

SUBDIVIDING

The Science of Strumming

One of the major obstacles for beginning rhythm guitarists is laying down a strong groove. In the business, this is referred to as playing "in the pocket." There are often technical issues that prevent this from happening. Most often, difficult chord changes cause pauses in the timing. Also, often times beginning guitarists will approach rhythm guitar as a process of randomly strumming up or down in a way that may feel natural, but often sounds uneven, unsteady and even clumsy. Specifically, the process of choosing whether to strum up or down on a specific note is sometimes treated as a mere product of chance. In my experience, "random" is a terrible way to achieve a solid groove. Essentially, this study is going to be about the **science of strumming up and down**.

The Principle of Continuous and Steady Strumming Hand Movement

The best way to strum is to **subdivide** based on a particular note value (either the shortest note value being used or a shorter one). By "subdivide," I am referring here to using **continuous and steady strumming hand movement**. For example, in a pattern that uses quarter notes and eighth notes, you would move your right hand up and down in a constant eighth note rhythm. However, most rhythm patterns are not constant eighth notes exclusively but include some quarter notes as well. So, this is going to mean that while your right hand is constantly moving up and down, the pick will not always connect with the strings.

Below is an example that shows how to subdivide* quarter notes. Simply strum down on beats one and three, and strum up on beats two and four. Subdividing quarter notes is a rare occurrence for a number of reasons. First, quarter notes are usually slow enough that it is unnecessary to use alternating up and down strumming. In fact, doing so would tend to make one rush. Another reason that subdividing by quarter notes does not happen often is that quarter notes are rarely the shortest note value in a rhythm pattern. In other words, you cannot subdivide by quarter notes when eighth notes are present. Finally, as a rule of thumb, it is usually best to strum down on the beat. The down strum puts a natural accent on the rhythm, which helps to clarify where the beat is. When subdividing by quarter notes, this rule is broken on beats two and four. Regardless, let's learn how to do it so that we can better grasp the concept of subdividing.

"Subdividing" Quarter Notes*

The image shows three musical examples, ex. 1.a, ex. 1.b, and ex. 1.c, on a single staff in 4/4 time. Each example has four beats. Ex. 1.a shows a standard alternating strum pattern: down on 1, up on 2, down on 3, up on 4. Ex. 1.b shows a pattern where the pick does not touch the strings on beats 2 and 4, indicated by diamond symbols. Ex. 1.c shows a pattern where the pick does not touch the strings on beat 3, indicated by a diamond symbol. Arrows point from text labels to the strumming symbols: 'strum down towards the ground' points to the down symbols in ex. 1.a; 'strum up towards the ceiling' points to the up symbols in ex. 1.a; 'strum up without touching the strings' points to the diamond symbols in ex. 1.b; and 'strum down without touching the strings' points to the diamond symbol in ex. 1.c.

Again, subdividing by quarter notes does not make a lot of sense for all practical purposes. Many of the following examples will have more practical significance. The above examples are only meant to illustrate subdividing or continuous and steady right hand movement. Notice that all three use the same movement (Down, Up, Down, Up). In **ex. 1.b**, you strum up on beats 2 and 4, but the pick should not touch the strings. Now let us move beyond the theoretical to the practical by subdividing eighth notes.

*The term "subdivide" is a misnomer in this context in that you are not truly subdividing when you mark the beat alone. Subdividing only truly happens when you break up the beat into smaller units, e.g., eighth notes or sixteenth notes. However, I apply the term here regardless in order to illustrate this system of constant steady strumming using the simple quarter note feel.

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For these next few examples, use **muted strumming**. This is where you lightly touch all six strings with all four fingers of your left hand. The idea is to deaden the tones so that all that is left is the percussive sound of the pick hitting the strings. The key is to not press too hard. Just press the strings slightly to mute any harmonics, but avoid pressing it too far thus causing any fretted notes to ring. The benefit of trying new rhythms this way is that you are only hearing the rhythm, nothing more. Each strum will sound short, detached and very clear. Most importantly, it is very easy. When learning new strumming patterns, it is best to focus on the right hand movement. Muted strumming allows this to happen. Once you have mastered the pattern, try inserting your favorite chord progressions.

Subdividing Eighth Notes

let ring

ex. 2.a **ex. 2.b** **ex. 2.c**

1 + 2 + 3 + 4 + 1 (+) 2 (+) 3 (+) 4 (+) (1) + (2) + (3) + (4) +
 V ^ V ^ V ^ V ^ V (^) V (^) V (^) V (^) (V) ^ (V) ^ (V) ^ (V) ^

ex. 2.d **ex. 2.e** **ex. 2.f**

1 + 2 + 3 (+) 4 (+) 1 + 2 + (3) + 4 + 1 (+) 2 + (3) + 4 +
 V ^ V ^ V (^) V (^) V ^ V ^ (V) ^ V ^ V (^) V ^ (V) ^ V ^

ex. 2.g **ex. 2.h**

1 + (2) + 3 + (4) + 1 (+) 2 (+) 3 + (4) + (1) + 2 (+) 3 + 4 +
 V ^ (V) ^ V ^ (V) ^ V (^) V (^) V ^ (V) ^ (V) ^ V (^) V ^ V ^

Subdividing Sixteenth Notes

ex. 3.a **ex. 3.b**

1 e + a 2 e + a 3 e + a 4 e + a 1 (e) + (a) 2 (e) + (a) 3 (e) + (a) 4 (e) + (a)
 V ^ V ^ V ^ V ^ *sim.* V (^) V (^) V (^) V (^) *sim.*

ex. 3.c **ex. 3.d**

1 (e) + a 2 (e) + a 3 (e) + a 4 (e) + a 1 e + (a) 2 e + (a) 3 e + (a) 4 e + (a)
 V (^) V ^ V (^) V ^ *sim.* V ^ V (^) V ^ V (^) *sim.*

ex. 3.e **ex. 3.f**

1 e (+) a 2 e (+) a 3 e (+) a 4 e (+) a 1 (e) (+) a 2 (e) (+) a 3 (e) (+) a 4 (e) (+) a
 (V) ^ (V) ^ V ^ (V) ^ *sim.* V (^) (V) ^ V (^) (V) ^ *sim.*

ex. 3.g **ex. 3.h**

1 e + a 2 e + a 3 e + a 4 e + a 1 (e) (+) a (2) e + (a) (3) e (+) a 4 e + a
 V ^ V ^ V ^ V ^ V (^) (V) ^ (V) ^ V (^) (V) ^ V ^ V ^

Eighth note triplets present a unique challenge to rhythm guitarists because there are an odd number of strums (three) per beat. As a result, when using a consistent up and down alternating pattern as in **example 4.a**, beats two and four land on an up strum. There are two disadvantages to using up strums on any beat. First, up strums will naturally have a different sound than a down strum that is unavoidable because the strum starts on the higher notes of the chord and moves down to the lower notes. Secondly, to accent using an up strum, you have to work against gravity, so it takes more effort.

That being said, there are two benefits of using alternating down/up strums on triplets. First, it is the most efficient way of strumming which naturally makes it the fastest way also. Secondly, you can easily achieve an interesting two against three syncopation. For example, when strumming triplets with a metronome clicking on the beat, try accenting only down strums. Then try accenting just the up strums.

Ex. 4.b offers an excellent alternative to alternating down/up strumming. Notice the down, up, down; down, up, down pattern. As you can see, this example is going to stray from the concept of "continuous and steady right hand movement." The major benefit of strumming triplets this way is that you get a consistent down strum accent on all four beats. This pattern will take more work to master, but the results will more than make up for it. That being said, because of the inefficiency of having two down strums right in a row, this pattern tends to be a slower alternative to the former pattern. In conclusion, both patterns should be mastered.

"A one, a two, a one, two, three, four!" This is a common way to count off before starting a shuffle or a swing tune, or in this case a discussion on shuffle or swing patterns. Swing or Shuffle rhythms are very common in jazz and blues, but can be heard in all genres of music. Swing Eighth Notes are written like straight eighths but are played with more of a triplet feel. The tempo indication above **ex. 4.c** is a good illustration of how to play swing eighths. What's written as two eighth notes (**ex. 4.c**) is translated into a triplet quarter note followed by a triplet eighth note (**ex. 4.d**). On a side note, notice that swing eighth notes are counted using the syllable 'a' [uh] as in: "1 a 2 a 3 a 4 a," as opposed to the straight eighth equivalent 'and' as in: "1 and 2 and 3 and 4 and."

Examples **4.c through 4.f** are all essentially the same swing feel written 4 different ways. Slower blues tunes will often use a 12/8 time signature (**ex. 4.f**). However, swing eighth notes are most commonly written as normal eighths as in **ex. 4.c** with the swing tempo indication above the staff.

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There are a few different ways to strum **swing eighth notes**. The most common way, especially at faster tempos, is illustrated in **ex. 4.g**. The term 'subdivide' as I use it in regards to strumming, or the **Principle of Continuous and Steady Strumming Hand Movement** looks a little different in this approach. Namely, the down strum becomes twice the length as the up strum. This is a fairly simple technique in that you would approach it in the same way that you would approach strumming straight eighth notes. **Once your strumming hand gets used to this feel, go back to examples 2.a through 2.h, and try them again using swing eighth notes.**

The second approach to playing swing eighth notes is to use all down strums. This works better at slower tempos and has a more intense aggressive sound at quicker tempos. However, it is less efficient, so it is more taxing and will not reach speeds that are possible using the alternating down/up pattern (**ex. 4.g**). That being said, I have seen some guitarists use this form at lightning fast speeds.

The third form we will look at is seldom used in jazz or blues. However, it makes for an interesting alternative for swing eighth notes in that it is the only form that strictly follows the Principle of Continuous Strumming Hand Movement. This is because this is the only form where the strumming hand truly subdivides by the shortest note value, namely, the eighth note triplet. This certainly does not make it a better form, but it may inspire some interesting possibilities. This form of swing eighth notes works very well alongside the alternating down/up triplet (**ex. 4.a**).

Finally, when working with swing or shuffle patterns, it is natural to insert triplets periodically. **Examples 4.j-k** are exercises that will help to build stamina and coordination in going between swing eighth notes and triplets. Each exercise highlights one of the three forms of playing swing eighth notes that I just mentioned.

<p>ex. 4.g - Alternating</p>	<p>ex. 4.h - All Down Strums</p>	<p>ex. 4.i - Subdividing Triplets</p>
<p>ex. 4.j-l</p>		