the bassics

Music Notation

PREFACE

Hello!

I'd like to start by thanking you for your purchase of this BASS DRUM GROUP lesson book. It's your continued love and support that drives the creation of all of the content I make, and without you, none of this would be possible.

I created BASS DRUM GROUP with the goal of putting together the most comprehensive resource out there for bass drummers, and *The Bassics* are my latest addition to the project. Inside, you'll find 20+ pages of thorough explanations, diagrams, and exercises relevant to the specific Bassics subject you've purchased.

It is my hope that upon reading and applying everything this lesson book has to offer, you'll gain a greater understanding of the topic at hand which will help you progress towards your goals as a performer or instructor.

Thank you again, and happy practicing!

Elliott Duran

C O N T E N T S

A WORD ON LANGUAGE

Written language is a key part of human society. It allows us to communicate ideas between ourselves using a system of signs and symbols that can be strung together to create all sorts of different meanings.

In exactly the same way, **music notation** is the system of characters and signs that allows us to communicate musical ideas between ourselves. It gives us information about how loud or quiet a specific phrase is, how many notes need to fit into a certain amount of space, how fast or slow we should perform a piece, and much more.

Just like you need to have a certain degree of reading comprehension before you can read a chunk of text, you'll need to develop an understanding of music notation before you can read and execute the information in a piece of sheet music.

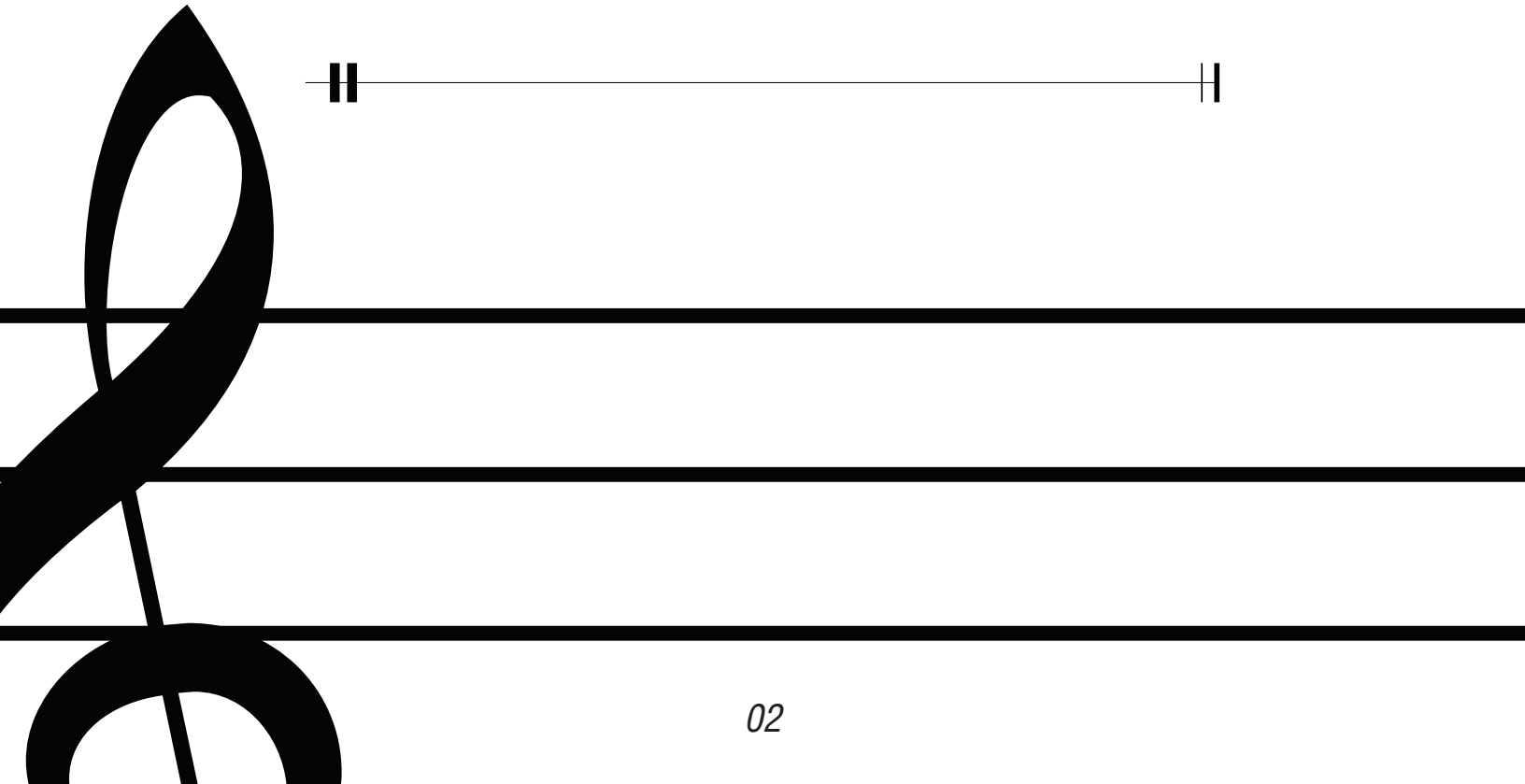
THE STAFF

When writing something like an essay, we have lines on our notebook paper or invisible guides on our computer's word processing apps that help us group our letters into words and our words into sentences in a neat and orderly fashion.

In the context of sheet music, a **staff** is what provides the guides we use to put down our notes and markings in an orderly way, and they're traditionally drawn as a set of 5 lines and 4 spaces.

The verticality of the 5 lines and spaces normally serves to provide information about pitch for instruments that can actually create multiple pitches, such as a trumpet or piano.

For the beginning phases of your own bass drum-oriented education, however, we'll be building a strong RHYTHMIC foundation first before bringing pitch into the equation. This will allow you to focus in and develop one fundamental skill at a time, and it will allow us to keep things simple and reduce our own staff down to only 1 line.

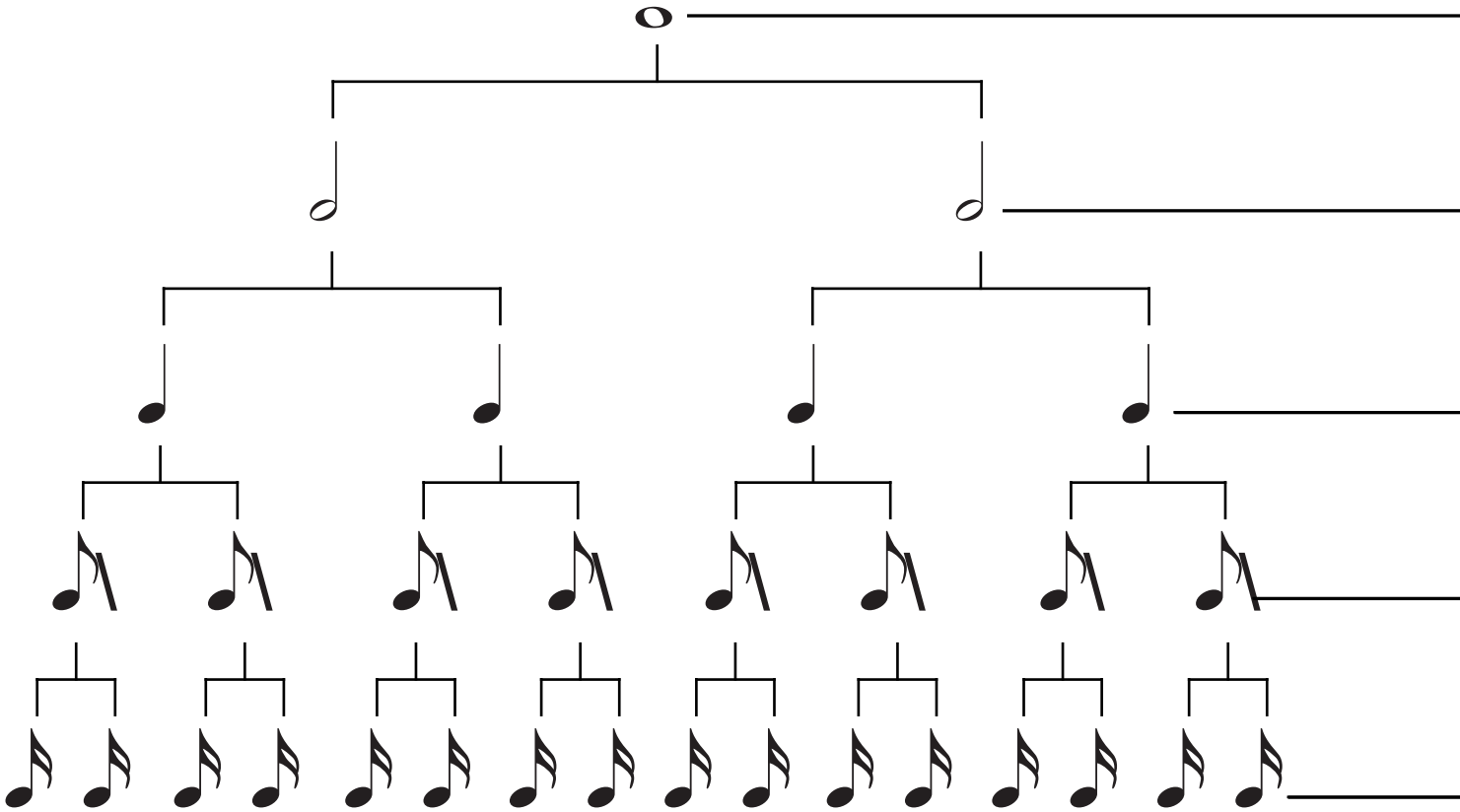


THE RHYTHMIC HIERARCHY

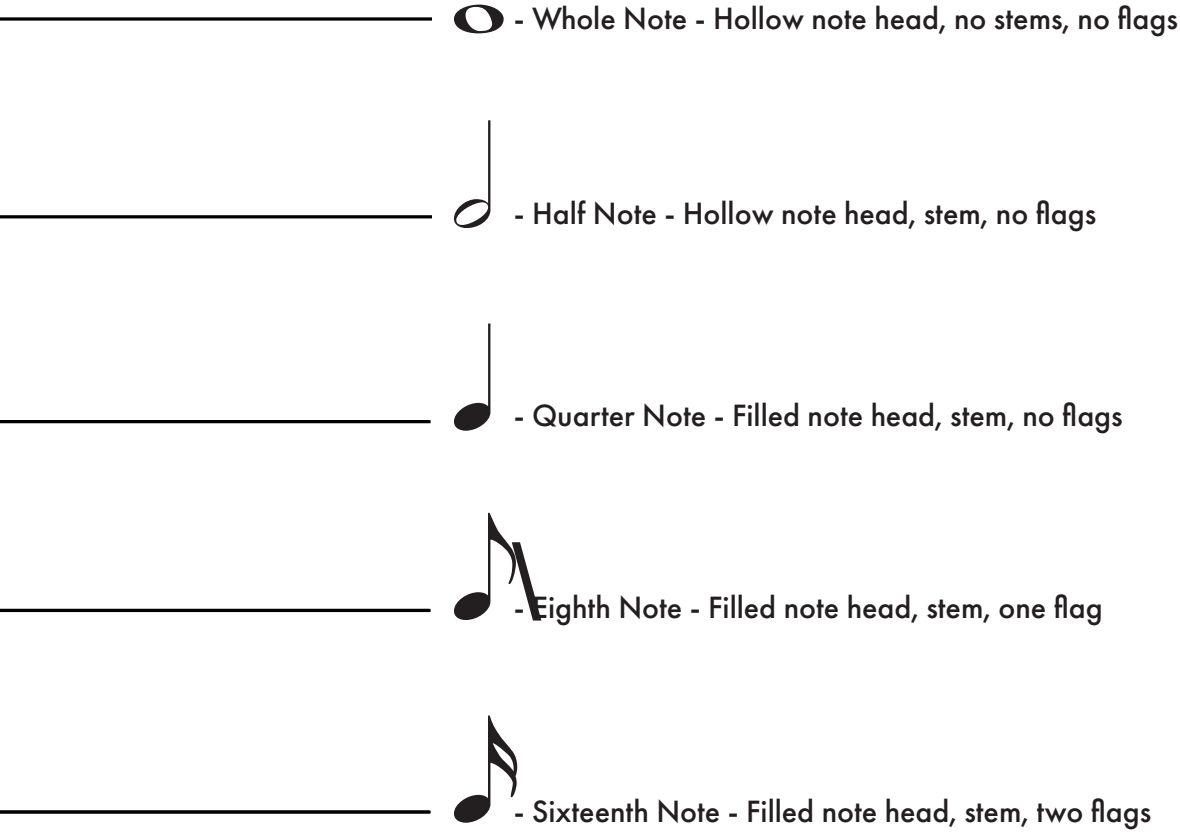
If a staff holds the lines we write music onto, then the **Rhythmic Hierarchy of Note Values** and **Rests** are the alphabets that we use to communicate information about when we play, the length of every note we play, where the silences and pauses in our music happen, and how long those silences last. By stringing together the symbols from these hierarchies, we can create endless combinations of rhythms that can be simple or complex.

Just like you have to understand the alphabet before you can start writing words, we'll first take some time to figure out what all of these different markings actually mean. Take a brief look at the chart on the next page and then proceed to the page after that for an in-depth explanation.

THE RHYTHMIC HIERARCHY
- NOTE VALUES -



NOTE VALUE ANATOMY



If you look towards the very top of the chart, you'll see a note shaped very similarly to an "o". This note is called a **whole note**, and it sits at the very top of the hierarchy because it holds the longest duration of any note in the chart. Every other note type below it is named based on its *binary* relationship to the whole note. Let's unpack what this means with some visuals.

Imagine a block of a certain length; we'll call that length 1 unit long. Let's say we want to divide this block into 2 pieces that are as equal as possible. The solution is simple; you would simply make a cut exactly down the middle of the block. This creates 2 blocks that are each half of the length of the original block, or half a unit long.

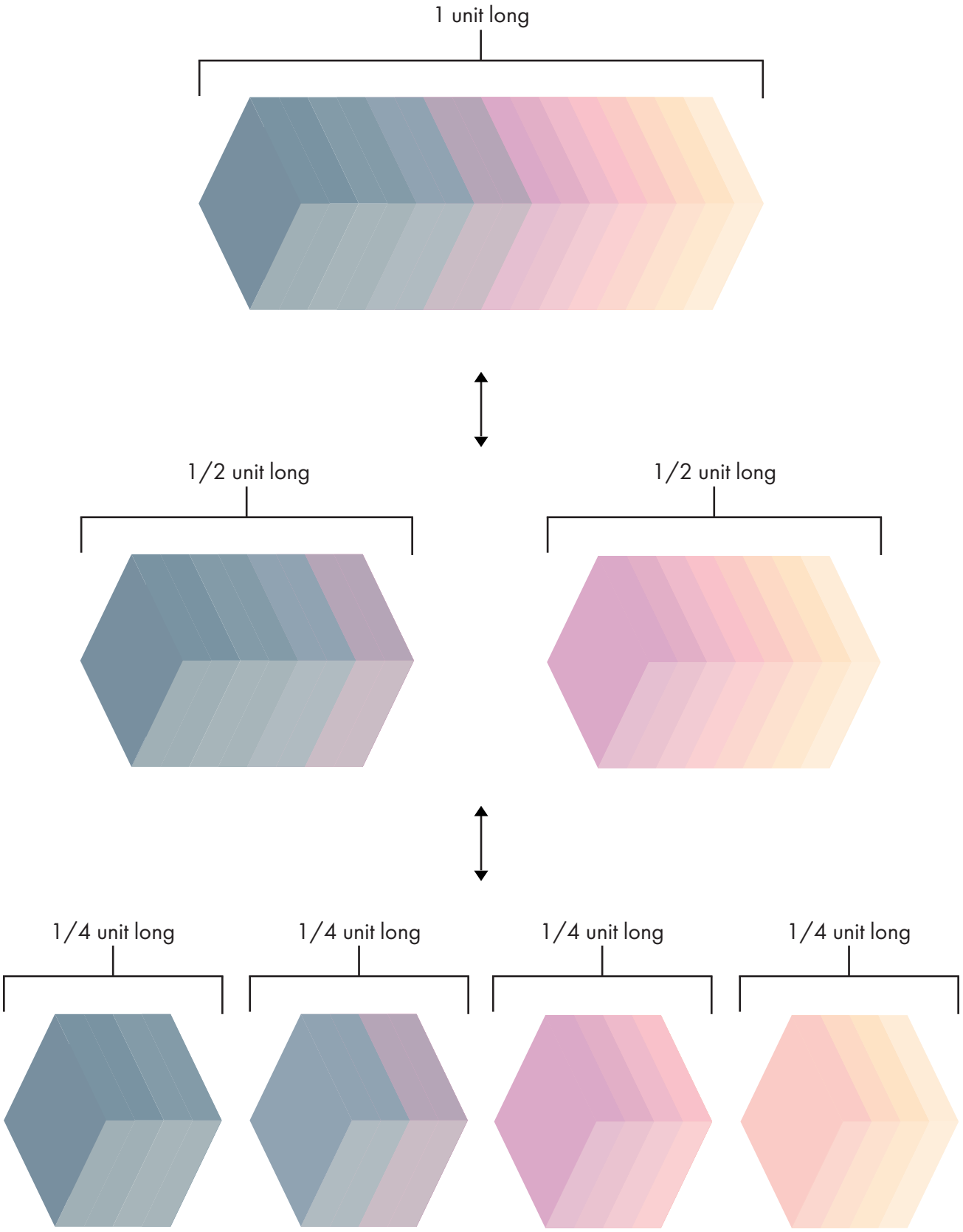
What if we'd like to have 4 blocks that are as equal as possible? The solution, again, is fairly intuitive. We'd simply take our 2 blocks that are half of a unit long, and cut each of them straight down the middle, yielding 4 blocks that are now a quarter of the length of the original block, or a quarter of a unit long.

What if we wanted to do the opposite and turn a couple of our quarter size pieces back into a block that's half the length of our starting block? We'd take some glue and attach two pieces together because 2 pieces that are a quarter of a unit long will add up to be a half of a unit long.

You might have begun to notice a pattern here that revolves around the number 2. No matter how you want to manipulate the length/number of your blocks, it will always involve either:

- A clean cut down the middle, causing a division in length by two or...
- A joining of two equal sized pieces, causing in multiplication in length by two.

We can therefore describe the relationship of these blocks to each other as "binary," a word whose dictionary definition reads: relating to, composed of, or involving two things. Our musical notes work in exactly the same fashion, so let's re-contextualize all of this information by applying it to our rhythmic hierarchy.


1 unit long
1/2 unit long
1/2 unit long
1/4 unit long
1/4 unit long
1/4 unit long
1/4 unit long

The whole note is the same as the original block we discussed in our visual example. Instead of being a physical item that's one 1 unit long, however, the whole note represents *a duration of sound that's 1 unit long*.

If we wanted to separate the whole note into two equal notes, we'd split it right down the middle, generating two notes that each hold half of the value of the whole note. Very appropriately, these are called half notes. What if want to create four notes that fit within the space of a whole note? We'd repeat what we did in the visual example and take each of our half notes and split them evenly down the middle, generating a total of 4 notes that each hold only a quarter of the space that a whole note does, and these are called quarter notes.

The name of the note you're looking at indicates the fraction of a whole note space that the note occupies. If we look down one more tier past the quarter note on our hierarchy chart, for example, we can see that our next group of notes called eighth notes. We can therefore deduce that these take up an eighth of the value that a whole note does.

The great thing about a system like this is that it works intuitively in terms of the math behind the music. If an eighth note holds an eighth of the value that a whole note does, then it makes sense that you'd need to put 8 eighth notes together to add up to the full value of a whole note. Conversely, if you wanted to split a whole note up into 8 equal notes, then you'd want to generate 8 eighth notes.

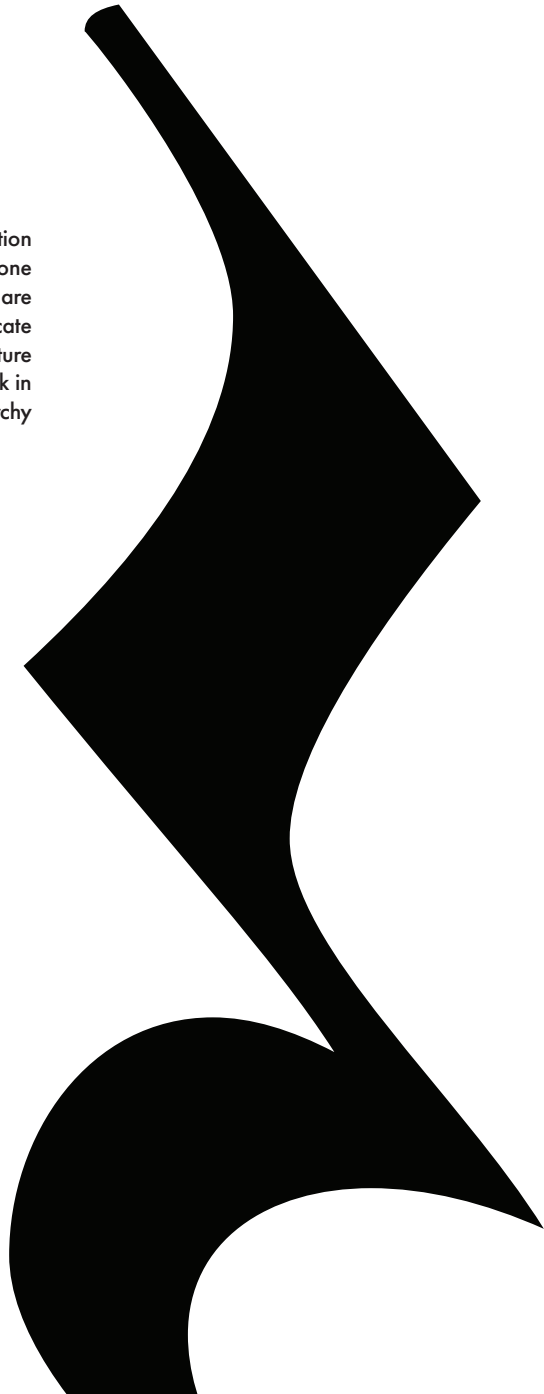
The hierarchy works in this way all the way from whole notes to 32nd notes and beyond, and the rules to travel through the tiers can be summed up like this:

- In order to travel down a tier, we are dividing the value of the original tier in half, resulting in two new notes that when put together, take up the same amount of space that one note from original tier held. Ex. One quarter note will divide down into two eighth notes, one eighth note will divide down into two 16th notes, and so on.
- If we want to travel up a tier, we must double the note value of the starting tier, resulting in only one note that will take up the exact amount of space that two notes in the starting tier held when added together. Ex. Two 32nd notes will compound back into one 16th note, two 16th notes will compound back into one 8th note, and so on.

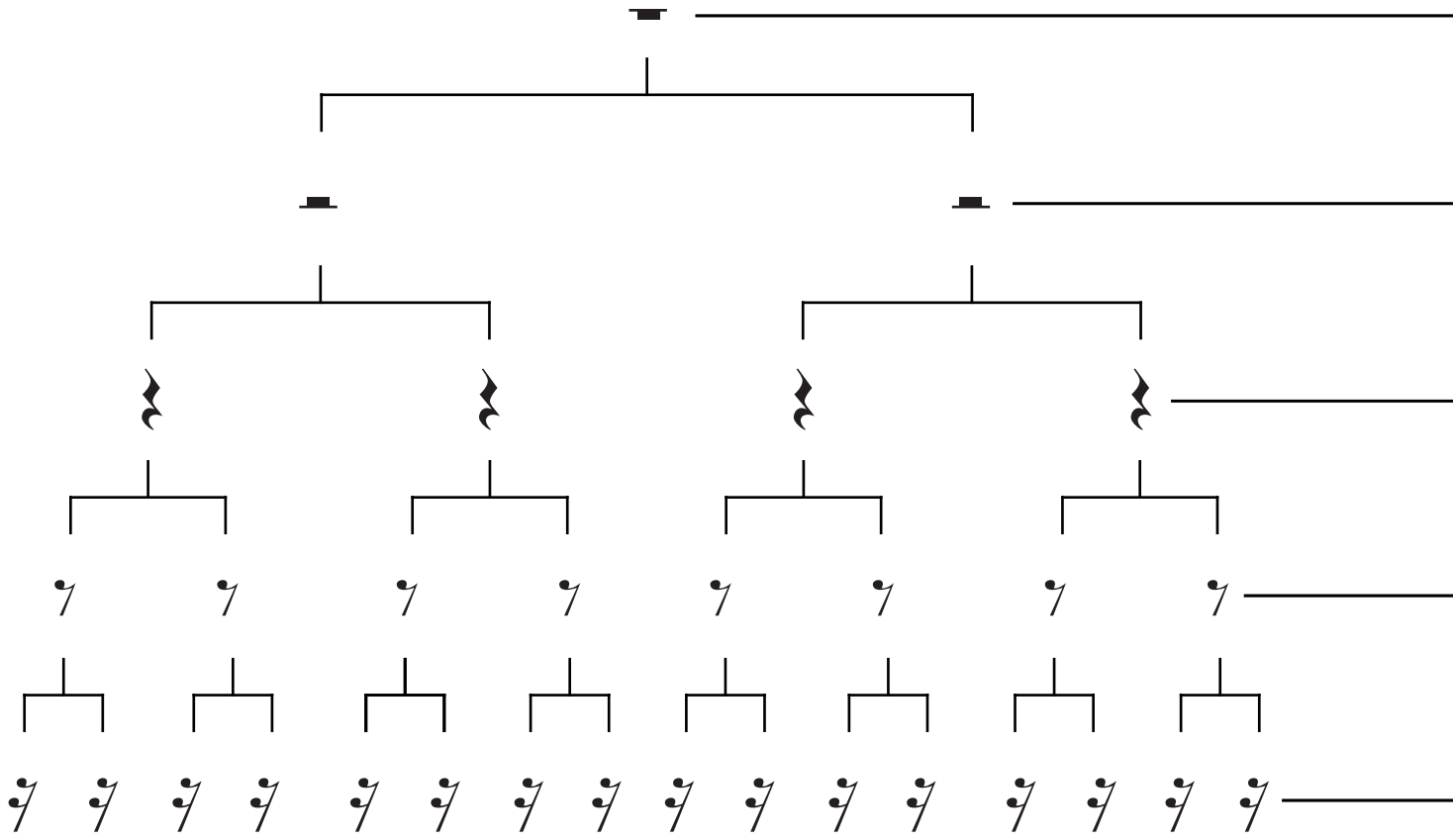
The ability that musical notation has to compound or break down like this is called **subdivision**, and the fact that the system works so elegantly is no coincidence. It was designed in this way to give musicians a neat and even musical grid to perform within that also gives them clear ways of checking whether every single note is being placed exactly where it goes.

R E S T S

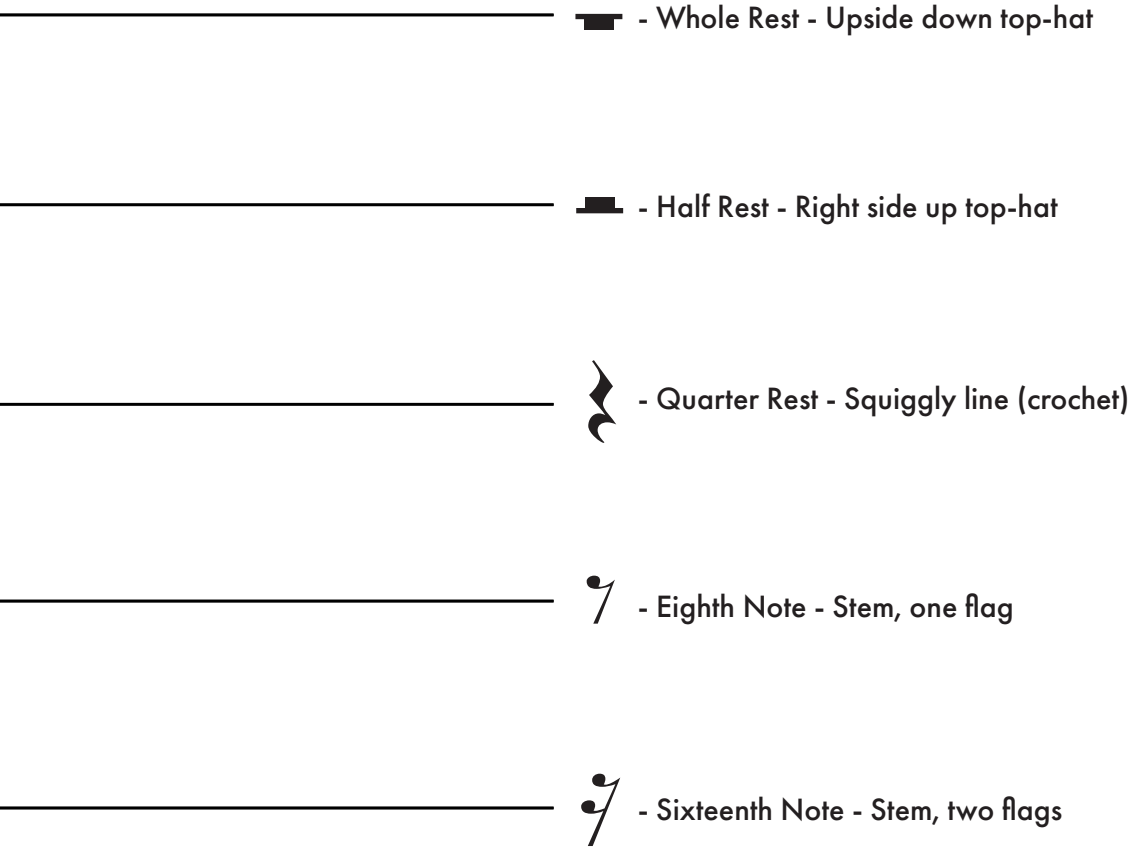
The opposite of sound is silence, and just like we have a notation system to indicate when we're going to play, we also have one to indicate when we shouldn't play. These intervals of silence are called **rests,** and they have their own set of symbols to indicate the duration of silence. Luckily, if you understand the binary nature of the rhythm hierarchy we've already discussed, the rests work in exactly the same fashion. Take some time to review the hierarchy on the next page.



THE RHYTHMIC HIERARCHY
- RESTS -



REST ANATOMY



DOTTED NOTE VALUES & RESTS

One way to modify the duration of a specific note value or rest is by applying a dot to the right of that note or rest. The dot increases the duration of the note or rest that its modifying by half of that note value. Let's look at two examples to see the dot modifier in action.

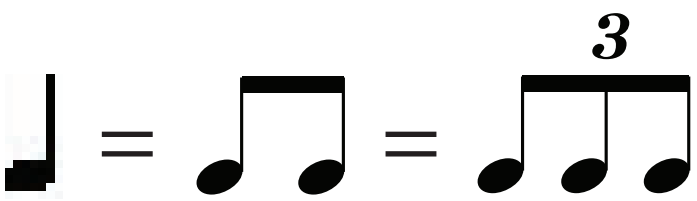
We'll first look at a dotted quarter note. As we've already seen in our rhythmic hierarchy, a quarter note can be subdivided down into two eighth notes, so those eighth notes each hold one-half of a quarter note. Therefore, a *dotted* quarter note retains the same amount of space as 3 eighth notes do: 2 eighth notes that a quarter note traditionally holds, plus the extra eighth note that half of a quarter note holds.

We'll look at a dotted eighth note rest next. Taking another look at our rhythmic hierarchy, an eighth note can be subdivided down into two sixteenth notes, and those sixteenth notes each hold one-half of an eighth note. Therefore, a *dotted* eighth note retains the same amount of space as 3 sixteenth notes do: 2 sixteenth notes that an eighth note normally holds, plus the extra sixteenth note that half of an eighth note holds.

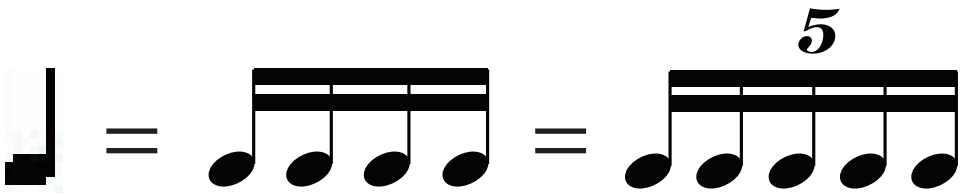
TUPLETS

Up until this point, we've discussed the relationship between our note values and rests solely as binary, but music is not always going to be subdivided in this way. Sometimes we're going to want to divide a quarter note down into 3 equal spaces instead of into two eighth notes like we've discussed. For cases like this, we're going to use **tuplets**, which are *any rhythm that involves dividing the beat into a different number of equal subdivisions from that are usually permitted by the time-signature.*

As an example, a quarter note can be subdivided down into two eighth notes, or into three irrational divisions, a set of which is called a triplet.



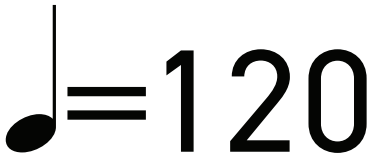
As another example, a quarter note can be subdivided down into four sixteenth notes, or into 5 irrational divisions, a set of which is called a five-tuplet, or five-let.



The subject of tuplets can become pretty expansive once you have a broader understanding of music notation, and we'll be delving deeper and deeper into the topic as we continue through The Bassics. As long as you understand that the possibility of subdivisions that aren't just binary exists, you are on the right track for now.

TEMPO

If you've listened to even a small amount of music in your life, you can agree that there are songs that are fast, and there are songs that are slow. The speed of a piece of music is formally called its **tempo**, and tempo is communicated through beats per minute (bpm). Here's what a tempo marking will typically look like.



Tempo markings are made up of two components. The note value on the left tells us *what kind of note we are assigning to serve as our beat*. The number on the right tells us *how many of those beats can fit into a minute*. Of course, no one is expecting you to try and count 120 beats aloud in order to try and fit them into a 60 seconds. Instead, you can find out what any tempo sounds like by plugging it into a **metronome**.

METRONOME

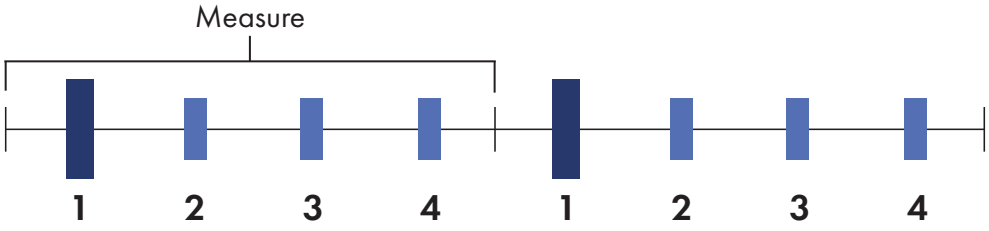
Metronomes exist to mark time for you at any tempo you desire. They can exist as physical devices or be recreated digitally through apps you can download on a mobile device. Once you enter your bpm into a metronome, it will begin to click at a certain speed, and every click will correspond to the note type that was assigned to be the beat.

TIME SIGNATURE

Thriller is a disco/funk song recorded by Michael Jackson in 1982 that remains instantly recognizable to listeners all over the world to this day. If you've heard it and can vaguely sing it in your head, you'll be set for this next section. If you haven't, feel free to take a quick listen to the tune as you follow along with the text.

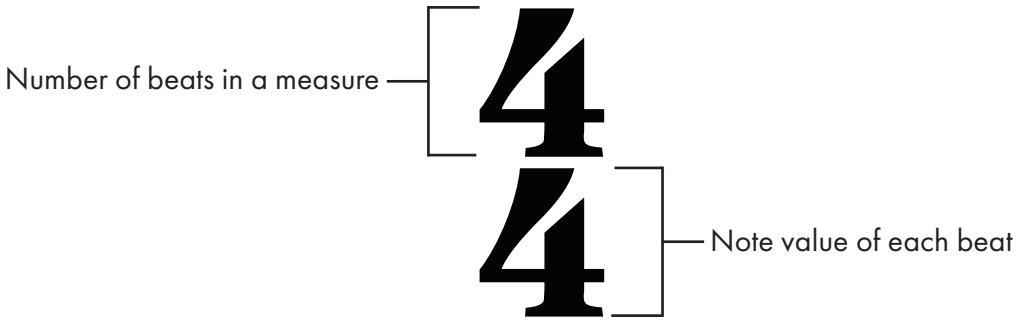
Because Thriller is a pretty groovy song, you'll most likely find yourself engaging the music with your body by tapping your foot or nodding your head along to the pulse. Pay close attention to the way you move and realize that you're most likely making these motions in groups of 4. Check this out by starting at a strong point in the song, and count to 4 over and over again along with your head nods or foot taps. You should find that every time you come back to 1, you arrive at another strong point in the music and the cycle begins again.

Everytime you count a new number, you're counting **beats**, which are simply *a unit of rhythm in music.* Because we've counted, we can tell that the beats in this song are grouped into phrases of 4. These groupings can be contained within **measures**, which are *arbitrary segments of time that are defined by a specific number of beats per segment,* which in this case is 4 beats per measure.



You'll find that it's helpful to interpret music in measures. Imagine trying to read through an essay that has no spaces or punctuation. You'd be looking at a jumble of letters and it would be almost impossible to derive any meaning from the text. Like punctuation and spacing, measures help keep our music segmented and clear, and if we want to rehearse a specific phrase in the middle of a piece, measures will give us distinct points where we can start and stop.

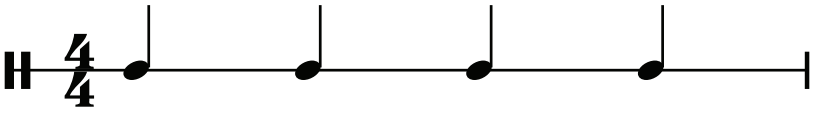
Although Thriller and most other pop tunes will adhere to the formula of 4 beats in a measure, not all music will be this clean cut. Take Five, for example, which is an iconic jazz piece written by Dave Brubeck, is played in groupings of 5 beats. If a composer is writing a new original piece that's never been heard before, how would they communicate to the reader how many beats they should expect to see in a measure? They would accomplish this task by using a **time signature.**

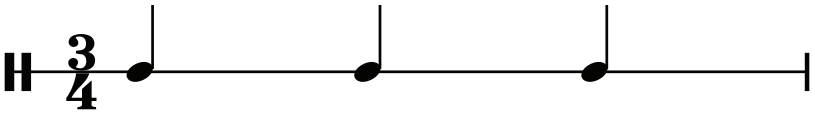


Time signatures are composed of two numbers stacked vertically like a fraction. The number on top, or the numerator, tells us *how many beats are grouped within one measure*. This is useful, but we're still missing one key piece of information because knowing only the number of beats in a measure is like being told that the size of a piece of paper is 5 by 6. Without units of measurement like inches or centimeters, the numbers 5 and 6 are essentially meaningless.

This is where the bottom number, or denominator, comes into play by telling us *the note value we're assigning to be our beat*. The denominator gives us this information by indicating what number to divide a whole note by. If the bottom number is a 4, for example, then we're dividing the whole note by 4, and therefore we are assigning a quarter note to be our beat. If it's an 8, then we're dividing a whole note by 8, telling us we're assigning an 8th note to be our beat.

Here are some more examples of some common time signatures you might see in your musical career. As you check this out, pay close attention to the ways the top number and bottom number modify the *number of notes*, as well as the *value of the notes* in each measure. If you need to, refer back to the rhythm hierarchy and the explanations on the previous two pages so that you really understand the relationship between the numbers in the time signature and the notation in the measure before moving on.





DYNAMICS

Dynamics are *differences in volume between certain notes or phrases.* Imagine yourself listening to a live performance at a concert. While listening to a band or DJ play at their maximum volume might entertain you for a little while, you can probably see how you would might eventually lose interest and feel like walking away to take a breather from the constant assault of noise.

Dynamics allow us to take our listeners on an emotional rollercoaster of loud moments, quiet moments, and everything in between so they are more likely to stay entertained and engaged, and we indicate these changes in volume using a wide assortment of dynamic markings.

This first set of markings communicate information about the volume of a note or an entire phrase, and they range from pp (pianissimo) which means very quiet, to ff (fortissimo) which means very loud. You'll usually find these dynamic markings under the measure or note they are modifying. This particular set of markings works interestingly because it modifies every single note after the note or phrase its under until you hit another one of these markings.

pp - pianissimo (very quiet)

p - piano (quiet)

mp - mezzopiano (medium quiet)

mf - mezzoforte (medium loud)

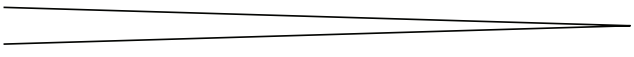
f - forte (loud)

ff - fortissimo (very loud)

This second set of markings indicates gradual shifts in volume from an initial dynamic at a defined starting point to a final dynamic at a defined ending point.

A crescendo is a gradual increase in volume and looks like this:

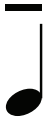
A decrescendo is a gradual decrease in volume and looks like this:



Accents are the next set of common dynamic markings and their main purpose in the context of percussion music is to indicate inflections in volume for the notes they're modifying. Unlike the two sets of markings we discussed in the previous page, accents typically only modify one note at a time as opposed to modifying extended phrases or groups of notes.

- Accent - Modifies the note to be 2 dynamics higher than the indicated dynamic

- Marcato - Sometimes indicates a rimshot, or a more aggressive accent

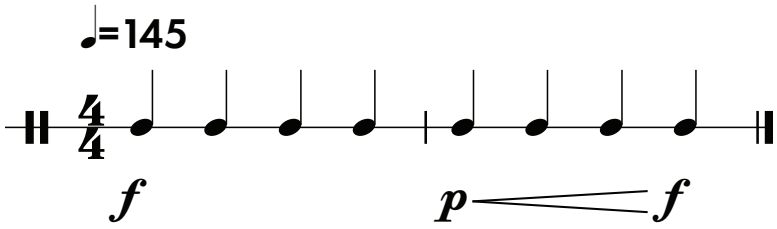


- Tenuto - Functions as a half-accent. Only modifies the note to be one dynamic higher than indicated.

At this point, you've seen all of the forms of music notation that will be relevant to you as you begin your musical career. There are still a few symbols that are more complex and not relevant to us just yet, but we will be sure to cover them when you've developed a knack for this set of notation. At this point, I'm going to show you an example of some sheet music that puts everything we've talked about so far together.

Note that if you are not quite sure how to read the rhythms in this example, that's totally ok! That is an entire other beast of a topic that's covered in the next installment of The Bassics; "How to Read and Write Music." We are simply focusing on interpreting the forms of music notation we've talked about thus far which are the staff, the rhythm hierarchy of note values and rests, tempo, time signatures, and dynamics.

APPLICABLE EXAMPLE



Tempo:
Let's start with our tempo marking, since that will give us some indication as to what the speed of this passage is. We check the left side first, and that lets us know that the quarter note is the note value that we're setting to be our beat. Looking to the right side of the marking, we can see that the BPM of this piece is 145. Putting this information together means that when you plug 145 into your metronome, the clicks will correspond to the speed of quarter notes in the piece.

Time Signature:
Next we'll look to the time signature. The numerator is a 4, meaning that there are 4 beats in each measure. The 4 in the denominator tells us that each of those 4 beats will be a quarter note. This makes sense because when we look at each measure, there are 4 quarter notes.

Dynamics:
If we look below the bars, we can see that there's a forte symbol under the first note. Remember that for these markings, that dynamic continues to modify every note after it until we hit another marking, which happens in the second measure. This means that every note in the first measure will be loud, then at the top of the second measure, we'll drop down to piano, which is quiet. Starting on the second measure we have a crescendo that starts at the beginning of the bar and ends at the end of the bar at forte again.