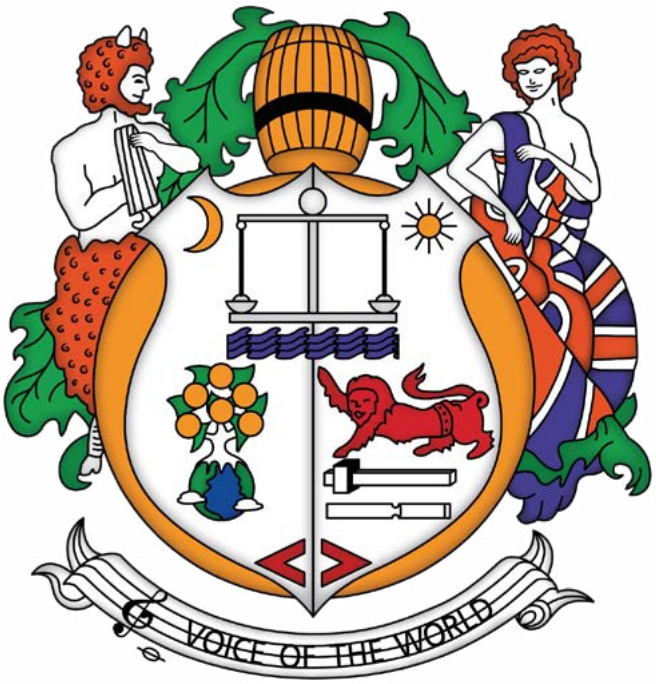
ORANGE™

Est. 1968



London | England

ORANGE ROCK GUITAR

FOUNDATION COURSE

Beginner - Grade 2

Orange Rock Guitar - Foundation Course

Orange Rock Guitar Foundation Course

Beginner - Grade 2

Version 1.2 July 2019

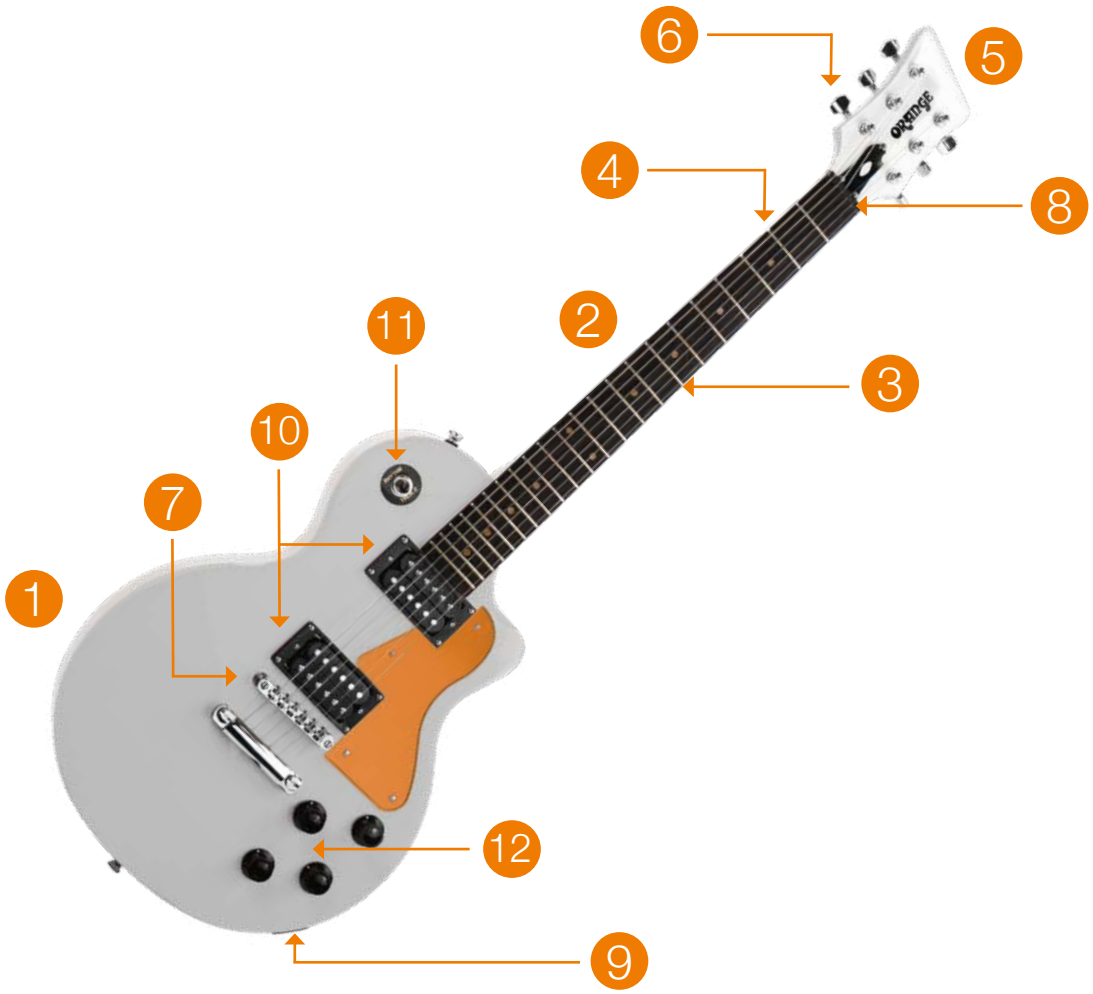
Guitar 101

This lesson will teach you the absolute basics, such as the parts of the guitar, how to hold the guitar, and how to use an amplifier. If you already know all of this then feel free to skip this lesson.

Parts of the guitar

Every electric guitar is a little bit different, but they all have the same basic parts. Take a look at the following image of a standard electric guitar:

1. Body
2. Neck - the long piece of wood sticking out of the body.
3. Fretboard - the flat piece of wood on the front of the neck.
4. Frets - the metal lines placed vertically along the fretboard.
5. Headstock
6. Tuning pegs
7. Bridge
8. Nut
9. Input jack. The placement of the input jack will be different on each guitar, but they're most commonly found on either the front of the guitar near the volume knobs/pickup selector, or on the side of the guitar.
10. Pickups. Guitars usually have two or three pickups - bridge, middle, and a neck. The bridge pickup gives a very bright sound, the neck pickup gives a mellower sound, and the middle pickup is somewhere in between.
11. Pickup selector. The most common types of pickup selector have 3 positions - the back position activates the bridge pickup, the front position activates the neck pickup, and the middle positions activates the middle pickup or the bridge and neck pickup simultaneously.
12. Volume/tone pots. The volume pot controls how loud your guitar sound is, and the tone pot controls how bright or dark your guitar sound is.



How to play

1

How to hold the guitar

Place the guitar on your lap, so that it sits on your leg.

Place your hand nearest to the bridge, known as the picking hand, over the strings, resting the edge of your palm just in front of the bridge – your forearm should rest at angle against the body of the guitar:

Your other hand, known as the fretting hand, will change positions as you play. Keep your fingers on the fretboard, and keep your thumb on the centre of the back of the neck.

2

The picking hand

Rock guitar is usually played using a plectrum, more commonly known as a pick. These are small teardrop-shaped pieces of plastic used to strike the string.

Some people prefer thinner picks, and some people prefer thicker ones - try some out and see what's right for you!

The pick is held between your thumb and your index finger – turn your hand so that your thumbnail is facing towards you. Curl your index finger gently, and place the pick between the centre of your thumb and the middle of your index finger - the tip of the pick should poke out, in the opposite direction of fingers.

Don't hold on too tightly to the pick - you should hold it just firmly enough that it won't slip when you are playing. Let your other three fingers curl naturally inwards towards your palm, at a similar angle to your index finger.

With your pick in hand, move your hand across the strings, ensuring that only the pick meets the strings - any finger contact will dampen the sound.

3

The fretting hand

To create notes on the guitar, you must press your fingers down on the fretboard BETWEEN frets, NOT on them. To play the 3rd fret, for instance, you should place your finger on the fretboard just behind the 3rd fret.

When fretting notes, in most instances you should use the tips of your fingers to press down onto the fretboard. It may ache at first, but after only a little while you'll be able to press down on the fretboard with any fretting hand finger easily!

4

Open strings and tuning the guitar

A string is played '**open**' when you don't press down on a fret. Each of the strings is tuned to a certain note.

The order is as follows - from the thickest to the thinnest string: E, A, D, G, B, e. The thickest string is often referred to as the low E string, and the thinnest is referred to as the high e string.

When you tune the guitar, you make sure that each of the open strings is at the correct note. If a note is too high, we call it **sharp**, and if it is too low, we call it **flat**.

Tuning is usually done using a guitar tuner, but there are plenty of tuning apps or websites that you can use.

5

Using an amplifier

Half of the sound of an electric guitar comes from the amplifier - we always recommend playing plugged into an amplifier, as it gives you a much better idea of how your playing really sounds.

To plug the guitar into the amplifier, you will need a ¼-inch jack lead, also known as a guitar lead. Plug one end of the guitar lead into your guitar's input jack, and the other into the amplifier's input jack. Make sure you do this before you turn the amplifier on, and don't unplug your guitar until the amplifier is switched off.

Here's a brief description of some of the common controls on an amplifier:

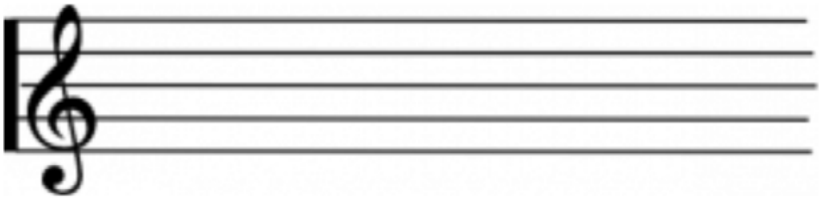
Volume - How loud your amplifier is
Treble - Controls the higher frequencies of your sound
Middle - Controls the mid-range frequencies of your sound
Bass - Controls the lower frequencies of your sound
Gain - How clean or distorted your sound is

For treble, middle, and bass, a good starting point is to place all of these knobs at 12 o'clock (halfway) and adjust them until you get a sound you like.

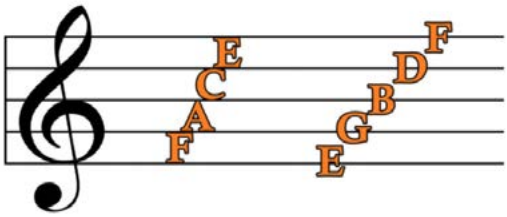
How to read notation and TAB

Notation

Musical notation is read and written using a stave, which is a combination of 5 lines and 4 spaces:



When we put notes on a stave, we can put them both **on the lines** and **in the spaces**, with each line and each space representing a different note:



The shape to the left of the stave that looks like a curly ‘g’ is known as a **treble clef**, which specifies which notes go on the lines and in the spaces. We put one of these at the beginning of every stave we use.

It is important to familiarise yourself with all the notes on the stave. Luckily for us, there are some tried and tested ways to memorise them we can use.

To remember the notes on the lines, you could use the phrase:

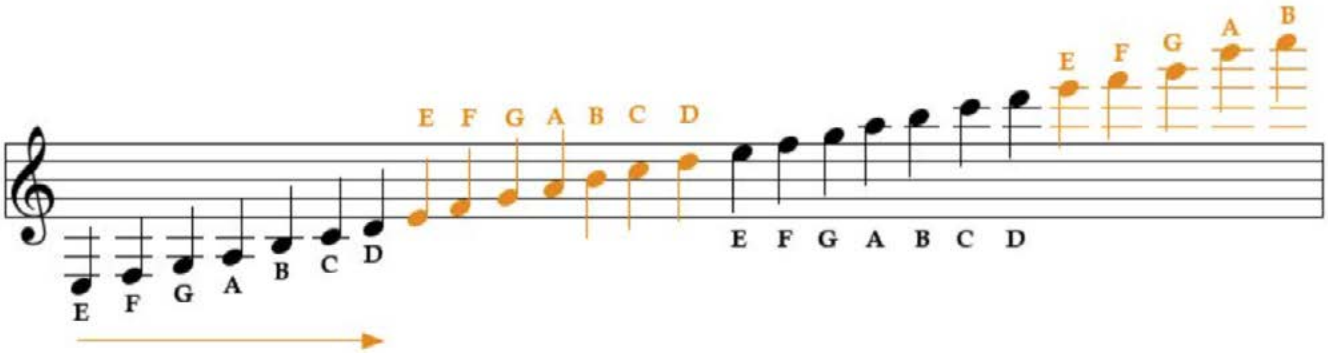
Every Good Boy Deserves Football

E G B D F

To remember the notes in the spaces, we use the word:

FACE

We can also have lines and spaces above and below the stave. A lot of guitar music will frequently use these notes, so it's important to become familiar with them. The stave below displays notes from low E string all the way up to the high B, the 19th fret of your top e string.



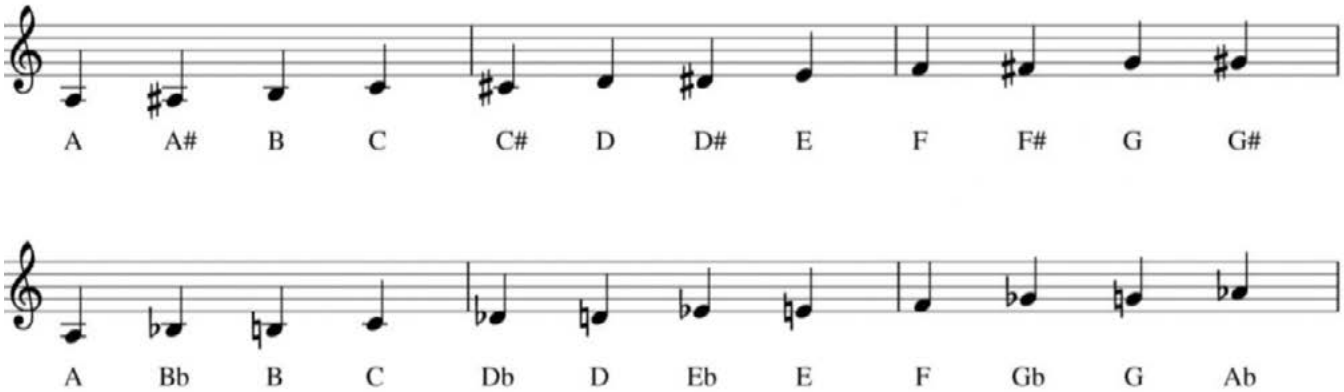
As the examples above show, musical notes are shown using letters from A to G, which are known as **natural** notes. There are also other notes in-between these letters, which are known as **sharp** and **flat** notes.

When a note is sharp (♯), it is 1 note higher than the natural note (♮).

When a note is flat (♭), it is 1 note lower than the natural note (♮).

The natural sign (♮) returns the note to its original pitch. So if we move up 1 fret from B flat (B♭), we will return to B natural (B♮). We use the natural sign to show that a note that was formerly sharp or flat is now a natural note.

The following example shows how sharp and flat notes are written on a stave:

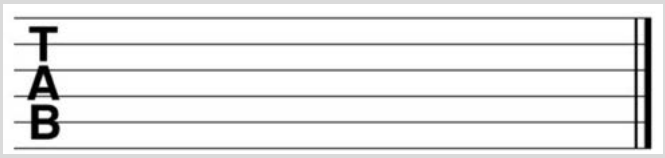


The above 2 staves, though written differently, would sound exactly the same. This is because some notes can be written in more than one way - for instance, the note between A and B could be called either A♯ or B♭, as it is both one note higher (sharp) than A, and one note lower (flat) than B. There are **no notes between B and C or E and F.**

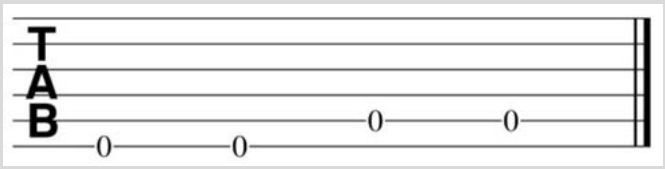
Remember: 1 fret = 1 note!

TAB

Tablature (TAB) is another form of musical notation popular among electric guitarists. TAB indicates the fingering of notes rather than specific individual pitches. TAB consists of 6 lines, representing the 6 strings on the guitar. The bottom line is the low E string.

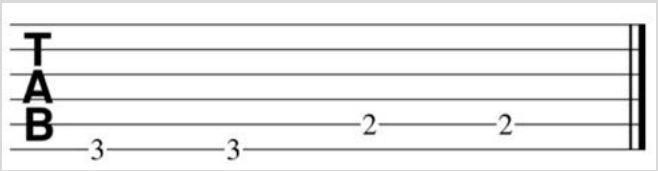


Unlike notation, there are numbers on the TAB lines to tell you which string to play and which frets to use, rather than telling you specific pitches. TAB is read from left to right. The following example tells you to play the low E string 2 times, and then the A string 2 times, without pressing down on any frets.

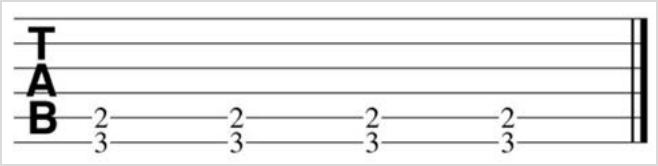


Numbers are used to tell you which frets to press down. In the above example, a '0' is used to indicate that the string is played **open**, meaning without pressing down on any frets.

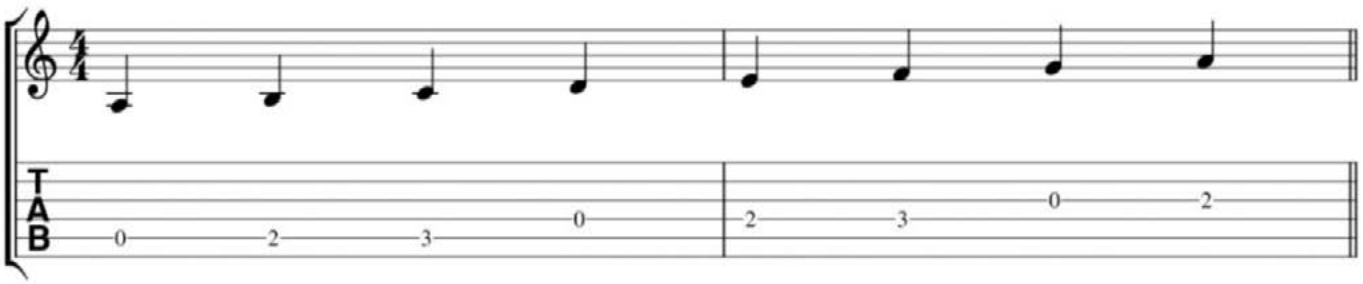
The following example tells you to press down on the 3rd fret of the low E string and play 2 times, and then press down on the 2nd fret of the A string and play 2 times.



When numbers are placed vertically, it means that multiple strings are played simultaneously. The following example tells you to press down on the 3rd fret of the low E string and the 2nd fret of the A string (at the same time), and play both strings 4 times.



The Rock Guitar Syllabus uses a combination of notation and TAB; when we combine these, we place them on top of each other:



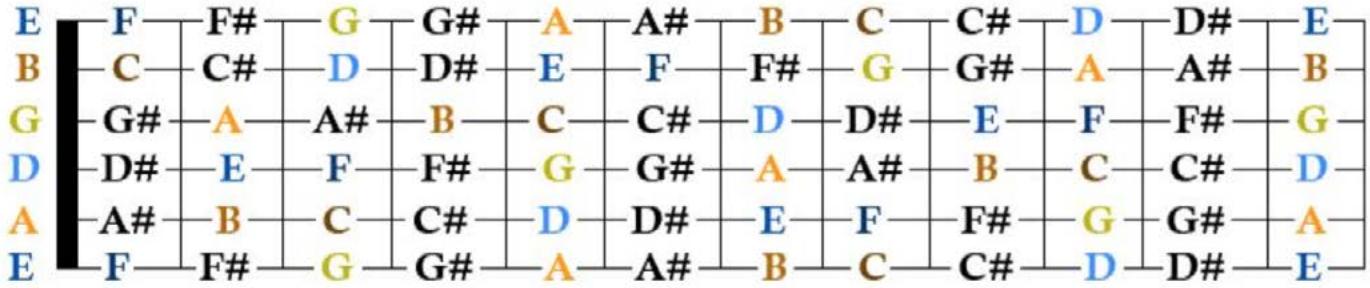
This means that we can see the notes and the rhythm using notation, and the exact fingering and position on the fretboard using TAB. Be aware that sometimes you might find music that only uses TAB, or that only uses notation.

Guitar fretboard

The image below clearly displays all the names of each note on the fretboard. But don't worry about learning every note immediately - you can use this image as a reference until you develop a better knowledge of the fretboard.

The E in the bottom-left corner of the illustration is the bottom E string (the thickest one), and the E in the top-left corner of the graphic is the top e string (the thinnest one).

This image features sharp notes only - try and convert them to flat notes (for example, F# is also Gb).



Rhythm

Click here for this lesson's audio playlist ›

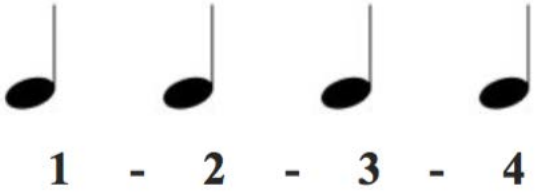
Rhythm refers to the steady pulse we find in music, sometimes called a beat.

Crotchet

You will often hear rhythms counted as repeats of 4 beats, '1-2-3-4', almost like footsteps. Each of these beats can be represented by a note, known as a **crotchet.**

Crotchet = 1 beat

So a '1-2-3-4' rhythm would be written as 4 crotchets:

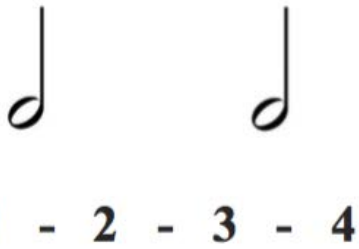


Minim

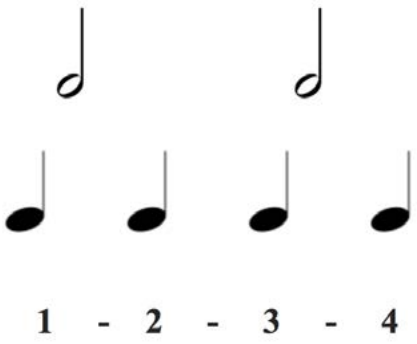
A note that lasts 2 beats is known as a **minim**.

Minim = 2 beats

Therefore, in a 4-beat rhythm, we would find only 2 minims, on the counts of ‘1’ and ‘3’.



With this information, we can deduce that a minim is double the length or value of a crotchet, so we can fit 2 crotchets into 1 minim.



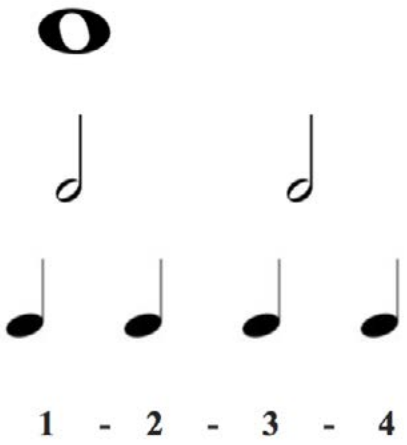
Semibreve

A note that lasts 4 beats is known as a **semibreve**.

Semibreve = 4 beats

In a 4-beat rhythm, we find only one semibreve on the count of '1'.

As before, we can deduce that a semibreve is double the length of a minim, and therefore equal to the length of 4 crotchets.



There are also notes shorter than a beat in length, which will be presented later in the course.

Rests

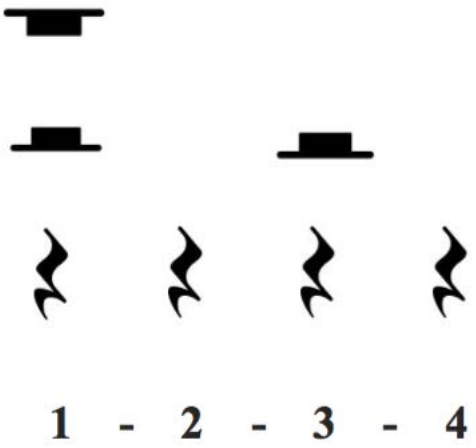
A moment of silence in music is known as a rest. Each rest has a specific symbol that is used to indicate its length relative to the note values you've learnt. For instance, a 1-beat rest is the same length as a crotchet (so it's also known as a crotchet rest):

1-beat rest/crotchet rest

2-beat rest/minim rest

4-beat rest/semibreve rest

Similar to the note values, we can fit 2 crotchet rests into a minim rest, and 2 minim rests into a semibreve rest.

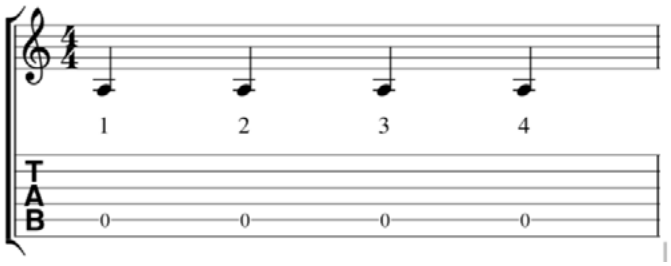


There are also rests smaller than a beat in length, which will be presented later in the course.

Bars and time signatures

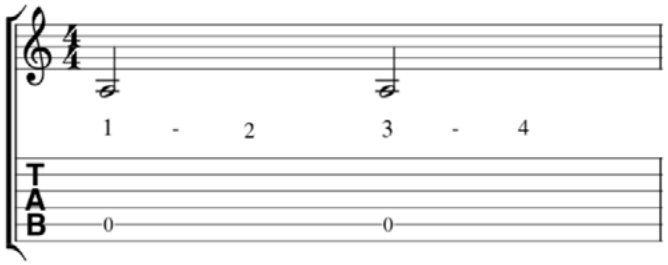
Bars

A bar is created when we put a group of musical notes onto a stave. For instance, we can group together 4 crotchets onto a stave to create a bar containing 4 beats. The following audio track shows you how to count crotchet beats:



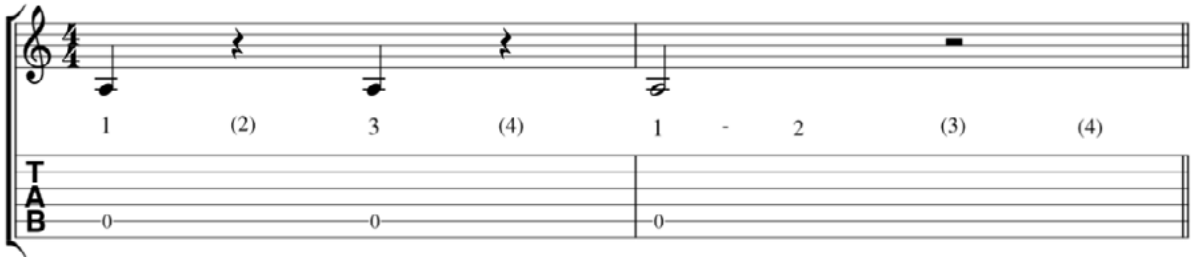
Crotchet counting example ›

We could also group together 2 minims to create a bar containing 4 beats. Listen to how it is different from the previous audio example - the voice counts each crotchet beat, and the guitar plays the minim beats:



Minim counting example ›

When we place rests in-between notes, we create moments of silences where a beat would usually be:



Crotchet and minim counting example ›

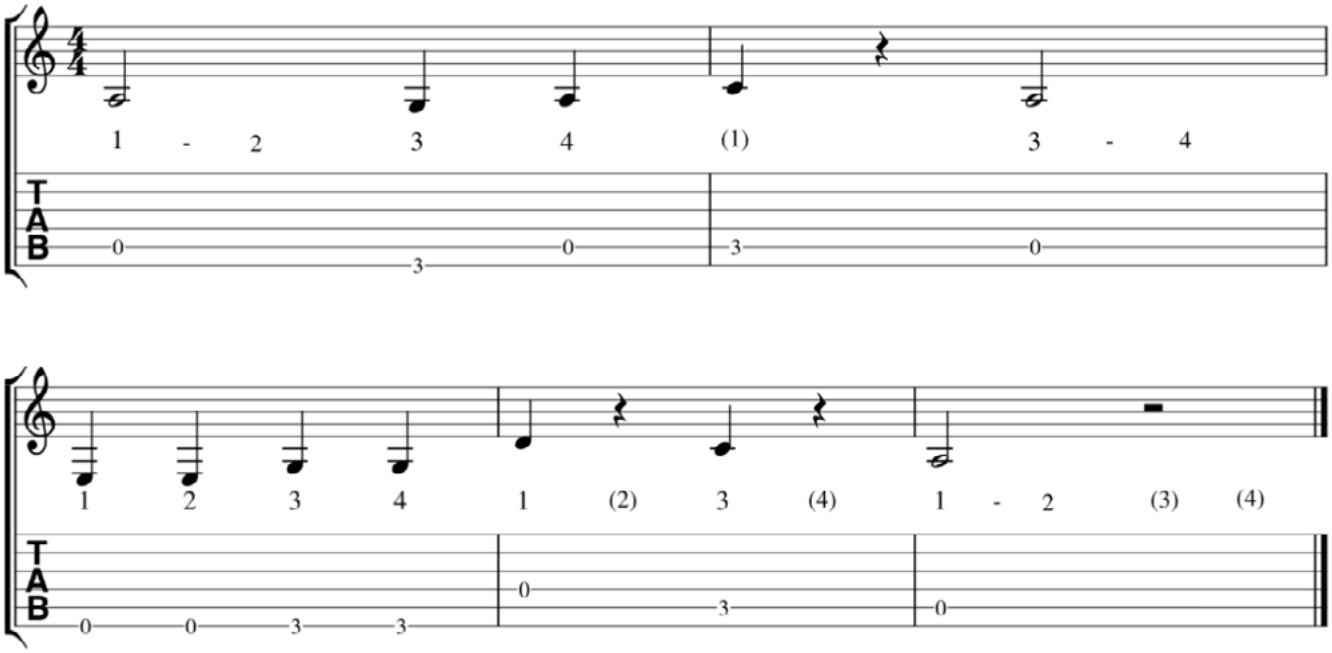
Time signature

The number of beats in a bar is specified by what is called a time signature. All of the above examples use a 4/4 **time signature**:

The top number indicates how many beats each bar has (in this case, 4) and the bottom number indicates what beats they are. The 4 on the bottom refers to a crotchet because it's commonly equal to a quarter (1/4) of a bar's full value, since 4/4 is the most common and natural sounding time signature.

NB There are other time signatures with different numbers of beats per bar and with different types of beat, which will appear later in the course.

The following example shows a combination of crotchets, minims, semibreves, and various rests. We can use any combination of notes and rests in a bar of 4/4, as long as their sum is equal to 4 beats:



Counting summary ›

NOTE: There is no specified rhythm for TAB. The fret numbers are placed directly beneath the relative notes in the notation stave, which give the rhythm. Sometimes you may see TAB without any notation, or notation without an TAB. Remember, when dealing with just notation you aren't told which strings to play or which frets to use, and when dealing with just TAB you aren't told the rhythm or which notes you are playing. Though using TAB may seem easier, it gives you much less information - you could play an unfamiliar piece of music correctly with just notation, but with TAB you would be missing the rhythm - so make sure you don't neglect learning notation.

Open strings

A string is played **‘open’** when it is played without pressing down on any frets.

Each of the open strings is tuned to a note - from the thickest string to the thinnest string, they are tuned in the following order:

E - A - D - G - B - e

Note that the first ‘E’ is uppercase, and the last ‘e’ is lowercase - when you refer to the low E string (the thickest string), you should always use an uppercase E, and when referring to the high e string (the thinnest string), you should always use a lowercase e. This is done simply to avoid confusing the two.

Alternate picking

This is when we pick in a continuous ‘down, up, down, up’ or ‘alternating’ fashion (no ups next to each other and no downs next to each other). Alternate picking is used to give an even sound to every note, and is much faster than just picking downward.

Up picking symbol

Down picking symbol

When playing this lesson’s course materials, you should try to use alternate picking. This can be particularly difficult when crossing from one string to the next, but with practice you’ll quickly be able to wrap your head around it.

You should also try to stop one string from sounding (also known as dampening) before you move on to the next - you can do this by placing your palm against the string you want to dampen as you begin to pick the next string.

Tempo

You'll notice that, in the top-left-hand corner of this lesson's course materials, there is a note followed by a number:

♩ = 60

This is known as a **tempo marking,** which determines the speed of a piece of music by telling you how many note values will fit into 1 minute (known as BPM - beats per minute). This example means that there will be 60 crotchet beats per minute (or 1 crotchet beat per second) - 60 BPM. As the number increases, the speed of the piece also increases - 120BPM would be twice as fast as 60 BPM.

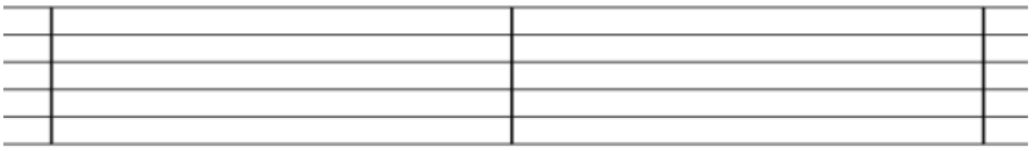
Use a metronome!

This is a device that produces regular 'ticks' or beats that will help to keep you in time. Make sure you always practice with a metronome - there are plenty of metronome websites and apps that you can use. Set your metronome to match the specified tempo marking in each of the lesson's course materials.

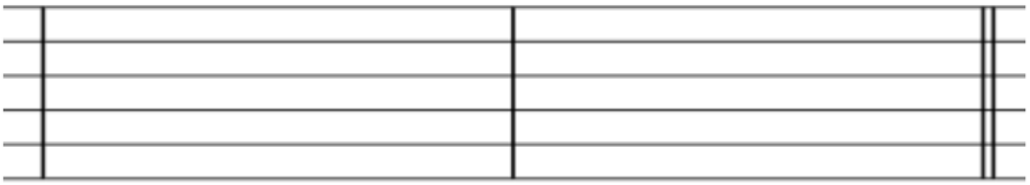
To use a metronome properly, first learn all the notes you have to play off by heart, then set the metronome to a speed where you can play your piece/exercise all the way to the end. If you find a particular speed easy, increase it slightly, but always make sure you can complete what you are playing to the end. Repeat this method, slowly building up your speed to the specified tempo for all of the course materials.

Bars and bar lines

A bar is a grouping of musical notes. Bars are separated using bar lines, which indicate the end of a bar.

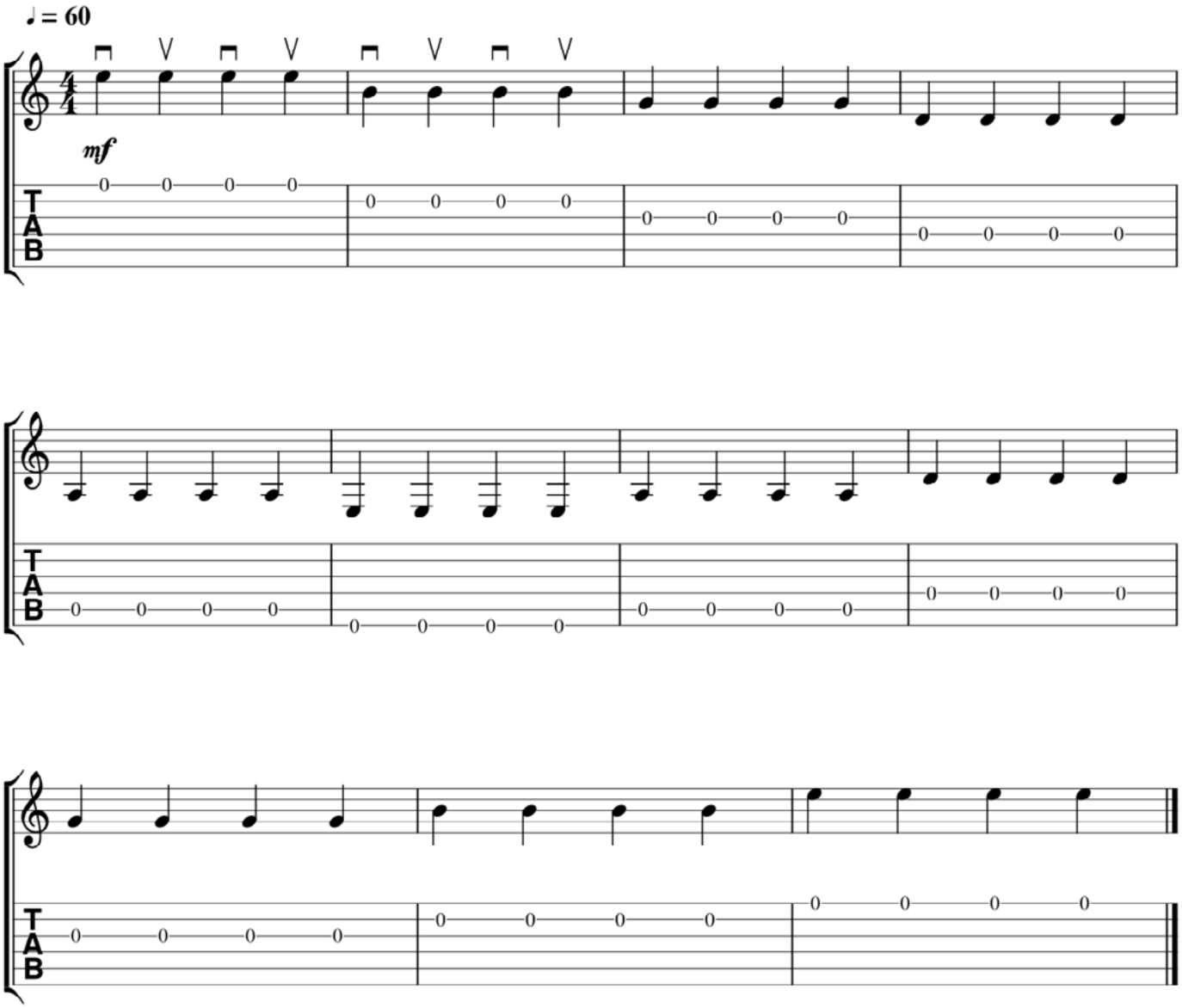


Double bar lines are used to separate sections of music - for instance, you might find a double bar line where the verse changes to the chorus.



Another type of double bar line is the final bar line, which indicates the end of a piece of music.

Open strings



1 Octave scales

Click here for this lesson's audio playlist ›

Tones and semitones

Tone (whole step) = 2 frets (move the note 2 frets)
Semitone (half step) = 1 fret (move the note 1 fret)

Major and Natural minor scales

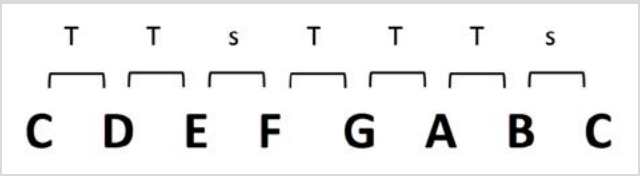
A **scale** is a series of single notes played one after the other. An octave scale is the name given to an 8 note scale that moves between 2 of the same note at different pitches - for instance, moving from one C note to the next highest or lowest C note.

To work out which notes need to be played for any given scale, we use tones (2 frets) and semitones (1 fret). So for instance, a C Major scale will start on note C, then according to the Major scale formula below, the second note is a tone/2 frets away, which is a D.

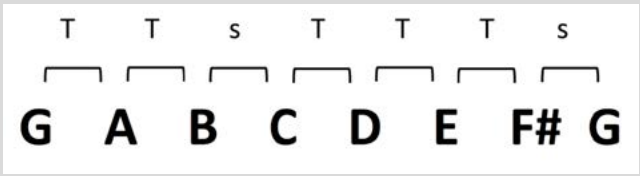
They are constructed using the following formulas:

Major = tone, tone, semitone, tone, tone, tone, semitone
minor = tone, semitone, tone, tone, semitone, tone, tone

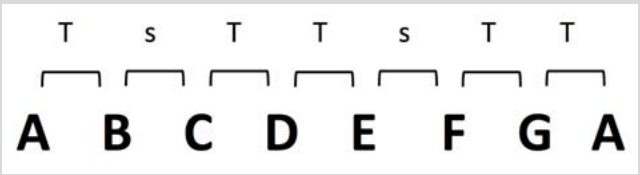
C Major:



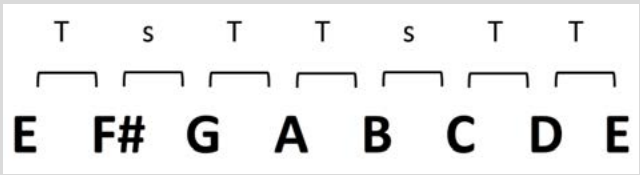
G Major:



A minor:



E minor:



Major scales tend to have a happy sound while **minor** scales tend to have a sad sound. Try working out some scales starting on other notes using the above formulas.

So why do we play scales? They can be found everywhere, and build the foundations of most music (as you will learn in depth later on) - for now, check out some of the following songs that make use of these scales:

Paul Gilbert - Marine Layer ›
This is a very obvious use of the C Major scale, but to great effect.

Amon Amarth - The Way of Vikings ›
The opening solo of this song is a great example of the versatility of the Natural minor scale - it can do traditional Rock'n'Roll, Viking Metal, and everything in between!

Luna Sea - In Silence
Though the major scale here is just ascending and descending, the use of a delay pedal adds that extra splash of creativity.

Major and minor Pentatonic scales

These are constructed using the following formulas:

Major Pentatonic = Notes 1, 2, 3, 5, 6 of the Major scale
minor Pentatonic = Notes 1, 3, 4, 5, 7 of the minor scale

A **Pentatonic scale** is a scale constructed from 5 of what are deemed to be 'the best' notes of the Major or minor scales. Many famous rock and blues solos are based on the Pentatonic scales, such as **AC/DC's 'Back in Black' ›.**

Bonus: Blues scale = notes 1, 3, 4, b5, 5, 7 of the minor scale

The Blues Scale is the same as the minor Pentatonic scale with one note added - the b5 note, or the **'blue note'**, which gives this scale its characteristic bluesy sound. All we have to do is play the note between notes 4 and 5.
The most famous example of the blues scale in Rock music is Cream's 'Sunshine of Your Love'.

Chromatic scales

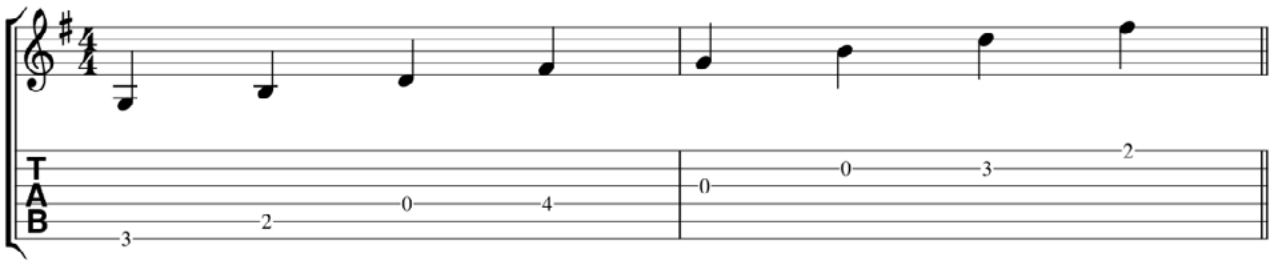
The chromatic scale has all 12 notes, using consecutive ascending or descending semitones. The course materials show how the chromatic scale can be written using both sharps (in the ascending scale) and flats (in the descending scale).

Key signatures

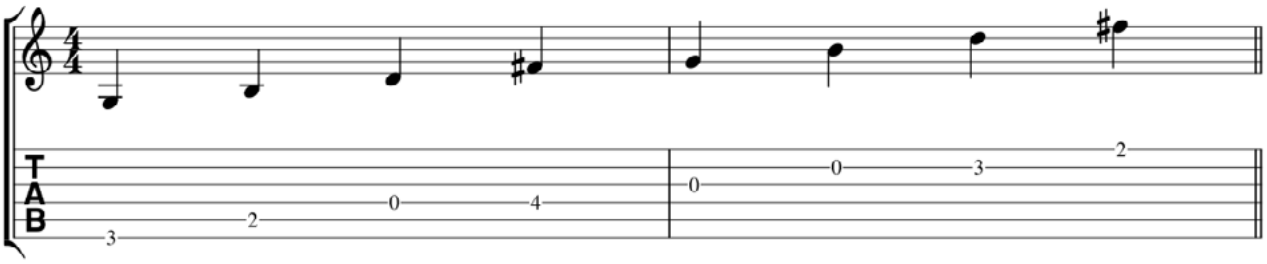
A **key** is a group of notes with which music is played and written. When we place these notes in ascending or descending order, we create the **scale for that key**.

A **key signature** indicates which key a piece of music uses, by indicating the sharp and flat notes (if any) included in that key at the beginning of a stave.

For instance, in the image below there's a sharp on the F line. This means that every F throughout the rest of the piece should be played as an F# (unless specified otherwise using a natural sign - ♮).



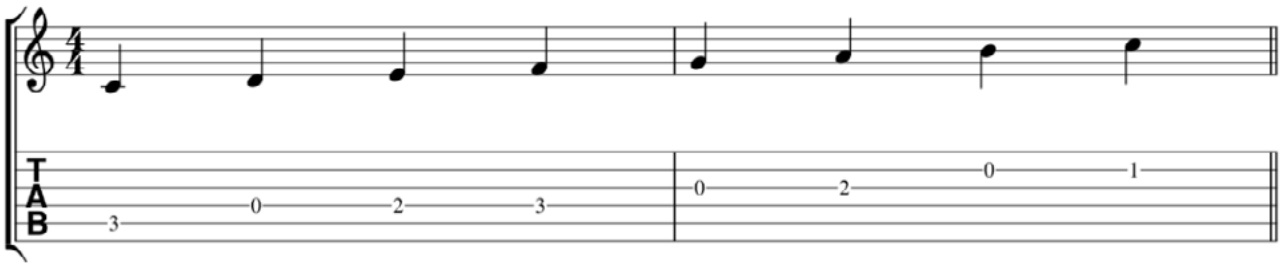
Without a key signature, we would have to play every F note as an F#:



G Major scale ›

This means that we're in the **key of G Major**, so the music is based on the notes of the G Major scale.

When we have no sharps or flats in the key signature, we are using the C Major scale:



C Major scale ›

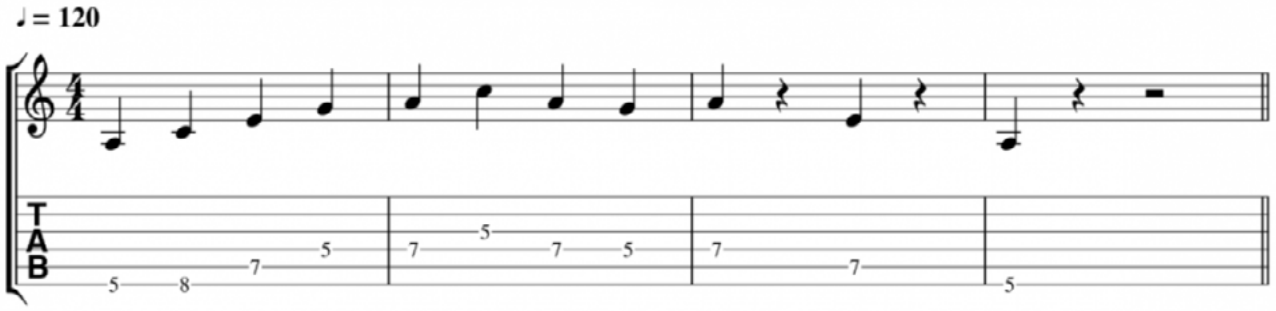
This means that we're in the **key of C Major**, so the music is based on the notes of the C Major scale.

Remember to memorise these key signatures!

Lil' licks!

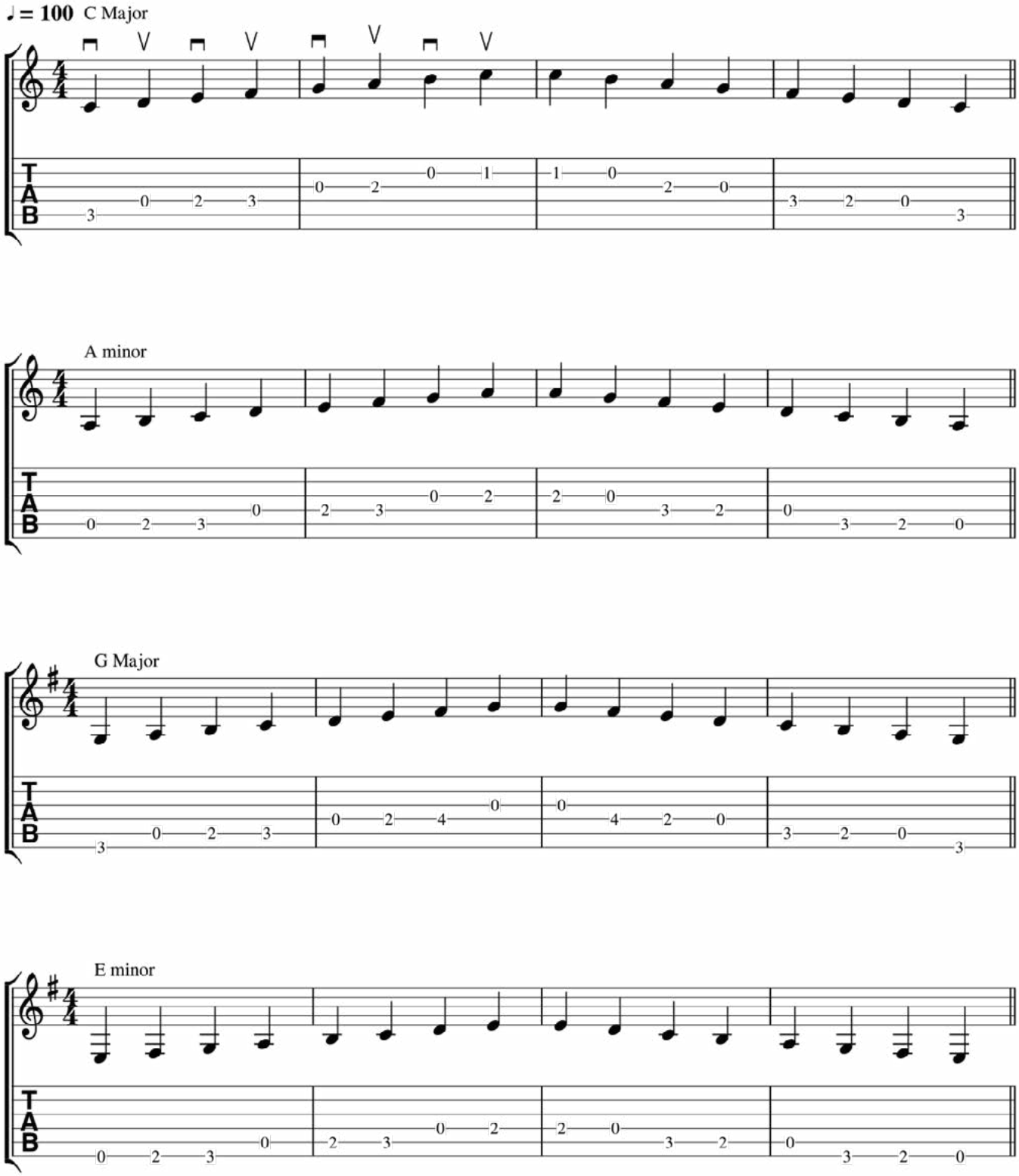
Welcome to lil' licks! At the bottom of some of your lesson pages, you'll find a short piece of music (or lil' lick, as we prefer to call them) that will demonstrate how what you learned in that lesson can be used on your journey to guitar mastery! Don't worry - these are just for fun, and will not appear in your exam!

Your first lil' lick is a 4-bar A minor Pentatonic phrase. Listen to it and read along with the sheet music and TAB before giving it a go. This is a great example of how something short and simple can pack plenty of attitude!

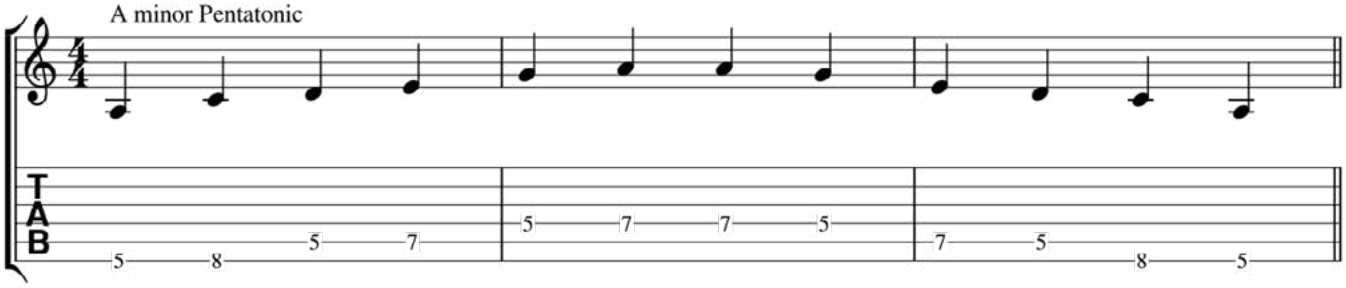


Lil' Licks - 1 Octave scales ›

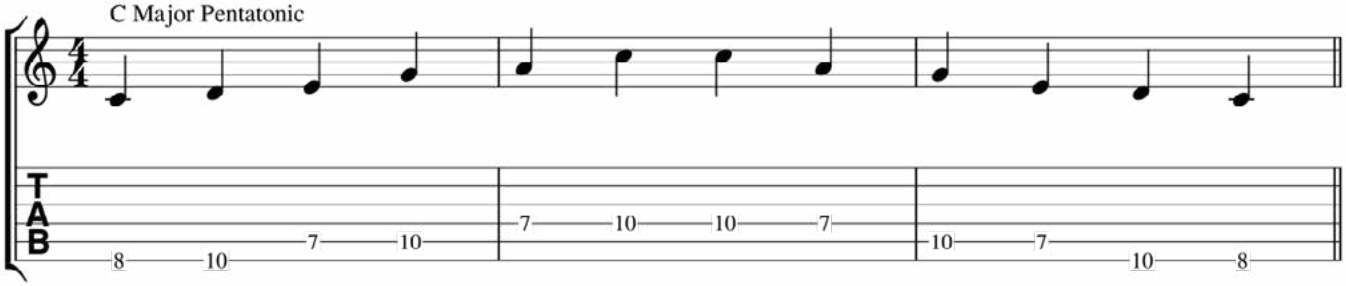
1 Octave scales



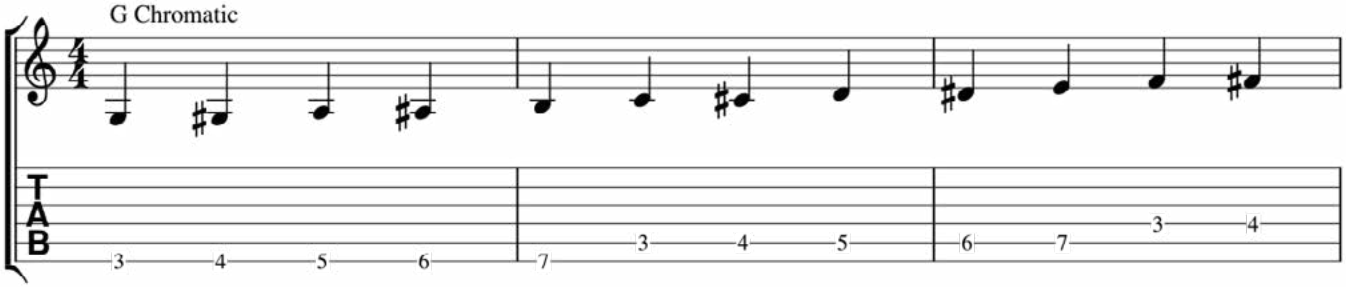
A minor Pentatonic

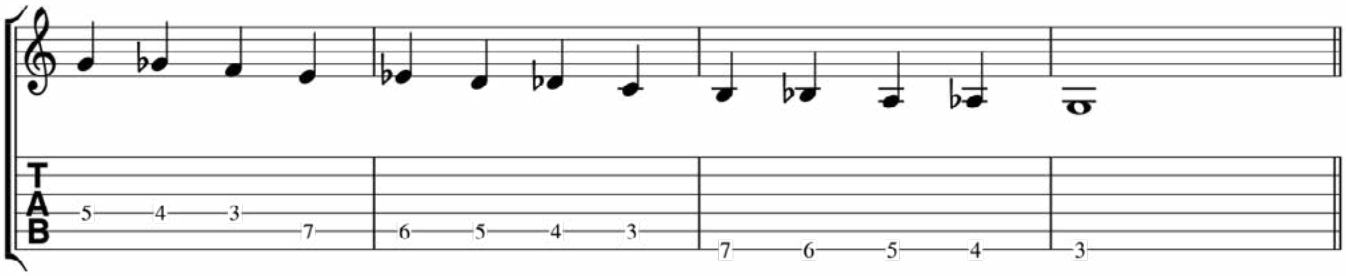


C Major Pentatonic



G Chromatic





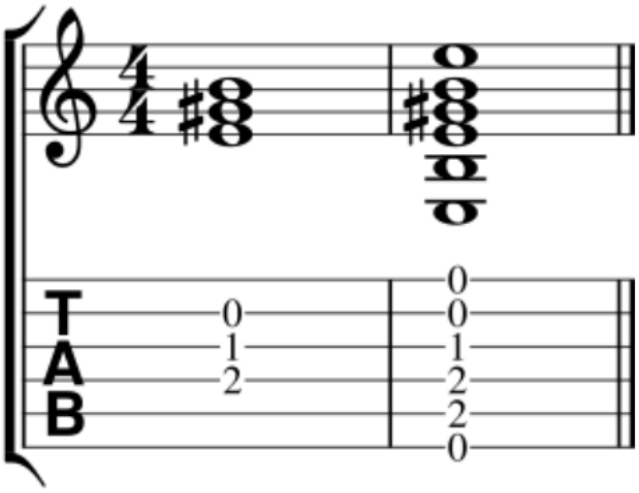
Open chords

Click here for this lesson's audio playlist ›

Major and minor chords

A **chord** is when you play more than one note at the same time. An **open chord** means that the chord uses open strings.

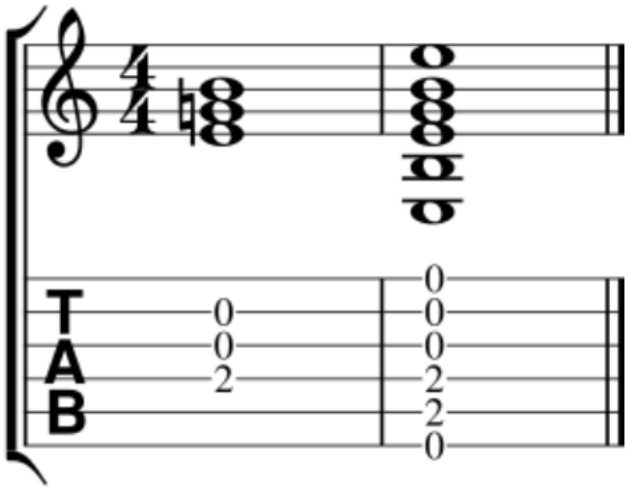
Major chords are made up of the 1st, 3rd and 5th notes from the Major scale. For instance, you'd play an E Major chord using the notes E, G#, and B (the 1st, 3rd, and 5th notes of the E Major scale).



E Major triad ›

Note how a chord can repeat any notes in the formula, so the open E major chord in the 2nd bar contains 3 Es, 2 Bs, and 1 G#.

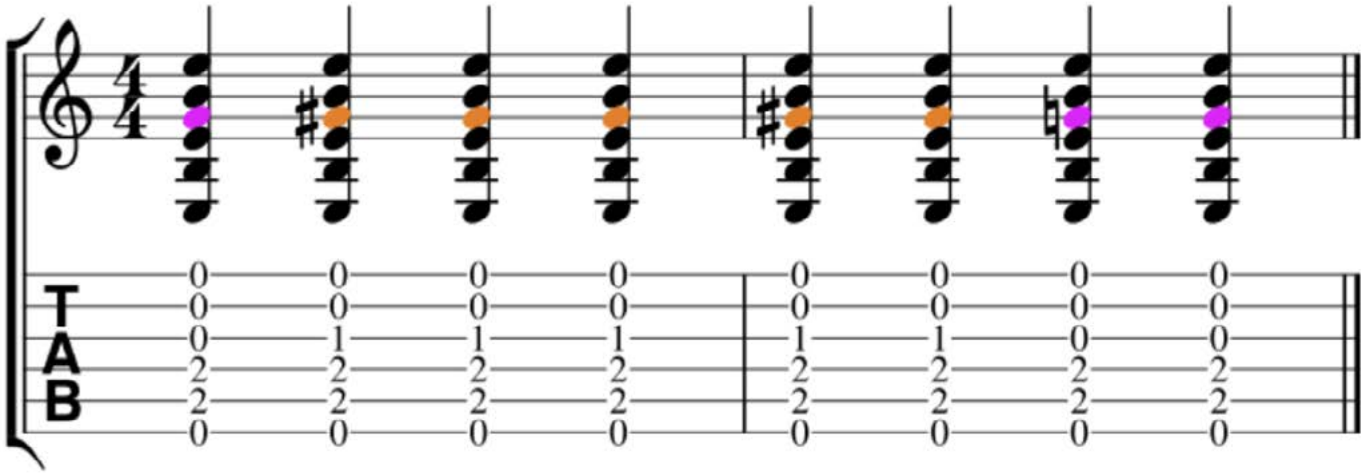
Minor chords are constructed in a similar way to **Major chords**, using the 1st, 3rd, and 5th notes from the minor scale - for instance, an E minor chord is constructed from the notes E, G, and B (the 1st, 3rd, and 5th notes of the E minor scale respectively).



E minor triad ›

As you can see, the only difference between a Major chord and a minor chord is the 3rd note - the 3rd note of the Major chord is a semitone higher than that of the minor chord. Similar to the the scale types, Major chords tend to have a happy sound and minor chords have a sadder sound.

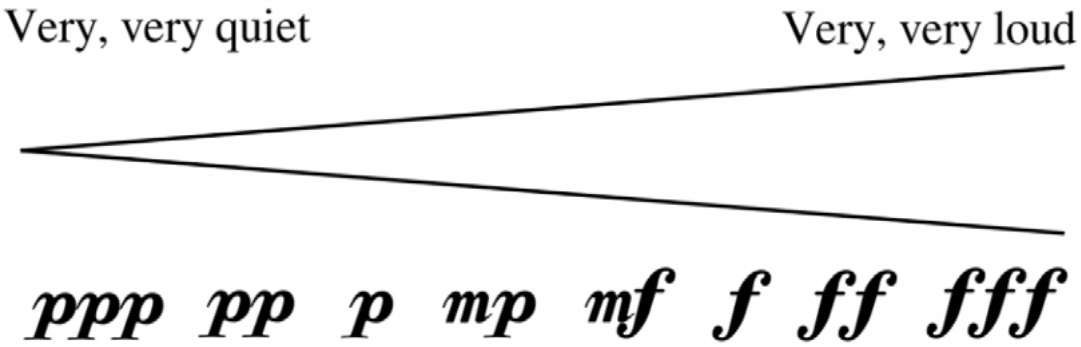
NB Once an accidental (sharp or flat) has been introduced once in a bar, it does not have to be introduced again - it is assumed that that note will be sharp/flat until the end of the bar, unless specified otherwise by a natural sign.



In this above example, G♮ is highlighted in pink, and G# is highlighted in orange. Note how the accidentals affect the proceeding notes in a bar.

Dynamics

You may have noticed the italic letters 'mf' under the course materials notation score - these are known as **dynamics**, which determine how loud or quiet your playing should be. Dynamics can range from very, very quiet to very, very loud:



As you can see, there are 8 possible dynamics, which are represented by a letter or group of letters. Each letter stands for an Italian term, which literally translate to the following terms:

ppp - pianississimo. Very, very soft/ quiet, or as quiet as possible. **pp** - pianissimo. Very soft/quiet.	**p** - piano. Quiet/soft. **mp** - mezzo-piano. Half-soft or quite soft. **mf** - mezzo-forte. Half-loud or quite loud.	**f** - forte. Loud. **ff** - fortissimo. Very loud. **fff** - fortisssissimo. Very, very loud.

Remember that all dynamics are relative - what is piano in one piece of music may be forte in another. Dynamics are also liable to change throughout a piece of music.

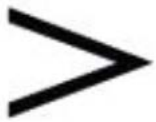
Chord progressions & strumming patterns

A **chord progression** is when 2 or more chords are played consecutively (i.e. one after the other in a sequence). Strumming patterns tell you how the rhythms are played for the chord progression. A strumming pattern can drastically change how a chord progression sounds, by giving or taking emphasis from each chord, or emphasising a certain beat in the bar.

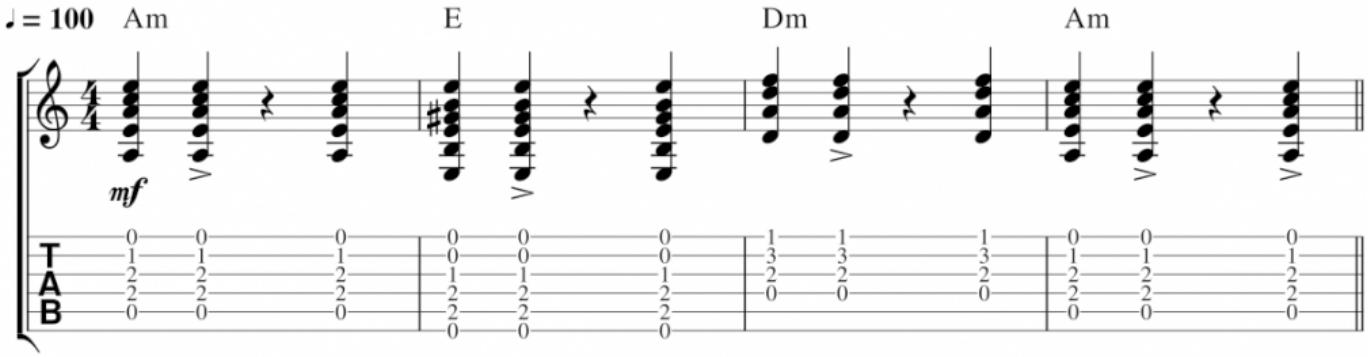
There are a couple of techniques that can be used to enhance your chord progressions and **strumming patterns**:

Accents

An accent is when you give a certain note or chord emphasis, usually by playing it louder and with a stronger attack.
A note is accented when the following symbol is placed above or below it:



Look at the following chord progression - notice how the accents give certain chords and beats emphasis.

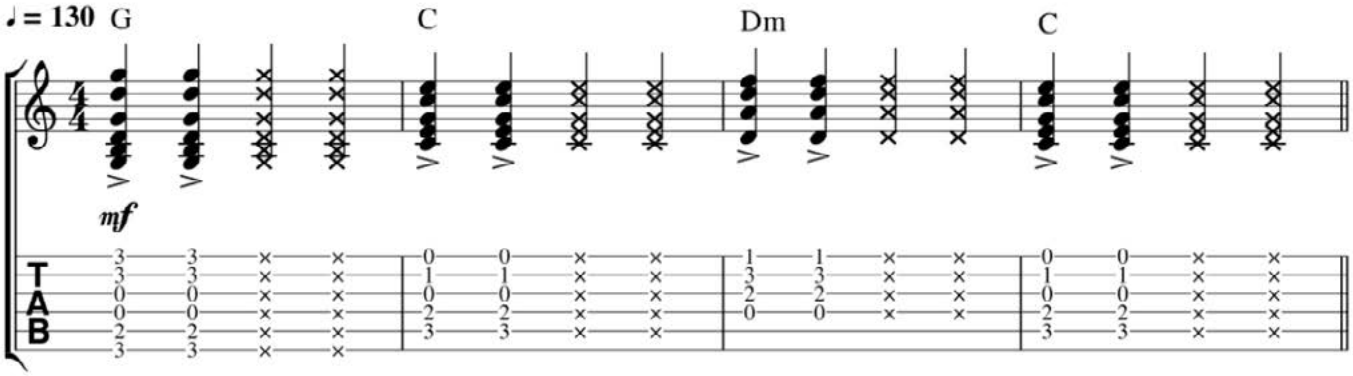


Accents example ›

Muting

Muting strings during chord progressions can also allow you to highlight certain parts of the chords or rhythms, by adding a percussive element to your playing. It's also a useful tool for making difficult chord changes without having open strings ringing out.

To mute the strings, gently place the fingers of your fretting hand over the strings, making sure you aren't pressing hard enough to play any notes. This should deaden the sounds of the strings, creating a percussive sound. In notation/TAB, muted notes are represented by an 'x' where the note would usually be. Listen to the following example to hear how muting can be used in chord progressions.



Muting example ›

Combining chord progressions and strumming patterns is often how you build the foundations of a song. Listen out for this in the following songs, which use various open chords and strumming patterns.

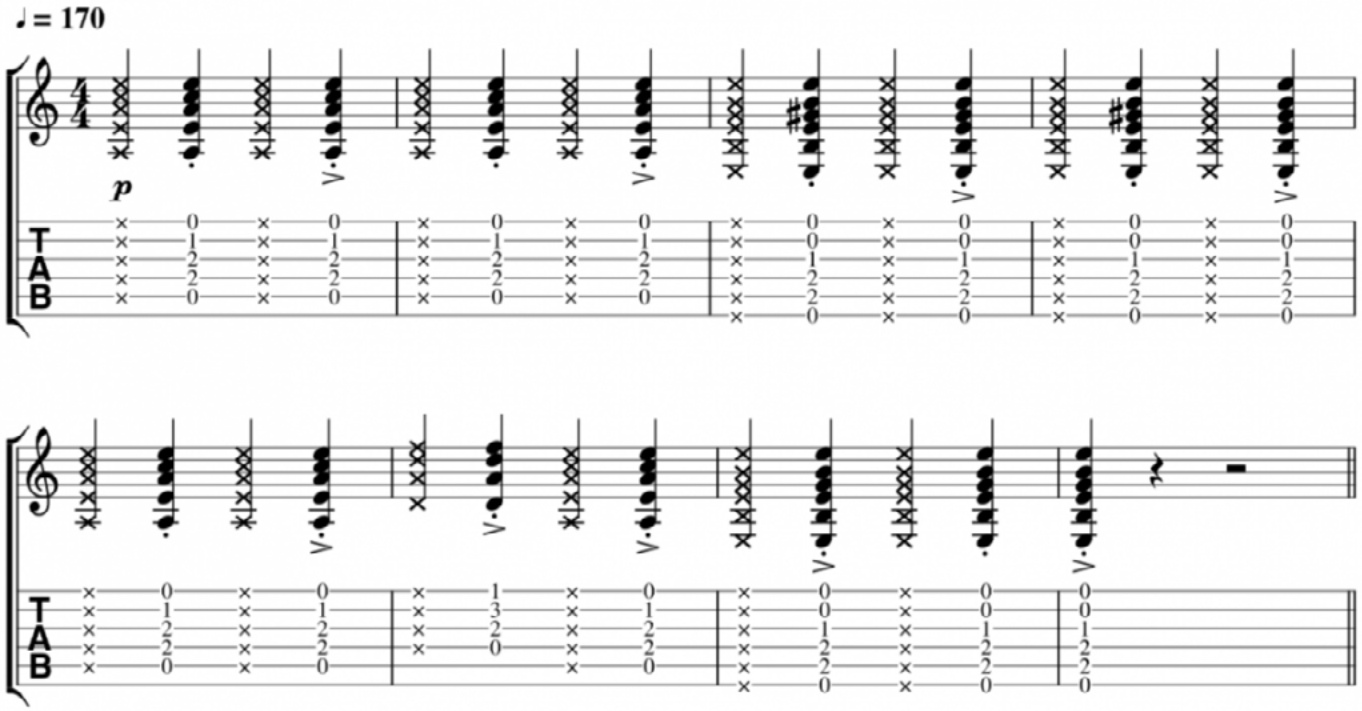
David Bowie - Space Oddity ›
This song is more ambitious with its use of open chords, but uses a more relaxed strumming pattern throughout.

Brain Failure - Give Me A Knife
This punk song uses two open chords throughout, A Major, D Major (and the occasional E Major in the chorus). The aggressive strumming pattern gives this song its drive.

Lil' licks!

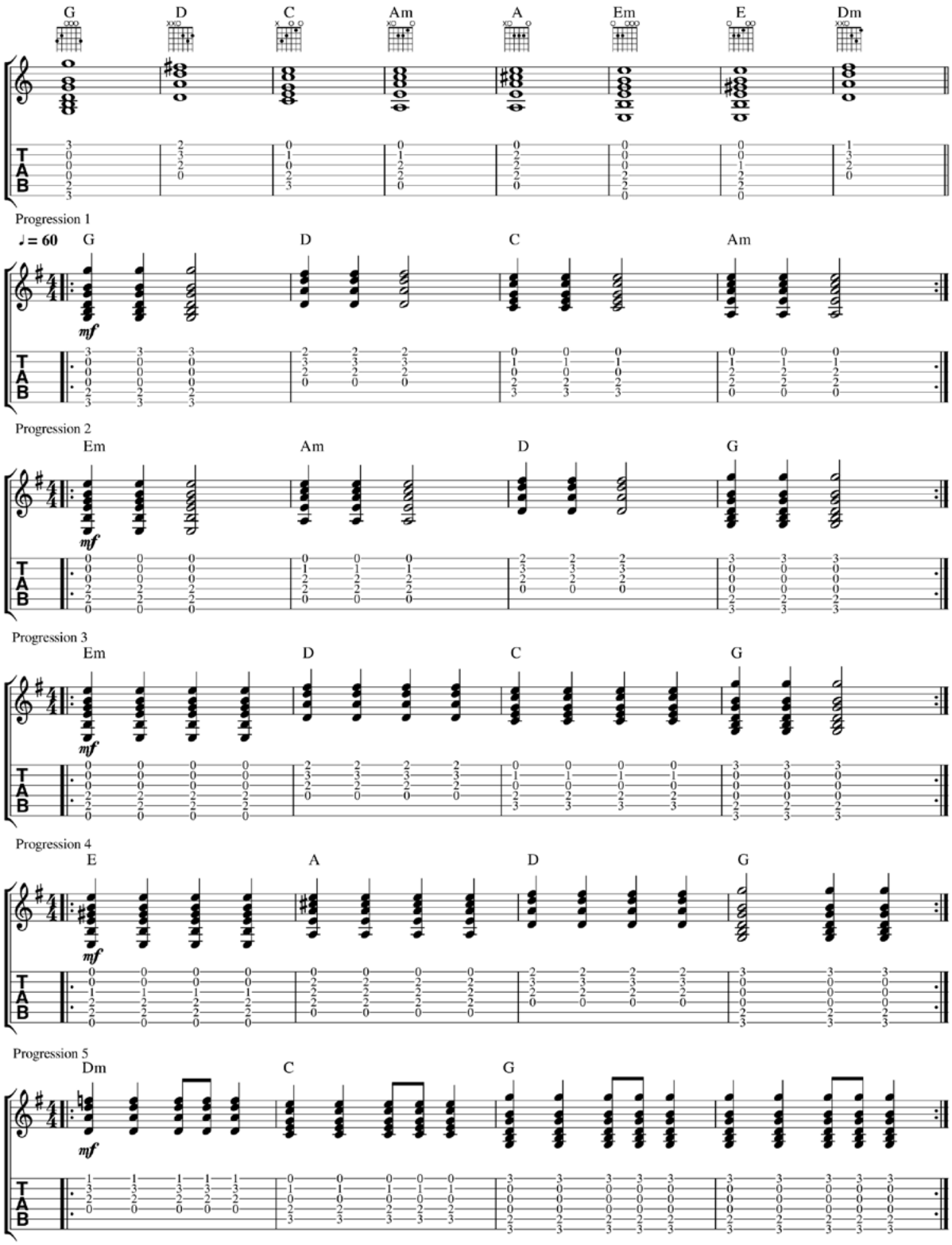
This piece combines open chords with accents and muting for a sharp, edgy chord progression. Pay attention to the dynamics - make sure the unaccented chords are played piano, so that the accented chords really strike out.

You may notice the small dots underneath each chord. This is known as staccato and it means that you should play these chords as quickly and suddenly as possible. You will learn more about this later in the course.



Lil' Licks - Open Chords ›

Open Chords



Click here for the Open Chords course material recordings ›

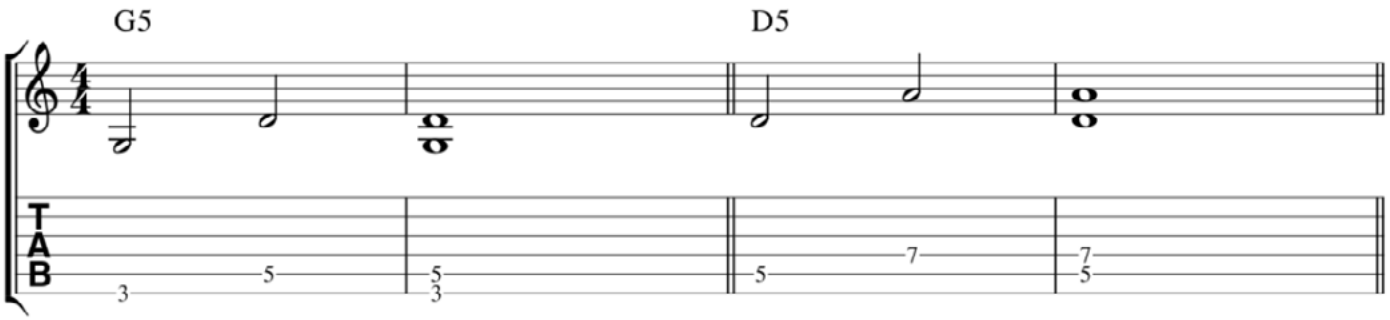
Click here for the Open Chords course material backing tracks ›

Power chords

Click here for this lesson's audio playlist ›

Power chord shapes

Power chords are played using only a root note (the 1st note of the scale) and a 5th (the 5th note of the scale) - that's why they're also called '5' chords. For instance, a G5 chord is built from the root note G and, a 5th above it, D. A quick way of building power chords from a root note on the low E or A string is to move 2 frets up and 1 string down from your root note to find the 5th.



Power chord construction ›

Though mostly the domain of rock and metal, power chords are used in all kinds of music. Listen to the following songs to hear some examples of how power chords can be used:

The Outfield - Your Love ›
The main riff of this song is 3 power chords, and then another is introduced in the chorus.

Green Day - American Idiot ›
One of the most famous power chord riffs out there, the main riff of this song also uses on 3 power chords, before introducing a few more in the chorus.

Notes

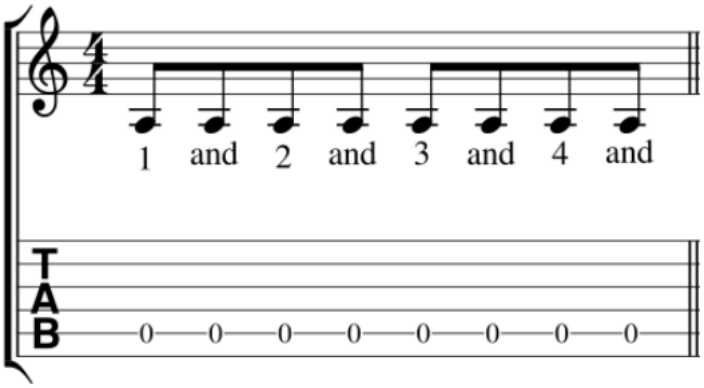
Quaver

This is a note or rest that lasts for ½ a beat.

Quaver note = ½ beat

Quaver rest = ½ beat

This means that a quaver is half the value of a crotchet, so we can fit 8 quavers into a bar of 4/4. It is common practice to count the quavers in-between the 4 beats of the bar '1,2,3,4' using 'and', as can be heard in the following example:

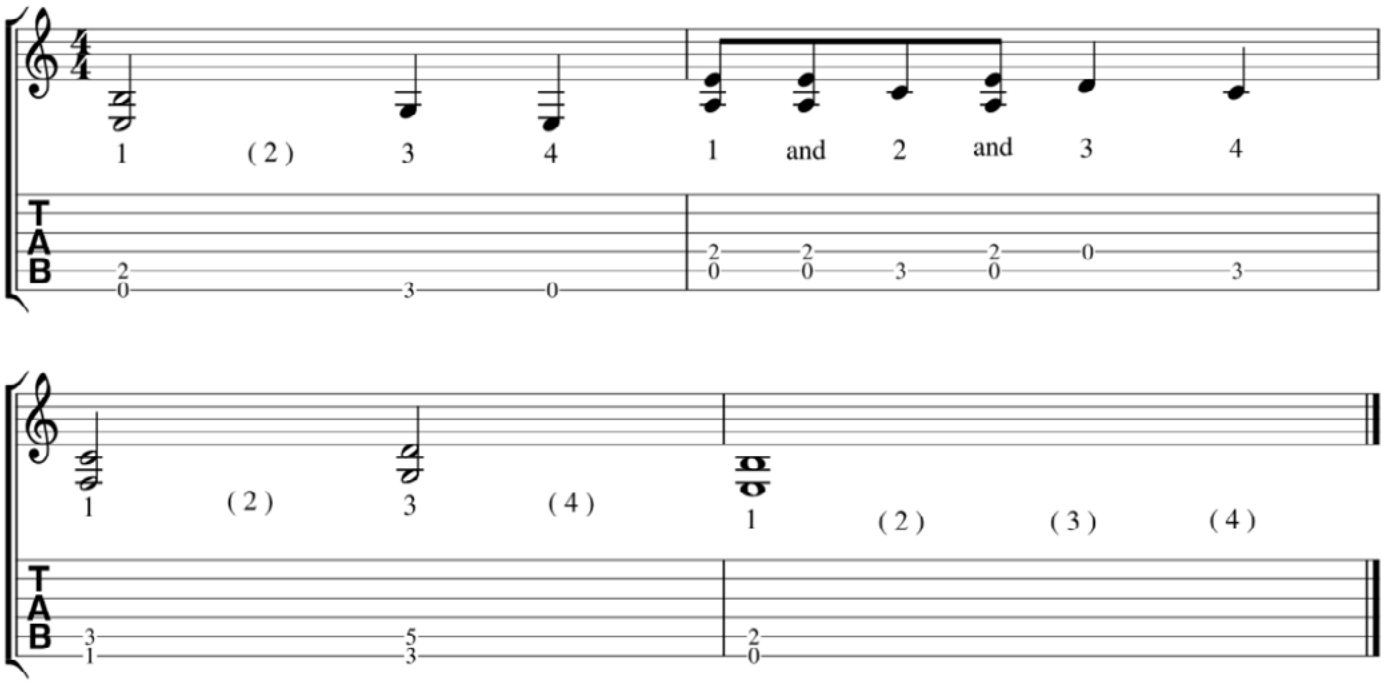


Quaver counting example ›

When 2 or more quavers are placed directly next to each other, a beam is created between the 2 notes, which is a line joining them together.

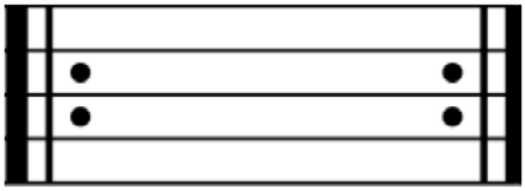
NOTE: Only notes that last for a 1/2-beat or less can be beamed together. You'll encounter shorter notes later in the course.

The following example shows how you can count with different note values - listen to the audio example and count along with the score. To get a heavy distorted sound, turn the ‘gain’ knob up on your amplifier, and get ready to rock!



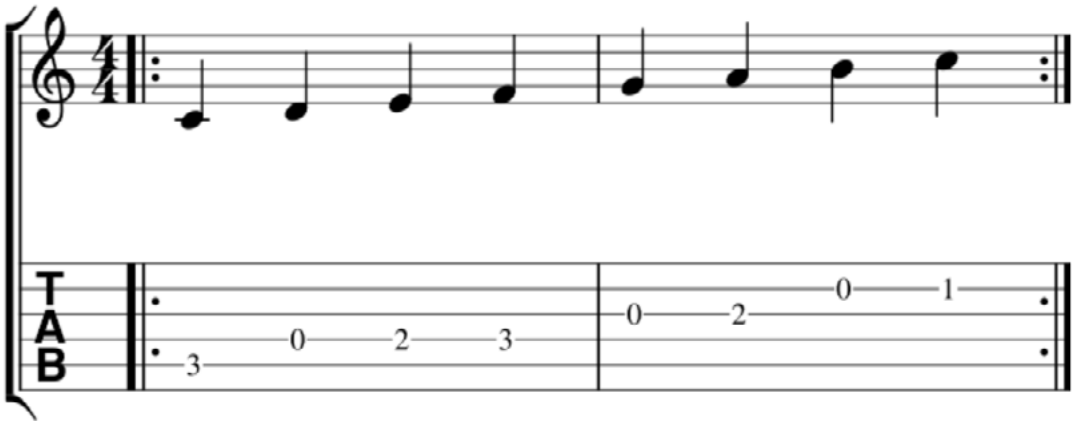
Quaver counting riff ›

Repeat lines



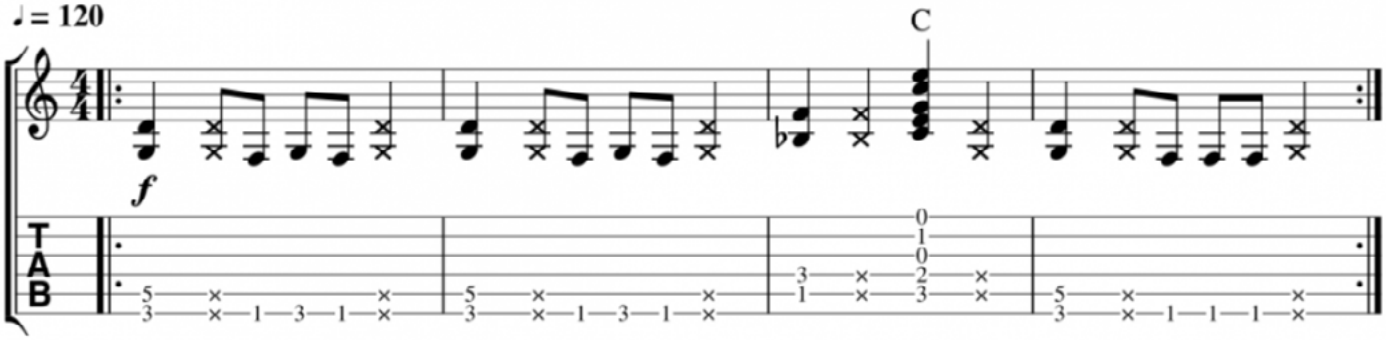
Repeat lines are used when we want to play the same bar or group of bars multiple times. They appear at the beginning and end of the repeated bars.

For instance, the following C Major scale 2-bar phrase is found between a set of repeat lines, so will therefore be played twice.



Lil' licks!

This piece combines power chords and open chords with left-hand muting, and packages it all in a repeat mark, creating a 4-bar looping riff to play around with! The dynamics ask for forte playing throughout, so be sure to give it plenty of power, and plenty of attitude.



Lil' Licks - Power Chords ›

Bonus - songs you can try

By this point, you will have covered a number of different areas and techniques - open chords, power chords, and 1 Octave scales more specifically. There are plenty of great songs you can learn to play with little more than these techniques:

Screaming Females - Empty Head ›
Though a relatively simple power chord riff, the chord changes are quick and often, so take it slowly at first.

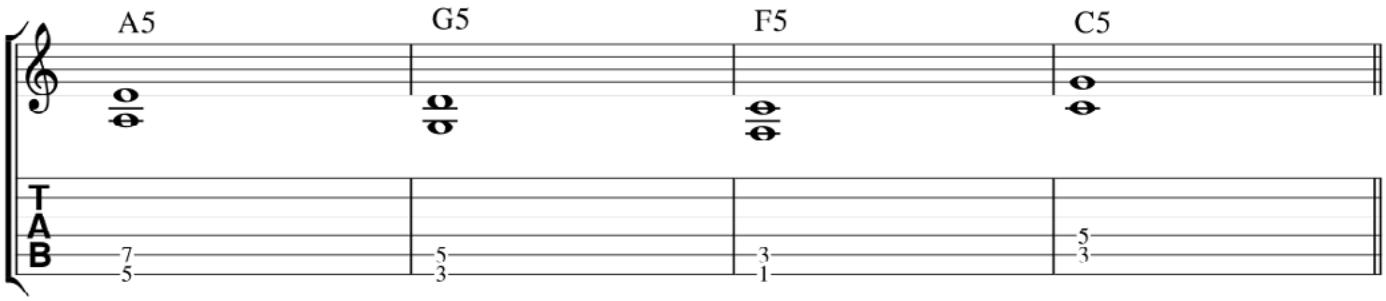
Nirvana - Smells Like Teen Spirit ›
A beginner's dream - this song is built on a fast paced, repetitive power chord riff, and even has a simple F Natural minor solo to play.

Rammstein - Du Hast ›
This aggressive power chord song will test the speed of your chord changes. Crank up the overdrive for this one!

Thin Lizzy - Jailbreak
Most of Thin Lizzy's repertoire has very complex guitar parts, and even this song features one or two sections that might take a bit of time to get your fingers around. However, the main power chord riffs for the verses and the chorus, and the ascending chromatic riff in the bridge shouldn't prove too much trouble.

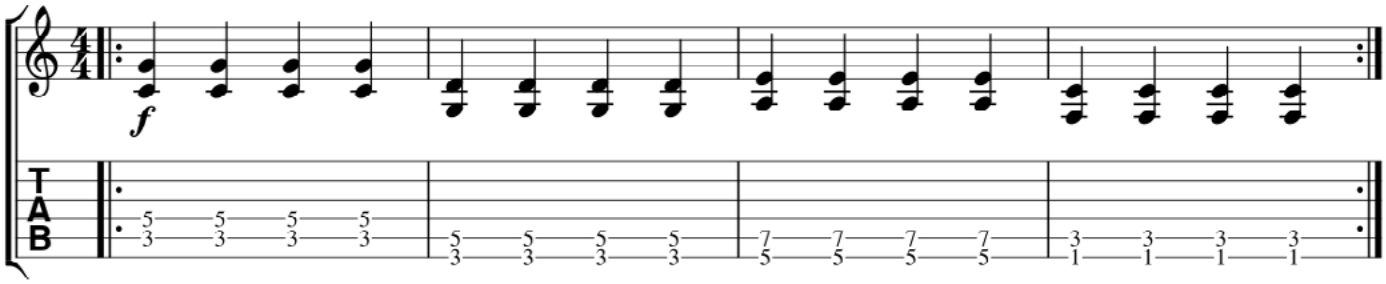
Sleater Kinney - One Beat
This main riff of this song consists of 2 alternating power chords, and continues to layer melodies and chords on top - see if you can figure them out!

Power chords

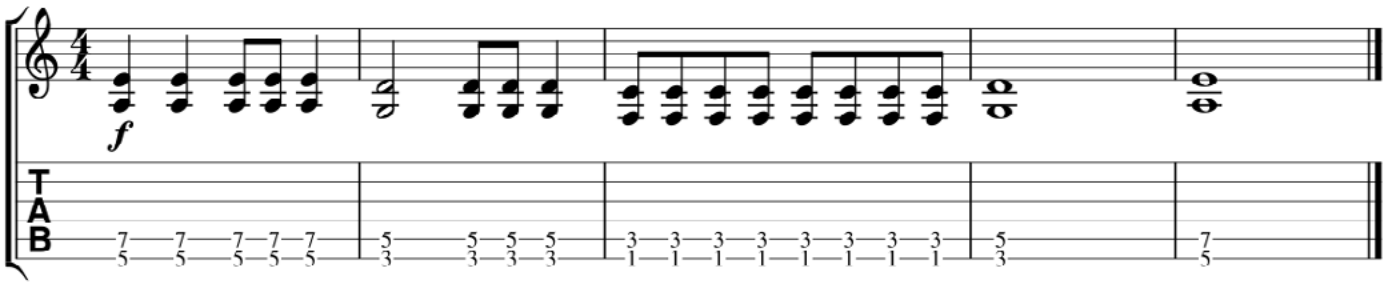


Progression 1

♩ = 60



Progression 2



Click here for the Power Chords course material recordings ›

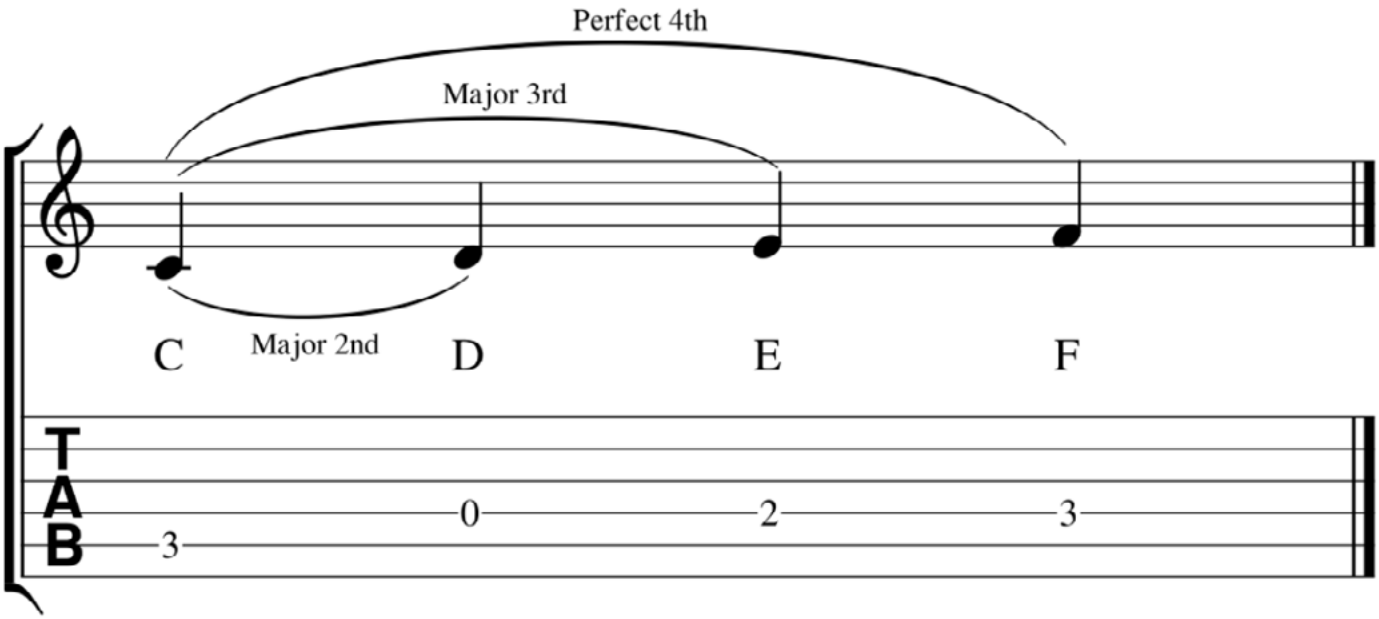
Click here for the Power Chords course material backing tracks ›

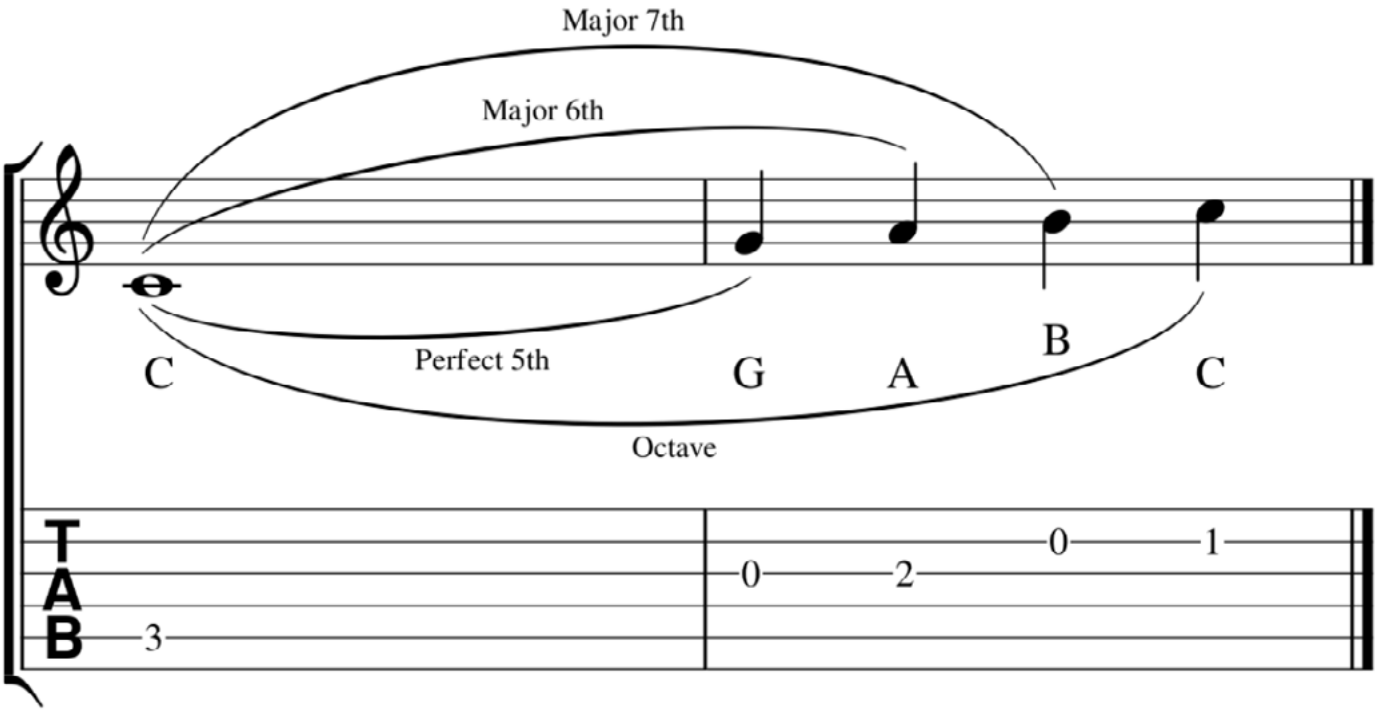
Intervals of the Major scale

As well as counting the distance between notes using tones and semitones, we can use intervals.

The intervals of a scale are calculated as the distance between the root note and any other note in that scale. We refer to the first note of any scale as the root note.

For instance, here are the intervals of the C Major scale, from the root of C Major (C) to the other scale degrees:



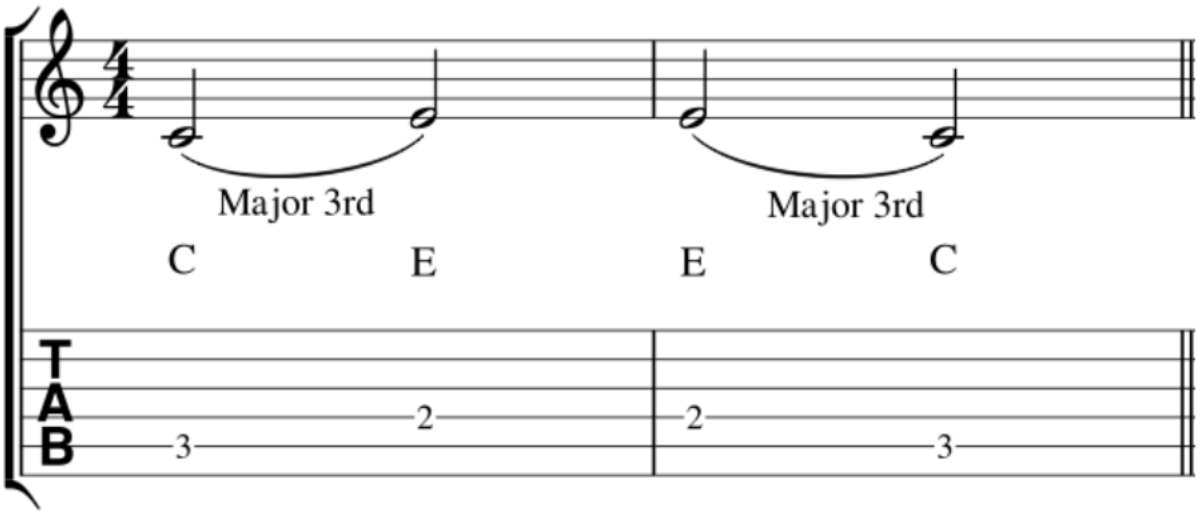


So the order of the intervals in any Major scale are:

Root - Major 2nd - Major 3rd - Perfect 4th - Perfect 5th - Major 6th - Major 7th - Octave

The Major scale has 2 types of interval - Major and Perfect. Major intervals have a ‘happy’ sound (the same as Major chords), while Perfect intervals have a more neutral, stable sound than other intervals.

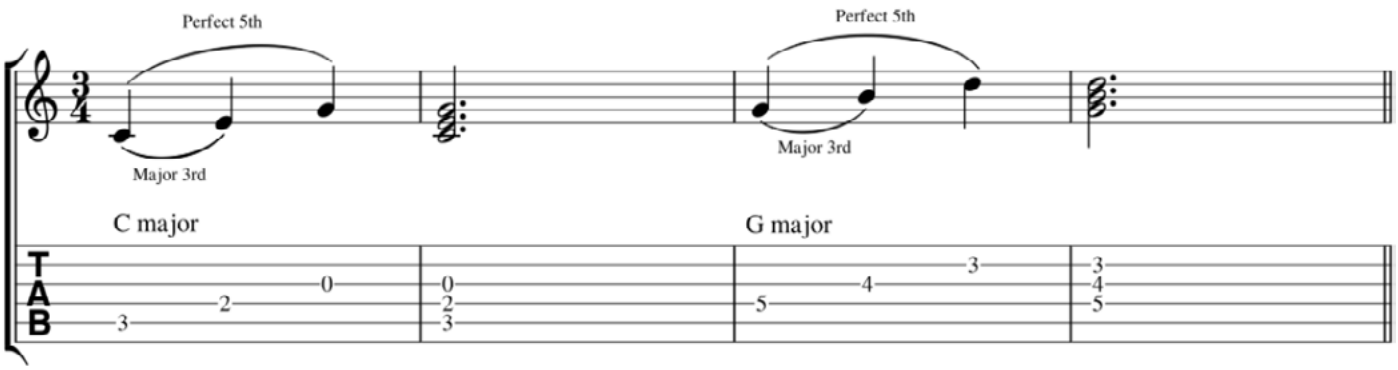
Intervals are always calculated from the lowest note, regardless of the direction of the notes. For instance, the following movement between C and E will always be a Major 3rd, whether we go up or down.



Major 3rd interval ›

Chords and intervals

We can also make sense of chords using intervals. As we know, Major chords are made from the 1st, 3rd, and 5th notes of the Major scale. This can be translated to become a root note, a Major 3rd above the root note, and a Perfect 5th above the root note. Major chords made up of these three notes alone are known as Major triads.



Major triad construction ›

It can be helpful to think of intervals in terms of semitones and tones. Here is a list of the number of semitones/frets in each interval:

- **Major 2nd** - 2 semitones/frets
- **Major 3rd** - 4 semitones/frets
- **Perfect 4th** - 5 semitones/frets
- **Perfect 5th** - 7 semitones/frets
- **Major 6th** - 9 semitones/frets
- **Major 7th** - 11 semitones/frets
- **Octave** - 12 semitones/frets

1 Octave Arpeggios

Click here for this lesson's audio playlist ›

Arpeggio shapes

Arpeggios are when we take the notes of a chord and play them separately, one after the other. Therefore, the formula for figuring out an arpeggio is the same as figuring out a chord. Since we already know chords made from the 1st, 3rd, and 5th notes of the Major and minor scales (Major and minor chords), we can deduce that Major and minor arpeggios also use the 1st, 3rd, and 5th notes of the Major and minor scales.

Arpeggios are a notoriously tricky technique to master, especially in rock and metal (as they're all so speedy!) but there are still a few songs that are do-able:

Hangar 18 - Megadeth
The intro to this song introduces a progression of 3 string chords, and follows by arpeggiating them. Be warned, this riff is tough, so be sure to start very slowly and gradually build up your speed.

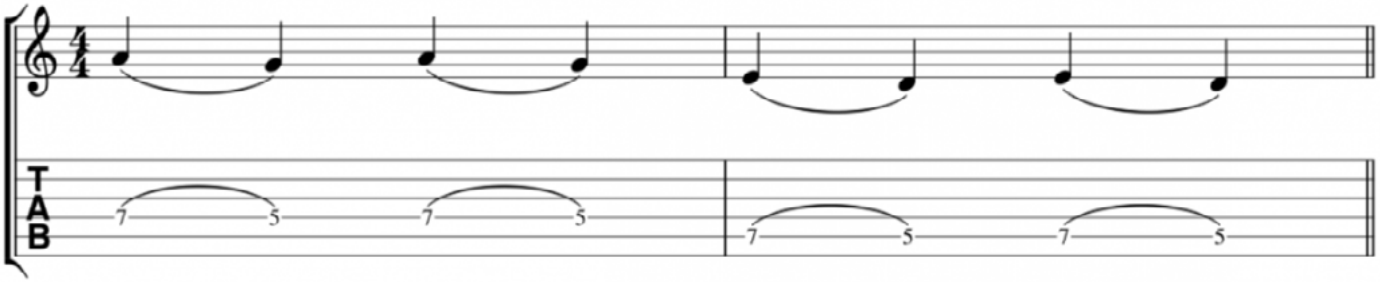
Kill The King - Rainbow
The intro riff to this song uses just 2 arpeggios (which are then played in a different key during the solo). Once again, this is a tough riff to play fast, so slow it right down and gradually build up speed.

Hammer-ons and pull-offs

Hammer-ons are achieved by firmly placing or 'hammering' a fretting finger onto a string without picking, moving the note **upward in pitch.** Pull-offs are achieved by pulling a fretting finger off a string without picking, moving the note **downward in pitch**.

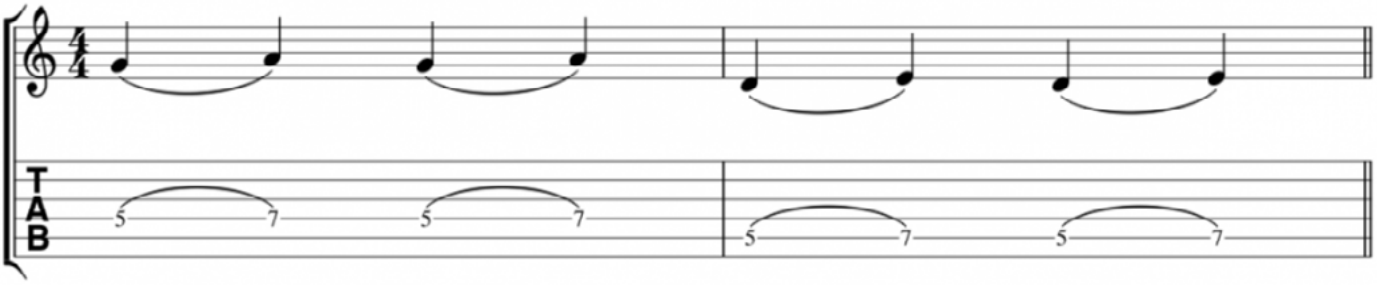
These techniques are used to create a smoother sound, which is known as **legato.** They are notated using a line known as a **slur** to connect 2 notes. A slur indicates that a group of notes should be played in a legato style.

This example shows pull-offs - note the movement from 1 note downward to the next.



Pull-off example ›

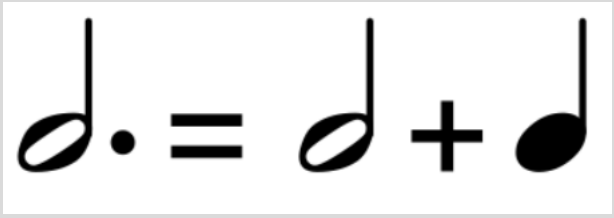
This example shows hammer-ons - note the movement from 1 note upward to the next.



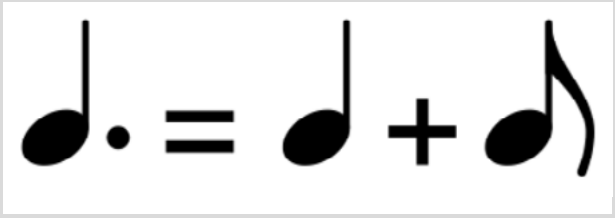
Hammer-on example ›

Dotted notes

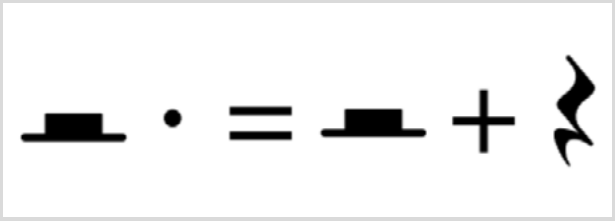
When you see a dot added to the side of a note, it adds half the value of the note on top of the original note value.



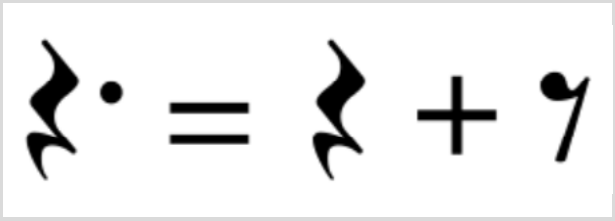
For example a dotted minim would last 3 beats. A minim + half its value (a crotchet): 2 + 1 = 3 beats



Similarly, a dotted crotchet would last 1 and a half beats. A crotchet plus half its value (a quaver): 1 + 0.5 = 1.5 beats



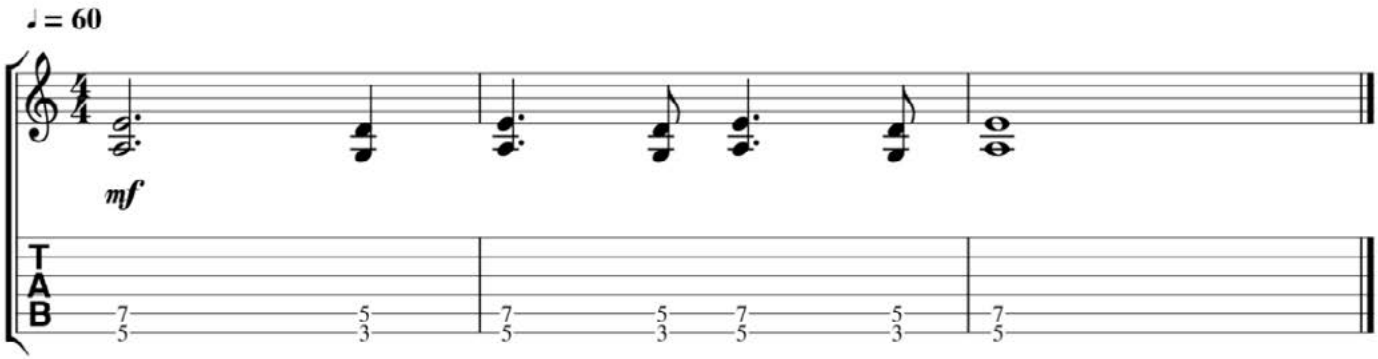
The same formula applies for dotted rests - a dot added next to a rest adds half the value of the rest on top of the original rest value. For instance, if we represent the previous example as rests:



A dotted minim rest is 3 beats: minim rest (2 beats) + half its value (crotchet rest - 1 beat)

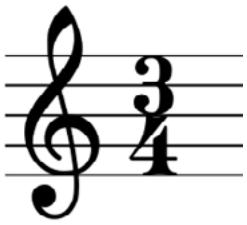
A dotted crotchet rest is 1 and a half beats: crotchet rest (1 beat) + half its value (quaver rest = 1/2 beat)

The following power chord riff uses dotted notes - a voice counts each crotchet beat, whilst the guitar plays the dotted note rhythm. Listen to how the dotted rhythm is different from the crotchet beat rhythm:



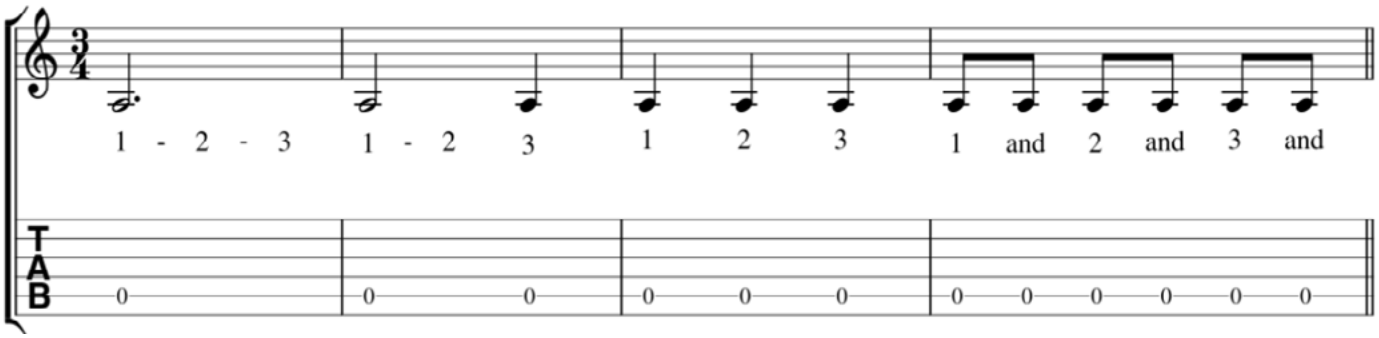
Dotted note riff ›

3/4 time signature



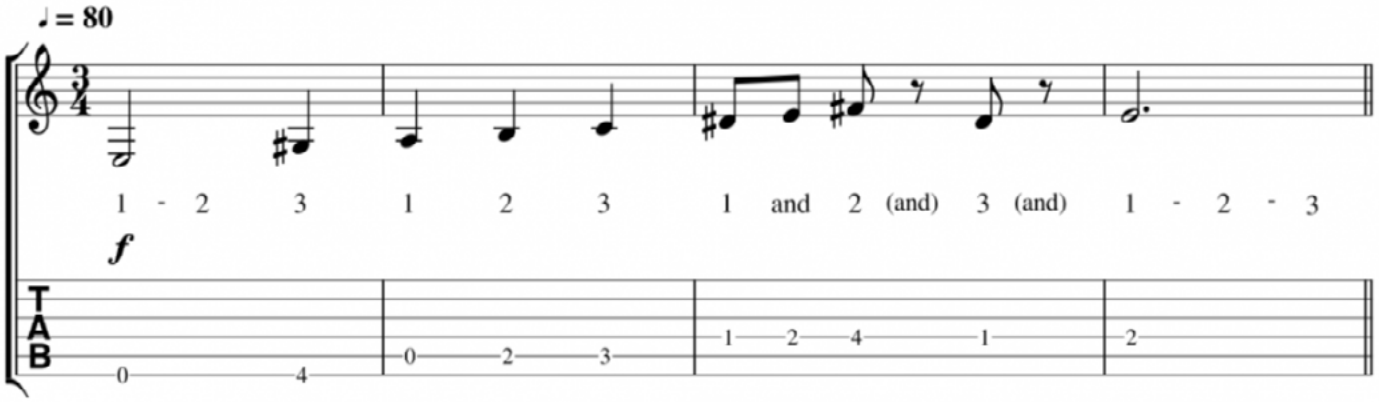
The top number indicates how many beats each bar has (in this case, 3) and the bottom number indicates what beats they are - the 4 on the bottom refers to a crotchet beat.

This time signature fits a different number of notes and rests into each bar. The following example shows how the notes you've already learned fit into a bar of 3/4:



3/4 counting example ›

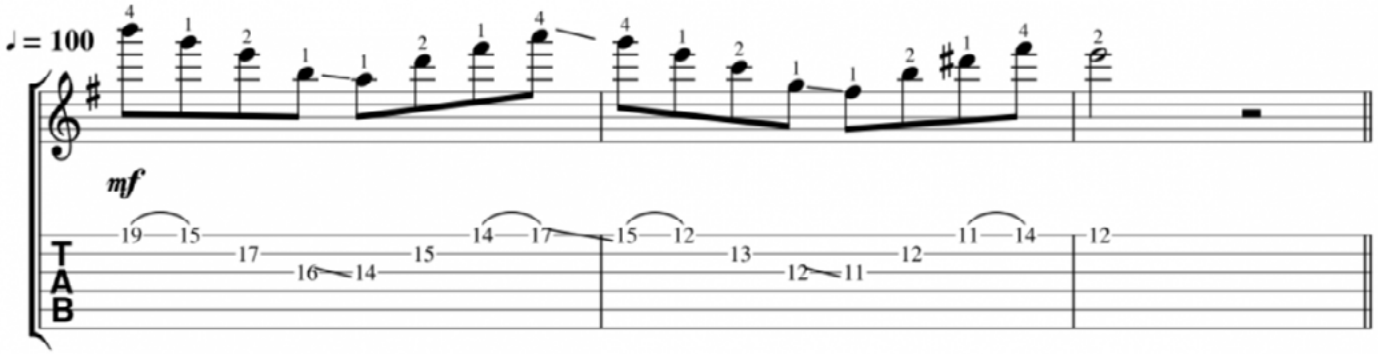
The following example shows a combination of crotchets, minims, semibreves and various rests. We can use any combination of notes and rests, as long as their sum is equal to 3 beats:



3/4 riff ›

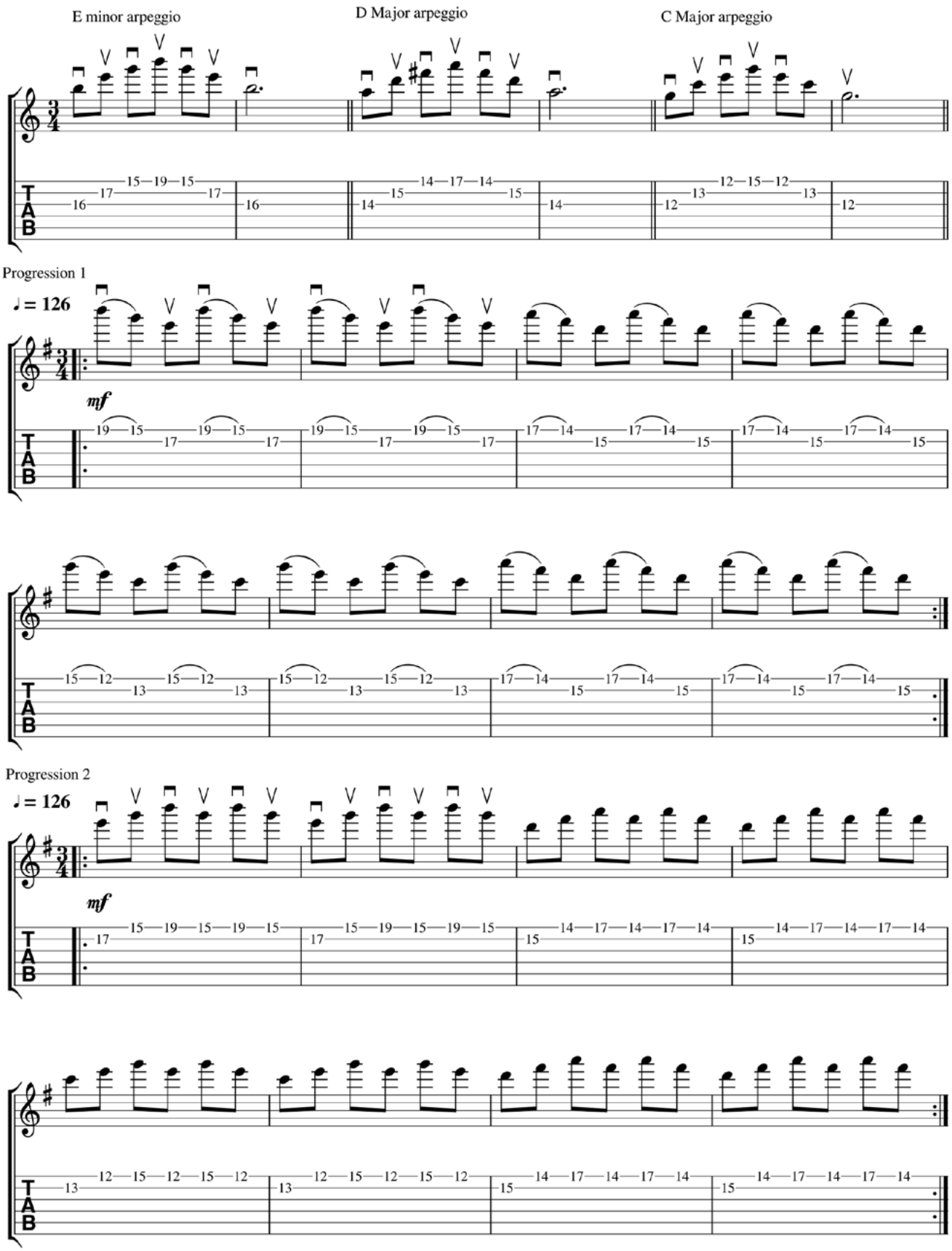
Lil’ licks!

This lick is taking you way up the neck! It combines the arpeggio positions introduced in this lesson’s course materials, and the use of hammer-ons and pull-offs. The small numbers above the notation indicate which fretting-hand fingers to use for each note (1 for index, 2 for middle, 3 for ring, 4 for pinky). And the small lines between some of the notes indicate a change in position (by moving the whole hand down a number of frets).



Lil’ Licks - 1 Octave Arpeggios ›

One Octave Arpeggios



Chromatic Alternate Picking Routine

Click here for this lesson's audio playlist ›

Technique

These chromatic exercises are beneficial in many ways.
As well as being a fantastic way to warm up, these exercises will improve:

- Finger independence
- Finger strength
- Alternate picking skills
- Co-ordination between your fretting and picking hands

Note values

Semiquaver

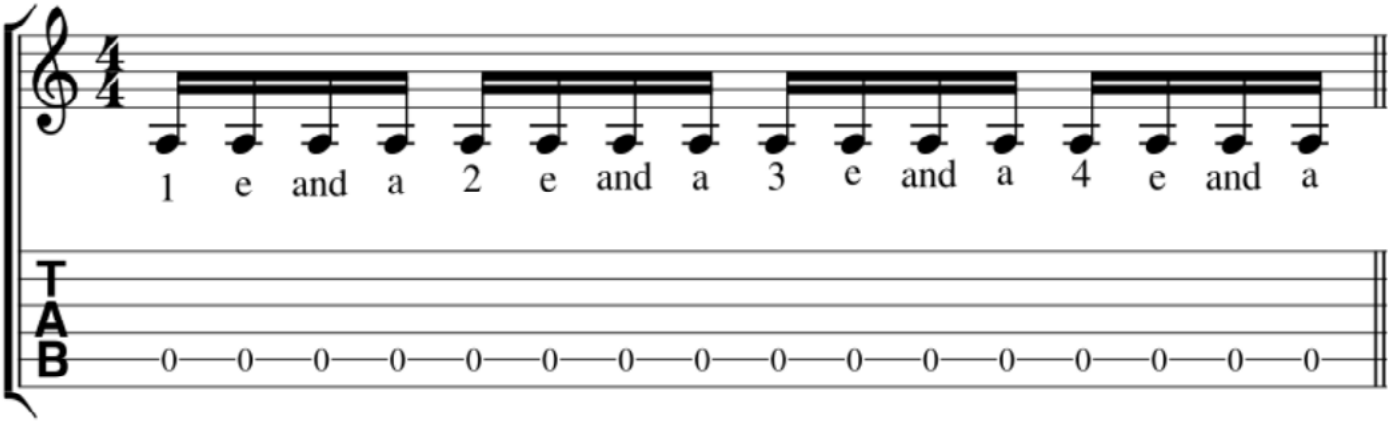
A semiquaver lasts for a ¼ beat.

Semiquaver note

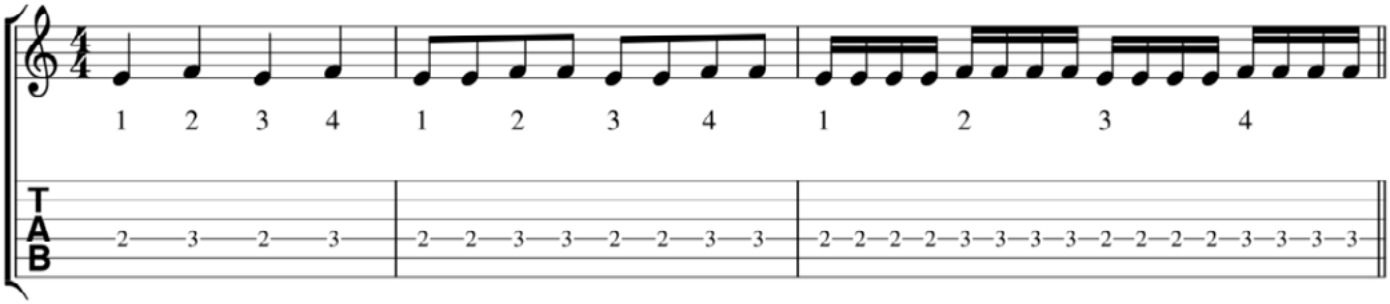
Semiquaver rest

This means that a semiquaver is half the value of a quaver, and therefore a quarter the value of a crotchet.
We can fit 16 semiquavers into a bar of 4/4.

As we have seen before, it's common practice to count the quavers in-between the 4 beats of the bar '1,2,3,4' using 'and'. Semiquavers introduce notes in-between the 4 beats of the bar and the 'and' beats. It is common practice to count the semiquavers in-between these beats as 'e' and 'a':



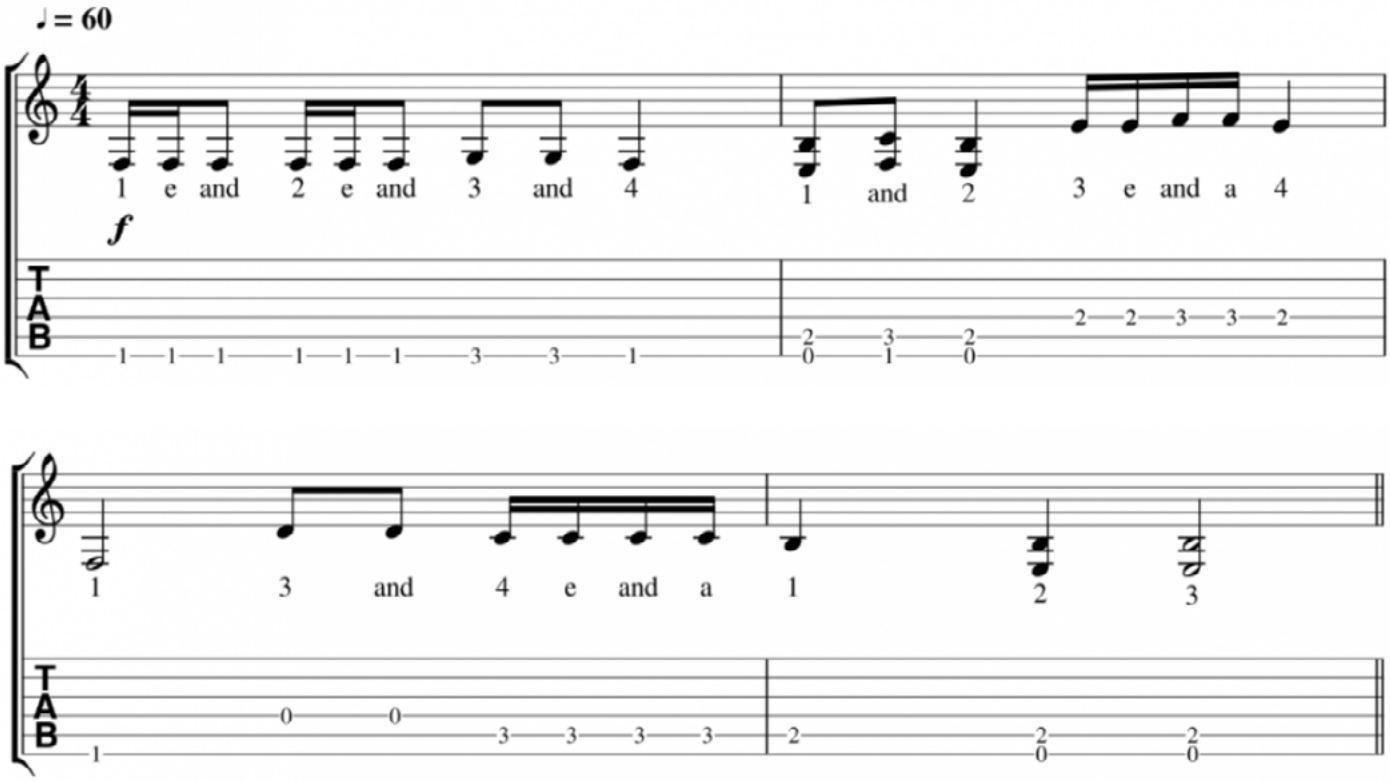
Listen to the following audio file, which shows you the difference between counting with crotchets, quavers, and semiquavers - listen for the '1,e,and,a' during the last bar.



Semiquaver counting example ›

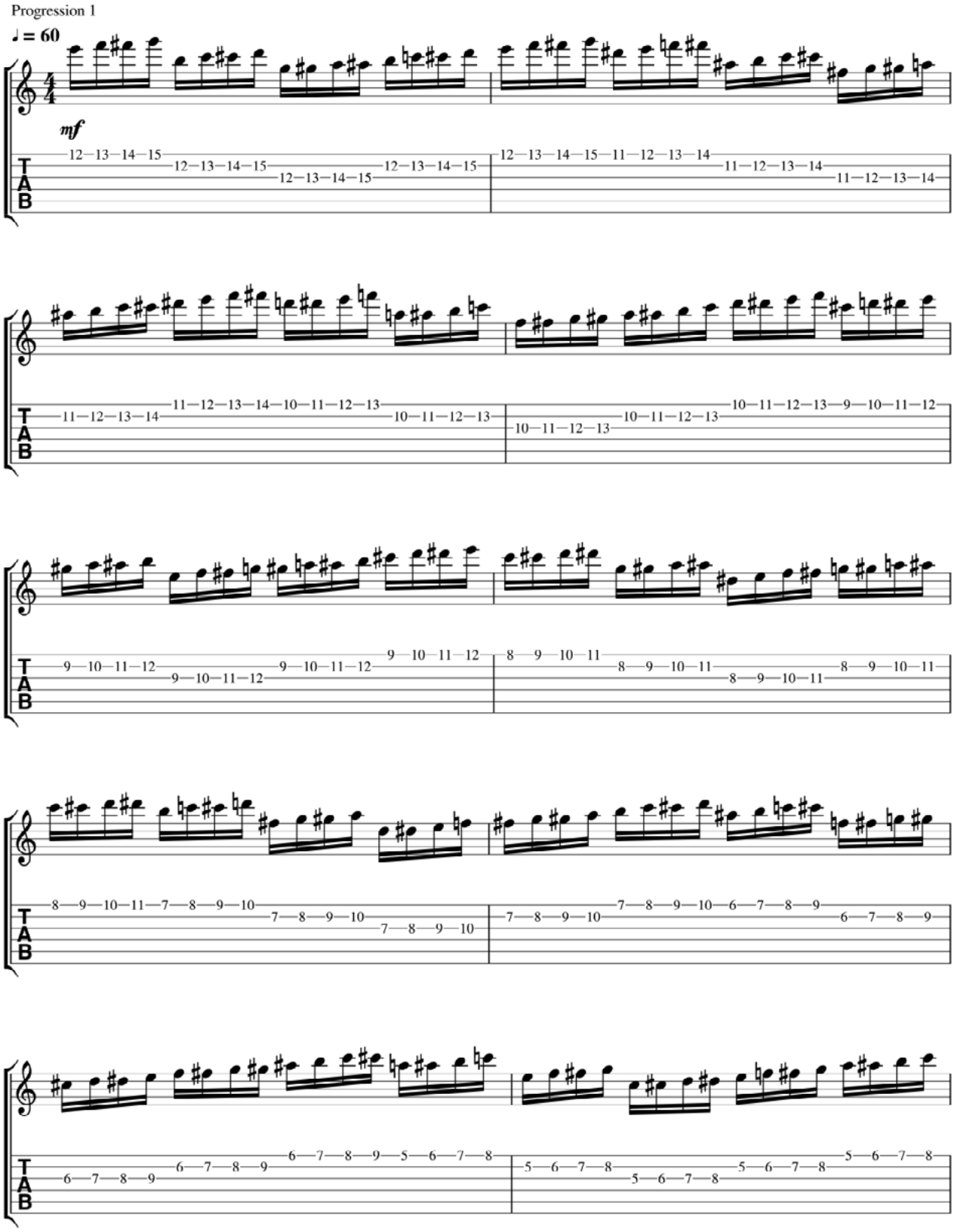
Notes half a beat long and less can be beamed together.
Quavers and semiquavers are commonly beamed into groups of 2 or more.

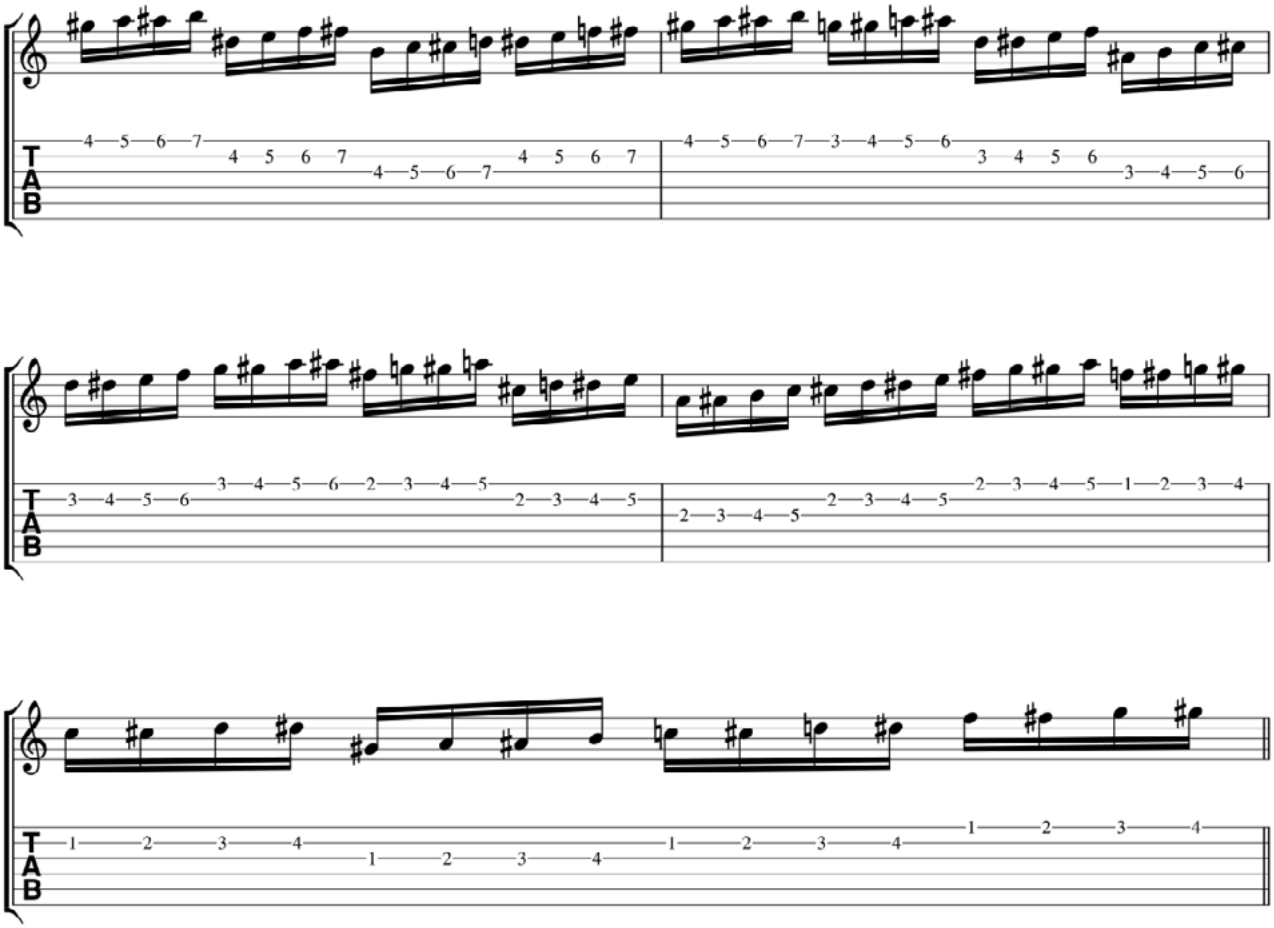
The following example shows how to count with semiquavers among other note values - listen to the audio example and count along with the score:



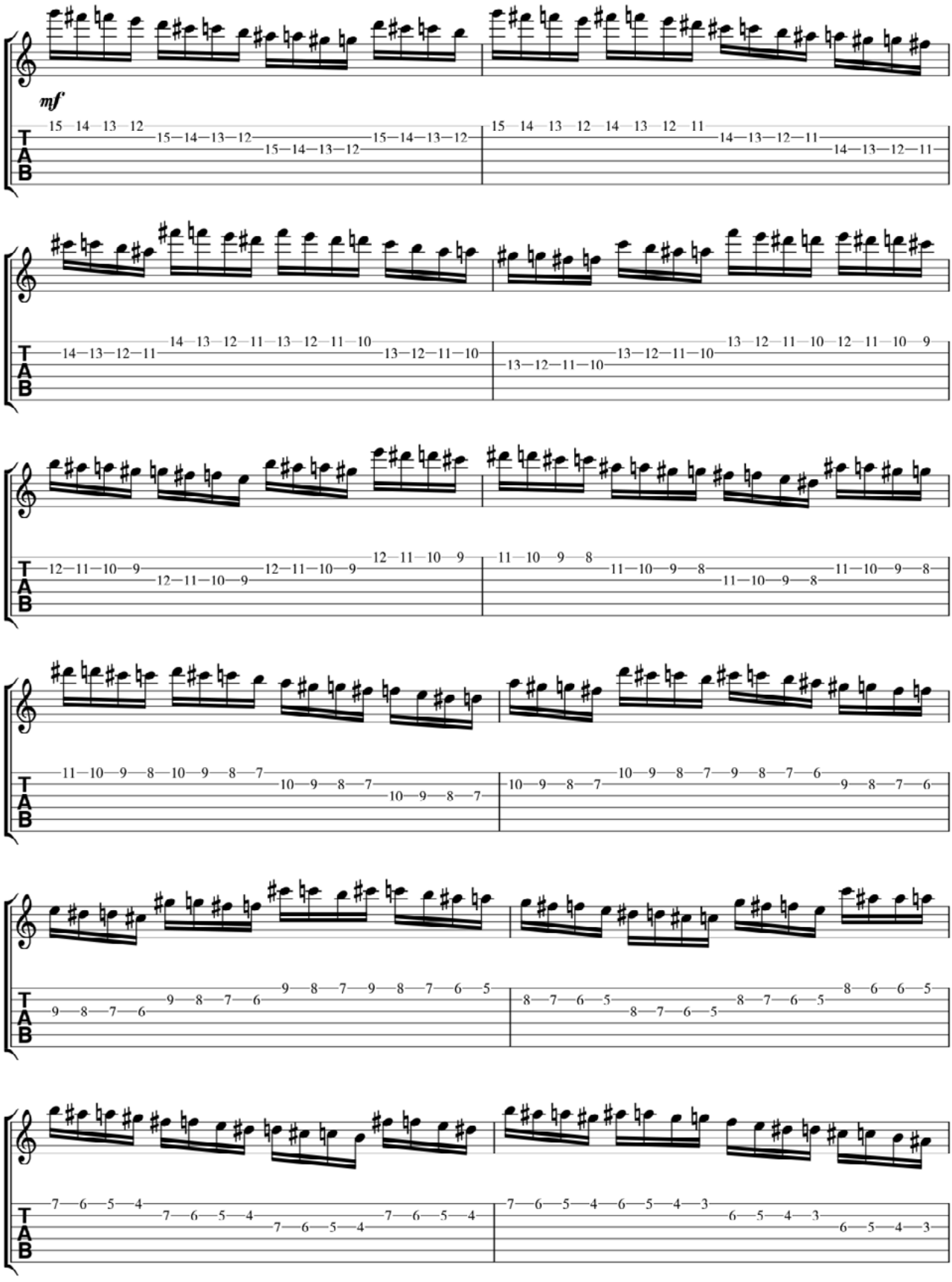
Semiquaver riff ›

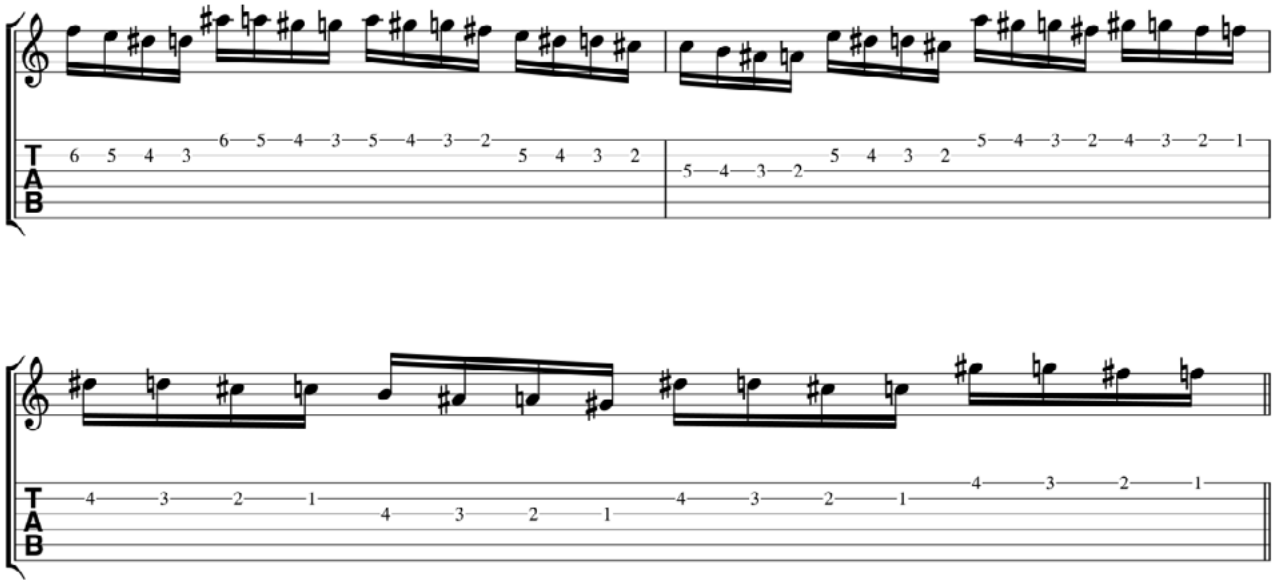
Chromatic Alternate Picking Routine




T
A
B

Progression 2




T
A
B
6 5 4 3 6 5 4 3 5 4 3 2 5 4 3 2
5 4 3 2 5 4 3 2 5 4 3 2 4 3 2 1

T
A
B
4 3 2 1 4 3 2 1 4 3 2 1 4 3 2 1

Performance pieces

If you decide to take the Orange Rock Guitar exam, you will need to learn one performance piece.

The song you choose must contain the following elements:

1. Have at least 4 different open chords or power chords from this course
2. Contain a simple solo/melodic element such as a short riff of at least 3 different notes
3. Include any articulation learned in the Foundation course, e.g. accents, muted strings, hammer-ons and pull-offs etc
4. Be between approximately 2 and 5 minutes long

When you have decided which piece you would like to play you must:

1. Find a backing track for your chosen piece that does not have the guitar part.
2. Obtain a version of the tab/notation to read during your exam (please make sure you do so legally).

Choose your own

You may choose any song from any artist that you wish (as long as it adheres to the above parameters), but here is a list of songs we've put together from a range of different styles of rock music to help you decide what to play:

- **Nirvana - Smells Like Teen Spirit**
- **Screaming Females - Empty Head**
- **The White Stripes - Seven Nation Army**
- **The Cranberries - Zombie**
- **The Breeders - Cannonball**
- **Weezer - Island in the Sun**
- **Metallica - For Whom The Bell Tolls**
- **Cream - Sunshine of Your Love**
- **Green Day - Holiday**
- **Asian Kung Fu Generation - Re:Re:**
- **Swearin - Movie Star**
- **Blink 182 - Damnit**
- **Franz Ferdinand - Take Me Out**
- **Arctic Monkeys - Crying Lightning**
- **The Black Belles - What Can I Do?**

Aural development

Click here for this lesson's audio playlist ›

Developing your aural ability is a vital part of your development as a musician. Put simply - aural development is ear training. You need to develop your listening skills so you are able to easily recognise chords, rhythms and melodies just by listening to them.

The aural part of the exam can be split into 3 different sections: harmonic recognition, melodic recall and rhythmic recall.

Harmonic recognition

This part of the exam tests your ability to differentiate between types of chords.

NB You are **NOT** permitted to use your guitar at any point during this part of the exam. If you attempt to use your guitar to figure out the chords, ***you will be disqualified!***

In your exam, you will be played 3 chords, and for each one you must specify the chord quality, i.e. whether it is a Major chord or a minor chord.

You will hear the 1st chord 3 times. There will then be a 10 second gap in which you must give the name of the chord you heard. You will then hear the 2nd chord 3 times followed by a 10 second gap to give the name of the chord, and finally the 3rd chord 3 times followed by a 10 second gap to give the name of the chord.

You will be given the root note of each chord, and in your answer you must specify both the root note and the chord quality (e.g. Major or minor). You must **say** your answer, **NOT** play it.

1	2	3
Let's give it a try... Listen to the following chord. If the root note is D, what chord is it?	Once again, listen to the following chord. If the root note is A, what chord is it?	Last time - listen to the following chord. If the root note is C, what chord is it?
Harmonic recognition - chord #1 ›	Harmonic recognition - chord #2 ›	Harmonic recognition - chord #3 ›

Answers at the end of this section.

Harmonic recognition - answers

1. D minor. Remember that minor chords sound sad and Major chords sound happy.	2. A Major	3. C Major

Melodic recall

In this part of the exam, you will be tested on your ability to memorise and reproduce melodies.

You will be played a 2 bar melody, and you must play this melody back. The melody will be in the key of C Major, using the C Major 1 Octave scale position that you learned in the 1 Octave scales lesson, and it will be played using crotchets at 60 BPM. The time signature will be 4/4. The first note of the melody will always be C.

In your exam, you will hear the melody 3 times. There will be a 10 second gap between each repetition, and after the final repetition, you will have 15 seconds before you have to play the melody back. During this part of the exam, you may use your guitar to help you figure out the melody. When you are asked to give your answer, you must **play** the melody back on your guitar, **NOT** sing it.

1

So without further ado, let's try it!
Listen to the following melody.

Melodic recall - melody #1 ›

2

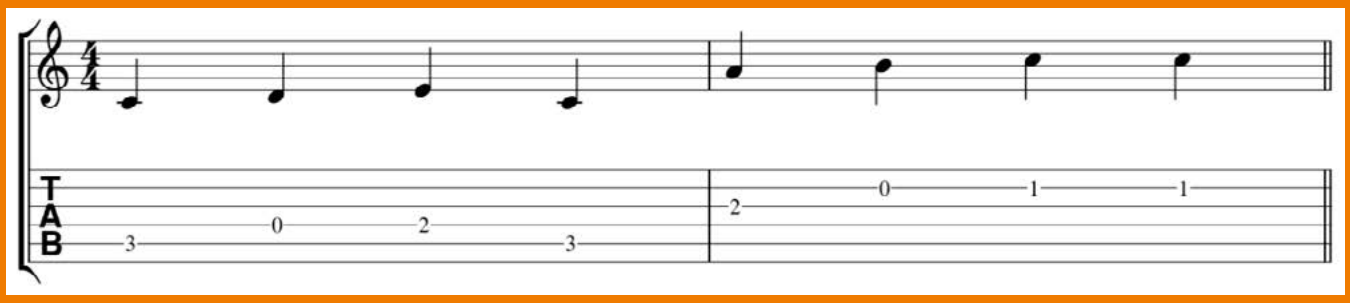
Let's try another one - listen to the following melody:

Melodic recall - melody #2 ›

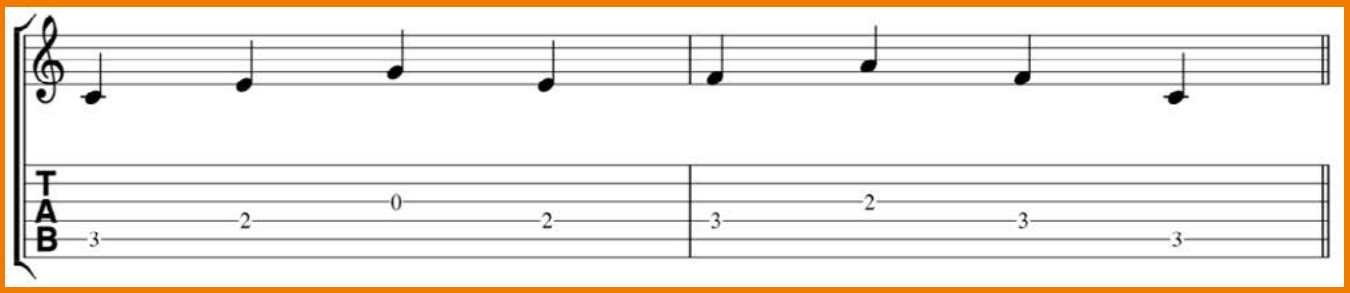
Answers at the end of this section.

Melodic recall - answers

1



2



Rhythmic recall

In this part of the exam, you will be tested on your ability to memorise and reproduce rhythms.

You will be played a 2 bar rhythm, and you must play this rhythm back during your exam. The rhythm will be played on an open A string using minims, crotchets, quavers, and their respective rests, at 60 BPM. The time signature will be 4/4.

In your exam, you will hear the rhythm 3 times. There will be a 10 second gap between each repetition, and after the final repetition, you will have 15 seconds before you have to play the rhythm back. During this part of the exam, you may use your guitar to help you figure out the rhythm. When you are asked to give your answer, you must **play** the rhythm back on your guitar, **NOT** sing it.

1

Here we go! Listen to the following rhythm.

Rhythmic recall - rhythm #1 ›

2

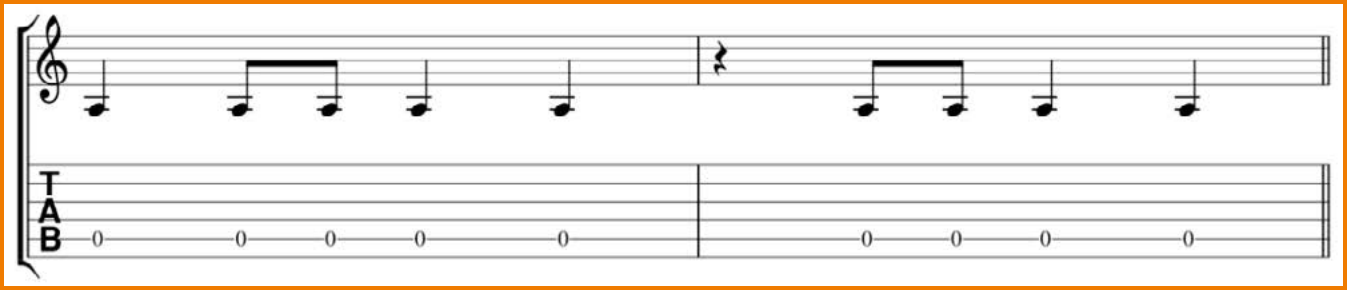
...And once again, listen to the following rhythm.

Rhythmic recall - rhythm #2 ›

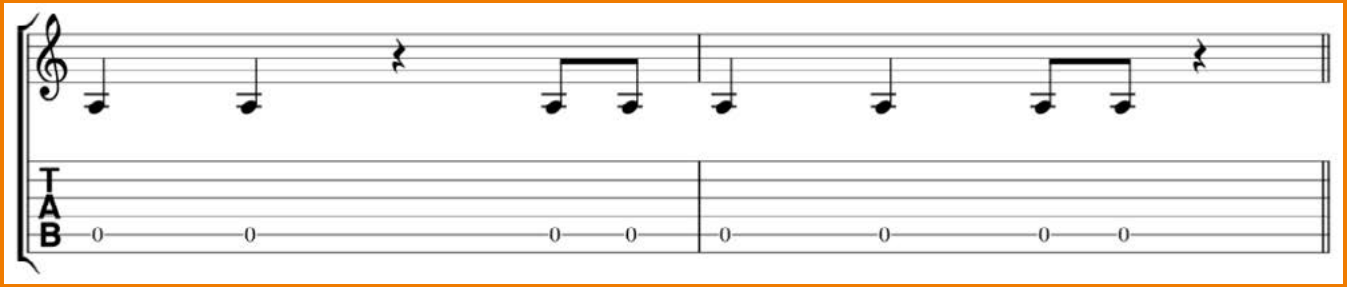
Answers at the end of this section.

Rhythmic recall - answers

1



2



Tips

1. Working out rhythms can be tricky - by dividing a rhythm into its smallest note values, it's far easier to get to grips with it. For instance, if the smallest note value in a complicated rhythmic phrase is a quaver, try counting the whole phrase in terms of quavers, i.e. a crotchet = 2 quavers, etc.

2. Remember to use your guitar when figuring things out - sometimes we remember certain melodies and rhythms better with our fingers than with our ears.

3. Practicing melodic and rhythmic recall with melodies and rhythms you've heard before is not a good idea, as you'll also subconsciously rely on your memory to do the work for you. Every time you practice, make sure you're using unfamiliar material - ask a friend to come up with some simple melodies and rhythms, or try and find some online.

4. For melodic recall, try to differentiate between small and large movements, or **step** and **leap** respectively - moving by step is when a melody moves in a stepwise fashion, usually by one or two scale degrees at a time (for instance, C-D-E would be a stepwise melodic movement), whereas moving by leap is when a melody moves multiple scale degrees at once (for instance, C-G-B would be melodic leaps).

5. On each reiteration of the melody or rhythm, try to hum or sing along - this is much easier than trying to remember purely by ear.

Sight-reading

Click here for this lesson's audio playlist ›

As well as developing your listening skills, it's also important to develop your **sight-reading** skills. Sight-reading means you have to play a piece of written music straight away without learning it, **without TAB.**

During your exam, you will be required to sight-read a 4 bar chord progression and a 4 bar melody, both at 60 BPM. You will be given 30 seconds to look at the melody/chord progression before you are expected to play it. During the 30 second countdown, you can use your guitar to help you figure out how to play melody/progression. After the 30 second countdown, you must attempt to play the melody/progression on screen in time to the metronome. When you are asked to give your answer, you must **play** the melody back on your guitar, **NOT** sing it.

Note that you will only be expected to sight-read from scales and chords within the Orange Rock Guitar Foundation course. Rhythms will consist of combinations of crotchets, quavers, minims, semibreves, dotted minims, tied-notes and their corresponding rests.

Any of the following chords may appear:

Open chords: **G Major, D Major, C Major, A Major, E Major, A minor, E minor, D minor**
Power chords: **A5, G5, F5, C5**

Any of the following scales may appear:

1 Octave scales: **C Major, A minor, G Major, E minor, A minor Pentatonic, C Major Pentatonic**

Any of the following time signatures may appear:

3/4
4/4

Any of the following key signatures may appear:

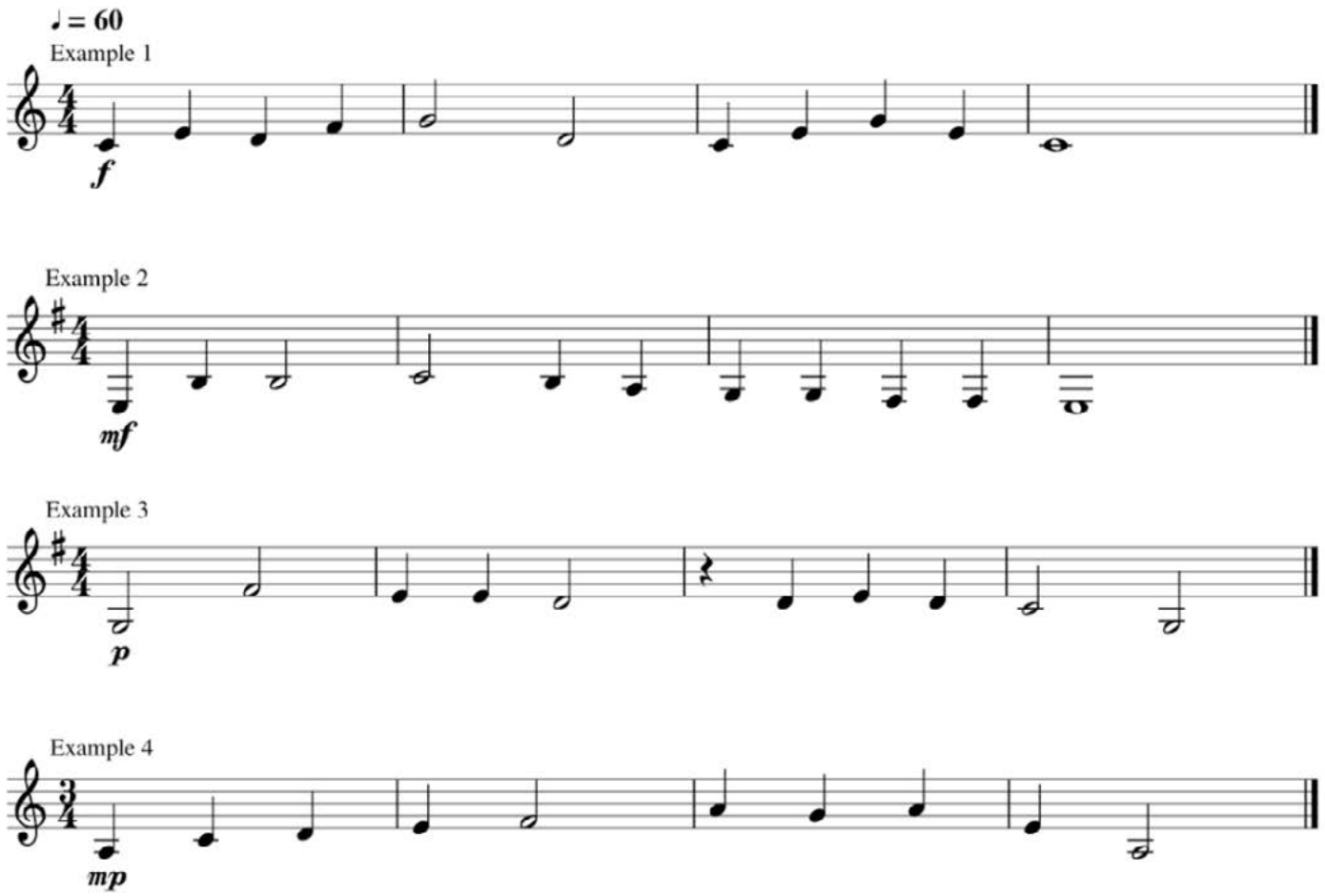
no sharps/flat = **C Major**
1 sharp = **G Major**

Any of the following dynamics may appear:

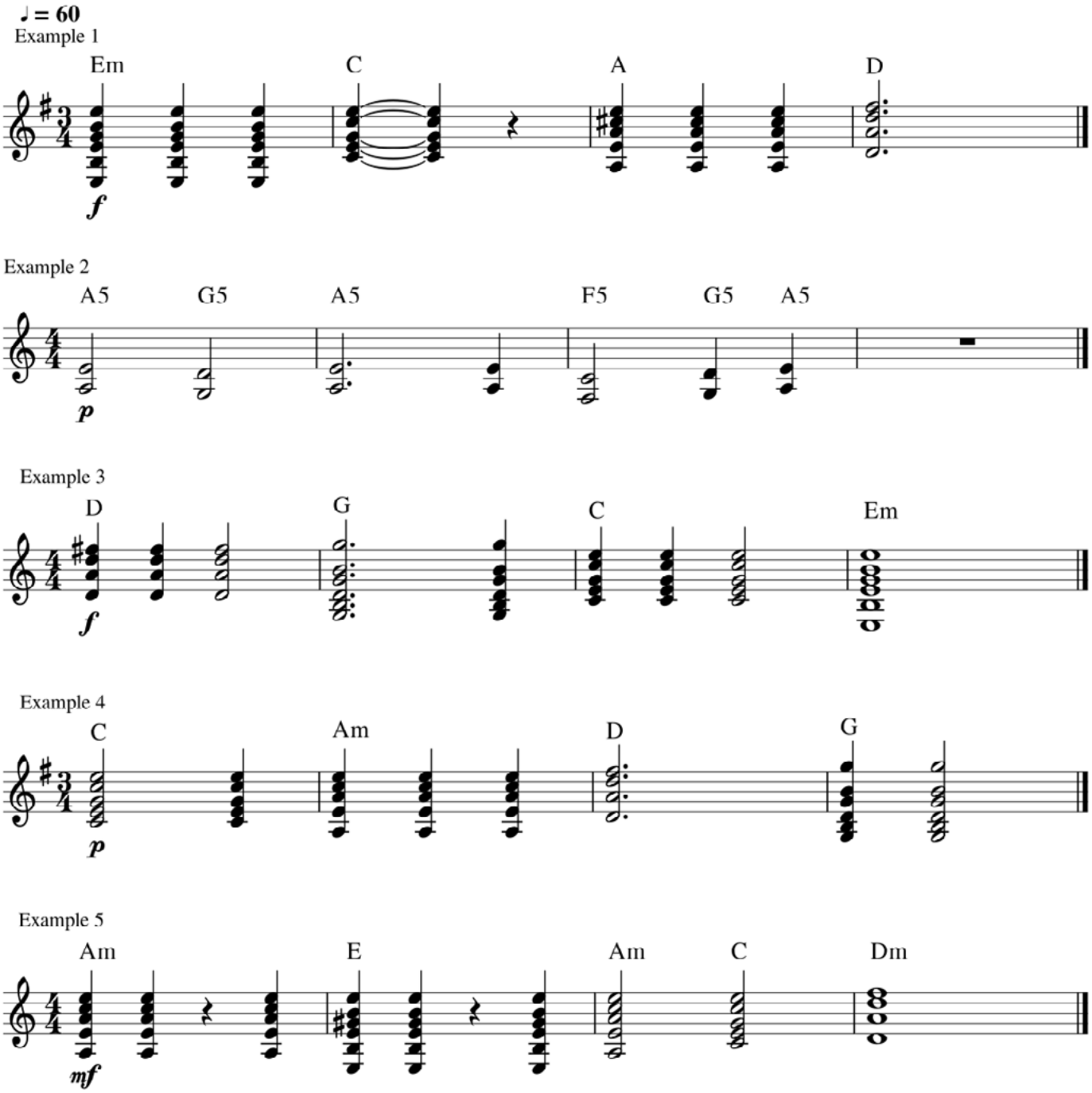
forte (f)
mezzo-forte (mf)
mezzo-piano (mp)
piano (p)

The following course materials include some practice examples. Try and play each example all the way through after 30 seconds of first seeing it. Then listen to the audio track after to see how it should sound. Best of luck!

Sight-reading examples - Melody



Sight-reading examples - Chords



Answers can be found in

this lesson's audio playlist ›

Tips

- **1.** Check the **time signature** first so you know how many beats are in each bar.
- **2.** With your foot, tap the tempo of the piece as if you were tapping to a **metronome.** Make sure this speed is slower rather than faster to give you time to read each note without hesitating.
- **3.** Try not to stop, if you make a mistake do not try to correct it, just concentrate on keeping your tempo and completing the piece. Imagine you were playing the piece with a band - the band wouldn't stop if you played a wrong note.
- **4.** Remember to read unfamiliar music - if you have heard a piece of music before, then you aren't sight-reading - you will subconsciously use your musical ear to help you figure out what and when to play. Similarly, when you've sight-read a piece of music more than 2 or 3 times, you will be familiar enough with it that you will play it more from memory than from reading it.
- **5.** Similar to aural testing, try to reduce the written rhythm to its smallest possible note values - so if the smallest note value is a semiquaver, try counting the whole phrase using semiquavers, i.e. 1 crotchet = 4 semiquavers.
- **6. Read, read, read!** Sight-reading only gets better with practice, so read anything you can get your hands on.

Exam specification

Once you have completed any of the Foundation, Intermediate and Advanced courses, whether with your teacher or on your own, you should be ready to take the internationally recognised and accredited online exam. Your mark will help towards your future education in music and will be registered on the RQF and EQF qualification frameworks.

Please refer to the **Rock Guitar syllabus** for detailed information on exactly how to take your exam and exactly how it is marked.

Technical Exercises

Scales

All scales must be played using alternate picking at the indicated tempo and using the indicated note values. Scales must be played as specified in the course materials. Any fingering that is economical and sounds good will be accepted.

1 Octave scales
100BPM - using crotchets (1-note-per-click)
C Major, A minor, G Major, E minor, A minor Pentatonic, C Major Pentatonic, G Chromatic.

Arpeggios

All arpeggios must be played as part of the progressions included in the course materials. Any fingering that is economical and sounds good will be accepted.

1 Octave Arpeggios
126 BPM - using quavers (2-notes-per-click)
Progressions 1 - 2

Chromatic Alternate Picking Routine

60 BPM - Exercises 1 - 2

Technical Studies

Chords

All chords must be played as part of the chord progressions included in the course materials. Any fingering that is economical and sounds good will be accepted.

Open chords
60 BPM - Progressions 1 - 5.
These progressions must be played with their corresponding backing tracks.

Power chords
60 BPM - Progressions 1 - 2.
These progressions must be played with their corresponding backing tracks.

Performance piece

You must perform 1 piece of music for your exam, either unaccompanied or using a backing track. You may perform any piece of electric guitar music from any artist, as long as it adheres to the parameters outlined below. Performance pieces may be played using an alternative tuning. Students may read from notation/TAB during the exam.

Performance pieces MUST:

1. Be between approximately 2 and 5 minutes long
2. Contain 4 different open or power chords learned from the Foundation course
3. Contain a melody solo element that consists of at least 3 notes
4. Show any articulation learnt in the Foundation course

Sight-reading

During your practical exam, you will be required to sight-read a 4 bar chord progression and a 4 bar melody, both at 60 BPM. You will be given 30 seconds to look at the melody/chord progression before you are expected to play it. During the 30 second countdown, you can use your guitar to help you figure out how to play melody/progression. After the 30 second countdown, you must attempt to play the melody/progression on screen in time to the metronome. When you are asked to give your answer, you must **play** the melody back on your guitar, **NOT** sing it.

Note that you will only be expected to sight-read from scales and chords within the Orange Rock Guitar Foundation course. You may also encounter any of the key signatures or time signatures that appear in the Foundation course. Rhythms will consist of combinations of crotchets, quavers, minims, semibreves, dotted minims, and their corresponding rests.

Any of the following chords may appear:

Open chords: **G Major, D Major, C Major, A Major, E Major, A minor, E minor, D minor**
Power chords: **A5, G5, F5, C5**

Any of the following scales may appear:

1 Octave scales: **C Major, A minor, G Major, E minor, A minor Pentatonic, C Major Pentatonic**

Any of the following time signatures may appear:

3/4
4/4

Any of the following key signatures may appear:

No sharps/flat = **C Major**
1 sharp = **G Major**

Any of the following dynamics may appear:

forte (f)
mezzo-forte (mf)
mezzo-piano (mp)
piano (p)

Aural

Harmonic recognition

In your exam, you will be played 3 chords, and for each one you must specify the chord quality, i.e. whether it is a Major chord or a minor chord. You will hear the 1st chord 3 times. There will then be a 10 second gap in which you must give the name of the chord you heard. You will then hear the 2nd chord 3 times followed by a 10 second gap to give the name of the chord, and finally the 3rd chord 3 times followed by a 10 second gap to give the name of the chord.

You will be given the root note of each chord, and in your answer you must specify both the root note and the chord quality (e.g. Major or minor). You must **say** your answer, **NOT** play it.

Melodic recall

In this part of the exam, you will be tested on your ability to memorise and reproduce melodies. You will be played a 2 bar melody, and you must play this melody back. The melody will be in the key of C Major, using the C Major one octave scale position that you learned in the One Octave scales lesson, and it will be played using crotchets at 60 BPM. The time signature will be 4/4. The first note of the melody will always be C.

You will hear the melody 3 times. There will be a 10 second gap between each repetition, and after the final repetition, you will have 15 seconds before you have to play the melody back. During this part of the exam, you may use your guitar to help you figure out the melody. When you are asked to give your answer, you must **play** the melody back on your guitar, **NOT** sing it.

Rhythmic recall

In this part of the exam, you will be tested on your ability to memorise and reproduce rhythms. You will be played a 2 bar rhythm, and you must play this rhythm back during your exam. The rhythm will be played on an open A string using minims, crotchets, quavers, and their respective rests, at 60 BPM. The time signature will be 4/4.

You will hear the rhythm 3 times. There will be a 10 second gap between each repetition, and after the final repetition, you will have 15 seconds before you have to play the rhythm back. During this part of the exam, you may use your guitar to help you figure out the rhythm. When you are asked to give your answer, you must **play** the rhythm back on your guitar, **NOT** sing it.

Theory

You will take a multiple-choice theory exam. The contents of the exam will consist of all of the theory introduced in the lessons of the Foundation course.

Any of the following theory subjects may appear:

- Notation & TAB - staves, clefs, note names, enharmonic notes
- Note names and note values - semi-breve, minim, crotchet, quaver, semi-quaver, dotted notes
- Rest names and rest values
- Bars and bar lines
- Accidentals - sharps, flats, and naturals
- Time signatures - 4/4, 3/4
- Up and down picking symbols
- Tones and semitones
- Scale formulae - Major, Natural minor, Major Pentatonic, minor Pentatonic, Blues scale
- Chord formulae - Major, minor, power chords
- Arpeggio formulae - Major, minor
- Key signatures - C Major, G Major
- Repeat lines
- Legato symbols - slurs
- Intervals of the Major scale

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