shows a sequence of notes: d (fret 0), d (fret 0), e (fret 2), e (fret 0), e (fret 4), e (fret 0). The bottom staff shows: d (fret 0), d (fret 4), d (fret 2), d (fret 0), e (fret 0), e (fret 0).

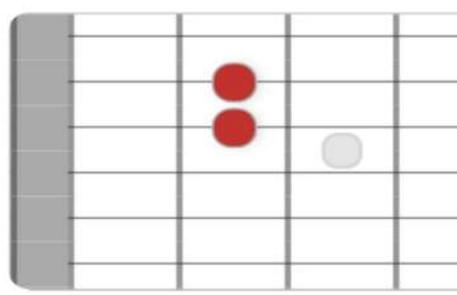
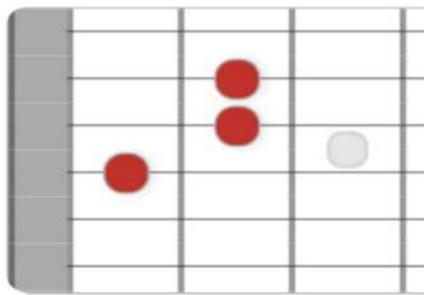
Barre chords

Barre chords are based on two open chord shapes – E Major and A Major. These chords and their derivative minor chords provide the basis for almost all of popular music repertoire (in addition to open chords).

To begin, finger the E major chord with, however, do not finger it with fingers 1, 2, 3, rather, finger it with fingers 2, 3, 4 - like this. This chord gets its name from string 6 played open (E note). We say that this note is the root note of the chord. Now, while keeping the chord shape, shift the chord up one fret, then drape finger one across all six strings at fret one. Apply pressure particularly to strings 1, 2, and 6, as was described in the accompanied reading to this section. Now the root note of the chord is F. Because E to F is the distance of one fret, and we are now playing the first fret of string 6, this chord is now called F major. Move it to fret 3 and you will be playing G chord (follow the logic learned in the theory part of this week's lesson). in between the 1st and 3rd frets on the low string 6, on fret two we have an F# or a Gb chord. Similarly, if you begin with an e minor chord and move up the frets, say to fret 5, you will be playing an a minor chord. Natural notes that go lower by a fret will be flat chords, notes that go higher will be sharp chords (notice that each chord can have two names at this point). Remember to let gravity pull the left hand down to apply pressure to the chord. As an exercise, lift all fingers except finger see if you can only hear only string 1, 2, and 6. Do not apply pressure with on strings 3, 4, 5.

E Major

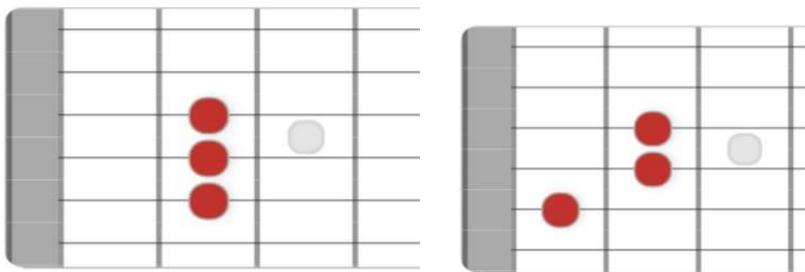
e minor



The same is true of the A chord shapes. Begin by playing A chord with fingers 2, 3, 4, and move up two frets. The root note of these chords is string 5. The distance from A to B is 2 frets (see theory section from this week). Play the chord at fret 3 and you will have a C chord. Now play an A minor shape and move up the neck finding the natural notes on string 5.

A Major

a minor



As was mentioned in this week's readings, curve finger 1 and apply pressure to only string 5 and string 1. Do the same exercise as above.

Barre chords take a significant amount of time to play cleanly. Shifting from one to the other also takes time. Be patient with yourself as you practice.

Try the following chord progression from Led Zeppelins' "Stairway to Heaven" all using the E shape chords - a minor, G, F, G,

- ?
- 5. cradling the neck in the space between the thumb and first finger, with the thumb sticking out above the fingerboard
 - ✓ 6. playing with the tip segment of the thumb toward the palm instead of away from it
 - ✓ 7. squeezing too hard with the thumb and fingers
 - ✓ 8. holding the knuckles too low in relation to the fingerboard
 - 9. keeping the line that goes through the knuckles too far from being parallel to the strings
- Same things? L?

All of the above problems of the left hand can result in excess tension, fatigue, and poor control over the finger movements. As with the right hand, there are always some deviations from the basic dynamically relaxed position that are perfectly fine. As we mentioned, some bending of the wrist is necessary, particularly for full bar chords and long stretches, but it should be kept to a minimum. After such deviations, the player should always come back to the basic straight-wristed position as quickly as possible in order to keep the hand quiet and relaxed.

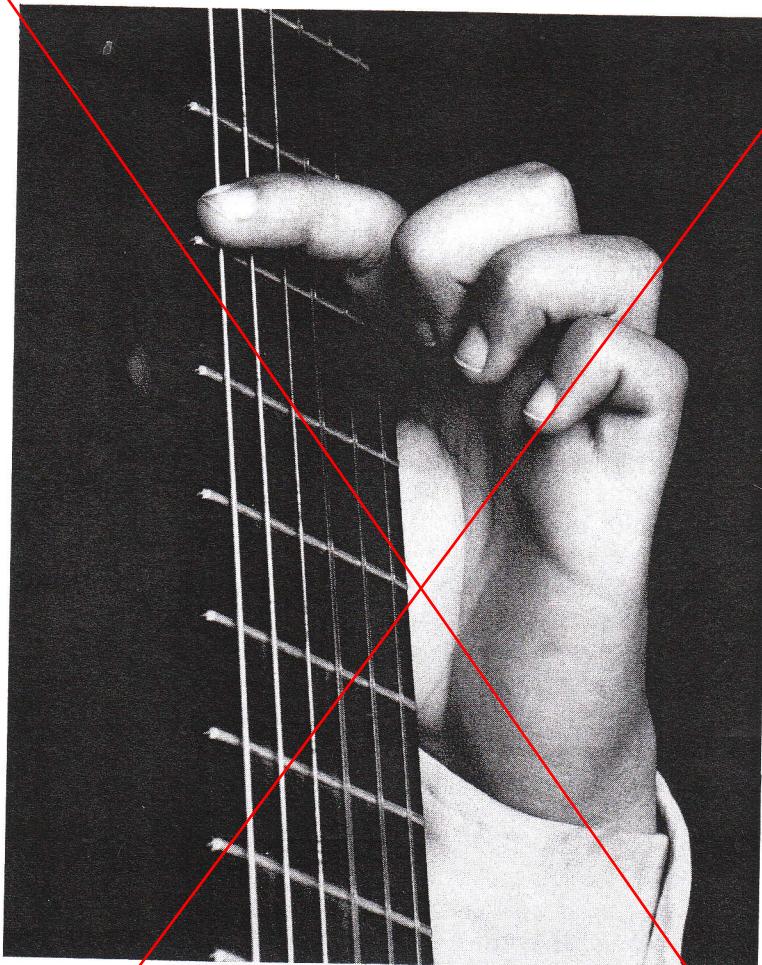
Bar Chord Position

Fernando Sor recommends that one should "be sparing of the operations called barring and shifting."⁹ The principal reason for avoiding bars is that playing them requires more effort than not. However, there are frequent occasions when bars are the best or only solutions for playing certain passages. So if a common mistake in playing bar chords is to hold the first finger literally like a straight bar. Unfortunately, the leverage provided by that position is not very great and thus it requires a considerable amount of energy to play the bar. However, if the first finger is curved to some degree, then you will have much more leverage and will need much less energy to play the bar. For example, the full six-string bar is much easier to play if the first finger is bent somewhat at the middle joint. It also helps to bend the base joint of the finger considerably so that the palm is close to the fingerboard. A sample of the curved full-bar position is shown in Figure 4-18.

The curved position can be used to special advantage in certain cases where some of the chord tones are held down by fingers other than the bar finger. In such cases, the bar finger only needs to exert pressure on those notes not pressed by the other fingers. In the five-string bar (a C minor chord) in Figure 4-19, the first finger is not only curved but is only pressing two notes, thus saving a great deal of energy.

⁹Fernando Sor, *Method for the Spanish Guitar*, trans. A. Merrick, Da Capo Reprint Series (New York: Da Capo Press, 1971), p. 48.

Figure 4-18 Full bar with curved index finger



If the second, third, and fourth fingers are raised, the strings that are under them will sound dead because the bar is just barely touching them; the first finger is curved such that it exerts pressure only on the fifth and first strings. This special technique can be very helpful in many situations. For a bar chord piece such as Sor's Op. 29, No. 1 (No. 19 in Segovia's edition of Sor Studies), the energy that can be saved by using this technique on many of the chords, particularly B_b in the first position, means the difference between playing it in relative comfort on the one hand and suffering through it with aching muscles on the other.

C Adances

- ?
5. cradling the neck in the space between the thumb and first finger, with the thumb sticking out above the fingerboard
 - ✓ 6. playing with the tip segment of the thumb toward the palm instead of away from it
 - ✓ 7. squeezing too hard with the thumb and fingers
 - ✓ 8. holding the knuckles too low in relation to the fingerboard
 9. keeping the line that goes through the knuckles too far from being parallel to the strings
- Same thing? L ?

All of the above problems of the left hand can result in excess tension, fatigue, and poor control over the finger movements. As with the right hand, there are always some deviations from the basic dynamically relaxed position that are perfectly fine. As we mentioned, some bending of the wrist is necessary, particularly for full bar chords and long stretches, but it should be kept to a minimum. After such deviations, the player should always come back to the basic straight-wristed position as quickly as possible in order to keep the hand quiet and relaxed.

Bar Chord Position

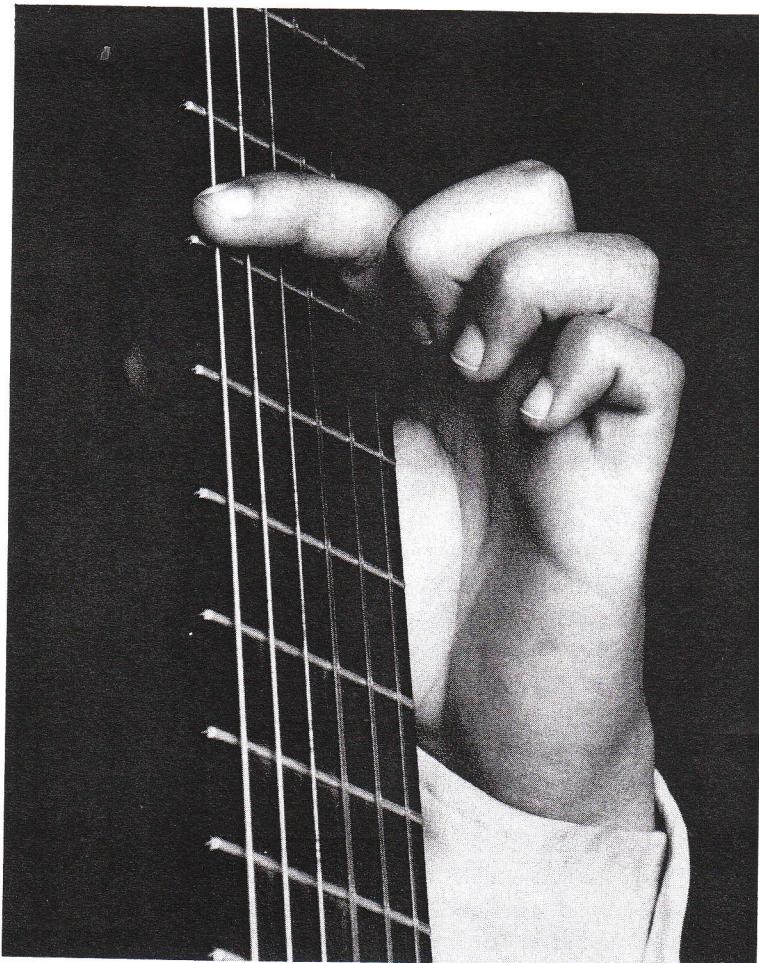
Fernando Sor recommends that one should "be sparing of the operations called barring and shifting."⁹ The principal reason for avoiding bars is that playing them requires more effort than not. However, there are frequent occasions when bars are the best or only solutions for playing certain passages. So, if you have to use bars, why not look for the easiest ways of playing them?

A common mistake in playing bar chords is to hold the first finger literally like a straight bar. Unfortunately, the leverage provided by that position is not very great and thus it requires a considerable amount of energy to play the bar. However, if the first finger is curved to some degree, then you will have much more leverage and will need much less energy to play the bar. For example, the full six-string bar is much easier to play if the first finger is bent somewhat at the middle joint. It also helps to bend the base joint of the finger considerably so that the palm is close to the fingerboard. A sample of the curved full-bar position is shown in Figure 4-18.

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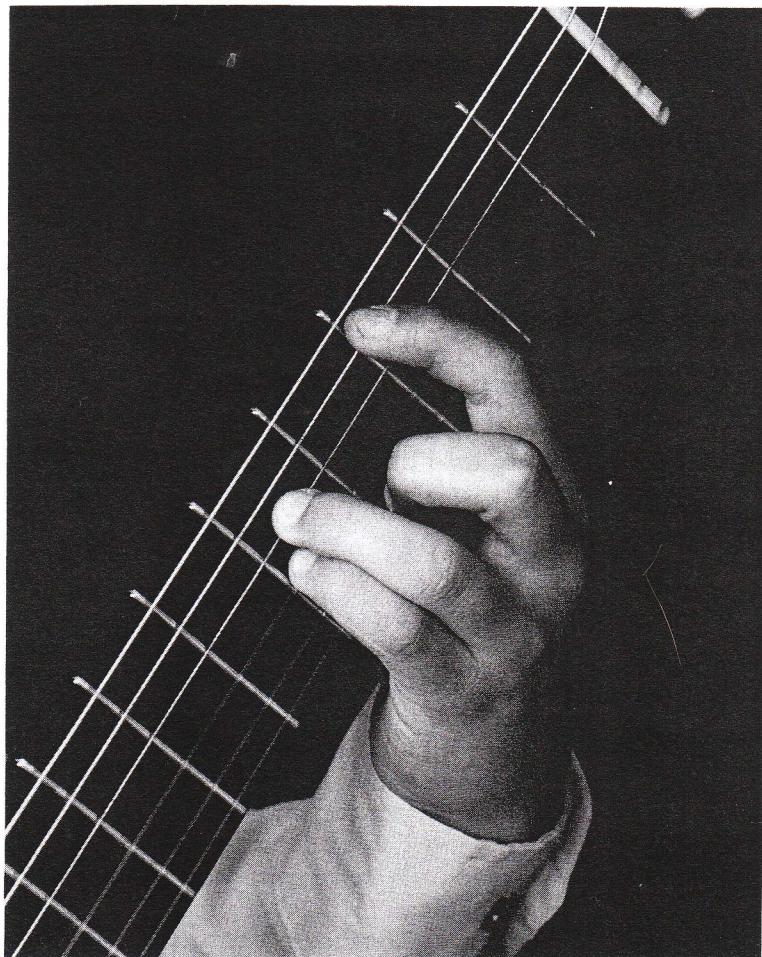
Figure 4-18 Full bar with curved index finger



If the second, third, and fourth fingers are raised, the strings that are under them will sound dead because the bar is just barely touching them; the first finger is curved such that it exerts pressure only on the fifth and first strings. This special technique can be very helpful in many situations. For a bar chord piece such as Sor's Op. 29, No. 1 (No. 19 in Segovia's edition of Sor Studies), the energy that can be saved by using this technique on many of the chords, particularly B_b in the first position, means the difference between playing it in relative comfort on the one hand and suffering through it with aching muscles on the other.

Cadences

Figure 4-19 Partial bar with curved index finger



There are other energy-saving techniques for bar chords. You can use the gravity technique that we discussed earlier in this chapter and "hang" on the chords instead of squeezing them. This works best when combined with the curved bar finger described earlier. In this way of playing, you let the flesh of the bar finger roll up close against the fret and let the weight of the arm supply much of the needed pressure; thus little of the pressure comes from squeezing. To save energy, remember that the minimum bend in the wrist for a given position is generally best because the leverage is greater with less bending.

Heavy
Hand

Another energy saver is to bar only the number of strings necessary. Why bar six strings when five will do? Occasionally you may come to a situation where you would like to use a smaller bar (four or five strings) but decide to play a full bar anyway. This is because one of the strings is not pressed down properly by the smaller bar because of lack of flesh on the finger at that point (usually at the middle joint). Thus it is better to play the full bar so that the note will sound properly. This tactic may also prove useful when the full bar would serve as a preparation for what is needed in the next measure or two. One final way of saving energy is to lay the second finger on top of the first during full bars where the second finger is not needed for other notes. This trick will spare you much fatigue in long pieces.

Before we leave the subject of bar chords we should mention the so-called half-bar. This type of bar usually covers from two to four strings. For most players, the half-bar should take little energy if played with the first finger bent rather sharply at the middle joint. Finally, as with the full-bar, it is easier to hang on the half-bar rather than to squeeze it.

*Hinge
Sole*

SUMMARY

The guitarist who wants to play effortlessly will be an eager student of dynamic relaxation. Being able to achieve the state of dynamic relaxation in mind and body on a regular basis is one of the major keys to success with the guitar. It is not some mysterious state but is simply the state in which mind and body are functioning normally and naturally with minimum effort. That "normal" state often seems supernormal because many people do not experience it regularly. It is a state that people need to recapture. It can be cultivated on the guitar by seeking those positions and movements that are physically natural for the player, that is, those that require the least effort. In this chapter, we have discovered some natural positions for sitting and for the right and left hands. If you study these positions carefully and see how they apply to your particular physical characteristics, you will be able to find your own dynamically relaxed way of sitting and holding the hands. It is not necessary to try to follow the positions described in this chapter exactly. However, it is good to hold to the principles of balance, naturalness, and minimum effort for whatever variation of the positions you may choose.

You will know when you have found dynamically relaxed positions because they are stable, comfortable, and produce good results for your playing. With such positions, you will have a strong foundation for ease of execution and you will be one step closer to playing the guitar with the ease of the masters. The next chapter will take you another step on the way to effort-

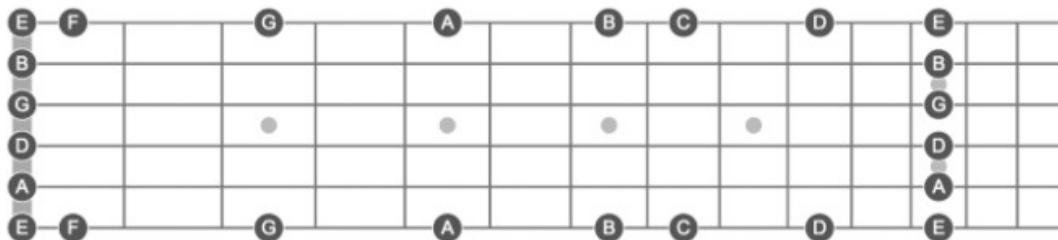
Open notes on individual strings – horizontal mapping

Semi-Tone = distance of 1 fret

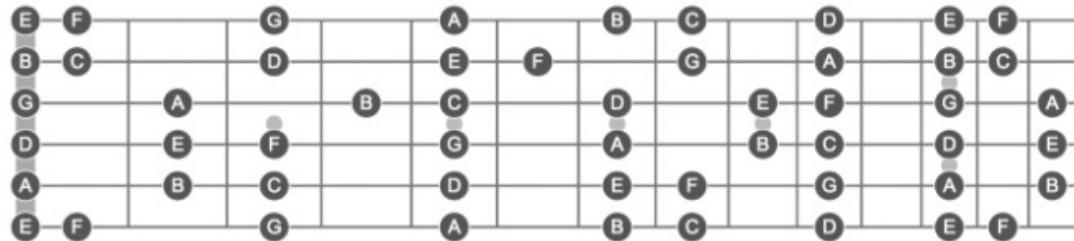
Tone = distance of two frets

Eastern France and British Columbia (mnemonic)

Semi-tones (distance of 1 fret) fall between E & F and B & C. All others are the distance of a tone (two frets). Below you can see the low and high E strings. Notice that E TO F (open to first fret) and B to C (fret 7 -8) are the distance of 1 fret. All the others are the distance of 2 frets.



Below you can see the entire guitar fretboard – it looks intimidating, however if you know the open string letter names of each string you can find the natural notes going all the way up the string. Practice going up each string to the twelfth fret and playing and saying the natural letter names of each note. Did you notice that the notes of the guitar start to repeat at the 12th fret?



Natural-only notes on the fretboard

