

Introduction

Many musicians learn to play an instrument without any knowledge of the fundamentals of reading music. Indeed, learning to read music is not essential to playing an instrument, but there are distinct advantages. Complex concepts can be expressed and understood without the need to play or listen. Treat the knowledge of written music as just another communication device.

I will aim to provide essential points you need to know when reading rhythm for the drum set. As drummers, rhythm is all important. Once you have a steady grasp of the basic note values, everything else will come naturally.

Here is a staff (or a stave):



The staff is where we place our drum notation. It consists of five straight lines. At the beginning of this staff you will notice a '||' symbol. This is a drum or percussion 'clef'. Clefs indicate what instrument or key a piece of music is written in. For drum notation, quite often no clef is used.

Notes can be placed *on* the lines, *in between* the lines or even *above and below* the staff.

These notes represent our individual drums. On the following page is an example of a 'drum key'. This drum key shows us a typical example of where we can place certain drums when writing. Different drum books often use different drum keys. Don't fret over minor differences. The main goal here is understanding how the rhythm is phrased.

Drum key

The symbols used for notating drum and cymbals can vary from one piece of music to another. Here is an example of a guide to reading the staff:

The bass drum:



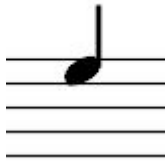
Second bass drum:



Snare:



Tom-tom:



High-tom:



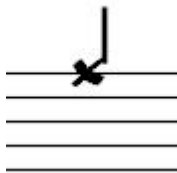
Low-tom:



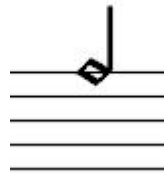
Floor-tom:



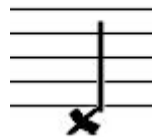
Closed hihat:



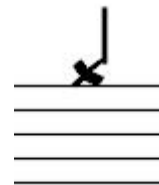
Open hihat:



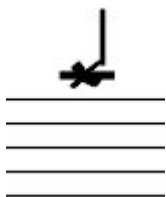
Hihat foot:



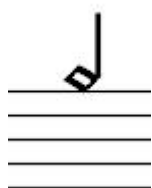
Ride cymbal:



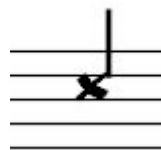
Crash cymbal:



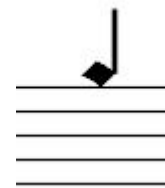
Ride bell:



Snare click:



Cowbell etc.

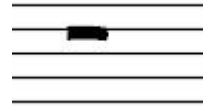


Note key

Whole note (semibreve):



Whole note rest:



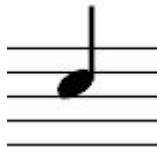
Half note (minim):



Half note rest:



Quarter note (crotchet):



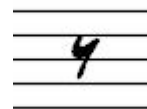
Quarter note rest:



8th note (quaver):



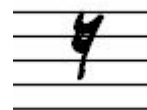
8th note rest:



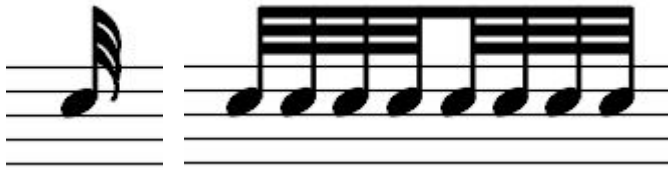
16th note (semiquaver):



16th note rest:



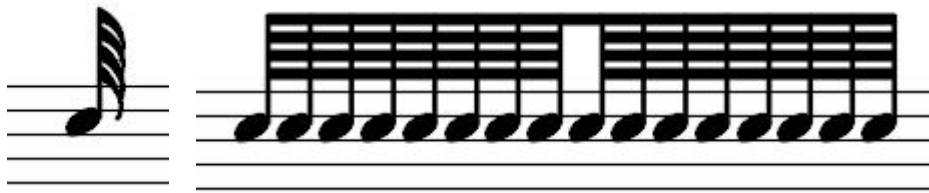
32nd note (demisemi-quaver):



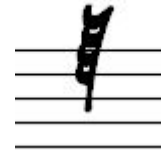
32nd note rest:



64th note (hemidemisemi-quaver):



64th note rest:



Music notation is very mathematical in its nature. A whole note is twice the value of a half note. A half note is twice the value of a quarter note. This pattern continues on and on giving us a range of smaller units with different note values.

It is these note values that help us define music in a written format.

For every note value there is an equivalent 'rest' value. Rests are used to indicate the periods of silence in music.

Before we move on, examine each note and its corresponding rest. Become familiar with them and their differences. You will notice the 8th note is made up of a solid black note head, a stem and a tail. The corresponding picture shows two 8th notes joined together by their tails. The 8th note rest also has one tail and looks vaguely similar to a '7'.

As you examine the 16th notes, 32nd notes and 64th notes, you can see how extra tails are added to indicate note value. These tails are crucial to understanding musical notation.

Each note has an alternative name in parentheses. This is the traditional name for the note, commonly used in classical music terminology. Although it can be helpful to know both sets of terms, in this book I will mainly use the fractional terms such as 8th, 16th, 32nd etc. This makes explaining time

signatures all the more easy.

Time signatures

The time signature is an extremely important indicator when reading music.

Time signatures are read as they read, so:

3/4 is “three, four”

9/8 is “nine, eight”

21/16 is “twenty one, sixteen”

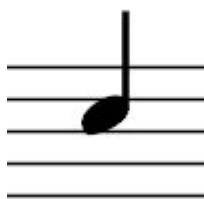
The number on the bottom refers to the type of beat to be counted. The number on the top refers to the amount of these beats there are per bar.



Lets take an example of **4/4**. The top number tells us there are four beats to the bar. The bottom number tells us each beat is a 'quarter note' or a 'crotchet'.

This quarter note usually refers to the metronome BPM settings we often see on sheets of music. The quarter note is also commonly referred to as the 'pulse' of a song. This will be our reference beat to which every other note value will relate to.

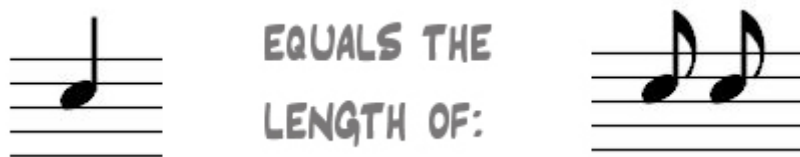
Here is a picture of a quarter note:



Notice how it is made up of one note head and a stem. In this example it is placed on the staff as a snare.

A BPM setting of 60 would literally mean '60 **B**eats **P**er **M**inute' – one beat every second. Let us examine the mathematics involved with note values.

Every quarter note is equal in length to two 8th notes (also called quavers):



Each 8th note is represented by a note head, a stem and 1 tail. When grouped together these tails can often join:



You must never join an 8th note tail to a quarter note. The reason being, this will in turn give the quarter note a tail, which makes it look just like an 8th note.

If our quarter note (at 60 BPM) is once every second, then our 8th notes will be played at the rate of **twice** every second.

Quarter note = every 1 second
8th note = every .5 seconds

Try this yourself. First tap along to a metronome at 60 BPM, or if you don't have a metronome use the second hand on a clock as a reference. The second

hand naturally strikes 60 times a minute, or once a second.

Tapping once every second gives us our quarter note at 60 BPM. By evenly doubling the speed of the tap we can play 8th notes.



The quarter note is also equal in length to four 16th notes (semi-quavers)

Each 16th note is represented by a note head, a stem and **two** tails. When 16th notes are played consecutively these tails can also join together. Often when you have a long line of 16th notes often they will be separated into groups of four. This makes it easier to read and also establishes where the quarter note pulse is.

As with 8th notes, you must never join a 16th note tail to a quarter note. Having a tail changes the value of the quarter note. You can, however, join 16th notes and 8th notes easily. Take the example below:



Notice how the 8th note is joined to the two 16th notes by only the **one** tail. This is extremely important in how we read music. The clue to the note's value is always in the tail(s), or lack thereof.

If our quarter note (at 60 BPM) is once every second, and our 8th notes are at the rate of twice every second, then our 16th notes will be at the rate of **four** every second.

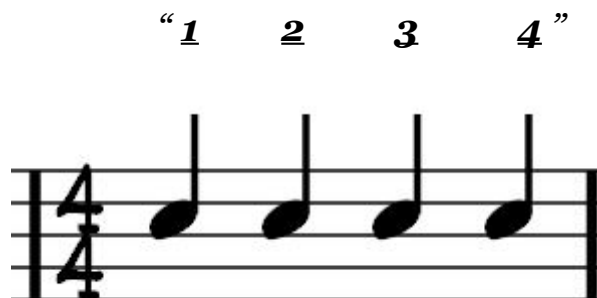
Therefore at 60 BPM:

Quarter note = every 1 second
8th note = every . 5 seconds
16th notes = every . 25 seconds

Snare exercise

Again, set your metronome to 60 bpm. This will be our quarter note, our pulse.

Count out loud as you play each beat on your snare or table top:



Next we will play 8th notes. This rhythm will be twice the speed of the last example. For every 60BPM pulse we will play **two** notes.

Count this phrase out loud as you play each 8th note:

1 and 2 and 3 and 4 and "



The 60 bpm pulse is underlined in **bold**. Be sure to stay true to the metronome with your counts of 1, 2, 3, and 4.

Count steadily.

It is important that the 8th note count exactly splits each quarter note count in two. In these examples the 8th notes are exactly twice the speed of the quarter notes.

Combinations

Next we will look at combining quarter notes with 8th notes.

With your metronome at 60 BPM count along with the piece:

1 **2** **3** and **4**



Each numbered count in bold should land on the metronome click. The additional beat here, the 'and', should land exactly between beats 3 and 4.

Notice how this added 8th note does **not** join to the quarter note on beat 4. Quarter notes must never be joined with tails.

Now a syncopated example involving the use of 8th note rests:

“ **1** and(2) and **3** (and) **4** and ”



The 'C' here refers to 'common time' which is identical to **4/4**.

We can also use quarter notes to notate the same rhythm:

“ **1** and (2) and **3** (and) **4** and ”



Remember, quarter notes are equal to the length of two 8th notes. This means there are exactly the same number of notes in this example as the previous one. Also the notes are to be played with the **same** timing as the last example. The only difference here is the length of the notes. As drummers the length of a note is musically not an issue for us. Drum sounds are not considered to have much 'sustain' of importance.

And now we will use only 'off-beats'. Every note here falls between each count:

“ (1) **and** (2) **and** (3) **and** (4) **and** ”



Each hit here lands exactly between the metronome pulse. Use the count out loud to help you time each note.

Sixteenths

Next we will play 16th notes. This rhythm will be twice the speed of the 8th note example. That's four notes per 60 BPM pulse (per second).

Count out loud as you play each 16th note:

1 e and a 2 e and a 3 e and a 4 e and a”



There are now four counts to represent each 16th note: '1', 'e', 'and' & 'a'.

The 60 bpm pulse is again underlined in **bold**. Be sure to stay true to the metronome on each count of 1, 2, 3, and 4.

Count steadily.

It is important that the 16th note count exactly splits each quarter note count in **four**. The 16th notes are exactly twice the speed of the 8th notes.

Next an example containing 8th notes and 16th notes:

Again, count aloud along to the metronome:

“ 1 and 2 and a 3 and 4 and ”



Examine beat 2. It is made up of one 8th note and two 16th notes.

Usually a group of four 16th notes is counted:

“1 e and a ”

or

“2 e and a ” etc.



In this example there is no need for us to count the second 16th note - the “e”. The 8th note lasts for the duration of the first two 16th notes (“2 e”), giving us:

“2 and a ”



With an example like this, you can count the “e” *silently*.

“2 (e) and a ”

It is important to be able to recognise the different combinations of 8th notes and 16th notes and how they are counted.

With the metronome still at 60 BPM tap along with the next few examples:

“1 e and a 2, 3, 4”



“1 e and 2, 3, 4”



“1 and a 2, 3, 4”



“1 e (and) a 2, 3, 4”



“1 e (and) a (2) e and 3, 4”



In this last example we avoid playing any 'down' beats (1, 2, 3 and 4). For a reference you can count each down beat out loud whilst tapping the notated rhythm.



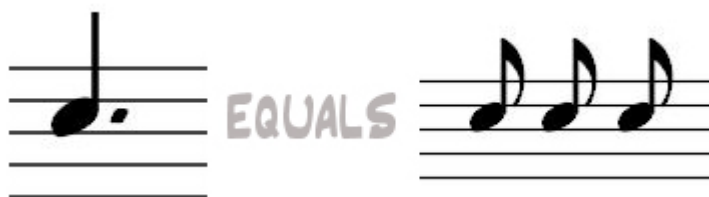
Dotted notes

When you see a note head with a dot after it like this...



The instruction is to *increase the value of the note by half*.

This means that if one quarter note equals the duration of two 8th notes, then one dotted quarter note equals the length of *three* 8th notes.



Dotted notes vs rests

Because drummers need not worry about the length of any given note we can notate music in a number of ways. We can use long notes or short notes with rests.

For example, this can be counted:

“ 1 (and 2) and 3 and 4 and ”



The first note is a dotted quarter note, so it lasts for the length of three 8th notes.

Sometimes dotted notes will be used in drum notation. Other times they can be replaced by rests.

Take the following example which uses two 8th note rests to play a similar pattern:

“ 1 (and 2) and 3 and 4 and ”



We begin the bar here with an 8th note. As a drummer there is no difference in playing the previous two examples. This is because sustain (length of note) is not usually associated with drumming.

This next example is again effectively the exact same musically in drum terms:



Here we have started the bar with a quarter note plus one 8th note rest. This again equals three 8th notes, or one dotted quarter note.

Dotted 8th notes

Let's take an example containing dotted 8th notes. By adding half of the value, the dotted 8th note will equal **the length of** three 16th notes (8th note + 16th note).



And next we use 16th note rests to demonstrate the value of the dotted 8th note:



Or



On the drum kit, a dotted 8th note is equal in value to a 16th note plus an 8th note rest.

Because the length of note does not play a big part in basic drum kit notation, we can use rests whenever they are convenient. Quite often a decision to use rests is based on the appearance of a piece. Too many rests can leave a drum part cluttered and confusing.

Introducing drum beats

Lets use the 60 BPM metronome as our reference again. Here is how a basic rock/pop drum beat would relate to this pulse. First we will add the bass drum and the snare:

Count out loud as you play each beat.

“ 1 2 3 4 ”



Bass Snare Bass Snare

This piece is in 4/4 again. Each bar is the length of four quarter notes. The first count is on the bass drum, the second on the snare, third on the bass drum again and finally the fourth beat is the snare again.

Note stems can point upwards or downwards, depending on convenience. In the majority of cases drum notation will point upwards in order to tie in with the hihats/cymbals at the top of the staff.

An extra bass drum is added on the “and” of beat 3.

Count:

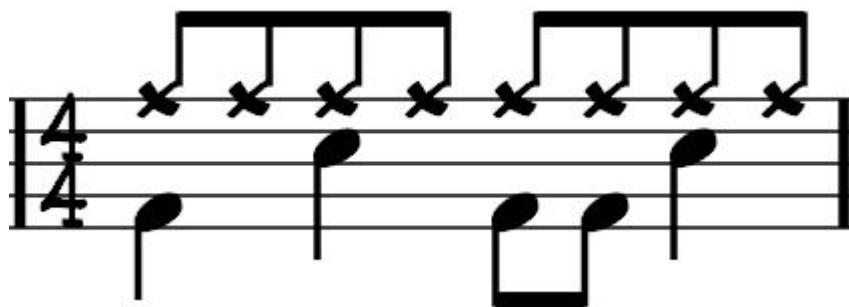
“1 2 **3** and **4**”



Next we add the hihat. The hihat will play 8th notes. Pay careful attention to how the tails on the 8th note tie together.

The 8th note hihats are counted:

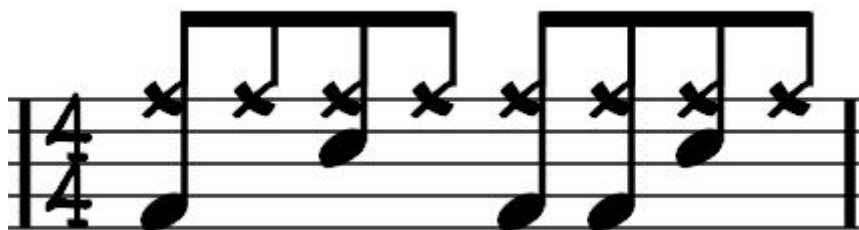
“1 and 2 and **3** and **4** and”



We can hear the pulse on 1, 2, 3 and 4 whilst counting the 8th notes in between.

This beat can be notated in a number of ways. One way is to have the hihat/cymbal pattern with tails up and the other drums with tails down.

Or you can place all tails in an upward direction so that they tie in together above the staff:



In the above example each bass drum and snare has now become an 8th note. This because they now all have **one tail**, like all 8th notes. From a drumming perspective there is no difference in how the two above examples are played.

Next we will switch to 16th notes on the hihat. Each 16th note contains **two tails** that can tie together.

Remember, there are four 16th notes to every quarter note beat.

We count 16th notes as:



Next we will place these 16th notes into a drum beat context.

The bass drum and snare rhythm is underlined in **bold**:

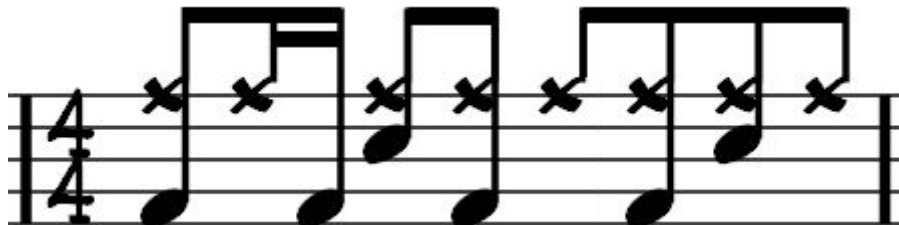
“ 1 e and a 2 e and a **3** e and a **4** e and a ”



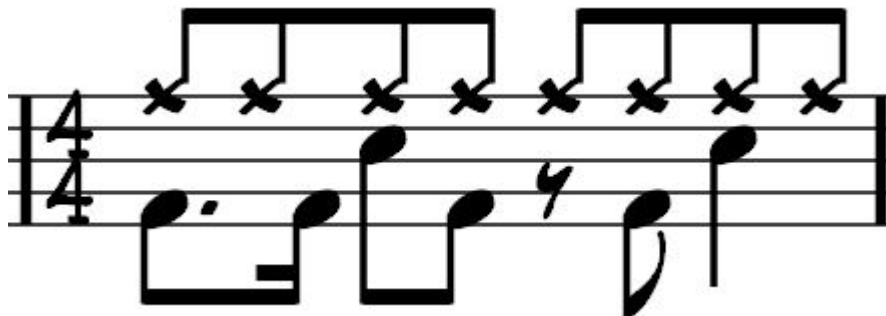
Now let's try some combinations involving syncopation between bass drum and hihat.

We can count this:

“ 1 and a 2 and 3 and 4 and ”



Let's take the same beat and notate the cymbals above and the drums below, like this:



The hihat plays a simple pattern on each 8th note.

“ 1 and 2 and 3 and 4 and ”

The bass drum and snare are a small bit trickier. In this example they are notated separately from the hihat. In relation to our 16th pattern we can see that:

The bass drum plays the following underlined counts:

“ 1 e and a 2 e and a 3 e and a 4 e and a ”

The snare plays only on '2' and '4':

“ 1 e and a 2 e and a 3 e and a 4 e and a ”

Both are legitimate ways of interpreting this beat. The first example treats each voice together interdependently. The second treats the hihats separately from the bass drum and snare.

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