

READING MUSIC FROM A LEAD SHEET

A detailed explanation of the most crucial music notation concepts

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introduction

Most music teachers hate to admit it, but playing music doesn't require reading it. In fact, you can get pretty good at any instrument by learning how scales, chords, licks and rhythm work on it, even if you don't read **music notation** — the "code" that music is written in.

But realistically, any musician often uses some kind of reference for songs, mostly because it's hard to remember everything off the top of their heads. The thing is, sheet music is really one of the best resources to reference in most cases, because well, it's designed to convey music.

Now, while there are many types of sheet music — a lot of which can be pretty painful to use — a **lead sheet** gives you everything you need to play a song in a form that's usually really short and fairly intuitive to read — kind of like a **sheet music cheat sheet**. Here's a how to use one for your playing.

what exactly is a lead sheet?

A lead sheet is an approachable version of sheet music that has its roots in jazz. Its main purpose is to tell you two things, **the melody**, or tune of a song, and which **chords to play in the background**. It also gives you a basic order in which to play things, called an **arrangement**.

It's mostly used as a starting point for playing a song rather than being the exact way to do it, but it can be played either way. This makes the lead sheet a pretty flexible resource — it's useful for the player who mostly plays by ear and feel, but also for the player who needs to rely more on reading sheet music to perform.

The big difference between a lead sheet and a more conventional form of sheet music is that there's no information about the rhythm patterns for the chords or, if needed, bass lines.

Of course, if you needed all that stuff, a lead sheet probably isn't for you — it's more of a quick and dirty reference that you would use in a popular music kind of setting as opposed to what you would use in an orchestra.

Full lead sheet for “The Wheels on the Bus”

The Wheels on the Bus

The lead sheet for "The Wheels on the Bus" is presented in two staves. The first staff begins with a treble clef and a 4/4 time signature. The melody is written on a single line, with lyrics underneath. Chords C, G, and C are indicated above the staff. The second staff continues the melody, with a measure number '6' at the beginning. It includes first and second endings, marked '1.' and '2.', both with a C chord above them. The lyrics are: "The wheels on the bus go 'round and 'round, 'round and 'round, 'round and 'round. The wheels on the bus go 'round and 'round all through the town. The town."



why you would choose a lead sheet over other resources and where to find one

The primary reason to use a lead sheet over anything else is that no other resource offers the same combination of completeness and simplicity.

Conventional types of sheet music usually require you to read the notes in the chord as well as the melody, so you have to read around four lines of music at a time.

Plus, many songs are written out so completely, like in a type called a **score**, that it can be pages and pages long.

On the flip side, a song chart, which only has lyrics and chords, gives no information about how long you play chords for, nor which notes make up the melody.

References that are particular to certain instruments, such as **guitar tab** also typically leave out information about rhythm and actual notes.

Ultimately, a lead sheet lands somewhere in the middle. It's useful for having a complete picture of how a song should be played, but leaves room for personal creativity.

As far as where to get one, most of the time you can find a lead sheet by searching online for the title of the song along with the words, "lead sheet."



an overview of basic lead sheet elements

Let's learn to read a lead sheet all the way from scratch. The five horizontal lines that everything is written on is called **the staff**. The lines themselves are called **staff lines**. The circle-type symbols with lines extending from them are called **note symbols**. Note symbols can sit on, between, above or below the staff lines, and there are different types with slightly varying characteristics. The names of the notes that are associated with note symbols are determined by the **treble clef** symbol, the first thing you see on the staff. There are actually two clefs in music notation — the other is called the **bass clef**, and when that one's present, the notes are named differently. Lead sheets are almost always written using the notes of the treble clef.

The symbol with two stacked numbers is called the **time signature**. It gives us a number to count to repeatedly throughout a song. After each completed count, there's a horizontal line called a **measure line** that breaks the staff up into sections. Each section contains a completed count and is called a **measure** or a **bar**, terms that are synonymous. Measures are usually referred to by number — measure 1, 2 and so on. A letter above a bar indicates what chord or chords to play during that particular measure's count. Lastly, lyrics, if there are any, sit below the staff.

Basic lead sheet elements

Treble clef

Time signature

C

Two notes connected

Standalone note

Measure (or bar) line

G

Chord symbol

Standalone note

Measure line

The staff, made up of five staff lines

Hush

lit - tle

ba - by

don't

say

a

word,

Lyrics

Measure 1

Measure 2

There are really only a few basic music notation elements that are essential to being able to read music. At its crux, reading music is mostly about identifying notes by name and determining how long to play them for. The fact that a lead sheet gives you chords to play to fill out the sound, rather than more notes, cuts back on a lot of further work. The truth is, anything in a lead sheet beyond what notes and chords to play largely comes as a creative choice from the person who made the lead sheet, called the **arranger**, and should be viewed more like a good suggestion rather than strict instructions.

the concept of time in music notation

An important, but often understated truth about music notation is that it's largely a reflection of how a musician should pass time in a song.

In fact, you can think of a song itself as a unit of time, much like a day of the week. A day, of course, can be broken up into hours, and so too can a song be split up — into measures.

Measures can further be divided into even smaller units of time, called **beats**.

Beats are the units of time you deal with most often in music, but unlike a minute or second, they don't have a pre-determined length that they have to follow in every situation. Rather, their length is flexible and largely based on the creativity of the person writing the music, called the **songwriter** or **composer**.

Beats can further be broken down into smaller beats. The smaller beats function in the same ways as the parent — they just cover a smaller timeframe. In general, beats don't have specific names to start with; they're ultimately identified by the context of the situation you find them in.

Overall, in music, beats are the standard unit of measurement for time, which is the backbone of all the sounds you'll eventually play on an instrument. Strung together, beats create sequential patterns called **rhythm**, which is the force behind music that drives people to sing, dance, tap their feet or bop their heads.



introduction to note symbols

The most common way to fill a beat is with a **note**, which is a frequency of sound — called a **pitch** — with a name attached to it. Notes are represented in music notation with a note symbol, which come with a mathematical component built in called a **note value** that can be counted and used to cover time over the course of a beat and then, a measure.



types of note symbols and their values

The most common type of note symbol is called a **quarter note**. It has a closed oval shape with a line coming out of it called a **stem**. Despite the fractional name, **a quarter note's effective note value equals 1**. All note symbols have fractional naming conventions, but that's somewhat misleading in practical use. While there's probably some deep, theoretical reason to the contrary, the reality is that the system mostly revolves around how we use and manipulate quarter notes. We even mostly use other types of note symbols in some way or another to relay timing information as it relates to quarter notes. For all intents and purposes, the quarter note is your default note symbol.

After the quarter note, perhaps the next most common note symbol is the **eighth note**, which looks just like a quarter note except it has an ornament on its stem called a **flag**. An eighth note is equal to half a quarter note — **two eighth notes add up to one quarter note**.

Next up, is the **half note**, which looks like a quarter note, except it has a hole in the middle of its oval. A **half note consists of two quarter notes**. Finally, there's the **whole note**, which looks like a half note without the stem. A **whole note equals four quarter notes**.

Basic note symbols and their note values



Eighth note =
1/2 quarter note.
Two eighth notes equal
one quarter note.



Quarter note:
The most common note
symbol. Note value = 1



Half note =
Two quarter notes



Whole note =
Four quarter notes

Note

Even though the system is centered around quarter notes, the fractional relationship between notes does exist. A quarter note is in fact 1/4 of a whole note, and you can get a half note by combining four eighth notes. But the problem with the fractional names is that they imply that there's four timeframes — beats — to cover. This is often the case, and things make good sense when there are, but when there's only two or three, then you have situations where a quarter note is covering 1/3 of a measure or a half note is covering a whole measure. Stick with the idea that a quarter note equals 1, relate everything back to that point, and things always makes logical sense.

the time signature

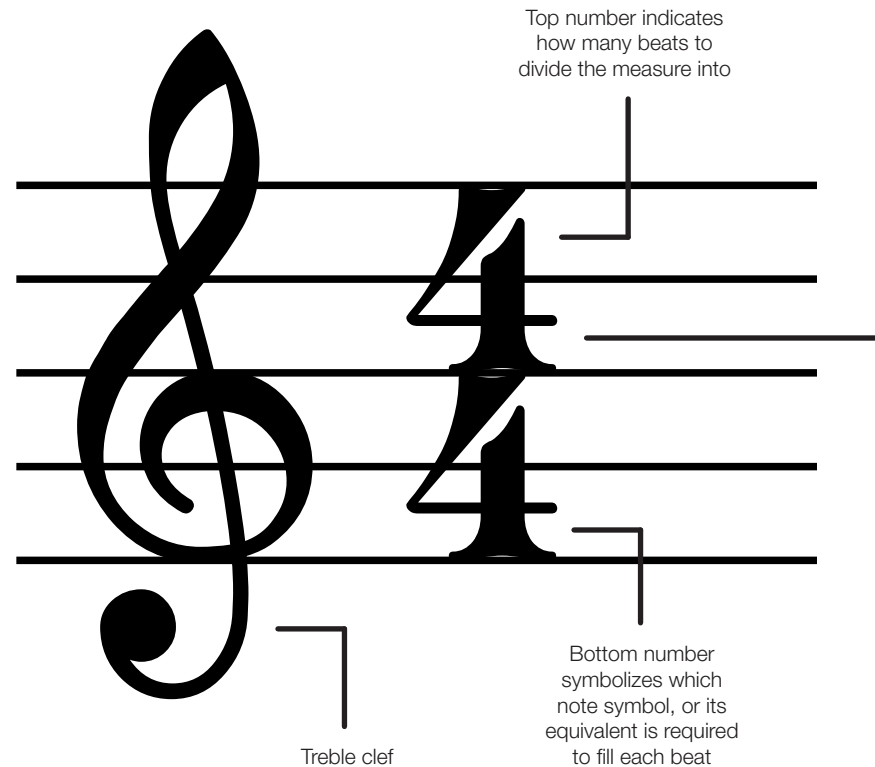
The time signature consists of two stacked numbers and contains all the instructions you need to split measures into beats and cover their timeframes. With rare exception, the time signature affects all measures in a piece of music.

The top number tells you how many beats to divide the measures into. The bottom number states which type of note symbol — or its equivalent — is required to fill one full beat.

For example, the most common time signature is 4/4, usually referred to as **4/4 time**. In 4/4 time, the top number indicates that each measure should be split into four beats. The bottom number indicates in somewhat of a shorthand, fractional way that you need the equivalent of a quarter note to cover one full beat.

The term "equivalent" is important here — anything that adds up to one quarter note satisfies the requirement, even if that means no quarter notes actually exists in the beat. This allows for an endless possibility of variation, which paves the way for rhythmic creativity and uniqueness.

The 4/4 time signature



In a nutshell, the 4/4 time signature instructs you to divide a measure into four beats, and fill them with the equivalent of quarter notes.

the main purpose of the time signature

Taking the time to solidify your understanding of time signatures will save a lot of confusion when you come across all the different ones.

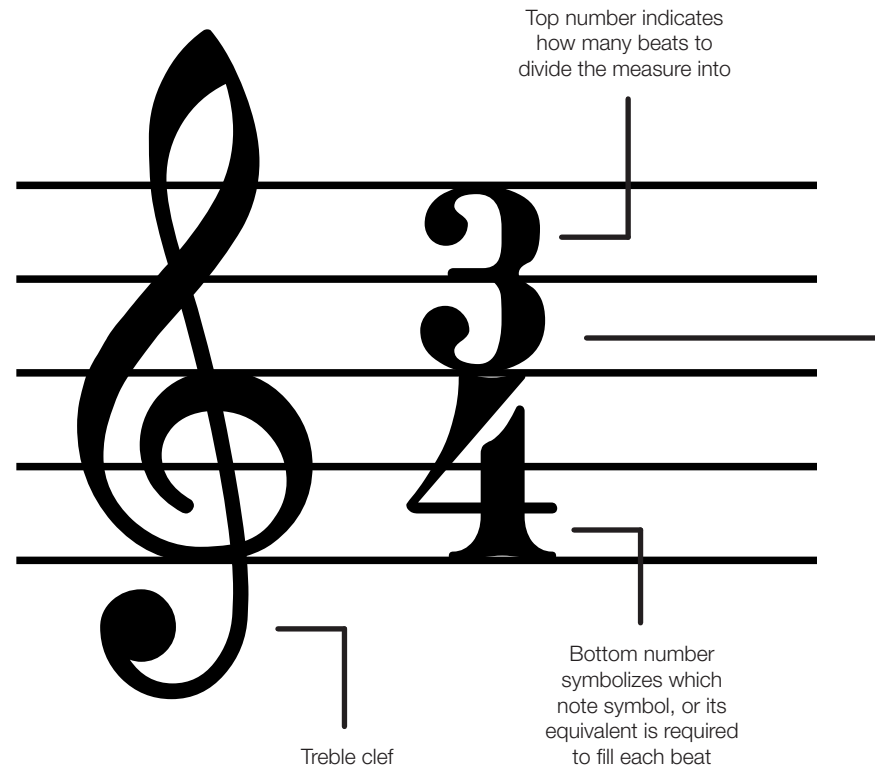
You really want to avoid getting tripped up by the fact that time signatures look like fractions — they're not fractions at all. They're symbols that **represent specific instructions about dividing measures and filling the resulting beats.**

Aside from 4/4 time, another common time signature is 3/4. In **3/4 time**, the top number indicates that the measure should be split into three beats, and the bottom number says that the equivalent of one quarter note is required to fill each beat.

That means, in a nutshell, that the equivalent of three quarter notes is needed to cover one full measure, a prime example of how looking at notes from a fractional standpoint will ultimately fail you — mathematically, in 3/4 time, a quarter note actually spans 1/3 of a measure instead of 1/4.

The takeaway? **Forget about fractions.**

The 3/4 time signature



In a nutshell, the 3/4 time signature instructs you to divide a measure into three beats, and fill them with the equivalent of quarter notes.

other types of time signatures

Realistically, time signatures can reflect any division of measures one wants, and they can also require the equivalent of any note symbol to cover the resulting beats. For instance, in **2/2 time**, measures are divided into two and the equivalent of a half note is required to fill each beat. In **6/8**, measures are split into six, and the equivalent of an eighth note is needed to cover the beats.

To belabor the point that time signatures are instructions and have nothing to do with fractions, consider that **5/4 time** divides measures into five beats, and requires the equivalent of a quarter note to fill each one, and **12/8 time** splits measures into 12 beats and requires eighth note equivalents for each one.

Time signatures: top number = how many beats to divide measure into; bottom number = what note symbol equivalent covers each beat



Full measure =
four beats; fill each
with the equivalent of
one quarter note



Full measure =
three beats; fill each
with the equivalent of
one quarter note



Full measure =
two beats; fill each
with the equivalent of
one half note



Full measure =
six beats; fill each
with the equivalent of
one eighth note



Full measure =
five beats; fill each
with the equivalent of
one quarter note

Notes

- Of all the time signatures you might possibly come across, 4/4 is far and away the one you'll see the most. In fact, musicians play in 4/4 time so much that it has a nickname, **common time**, and is often shown with a "C" symbol as a time signature as opposed to the "4/4" symbol.
- Though it's very rare, the time signature can change during a piece, an event called a **time change**. A time change is notated with the new time signature at the beginning of the first measure it affects and stays in effect until further notice. Often, it eventually goes back to the original time signature and that would be notated just like any other time change. You might never have to navigate a time change — just be aware they exist.

filling beats to make complete measures

At its core, the time signature's top number takes one unit of time, a measure, and breaks it up into smaller units of time — beats.

Beats are somewhat of an abstract concept in music notation, and they tend to get overlooked in favor of the actual note symbols that fill them. But beats are really the behind-the-scenes characters that glue together everything that makes up a song.

The presence of a time signature **automatically splits each measure it affects into an equal number of beats based on the top number**. These beats always exist as separate units of time no matter how note symbols are combined to cover a measure's timeframe.

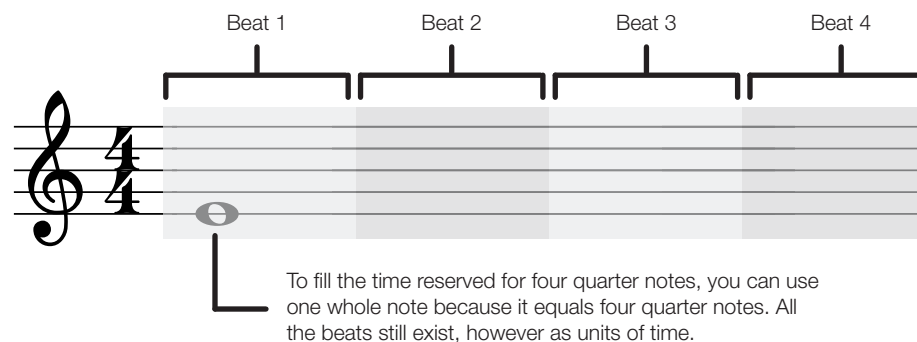
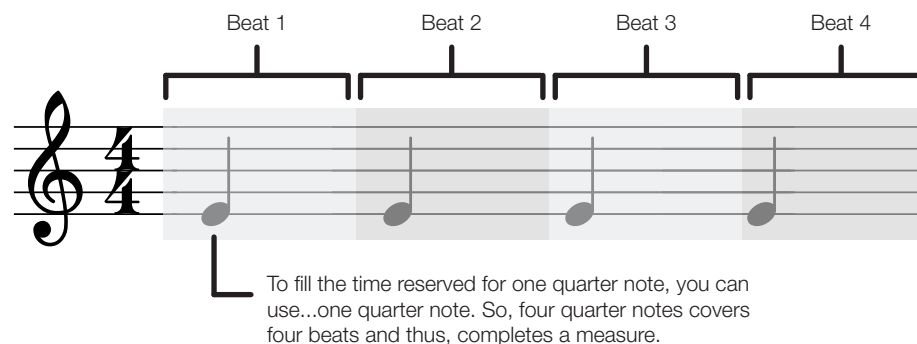
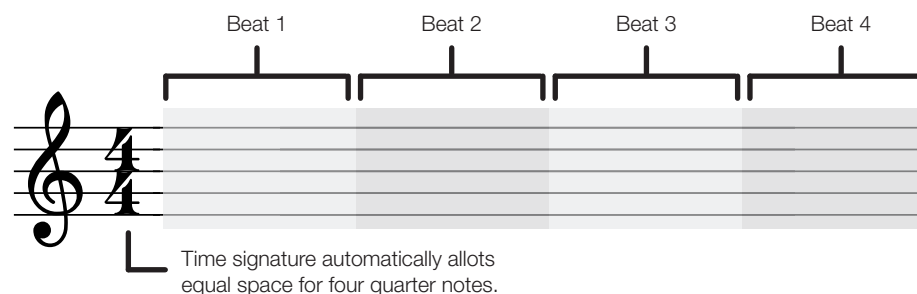
To illustrate, in 4/4 time, a measure is automatically divided into four equal beats, as dictated by the top number of the time signature. The bottom number, of course, states that each of those beats need to be filled with the equivalent of a quarter note, so it stands to reason that four quarter notes — one for each beat — works to complete an entire measure.

But you could also fill the measure in other ways.

A whole note, for instance, equals four quarter notes, so you could drop one into beat 1 of a 4/4 measure, and it also covers beats 2, 3 and 4, making a full measure.

Keep in mind, though, that even though one note symbol was placed in beat one and covered all the rest of the beats, all four of those beats still exist as separate units of time within the measure.

Counting complete measures in 4/4 time



reading beats in practice

When you're actually reading music, you always have to keep the abstract concept of beats at the forefront of your mind. Ultimately, half the process of reading music is going from one note symbol to the next accounting for the required number of beats in each measure.

In lead sheets, measures are always complete, so your goal is to discern how the note symbols written in them cover their beats. For a lead sheet in 4/4 time, you want to start reading note symbols in the first measure from the standpoint that somehow, it's divided into four equal beats. From there, you look at each note symbol in the measure and assign them to beats until all four are covered. Then, you move on to the next measure.

Naturally, there are multiple ways note symbols can cover beats and form complete measures. Let's study a few relatively common ways.

Four complete measures in 4/4 time

Quarter note covers beat 1 Quarter note covers beat 2 Quarter note covers beat 3 Quarter note covers beat 4 Half note covers beats 1 and 2 Half note covers beats 3 and 4 Half note covers beats 1 and 2 Quarter note covers beat 3 Quarter note covers beat 4 Whole note covers beats 1, 2, 3, 4

The first measure of this example is pretty straightforward. Since we need quarter note equivalents to cover four equal beats, logically, four individual quarter notes will do the job. In measure 2, we still need to fill four beats because, as expected, the time signature hasn't changed. The first note symbol in measure 2 is a half note. Since half notes equal two quarter notes, this one covers beats 1 and 2. Then, there's another half note that covers beats 3 and 4.

Measure 3 starts off like the previous one, with a half note covering beats 1 and 2, but finishes out with two separate quarter notes that cover beats 3 and 4 respectively. Finally, in measure 4, there's a whole note. Since a whole note equals four quarter notes, one will suffice to cover all four beats of the measure.

the count

As you account for beats in real time, it can get pretty old repeating, "beat 1, beat 2, beat 3, beat 4" over and over again throughout a piece of music. So, as people have a tendency to do, the phrasing is usually shortened by dropping the word "beat" in favor of the more concise, "1 2 3 4."

Of course, when that happens, accounting for beats closely resembles counting in general, and somewhere along the line, that notion stuck — now, most people associate rhythm in music with counting. In fact, the time signature is even colloquially referred to as **the count** because it gives instructions for how to "count" in a piece of music. But all said and done, counting in music is simply accounting for the equal number of beats that the time signature requires in each measure — without the word "beat." Since 4/4 time requires four equal beats, the count is **1 2 3 4**. Keep in mind that because the numbers represent beats, and beats always exist as units of time in the measure, when you count, you always have to acknowledge each number.

Four complete measures in 4/4 time with the count added

The image displays four measures of music in 4/4 time on a single staff. Above the staff, the counts '1 2 3 4' are repeated for each measure. Below the staff, vertical lines connect specific notes to their corresponding beat numbers. The notes are: Measure 1 (four quarter notes), Measure 2 (two half notes), Measure 3 (two quarter notes), and Measure 4 (one whole note).

Measure	Beat	Note Type	Description
1	1	Quarter note	covers beat 1
1	2	Quarter note	covers beat 2
1	3	Quarter note	covers beat 3
1	4	Quarter note	covers beat 4
2	1	Half note	covers beats 1 and 2
2	3	Half note	covers beats 3 and 4
3	1	Quarter note	covers beat 1
3	2	Quarter note	covers beat 2
3	3	Quarter note	covers beat 3
3	4	Quarter note	covers beat 4
4	1	Whole note	covers beats 1, 2, 3, 4

Something to remember is that at the end of the day, note symbols also represent a note that you'll play on an instrument. So, in practice, since measure 1 in our example contains four separate quarter notes, you play each one as you acknowledge — by saying or thinking — each number.

But measure 2 is a little different. Here, you play the note represented by the half note symbol as you say, "1," and then let it ring out as you say, "2." Then, you play the note represented by the half note symbol as you say, "3," and let it ring out as you say, "4." Measure 3 is essentially a combination of measures 1 and 2, but for measure 4, you play the note represented by the whole note symbol as you say, "1," and then let it ring out as you say, "2 3 4."

Finally, since the beats in each measure are equal, your count should be constant and consistent across every measure in the piece of music.

counting eighth notes

The most straightforward way to cover a single beat is with the exact note symbol specified by the time signature. But you can also cover beats with note symbols that have smaller note values that add up to the exact note symbol specified by the time signature. The most common note symbol used that has a lower note value than a quarter note is an eighth note. Two eighth notes equal one quarter note, so in 4/4 time, two eighth notes can cover one beat in a measure. When eighth notes are present, you identify them by using the word, "and," in the count.

For example, consider that a measure with four quarter notes can be counted as **1 2 3 4**. But, if you split each beat into eighth notes, your count would become **1 and 2 and 3 and 4 and**, with the number representing the first eighth note of the beat defined by the time signature, as well as the beat's starting point, and the "and" simply representing the second eighth note. You should also note that when two, three or four eighth notes appear subsequently, their flags become a single bar that connects them together, which helps promote better readability and keeps notation a little neater.

One measure of quarter notes and one of eighth notes

The image shows two measures of music on a treble clef staff with a 4/4 time signature. The first measure contains four quarter notes, each aligned with a number 1 through 4 above it. Below each quarter note is a vertical line and the text 'Quarter note covers beat 1' through 'Quarter note covers beat 4'. The second measure contains eight eighth notes, grouped into four pairs. Above the first pair is '1 and', above the second is '2 and', above the third is '3 and', and above the fourth is '4 and'. Below each pair of eighth notes is a bracket and the text 'Two eighth notes cover beat 1' through 'Two eighth notes cover beat 4'.

An exercise for counting quarter and eighth notes

To better understand how the "and" fits into the count, slowly start counting to four out loud repeatedly. As soon as you feel able, start clapping on each number. Hold the speed, musically known as **the tempo**, steady. Understand that as you clap on the numbers in the count, you're clapping out quarter notes in a 4/4 measure. Next, stay on the same tempo and continue to count and clap quarter notes, but now, right in the middle of the space between the numbered claps, say "and." Now, you're counting eighth notes. To go back to counting quarter notes, continue to count and clap the numbers with the same tempo, but simply stop saying, "and." Go back and forth between counting quarter and eighth notes by adding and taking out the "and" a few times to get a feel for it.

measures with eighth notes in practice

Of course, just as full measures can contain a combination of quarter and half notes, eighth notes can also be mixed in. Let's study a couple examples.

Measures in 4/4 time that contain eighth notes

The image shows two measures of music in 4/4 time on a single staff. Above the staff, the counting sequence is written: "1 and 2 3 4" for the first measure, and "1 2 3 and 4" for the second measure. The first measure contains: two eighth notes on the first beat (beamed together), a quarter note on the second beat, a quarter note on the third beat, and a quarter note on the fourth beat. The second measure contains: a half note spanning the first and second beats, two eighth notes on the third beat (beamed together), and a quarter note on the fourth beat. Brackets and vertical lines connect the notes to their respective beat counts below the staff.

1 and 2 3 4 1 2 3 and 4

Two eighth notes cover beat 1 Quarter note covers beat 2 Quarter note covers beat 3 Quarter note covers beat 4 Half note covers beats 1 and 2 Two eighth notes cover beat 3 Quarter note covers beat 4

Here, in measure 1, the first beat is split into two eighth notes, so it's counted as **1 and**, with the number representing the first eighth note of the beat defined by the time signature, as well as the beat's starting point, and the "and" simply representing the second eighth note. The second eighth note of beat 1 would typically be referred to as, "**the and of 1,**" which loosely translates to, "the smaller beat represented by 'and' in 1 beat of the measure." Similarly, it could also be called, "**the '1 and' beat.**" Any second eighth note of a beat defined by the time signature can be referred to by either term.

The rest of measure 1 is covered by three quarter notes, which can simply be counted as **2 3 4**. The full count of measure 1 is **1 and 2 3 4**.

Measure 2 starts with a half note, which covers beats 1 and 2. That portion of the measure is counted **1 2**. Beat 3 is split into two eighth notes, and then it's back to a quarter note for beat 4. The entire measure is counted **1 2 3 and 4**.

abstracting eighth notes

Sometimes, bars contain beats that start with an eighth note that isn't followed by another one, but rather, a quarter note. Handling these situations requires some conceptual thinking — since the eighth note only covers half the beat that's defined by the time signature, the quarter note needs to be split into abstract eighth notes. One finishes off beat 1, while the other begins beat 2. Let's study an example.

Measures in 4/4 time that require you to abstract eighth notes

The first abstract eighth note is represented by "and." This beat — **the and of 1** — is where you play the note on your instrument. This note completes beat 1.

The second abstract eighth note starts beat 2. Since there's no actual note though, let the note played on **the and of 1** ring over this beat while you say "2."

1 and 2 and 3 4

One eighth note only covers half of beat 1.

This quarter note gets split into two abstract eighth notes.

This eighth note completes beat 2.

Beat 3 is unaffected and the quarter note covers the entire beat.

Beat 4 is unaffected and the quarter note covers the entire beat.

Remember that the presence of eighth notes requires beats to be counted as number + "and." So, while the eighth note that begins this measure takes on the "1" portion of the count, we need to pull the "and" from the next note. Since the next note is a quarter note, it gets split into two abstract eighth notes that we can work with conceptually. The first eighth note finishes off beat 1, but more importantly, is the one that actually gets played on the instrument. Then, you would let the note ring out over the next abstract eighth note which begins beat 2. You don't actually play anything on this beat because it only exists abstractly. Now, since beat 2 starts with an abstract eighth note, we need another one to finish off the beat. In this case, the next note symbol is an eighth note, and it takes on **the and of 2** and completes the beat.

At this point, we've completely accounted for beats 1 and 2, so beats 3 and 4 are unaffected — no abstraction necessary. Overall, the count for this measure is **1 and 2 and 3 4**. Note that it takes into account the fact that we split a quarter note into two eighth abstract notes that crossed both, beats 1 and 2. Also recognize that something was actually played on an instrument for beats **1, the and of 1, the and of 2, 3** and **4**. The eighth note represented by beat 2 was simply an extension of what was played on **the 1 and beat**.

another bar with abstract eighths

Most of the measures you'll come across in a lead sheet are pretty straightforward and won't require you to abstract eighth notes. But it does come up often enough that you want to make sure you can handle each situation. Let's walk through another example.

Measures in 4/4 time that require you to abstract eighth notes

The first abstract eighth is marked by "and." This beat — **1 and** — is where you play the note on your instrument. It completes beat 1.

The second abstract eighth starts beat 2. Since there's no actual note though, let the note played on **the and of 1** ring over while you say "2."

The first abstract eighth of this quarter note is marked by "and." This beat — **the 2 and beat** — is where you play the note on your instrument. It completes beat 2.

The second abstract eighth note starts beat 3. Since there's no actual note though, let the note played on **the and of 2** ring over while you say "3."

One eighth note only covers half of beat 1.

Break this quarter note into two abstract eighth notes.

Also, break this quarter note into two abstract eighths because beat 2 needs to be completed.

This eighth note completes beat 3.

Beat 4 is unaffected and the quarter note covers the entire beat.

1 and 2 and 3 and 4

This bar starts with an eighth note that takes on the "1" portion of the count. But the next note is a quarter note that needs to get split into two abstract eighths so we can pull an "and" from it to finish beat 1. The first abstract eighth note completes beat 1 and gets played on an instrument. That note rings over the second, which begins beat 2. Nothing gets played here because it only exists abstractly. Now, since beat 2 starts with an abstract eighth note, we need another "and" to complete it. But the next note is another quarter, so it also gets split into two abstract eighths so we can work with it. The first of these abstract eighths completes beat 2, gets played on an instrument and rings over the second, which starts beat 3. Finally, there's another eighth note that gets us back to even by covering the **3 and beat**, leaving beat 4 to be counted without abstraction.

The count for this measure is **1 and 2 and 3 and 4**, taking into account that we split two quarter notes into abstract eighths to help cover parts of the first three beats. Also, something actually gets played on an instrument for beats **1, the and of 1, the and of 2, the and of 3** and 4.

half notes split into abstract eighths

To further punctuate the concept of abstract eighths, let's look at an example where a half note gets split up as opposed to a quarter. Note that since an half note equals two quarter notes, it gets split into four abstract eighth notes.

Measures in 4/4 time that require you to abstract eighth notes

The first abstract eighth note is marked by "and." This beat — **the and of 1** — is where you play the note on your instrument. It completes beat 1 and rings over the second, third and fourth abstract eighth notes.

The second abstract eighth note starts beat 2.

The third abstract eighth note completes beat 2.

The fourth abstract eighth note starts beat 3.

The first abstract eighth note of this quarter note is marked by "and." This beat — **the and of 2** — is where you play the note on your instrument. It completes beat 3.

The second abstract eighth note starts beat 4.

1 and 2 and 3 and 4 and

One eighth note only covers half of beat 1.

Break this half note into four abstract eighth notes.

Also, break this quarter note into two abstract eighth notes because you need to complete beat 3.

This eighth note completes beat 4.

This bar starts with an eighth note that takes on the "1" portion of the count. But the next note is a half note that needs to get split into four abstract eighth notes so we can pull an "and" from it to complete beat 1. The first finishes off beat 1 and gets played on an instrument. That note would ring over the second, third and fourth abstract eighth notes, as these only exist abstractly. The second abstract eighth begins beat two, and the third completes beat 2. The fourth and final abstract eighth that comes from the half note starts beat 3. Now, we need another "and" to complete beat 3, but the next note is another quarter, so it also gets split into abstract eighths — two of them. The first completes beat 3, gets played on an instrument and rings over the second abstract eighth note, which covers the start of beat 4. Finally, there's another eighth note that brings us back to even and completes the measure by covering the **and of 4**.

Overall, the count for this measure is **1 and 2 and 3 and 4 and**, taking into account that we split a half note and a quarter into abstract eighths that helped cover parts of each beat. Also, something actually gets played on an instrument for only beats **1, the and of 1, 4, and the and of 4**.

counting in real-world situations

As you work through a lead sheet, the counts in each measure add up to specify exactly how to play all the rhythmic patterns that serve as the backbone of a song's melody.

Now, having such a complete picture is great for ironing out the details of a particular song, but the truth is, in practice, it's not very efficient to count out every specific detail of every measure in every song. So, most experienced musicians usually only count out the rough parameters defined by the time signature and let their playing do the rest.

In 4/4, since the count centers around four distinct beats, when bars are strung together and actually played, it creates a **pulse** that musicians can always rely on to be consistent.

As such they often count 4/4 bars as if all the beats are filled in by quarter notes — **1 2 3 4** — known as the **quarter note count**. From there, they let their playing fill in the details. For example, a musician might think of a bar as **1 2 3 4**, but actually play **1 and 2 3 and 4** while reading a lead sheet.

Plus, eighth notes get used so much that it's also common to count as if all the beats are made up of two eighth notes. The **eighth note count** — **1 and 2 and 3 and 4 and** — might even be considered the recommended choice because it's the happy medium between all the actual specific measure counts and the relatively sparse quarter note count.

As you learn to read a lead sheet, you should stick with the specific measure counts, but you want to work toward using a rougher count as well because overall, it's more sustainable.

To get there, first consider that experienced musicians have typically practiced the quarter and eighth note counts so much that they can physically feel where the start of each beat is supposed to be. So, set a metronome to 50 beats per minute (bpm). On an instrument, use any note to play quarters on the clicks and eighths in between. Work up to 120 bpm.



note symbols: two functions in one figure

At its core, a note symbol tells you two things simultaneously. On one hand, it tells you how much of a beat's timeframe it covers. It also conveys the name of the note to actually play on your instrument. So, as you read music, you're constantly digesting what note to play and how long to play it for.

For the most part, if you get halfway decent at recognizing what's happening with the count to the level of abstract eighth notes, well, realistically, there's not much more complexity to the rhythmic component of note symbols. Plus, the advantage of learning to read a lead sheet as opposed to other types of sheet music is that in practice, it drastically cuts down the amount of different note names you actually have to be able to identify on the staff. In fact, once you can identify only 18 note names, you'll be well on your way to being able to combine both note symbol functions to play real songs from a lead sheet.



the treble clef

As you learn how to read specific note names from note symbols, it's important to get clear on a subtle distinction: note symbols simply relay information that actually resides on the staff whether note symbols are present or not.

To look more closely at this concept, let's take a step back and consider the staff as a whole. On its own, the staff and the five lines that make it up mean nothing; they're simply a vehicle on which to write music notation.

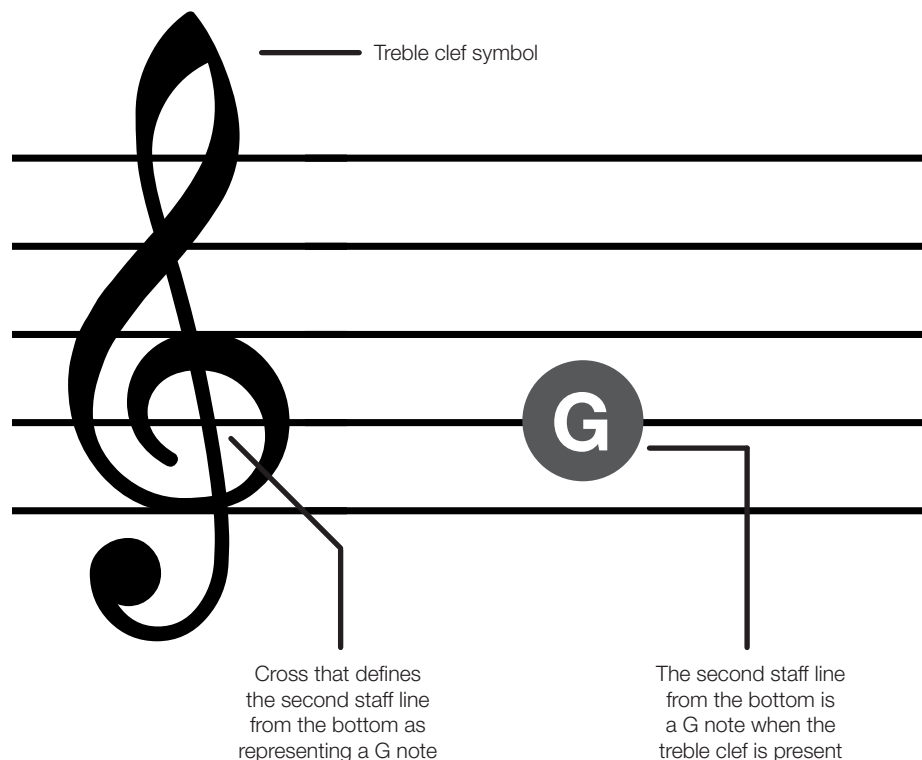
But a clef symbol breathes life into it. A clef symbol, or **clef**, for short, rather covertly sets one staff line to a note name that's identified by a letter of the musical alphabet. The particular note name set up by a clef serves as the linchpin for setting up all the other notes on the staff.

Now, there are two clefs in music, the **bass clef** and the **treble clef**, and each sets up notes on the staff differently.

But for reading a lead sheet, you only need to know how to read note names as they relate to the **treble clef**, which **sets the second staff line from the bottom to G by way of a little cross in the belly of its symbol**.

From this G note, we can find all the other note names that live on the staff when it's affected by the a treble clef, which in music terms is referred to as the **treble clef staff**.

The treble clef



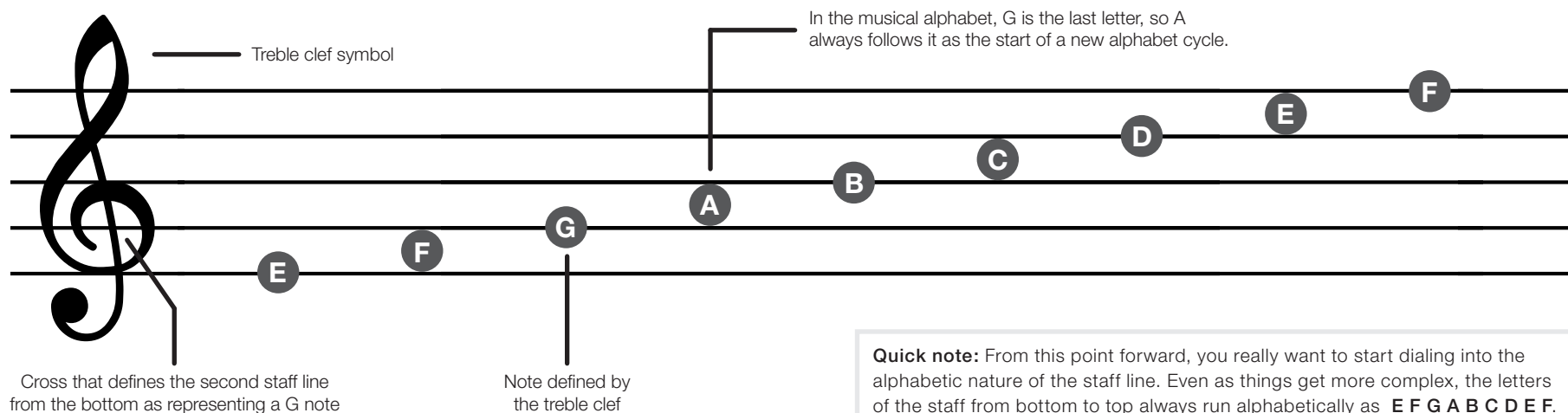
the note names on the treble clef staff

When a clef is present, every staff line and every space on either side of a staff line takes on a note name from the musical alphabet, which runs from A-G. From the G note defined by the treble clef, which sits on the second staff line from the bottom, going in either direction, note names perfectly follow the musical alphabet in a **space, line, space sequence**.

Whenever the end of the musical alphabet is reached on the staff — with a G — the next note starts the alphabetic cycle again — with an A. So, since the note defined by the treble clef is a G, which is at the end of the musical alphabet, the next note going up the staff toward the top staff line has to be an A. Plus, since that defined G note is actually on a staff line, that next A has to be in the space above it.

From there, you simply keep going alphabetically, alternating between on a line and in a space. Continuing up the staff, B lands on the third staff line from the bottom, and C is in the space above it. Then, D is on the second line from the top, and E is in the space above. Finally, there's the top staff line, an F note. Going down the staff, toward the bottom line, you have to think backwards. From the G defined by the treble clef on the second line from the bottom, F lives in the space below, and then, there's the bottom staff line, an E.

Note names on the treble clef staff

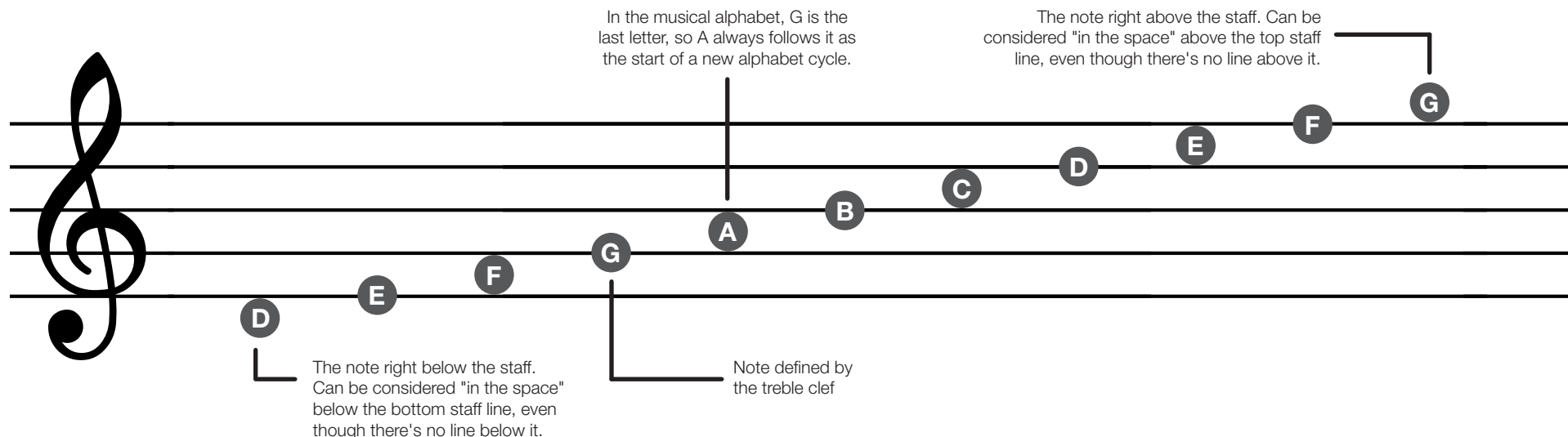


the two notes outside the staff

Note names also exist below or beyond the five-line staff. Above the very top staff line, which is represented by an F note when the treble clef is present, is a G note, which simply continues the alphabetic cycle. You can consider this note as being in a space even though it doesn't have another line above it.

Similarly, below the bottom staff line, which is represented by an E note when the treble clef is present, is a D note. Again, this D note is simply an extension of the alphabetic cycle. You can consider this note as also being in a space even though it doesn't have another line below it.

Note names on the treble clef



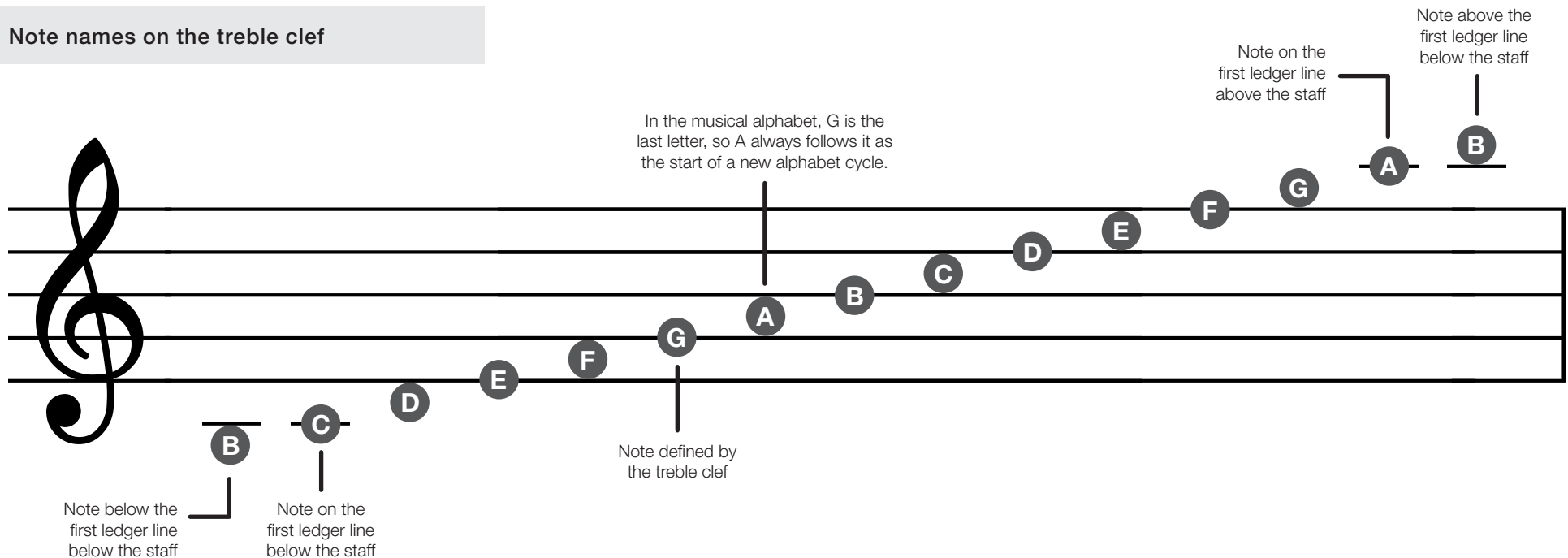
ledger lines

The five-line staff can also be extended to show additional notes. But instead of simply tacking on full staff lines, extensions are made with short lines, called **ledger lines**, that are just wide enough to accommodate a note symbol. Ledger lines basically serve as additional staff lines that extend the staff in either direction. As such, any notes that sit on or between them also follow the alphabetic cycle and the "space, line, space" pattern.

Theoretically, the staff can be extended with an infinite amount of ledger lines, but typically a lead sheet only has between one and three, if any. The note that sits on the first ledger line above the staff is A because in the musical alphabet, it comes after G, which sits in the space above the top staff line. The next note is B, which sits above the first ledger line. You can consider this note as being in a space even though it doesn't have line above it.

The note that sits on the first ledger line below the staff is C because alphabetically, it's before D, which sits in the space below the bottom staff line. The note before that is B, which sits below that first ledger line. This note is also in a space even though it doesn't have line below it.

Note names on the treble clef



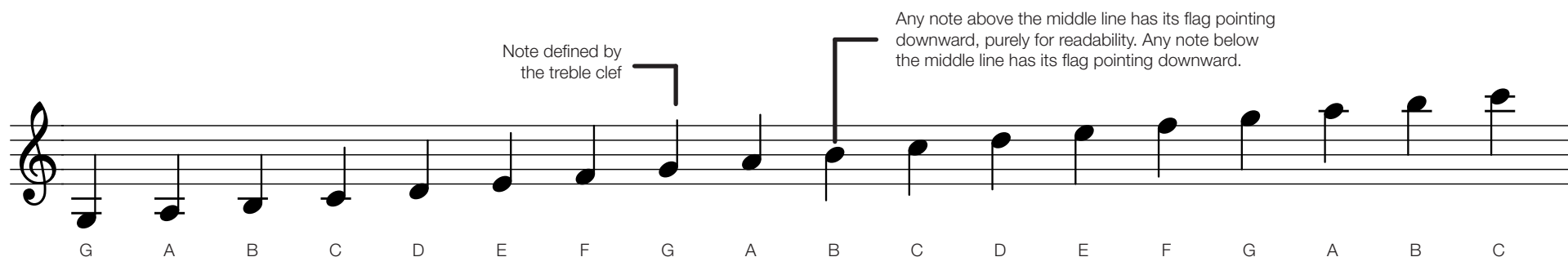
the 18 most common note names

Note symbols ultimately take on the name of the note that resides in the staff position where it sits. For example, if the circular head of the note symbol is on the bottom staff line, you read the note symbol as an E — because that's the note represented by that staff line. If it's in the space between the second and third staff lines from top, it's a C — because that's the note represented by that space on the staff.

Now's a good time to point out that any note symbol below the middle staff line — which is represented by a B note — has its flag pointing upwards. Any note symbol above the middle staff line has its flag pointed downwards. This is purely for readability purposes and doesn't really matter otherwise.

Also, you should know that colloquially, musicians usually refer to note symbols simply as "notes," implying the fact that they take on the note names that reside in and around the staff. Going forward, that's how we'll mostly refer to note symbols, too. As you learn how to identify the notes on the staff, keep in mind that while music notation is capable of showing a large number of notes through note symbols, in practice, most lead sheets actually require you to read only about five to seven different notes from a pool of around 18 note names throughout the entire piece.

The 18 most common note names on the treble clef staff



Tips for learning the note names

While there are a lot of tricks to learning the notes on the treble clef staff, ultimately, the best way to learn the notes is to actually use a lead sheet to try to read them. The more you do it, the better you'll get at identifying them. Also, something you'll want to keep in mind at all times are the simple facts that **the letters always run alphabetically, and even as things get more complex, the letters associated with the lines and spaces never change.** For example, a note on the bottom staff line will always read as some kind of E because that letter always represents that line.

So, **concentrate on just being able to identify these 18 letters on the staff**, and any further complexity will be much easier to process.

a basic approach to reading a lead sheet

Contrary to popular belief, not everyone who can read music can simply take a lead sheet that they've never seen before, and play the song it conveys perfectly without practice.

This skill is called **sight-reading**, and it's really the highest level of music reading. The truth is, though, there are levels below sight-reading, and it's useful to be even a below average reader.

Of course, between counting, identifying notes and actually playing something on an instrument, there's a lot going on in each measure. In fact, actually playing what you read is a completely different skill and presents challenges that require its own practice time.

So, in the beginning, a good way to approach a lead sheet is to use a three-step process that separates each action that reading requires.

First, **below the staff, write in all the notes**. Then, **underneath, write in the count**. Finally, **play what you've read on your instrument**.

With enough practice doing the three actions separately, you'll eventually be able to do them at once. It can be a slow and difficult process, but understand that even never getting past the level of having to write things in can still make you a better musician overall.

Consider that ultimately, reading a lead sheet is not about being able to read music, it's about unlocking what it conveys — new songs to play and thus, new challenges.



reading notes in your first song measure

To avoid frustration with reading music, it's best to work slowly and take things one measure at a time. So, let's do the entire process of reading music by working through one fairly typical song measure. Using "Hush Little Baby" as an example, let's first identify all the notes in measure one.

The first note is a G, which you would write in below the lyrics. The next three notes are on the bottom staff line, so they're all the same note — E. The last note in the measure is in the space above that bottom staff line, so we can rely on the alphabetic cycle of the staff and identify it as F.

Now, it's time to count. The time signature divides the measure into four beats. Since the first note is a quarter, that covers beat 1 and is counted as **1**. The next two notes are eighths, which cover beat 2 and are counted as **2 and**. The final two beats are each covered by a quarter notes and are counted as **3 4**. As a whole, the entire count for this measure is **1 2 and 3 4**, which should get written underneath the previously identified notes.

The first measure of "Hush Little Baby"

C

Hush lit - tle ba - by

Identified note names — G E E E F

The count of this bar — 1 2 and 3 4

playing your first song measure

The notes in each measure of a lead sheet form a portion of a song's tune — the melody. The melody of a song is the most important information you get from a lead sheet, and in fact, learning the song's tune is the main reason you would opt for a lead sheet in the first place. If you didn't need a reference for how to play the melody, in many cases, it would be easier to just use a song chart, which simply has lyrics with chords over the words.

Because the notes in a lead sheet reflect the melody, they're often referred to as a singular unit called the **melody line**. In general, lead sheets typically reflect the bare minimum requirements of how to play a song, so you're free to play the melody line anywhere it makes sense on your instrument. In fact, in the spirit of flexibility and creativity, people who learn from an improvisational standpoint are often encouraged to learn the melody line of a song in multiple places on their instruments. For now, **find a place on your instrument to play the first part of the melody to "Hush Little Baby," using the written out notes and count, rather than looking at the actual note symbols in the measure.**

The first measure of "Hush Little Baby"

C

Hush lit – tle ba – by

G E E F

1 2 and 3 4

the chord symbol

The letter above the measure — the chord symbol — indicates which chord should be played as a backdrop to the notes within it. **It essentially means to play the notes in the measure and the chord above it at the same time.** A lead sheet offers almost complete freedom as to how to play the chord — it can be played with any rhythmic pattern that fits, as long as it stays true to the requirements of the time signature. In fact, the chord is not even dependent in any way on the count that the note symbols reflect, and many players use the chord to fill in any time gaps between the notes defined in the measure. However, the measure's specific count is a good starting point if you're not used to rhythmic improvisation.

A chord is placed over the first beat it affects, and remains the chord to be played in the background until further notice. In measure one of "Hush Little Baby," the instructions are to play the notes within the bar while playing a C chord at the same time. The C chord can be played in any rhythmic pattern that fits, and considering the fact that the chord symbol is over beat 1 and there's nothing to indicate a change, it should cover all four beats of the measure.

The first measure of "Hush Little Baby"

C — The chord starts on beat 1 and covers all four beats of the measure. It's played at the same time as the notes indicated by the note symbols.

Hush lit - tle ba - by

G E E F

1 2 and 3 4

playing the chord and the melody together

In a lead sheet, the notes on the staff reflect a song's tune, also known as the melody. As such, they're often referred to collectively as one unit, called the **melody line**, which is short for "the line of music that reflects the melody."

Now, playing the chord and the melody line at the same time can be achieved in a variety of ways, but largely depends on which instrument you're playing, as well as your skill level.

Playing by yourself and using one instrument is perhaps the most difficult approach overall, but it's pretty straightforward on an instrument like the piano, where your left hand can play a rhythmic pattern with the chord, and your right hand can play the melody.

On other instruments, performing the task solo is less obvious, but definitely doable with proper instruction, creativity and practice.

In general, though, it's more common these days for two instruments to handle the job — one is used to play a rhythmic pattern with the chord, while the other is used to play the melody. A prime example of this is when singers sing a song while they or someone else plays chords on the guitar. In cases such as these, the guitar handles the chord responsibilities, while the vocal handles the melody.

Of course, any combination of instruments can work together to play the chord and the melody at the same time. In fact, that common goal serves as the main reason people play together.



chord changes

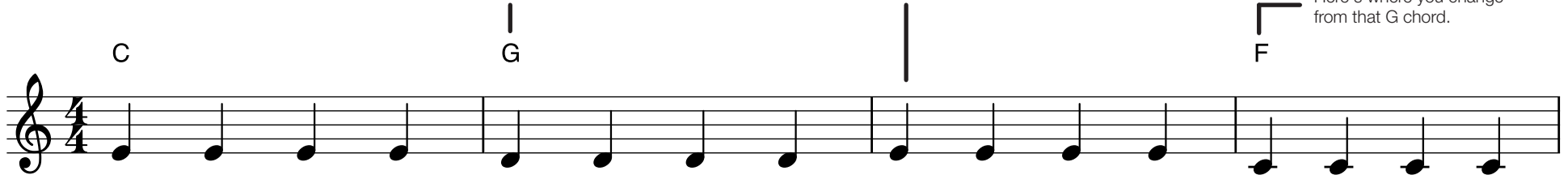
Within a song, chords can change at any time, even within the measure. Chord changes are indicated by a new chord symbol over the top of the first beat it affects. When a chord changes, use the new one until it actually changes again. That means, for example, that if there's a new measure with no chord over the top, stay on the same chord you were using prior to reaching that point. You might even come across a measure that has no chord on beat 1, but a new one over a beat part way through, often beat 3. In a case like this, you would start the measure with the chord you were using prior to reaching that point, and then change to the new chord on beat 3. Let's look at some chord change situations you're likely to encounter.

Chord change examples

Going from one chord to the next, measure by measure is the most common chord change scenario.

Even though this is a new measure, there's no chord change, so stay on G.

Here's where you change from that G chord.



Standard "one chord to the next, measure by measure" change here.

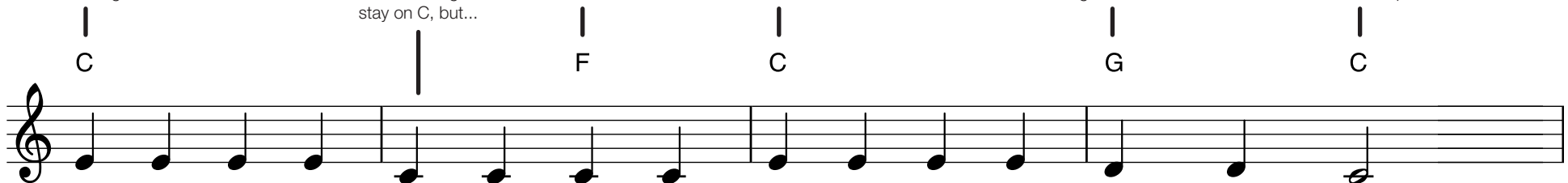
Even though this is a new measure, there's no chord change, so stay on C, but...

...change to the F on this 3 beat...

...and then, back to C for the start of the next measure.

Standard "one chord to the next, measure by measure" change here, but...

...the chord also changes to the F on this 3 beat and finishes the piece.



reading your first full lead sheet

Once you have even a theoretical idea on **how to count**, **how to identify note names**, **how to implement the chords** and **how to navigate chord changes**, you really have most of what you need to get through a lead sheet. In fact, nothing else is as important to reading music as being able to handle these tasks.

Take a look at the full lead sheet for "Hush Little Baby." Now, while there are still some details to learn, when the notes and the count are written in, the reading part is pretty much done. From there, you can concentrate simply on playing the tune on your instrument, which is ultimately the point being able to read music.

A quick note on lyrics

Note that lyrics align closely with the note symbols. Basically, lyrics are simply linguistic representations of melodies.

Lead sheets can come with or without lyrics — it largely depends on need. Consider that the better you know a song — which often happens through lyrics — the easier the whole process of using a lead sheet is, from reading it to playing what it conveys on your instrument.

But if you were playing "Hush Little Baby" instrumentally only, you might not need lyrics, especially if you were very experienced. The point is, there's options.

Lead sheet for "Hush Little Baby"

Hush Little Baby

The lead sheet for "Hush Little Baby" is presented in three systems. Each system consists of a musical staff in 4/4 time, lyrics, and a chord chart. Chords are indicated by letters (C, G, D, E, F) above the staff. Lyrics are written below the staff, with hyphens indicating syllables that span multiple notes. A count (1-4) is provided below the lyrics for each measure. Vertical lines indicate chord changes. Annotations like "No chord change here, so stay on G" are used to simplify the notation.

System 1:

Chords: C, G

Lyrics: Hush lit - tle ba - by don't say a word,

Chord Chart: G E E E F E D D D

Count: 1 2 and 3 4 1 2 and 3 4

System 2:

Annotations: No chord change here, so stay on G; No chord change here, so stay on C

Chord: C

Lyrics: Pa - pa's gon - na buy you a mock - ing - bird. And, if that mock - ing -

Chord Chart: G G D D D D E D C C C G E E F

Count: 1 and 2 and 3 4 and 1 2 3 4 and 1 2 3 4

System 3:

Annotation: No chord change here, so stay on G

Chords: G, C

Lyrics: bird don't sing, Pa - pa's gon - na buy you a dia - mond ring.

Chord Chart: E D D G G D D D D E D C C

Count: 1 2 3 4 1 and 2 and 3 4 and 1 2 3 4

beyond the basics

It can't be overstated how much of reading music revolves around identifying note names and counting. In fact, if you learned nothing else, you can probably combine those skills with your ear to get a decent sketch of a song to build upon, especially if you've played your instrument for a while.

See, here's the thing — music notation is a system designed so it can represent the tiniest details of even the most complex pieces of music. Practically, though, you just need to know the stuff that you're most likely to come across — anything else, you can simply look up as you encounter it.

So, here are the most essential broader music notation concepts. Learning them can really boost your musicianship.

rest symbols

In music, what you don't play is just as important as what you do play. Instructions about not playing come from **rest symbols**, which function very similarly to note symbols. The main difference between the two is the fact that there is no note name attached to a rest symbol.

But, from a rhythm standpoint, they are virtually identical. Take for instance, the **quarter rest**, which looks like a vertical, squiggly line. A quarter rest has a **rest value** that equals the note value of a quarter note. So, in 4/4 time, while a quarter note calls for something played for one beat, a quarter rest calls for complete silence over one beat — **no sounds from prior notes should ring over a rest**.

Naturally, since there's a quarter rest, there's also an **eighth rest**, which looks like a backwards, ornamented lowercase letter "r," and a **half rest**, which is represented by two short lines — a thick one on top and a thin one below it. Finally, there's the **whole rest**, which looks like an upside down half rest. To "play" any rest, take the note value of its note symbol counterpart and stop playing for that amount of time — no ringing over it.

Basic rest symbols and their rest values



Eighth rest:

Rest value is equal to the note value of an eighth note:
1/2 a quarter note



Quarter rest:

Rest value is equal to the note value of a quarter note: 1



Half rest:

Rest value is equal to the note value of a half note: 2 quarter notes



Whole rest:

Rest value is equal to the note value of a whole note:
Four quarter notes

Counting rest symbols

Rest symbols are counted the exact same way as a note symbol. For instance, a 4/4 measure that has three quarter notes covering beats 1-3 and a quarter rest covering beat 4 is still counted **1 2 3 4**, you just happen to not be playing anything through the duration of the four beat.

rest symbols in action

Rhythmically, anything that can be done with a note symbol can also be done with a rest symbol. But keep a few things in mind. Most important is that any ringing should be completely stopped for the duration of any rest beats. Also, while a standalone half rest symbol has a thin line below a short, thick line, in actual notation, a staff line acts as the thin line. So, when written in a measure, a half rest looks like a thick line with its bottom edge attached to the thinner staff line. The same idea applies to a whole rest, which looks similar. Lastly, just as it's possible to abstract note symbols, you can abstract rest symbols, and the same principles apply to both. Here are some common ways you might encounter rest symbols.

Rest symbol examples

Quarter rest. Stop playing for the duration of beat 2. Don't let the quarter note on beat 1 ring over it.

Eighth rest. Play the eighth note on beat 4, then halt the sound for the duration of the "and."

While the half note says, "play this note on beat 1 and let it ring over beat 2..."

...this means to play the note on beat 3, then stop the sound and have total silence over beat 4.

To play this measure, you would play the half note on beat 1, let it ring over beat 2, then stop to let silence cover beats 3 and 4.

Half rest symbol, which looks like a short, thick line that sticks above the middle staff line.

This measure starts with an eighth note, counted as **1**, but is followed by a quarter rest, meaning we need to abstract the rest into two eighth rests to complete beat 1.

First abstract eighth rest finishes off beat 1 and is counted as the **and of 1**.

Second abstract eighth rest starts beat 2...

...and this eighth note finishes off beat 2 and gets us back to even.

Whole rest symbol, which looks like a short, thick line that sticks below the second staff line from the top.

Notes

A couple more points on rest symbols — first, it's fairly uncommon to see more than one rest symbol come after another, so there's no equivalent to the practice of connecting the flags of subsequent eighth notes. If two eighth rests do happen to be next to each other, they would just be shown as separate symbols. Also, rest symbols always sit in the same place on the staff. For instance, a whole rest always sits below the second staff line from the top. The same idea applies to the positions of half, quarter and eighth rests.

the concept of subdivision

To this point, we've only considered splitting quarter notes and rests into two eighth notes or rests, but you can actually use notes and rests with even smaller note values to cover parts of a beat, a concept called **subdivision**.

See, even though most music notation concepts center around the quarter note, there's still an underlying theme that persists throughout the system — ultimately, bigger notes can be split into smaller notes.

It starts with the whole note, which can be split in half — subdivided — to create two half notes. A half note can be subdivided into two quarter notes. A quarter note can be subdivided into two eighth notes. Now, this is as far as we've gone, but of course, we can keep going.

Eighth notes can be subdivided into two **16th notes**, one of which only covers half the space of an eighth note. From there, 16th notes can be subdivided into **32nd notes**, which can be split into **64th notes** and then, **128th notes**.

Theoretically, notes can be subdivided infinitely, each time creating two notes that each carry half the note value of its parent. But practically, even advanced players only usually go as far as 32nd notes because as you subdivide, you exponentially create more notes per measure.

Consider that in a 4/4 measure, a whole note could ultimately be subdivided into 32 32nd notes, each of which has to be mentally processed and then, actually played on an instrument in the same timeframe as the original whole note would have taken. Especially at faster tempos, realistically, there's a certain point where playing so many notes in a measure is actually physically impossible.



the 16th note and rest symbols

While most of the time, the deepest level of subdivision you'll work with is eighth notes, 16th notes come up just often enough, especially in more advanced music, that you should have at least a basic idea on how to handle them.

For the most part, you deal with 16th notes in much the same way you handle eighth notes — they even look similar. In fact, the 16th note symbol looks almost identical to an eighth note symbol except it has an extra flag on its stem. Likewise, the 16th note rest symbol looks almost identical to an eighth rest symbol except it has an extra ornament sticking out of it.

Now, even though 16th notes and rests derive from subdividing eighth notes and are often used them to break them up, ultimately, you still want to mostly relate them back to quarter notes because so much of what happens in a measure revolves around quarter note equivalents.

So, in terms of note values, 16th notes and rests first and foremost, equal $\frac{1}{4}$ of a quarter note. They also equal $\frac{1}{2}$ of an eighth note, and it's pretty uncommon to relate them to anything else.

16th note and rest symbols



16th note =
 $\frac{1}{4}$ of a quarter note and
 $\frac{1}{2}$ an eighth note.

Four 16th notes equal
one quarter note.

Two 16th notes equal
one eighth note.



16th rest =
 $\frac{1}{4}$ of a quarter rest and
 $\frac{1}{2}$ an eighth rest.

Four 16th rests equal
one quarter rest.

Two 16th rests equal
one eighth rests.

Notes on further subdivision

In practice, it's pretty rare to come across 32nd notes in a lead sheet, and unless you were looking for them, you'll probably go your whole life without seeing a 64th or 128th note. But you should at least be able to identify them.

Each subdivision past 16th notes has one extra flag added to the stem of the note symbol and one extra ornament added to the rest symbol. So a 32nd note looks just like a 16th note, except it has three flags on its stem instead of two. Same idea for rest — three ornaments instead of two.

Even when it comes to counting 32nd notes and beyond, they need to be played so quickly that you're more likely to rely on "feeling" them than actually counting them. From here on out, we'll stick to 16th notes as the deepest level of subdivision you need to have a handle on.

counting 16th notes and rests

Since four 16th notes equal one quarter note, in 4/4 time, four sixteenth notes can cover one beat in a measure. When 16th notes are present, they're represented by a **number followed by the phrase, "e and a"** — with the "a" part pronounced "uh." For example, consider that a 4/4 measure with four quarter notes can be counted as **1 2 3 4**. Of course, when two eighth notes cover each beat, the measure is counted **1 and 2 and 3 and 4 and**.

But, when four 16th notes cover each quarter note equivalent, it's counted with the **16th note count** — **1 e and a 2 e and a 3 e and a 4 e and a**, with the number representing the first 16th note of the beat defined by the time signature, as well as the beat's starting point. Then, "e" marks the second 16th note, while the "and" and the "a" denote the third and fourth respectively. Keep in mind that since four 16th notes also equal two eighth notes, the number plus "e" equals one eighth note equivalent while "and" plus "a" equals another. These two eighth note equivalents, of course, add up to a quarter note equivalent.

Furthermore, just like eighth notes, when two, three or four 16th notes appear subsequently, their flags connect for readability purposes. Naturally, all these principles also apply to 16th rests because they're rhythmically, they're identical to 16th notes — they simply don't have an actual note attached to them.

Measures as covered by quarter, eighth and 16th notes

The diagram illustrates three measures of music in 4/4 time, each with a different note value and its corresponding count.

Measure 1: Covered by four quarter notes. The count is **1 2 3 4**. A bracket below the staff indicates "Measure 1 covered by four quarter notes".

Measure 2: Covered by eight eighth notes, two each per beat. The count is **1 and 2 and 3 and 4 and**. A bracket above the staff indicates "Equals equivalent of one quarter note" for the first two notes, and another bracket below the staff indicates "Measure 2 covered by eight eighth notes, two each per beat".

Measure 3: Covered by 16 16th notes, four each per beat. The count is **1 e and a 2 e and a 3 e and a 4 e and a**. Brackets above the staff indicate "Equals equivalent of one quarter note" for the first two notes, "Equals one eighth note equivalent" for the next two, and "Equals another eighth note equivalent" for the last two. A bracket below the staff indicates "Measure 3 covered by 16 16th notes, four each per beat".

an exercise for the 16th note count

To get a feel for counting 16th notes alongside quarter and eighth note counts, try this clapping exercise:

1. **Very slowly**, start counting a quarter note count out loud and repeatedly.
2. As soon as you feel able, start clapping on each number. Hold the tempo steady. Here is your **quarter note count**.
3. Next, stay on the same tempo and continue to count and clap quarter notes, but now, right in the middle of the space between numbered claps, say "and." Now, you're on the **eighth note count**.
4. Using the same tempo, stop saying "and," but continue to count and clap the numbers. Now, you've returned to quarters. Bounce between the quarters and eighths by adding and taking out the "and" a few times to get into a good rhythm.
5. Now, go back to quarters and stay there for a few measures to reset. It should go without saying at this point to not change the tempo. Once you're ready, say "e and a" between the numbers. Don't rush. If you clap and say "e and a" naturally, the four notes will cover, equally enough, each quarter note equivalent. Now, you're on the **16th note count**.

Note that if you can't fit "e and a" between claps, your initial quarter note count was probably too fast. Stop, take a breath and start with quarter notes again, this time at a much slower tempo. Then work your way back to 16th notes again.
6. Repeat step 4, but this time, add and take out the "e and a," switching back and forth between quarters and 16ths. As you get the hang of it, you can also switch back and forth between 16ths and eighths.

When you get really comfortable with this exercise, try counts that contain a mix of all three counts. Here's an example, but you can make up your own as well: **1 2 3 e and a 4 and REPEAT**. To do the exercise at a faster tempo, don't gradually speed up. Instead, stop, take a deep breath, pick a new tempo and start working fresh.

How to practice the quarter, eighth and 16th note counts in a sustainable way

At the end of the day, to become a solid musician, you'll eventually need to be able to switch between the quarter, eighth and 16th note counts seamlessly, while reading and playing. While the clapping exercise is useful to start with, really perfecting the skill comes from working with a metronome, which takes out all any uncertainty. So, set a metronome to 50 beats per minute (bpm). Clap, play something on an instrument, or simply count along to the clicks with your quarter note count. When ready, play, clap or count the "and" in between each click, the eighth note count and eventually, the "e and a" in between each click, the 16th note count. Work up to 120 bpm, but you should feel good about things at 80bpm.

16th notes and rests in action

Let's study a couple of measures that use 16th notes and rests in fairly typical ways. Something to note is that when both eighth and 16th notes appear next to each other within the same beat, they're connected by a thick line at the top of their stems. Over the 16th note portions of the beat, however, there's a second thick line below the first that represents the fact that 16th notes have two flags instead of the single one that eighth notes have.

Measures that contain 16th notes

Even though this is an eighth note, since there's 16th notes in beat, it's more intuitive to break this into two abstract 16ths. Play the note on the first abstract 16th and let it ring over the second.

Remember that eighth notes are represented by a number plus "and" so, here, we're breaking the "and" up into two abstract 16ths. Play the note on the first abstract 16th, represented by "and" and let it ring over the second, the "a."

Equals equivalent of one quarter note

Also equals equivalent of one quarter note, except with a mix of notes and rests.

One eighth note and two 16th notes equal a quarter note equivalent

Same idea as beat 1, except in this case, the 16th notes begin the beat

Measure 1 in this example is just straight ahead counting, with beat 1 being covered by two eighth notes and counted as **1 and**. Beat 2 is covered by four 16th notes, counted as **2 e and a**. Beat 3 starts with a 16th note that's followed by a 16th rest. That portion is counted **3 e**, and then that sequence is repeated to cover the rest of the beat, **and a**. Finally, a quarter note covers beat 4. The count for the entire measure reads **1 and 2 e and a 3 e and a 4**.

Measure 2 is where things can get confusing for an inexperienced reader. It starts with an eighth note that's attached to two 16ths. Now, there are multiple ways to process this, but most people would probably **split the eighth note into two abstract 16th notes** so that in total, you have four 16ths, which is more intuitive to count. The first abstract 16th takes on the **1** of the count, gets played on the instrument and rings over the second abstract 16th, which takes on the **e** of the count. Then, the two 16ths that follow both get played normally and are counted as **and a**. In general, when counting 16th notes gets complicated, it's best to simply break up any bigger notes into abstract 16ths because that will always make it more straightforward to count.

Continuing on with the second bar, beats 2 and 3 are both covered by quarter notes, and are counted as **2 3**. Beat 4 is simply a mirror of beat 1 — the two 16ths that start the beat are played normally and are counted as **4 e**, while the eighth note gets split into two abstract 16ths. The first abstract 16th takes on the **and** of the count, gets played on the instrument and rings over the second abstract 16th, which takes on the **a** of the count.

more on abstracting 16th notes

Between whole notes, half notes, quarters, eighths, 16ths and all their equivalent rests, there is practically an endless amount of ways to cover beats in a measure. And then of course, there's abstracting 16ths, which takes the whole process to another level. Here's an example of a measure with abstract 16ths. Keep in mind that when counting 16th notes gets complex, it's always more intuitive to split bigger notes into 16ths.

A measure containing abstract 16th notes

The first abstract 16th note is marked by "e." This beat, **the e of 3**, gets played on your instrument and rings over the second, third and fourth abstract 16ths.

The second abstract 16th.

The third abstract 16th, which completes beat 3.

The fourth abstract 16th, which starts beat 4.

The first abstract 16th note from this eighth note is marked by "e." This beat, **the e of 3**, gets played on your instrument and rings over the second abstract 16th.

The second abstract 16th.

Quarter note covers beat 1 neatly

Quarter note covers beat 2 neatly

Beat 3 starts with a 16th note, meaning we need to pull "e and a" from the following notes.

Since the next note is a quarter note, it gets split into four abstract 16th notes.

Since beat 4 starts with an abstract 16th, we need to pull "e and a" from the following notes, so this eighth note also gets split into abstract 16ths.

This 16th note brings the measure to even and ends it.

The measure in this example starts out with the first two beats each covered by a quarter note, counted as **1 2**. Beat 3 starts with a 16th note, but the next note is a quarter note that needs to be split into four 16ths to help finish off beat 3. The first abstract 16th covers the **e of 3**, gets played on an instrument and rings over the second, third and fourth abstract 16ths. The second abstract 16th takes on the **and of 3**, while the third one covers the **a** and completes the beat. The remaining abstract 16th starts beat 4, which means we again need to need to pull "e and a" from the following notes.

Now, the fact that the next symbol is connected to the one that follows it looks harder than it is — it's simply an eighth note followed by a 16th. To help finish off beat 4, the eighth note gets split into two abstract 16ths. The first abstract 16th covers the **e of 4**, gets played on an instrument and rings over the second abstract 16th, which takes on the **and of 3**. Finally, there's a 16th note that covers the **a**, which brings us back to even and ends the measure. The count for the whole measure is **1 2 3 e and a 4 e and a**, with notes actually getting played on the **1, 2, 3, 3 e, 4 e and 4 a** beats.

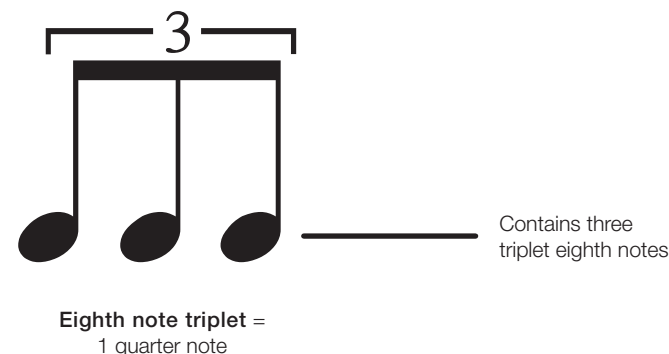
triplets

Far and away, it's most common to subdivide bigger notes either by two or four. But you can also subdivide them by three, the result of which is called a **triplet**. While any note can be subdivided into a triplet, mostly, you subdivide quarter notes. And though it makes little sense by name, when you turn a quarter note into a triplet, you end up with three eighth notes, each one called a **triplet eighth note**.

In music notation, a triplet made up of eighth notes — **eighth note triplets** — is indicated by three eighth notes tied together not only by a thick bar, but also by a bracket that's split down the middle with the number 3.

Ultimately, eighth note triplets are usually used collectively in relation to a quarter note. As such, a triplet's note value equals one quarter note.

Eighth note triplet symbol



Other types of triplets

Though you're unlikely to see them, a triplet made up of 16th notes — **16th note triplets** — is indicated by three 16th notes tied together not only by two thick bars, but also by a bracket that's split down the middle with the number 3. In fact, any note that's split into a triplet is made up of three notes from its first level of subdivision. For example, a half note can be subdivided into a triplet made up of quarter notes, and a 16th note can be subdivided into a triplet made up of 32nd notes. But really, anything beyond eighth note triplets is fairly advanced and not that common.



counting triplets

Eighth note triplets give music a "swing" and are staples of jazz and the blues. Considering how much those two styles have influenced almost every other kind of popular music, you're likely to come across them. While a full 4/4 measure counted with a basic eighth note count is **1 and 2 and 3 and 4 and**, a full measure counted with eighth note triplets is counted **1 triplet 2 triplet 3 triplet 4 triplet**. The number in the count accounts for the first eighth note of the triplet, while the "trip-" syllable accounts for the second, and the "-let" syllable marks the third.

Measures as covered by quarter notes, eighth notes, triplets and 16th notes

The diagram illustrates four measures of 4/4 time, each covered by a different note value. Each measure is shown on a single staff with a treble clef and a 4/4 time signature.

Measure 1: Covered by four quarter notes. The count is 1 2 3 4. A bracket below the staff indicates the measure is covered by four quarter notes.

Measure 2: Covered by eight eighth notes, two each per beat. The count is 1 and 2 and 3 and 4 and. A bracket above the staff indicates the measure is covered by eight eighth notes, two each per beat. A small bracket above the first eighth note indicates it is equal to one quarter note.

Measure 3: Covered by triplets, three eighth notes per beat. The count is 1 triplet 2 triplet 3 triplet 4 triplet. A bracket above the staff indicates the measure is covered by triplets, three eighth notes per beat. A small bracket above the first triplet indicates it is equal to one quarter note.

Measure 4: Covered by 16th notes, four each per beat. The count is 1 e and a 2 e and a 3 e and a 4 e and a. A bracket above the staff indicates the measure is covered by 16th notes, four each per beat. A small bracket above the first 16th note indicates it is equal to one quarter note.

triplets in action

If you've noticed, most of the time when you cover a measure, you use a combination of all the different note symbols to fill its beats. Now, we can add the triplet to the mix, which for all practical purposes is the final type of note symbol that you need to get down. And yes, a triplet would technically be considered one symbol — it's just made up of other note symbols. Let's look at some typical measures that contain triplets.

Measures that contain triplets

The first abstract eighth note is represented by "and." Play the note here and let it ring over the next abstract eighth.

The second abstract eighth note starts beat 2.

1 e and a 2 and 3 trip- -let 4

1 and 2 and 3 4 trip- -let

One eighth note only covers half of beat 1.

This quarter note gets split into two abstract eighth notes.

This eighth rest completes beat 2. Stop any ringing.

Beat 3 is unaffected and the quarter note covers the entire beat.

Beat 4 is unaffected and the triplet covers the entire beat.

In this case, measure 1 is straight ahead counting, with beat 1 covered by four 16th notes, counted as **1 e and a**. Then, two eighths cover beat 2, counted as **2 and**. Next comes a triplet on beat 3, counted **3 triplet**. Finally, a quarter note covers beat 4. The measure's full count is **1 e and a 2 and 3 triplet 4**.

Measure 2 starts with an eighth note counted as **1**, but is then followed by a quarter that needs to get split into abstract eighths to help complete beat 1. The first abstract eighth is counted as the **and of 1**, gets played on an instrument and rings over the second, which starts beat 2. Then, an eighth rest finishes beat 2 and squares up the count. That means beat 3, which is covered by a quarter note and beat 4, which is covered by a triplet can be counted normally. The measure's full count is **1 and 2 and 3 4 triplet**, with notes actually being played on **1, 1 and, 3**, as well as on each note of the triplet. Remember to stop any ringing on the eighth rest on the **2 and** beat. Also note that while triplets will definitely appear in measures that contain abstract notes, they'll almost never be a part of the abstraction. Technically, they probably could, but it's simply not a conventional way to use them.

triplets scenarios worth a mention

Though most of the time you'll see an eighth note triplet with three eighth note symbols, every once in a while, you'll see one mixed with note symbols and rests. Since an eighth rest has the same note value as an eighth note, rhythmically, you'll treat them the same way in a triplet as well. You just won't play a note during the rest portion of the triplet.

Even more rare, but worth the mention is an eighth note triplet that combines two of the eighth notes into a quarter note. Remember, ultimately two eighth notes equal a quarter note, not a mathematical value, so this is perfectly legal if not uncommon. The best way to handle this scenario is to break the quarter note into abstract triplet eighth notes and then count from there. Let's see these principles in action.

Measures that contain uncommon triplet variations

The first abstract triplet eighth note is represented by "3." Play the note here and let it ring over the next abstract triplet eighth, represented by the "trip-" syllable.

The second abstract triplet eighth, represented by the "trip-" syllable.

Play a note on "3," stop any ringing and rest on "trip-" and then play the note on "-let."

This quarter note gets split into two abstract triplet eighth notes.

This triplet eighth note gets played normally.

In this example, beat 3 in measure 1 contains an eighth note followed by an eighth rest and then another eighth note. In this case, you would play whatever note is represented by the first eighth note on the **3** of the triplet, then over "trip-" you would stop any ringing, account for the rest and then play the note that's represented by the third eighth note over "-let."

Beat 3 in measure 2 on the other hand, starts with a quarter note and finishes with an eighth, so you would start by breaking up the quarter note into abstract triplet eighth notes. The first would be counted as **3**, get played on an instrument and then would ring over the second abstract triplet eighth, represented by the "trip-" syllable. Then, triplet eighth note over "-let" would get played normally to close out the triplet.

dotted notes and rests

While note symbols and rests offer a lot of flexibility for how long to play — or even not play pitches — in their purest state, they do have limitations.

Consider the fact that you can cover the space of two quarter notes with one half note and four with a single whole note. But because we subdivide notes in multiples of two, note symbols don't naturally offer a way to cover three quarter notes with one single note, a limitation that's consistent across the board — there's no natural way to cover three eighth or 16th note equivalents with a single note, either.

As a solution, there's a special symbol for situations when you want to cover three note symbol equivalents with one single note — the **dotted note**, which simply looks like a note symbol with a dot to its right.

A dotted note technically means to **take the note's note value, divide it in half and add the result to the original note value**.

But, really, working with dotted notes is very similar to the idea of working with abstracting notes, and actually, **in practice, most people would see a dotted note and automatically split it into three abstract notes from the next level of subdivision below it**, which is a more straightforward approach.

For example, a dotted half note equals three abstract quarters because a quarter note is the next level of subdivision after a half note. Likewise, a dotted quarter equals three abstract eighths, and a dotted eighth equals three abstract 16ths.

For the most part, **you're most likely to only see dotted half, quarter and eighth notes**. Anything else is uncommon and advanced. Also keep in mind that just like any other time you break bigger notes into abstract smaller notes, the first abstract note gets played on an instrument and then rings over the rest.

Now, of course, due to the nature of how rests work, if you can dot notes, you can also dot rests, and all the same principles apply.

Common dotted notes and rests



Equals the equivalent of three quarter notes



Equals the equivalent of three eighth notes



Equals the equivalent of three 16th notes

basic usage of dotted notes and rests

Here are some measures that include common ways dotted notes and rests are used. As a rule of thumb, when you **see a dotted note**, **automatically split it into three abstract notes from the next level of subdivision and then work out the count from there**. Also remember that the first abstract note gets played on an instrument and then rings over the rest of the abstract notes.

Measures that contain basic usage of dotted notes and rests

This eighth gets the count back to even by covering the **and** portion of beat 2.

This 16th note gets the count back to even by covering the **a** portion of beat 3.

Dotted half note equals three abstract quarter notes, which in this case, cover beats 1-3.

Dotted eighth equals three abstract 16ths notes, which in this case, cover the **4 e and** part of beat 4.

This 16th note gets the count back to even by covering the **a** portion of beat 4.

Dotted quarter equals three abstract eighths, which in this case, cover the **1 and 2** part of beat 1.

Dotted eighth rest equals three abstract 16th rests, which in this case, cover the **3 e and** part of beat 3.

Measure 1 of this example starts with a dotted half note, which, since it equals three quarter notes, can neatly cover beats **1, 2 and 3**. Then, there's a dotted eighth, which gets split into three abstract 16ths that are counted as the **4 e and** part of beat 4. Of course, you would play the actual note on the **4** portion of the count and let it ring over the **e and** part. A 16th note closes out the bar by covering the **a** portion of beat 4. The full count of measure 1 is **1 2 3 4 e and a**, with notes getting played only on **1, 4 and the a of 4**.

Measure 2 starts with a dotted quarter note, which automatically gets split into three abstract eighths that are counted as **1 and 2**. The actual note gets played on the **1** portion of the count, and rings over the **and 2** part. Then, there's an eighth note that completes beat 2 as the **and** portion of the beat. Beat 3 starts with a dotted rest, which gets split into three abstract 16th rests that are counted as the **3 e and** part of beat 4. Since it's a rest, nothing should be played over this portion of beat 3. A 16th note follows the dotted rest, which closes out beat 3. Finally, there's a quarter note handling beat 4 that cleanly completes the measure.

The full count of measure 2 is **1 and 2 and 3 e and a 4**, with notes getting played only on **1, the and of 2, the a of 3 and 4**.

abstractions that include dotted notes

Because dealing with dotted notes starts with an abstraction, it's possible to run across some pretty complex situations. In fact, you might even have to abstract smaller notes from bigger abstract notes. Now, most of the time, dotted notes are used to make things easier to read as opposed to hard to think through and process, but it's worth working through something difficult so you're prepared for anything you encounter. Let's study a bar with a couple of complex abstractions. Realistically, if you can handle something like this measure, well, this is some pretty advanced counting.

Measures that contain basic usage of dotted notes and rests

The diagram illustrates a 4/4 measure with the following notes and rests: Beat 1: Quarter note. Beat 2: 16th note, followed by a dotted eighth note, and then a 16th note. Beat 3: 16th note, followed by a dotted quarter note. Beat 4: 16th note. The annotations explain the abstraction process: Quarter note starts beat 1. A 16th note starts beat 2. As a dotted eighth, this gets abstracted to three 16ths, which cover the **e and a** part of beat 2. No further abstraction needed. A 16th note starts beat 2. Abstract eighths from the dotted quarter. Abstract 16ths that come from the dotted quarter's abstract eighths. As a dotted quarter, this typically gets abstracted to three eighths, but we need to turn them into six 16ths because a 16th started the beat. The first three 16ths cover the **e and a** part of beat 3 to complete it. The fourth abstract 16th starts beat 4. The last two cover the **e and** portion of beat 4. A 16th finishes beat 2.

The bar in this example starts off easy enough with a quarter note. Then, a 16th starts off beat 2, which signals that unless the following three notes are also 16ths, we can expect to start abstracting a bigger note into smaller ones to help complete the beat. But since the following note is a dotted eighth, it gets split into three abstract 16th notes anyway, which happen to neatly cover the **e and a** portion of beat 2 to finish it off.

Beat 3 also starts with a 16th note, but it's followed by a dotted quarter note. This presents an issue because dotted quarter notes become abstract eighths, yet since the beat started with a 16th note, we need abstract 16ths to help complete beat 3. **Realistically, the best way to really handle this situation is to take all three abstract eighths and further abstract them down to six abstract 16ths.** The first three cover the **e and a** portion of beat 3 to complete that beat, while the fourth abstract 16th starts beat 4. Then, the last two cover the **e and** portion of beat 4, while an actual 16th covers the **a** portion of the beat to complete it as well as the entire measure.

Keep in mind that even though dotted rests weren't part of this example, if they had been, none of the principles would change.

ties

A dotted note is ultimately a symbol that represents a manipulation of a note symbol's note value. Another symbol that conveys a note value manipulation is a **tie**, which looks like a curved line that connects two notes of the same pitch.

When notes are tied, it means to play the first one on an instrument and let it ring over the timeframe of the second. Note that since the notes have the same pitch, they'll reside on either the same line or in the same space on the staff.

For example, take two quarter notes tied together on the bottom line of the staff at the beginning of a measure in 4/4 time. In this situation, you would play the quarter note on beat 1 and then let it ring over the second quarter note that represents beat 2.

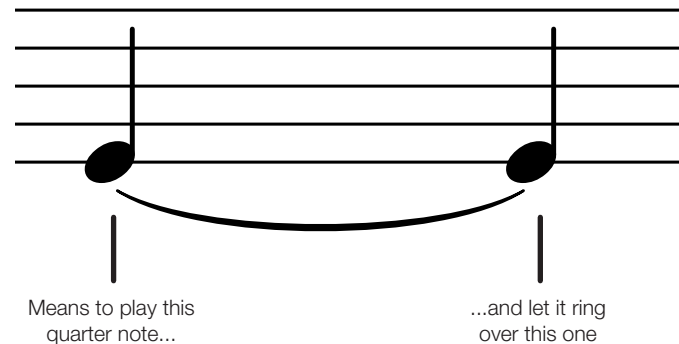
Now, you might pick up on the fact that a half note does the same thing, and in fact, ties function similarly to bigger note symbols as well as dotted notes. But ties have major distinctions from them in that they can connect any combination of notes and can also span multiple measures, which makes them a lot more flexible.

That being said, even though ties can be used within a bar, mostly, you'll see them used to cross between multiple bars.

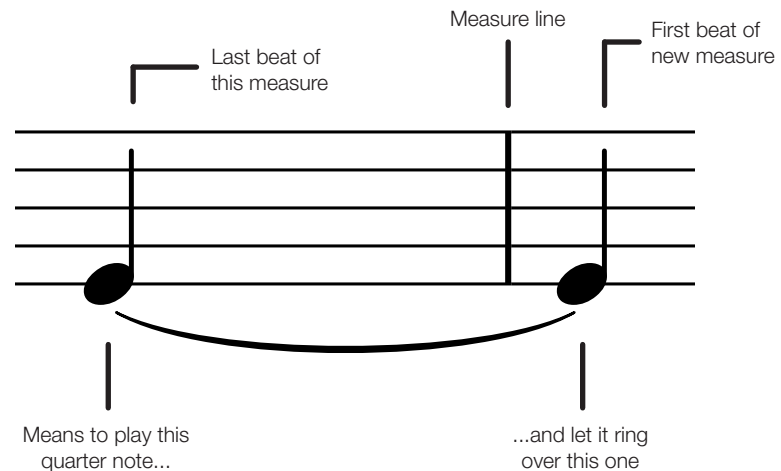
For example, take two quarter notes tied together on the bottom line of the staff, but this time, one represents beat 4 of one 4/4 measure, and the other represents beat 1 of the next measure.

In this situation, you would play the note represented by the quarter note on beat 4 in the first measure, and then let it ring over the quarter note that covers beat 1 of the next.

Ties within a measure



Ties that cross measures



ties in action

Let's take a look at a couple measures that contain ties.

Measures that contain ties

1 2 e and a 3 4 1 2 3 4

Means to play this quarter...

...and let it ring over this 16th.

This dotted eighth equals three abstract 16ths notes, which cover the **e** and **a** part of beat 2.

Play this quarter that completes measure 1...

...and let it ring over this quarter that starts measure 2.

Measure 1 of this example starts off with a quarter note tied to a 16th, so you'd play the note represented by the quarter, and then let it ring over the 16th. This is a practical usage of the tie within a measure because neither a note symbol nor a dotted note intuitively can instruct you to play a note once to cover what is in effect, five 16th notes — the four that could be theoretically abstracted from the quarter plus the 16th that starts beat 2.

This usage shows a major function of a tie — to handle situations that note symbols or dotted notes can't. From there, the dotted eighth following the tied 16th becomes three abstract 16ths that help finish beat 2, and then a quarter note covers beat 3.

Now, beat 4 of measure 1 also contains a quarter, but it's tied to another one that starts measure 2. Here, you would play the note represented by the quarter on beat 4 in measure 1, and then let it ring over the quarter that covers beat 1 of measure 2. One way or another, this usage is probably the most common way you'll encounter tied notes. Continuing on with the measure, a quarter note covers beat 2, and then a half covers beats 3 and 4.

Keep in mind that ties are just another counting tool, and you're bound to run across situations that include rests, abstractions, triplets and all the rest.

slurs

While a tie symbol links two notes of the same pitch, a **slur** symbol links notes of different pitches. Slur symbols look identical to tie symbols except because of the fact that they connect notes with different pitches, they'll connect notes that reside on different lines or in different spaces of the staff.

But even though a slur looks like a tie, it actually doesn't affect the timing of note symbols at all — it essentially means to play both notes, but use some type of embellishment on your instrument to connect them as seamlessly as possible. A classic example of this is when string players slide from one note to another. Ultimately, when you see a slur, don't modify the timing of the notes — simply use whatever embellishment tricks that are appropriate for your instrument to connect the pitches in a creative way. Let's take a look at a couple examples of a slur.

A measure containing slurs

The image shows a musical staff in 4/4 time with a treble clef. The measure contains five notes: an E quarter note on beat 1, an F quarter note on beat 2, an eighth note E on beat 3, a quarter note F on beat 3, a quarter note G on beat 3, and an E quarter note on beat 4. Slurs are placed over the E-F pair, the E-F-G triplet, and the F-G pair. A thick black line is drawn over the E-F-G triplet. Vertical lines connect the notes to their respective counts: E 1, F 2, E 3, e, F and, G a, E 4. Annotations provide performance instructions: 'Play this E note on beat 1...', '...and use an embellishment trick to connect it to the F on beat 2, which gets played as well.', 'Play this E note on beat 3...', '...use an embellishment trick to connect it to the F on 2 and.', '...and then connect that to the G on 2 a.', and 'Play this normally.' A bracket above the triplet notes states: 'This is an eighth note, but since 16th notes follow it, it's best to break it into abstract 16ths.'

While the presence of slurs can bring some pause in inexperienced readers, the reality is that nothing fundamentally changes as you read measures — the counting stays the same. In this example, beat 1 is a quarter note that represents an E. That's followed by an F quarter note that covers beat 2. The fact that they are joined by a slur simply means to play both notes, but use an embellishment trick to connect them creatively.

Beat 3 starts with an eighth note, followed by two 16ths. For ease of counting, it's best to abstract the eighth into two 16ths. Now, the E represented by the eighth covers the **3 e** portion of the beat while the two 16ths cover the **and a**. Each note of beat 3 gets slurred, from the E to the F, and then the F to the G. Finally, there's an E quarter note on beat 4 to finish the bar. The entire count is **1 2 3 e and a 4**, with notes getting played on beats **1, 2, 3, 3 and, 3 a** and 4.

barlines and measure numbers

Up to this point, we've used measure lines to mark the end of a measure, which fall into a category of symbols called **barlines**.

The primary function of barlines is to mark some type of ending. When a musical section ends, the measure line at the end of a bar is replaced by a **double barline** that looks like two measure lines sitting next to each other.

While this double barline doesn't have a specific name, it's best described as a **section line**.

For example, a song such as "The Muffin Man" has two distinct sections; the first half of the song is a question and the second is an answer. So, it would make sense to expect a section line at the end of the question part of the song.

Another place you'll find a double barline is at the end of a piece of music, except this one looks like a thin line followed by a thick line. Again, this barline doesn't have a specific name, but it's best described as an **ending line**.

If you can imagine, once bars become sections of music and then, entire pieces, keeping your place within the lead sheet can start to get challenging. Of course, since measures are referred to by number, they can also be marked by number in notation. This is typically done at the beginning of each new line of music. Unfortunately, if you need to know a measure by number in the middle of the line, you need to count, but at least you have a reference point.

Full lead sheet for "The Muffin Man"

The Muffin Man

The lead sheet for "The Muffin Man" is presented in four staves of music. Each staff begins with a treble clef and a 4/4 time signature. Chord symbols (C, Dm, G) are placed above the notes. The lyrics are written below the notes. Annotations with arrows point to specific barlines and measure numbers.

Staff 1: C Dm G
Do you know the muf - fin man, the muf - fin man, the muf - fin man?

Staff 2: 5 C Dm G C C
Do you know the muf - fin man who lives on Dru - ry Lane? Yes, I know the

Staff 3: 10 Dm G C
muf - fin man, the muf - fin man, the muf - fin man. Yes, I know the

Staff 4: 14 Dm G C
muf - fin man who lives on Dru - ry Lane.

Annotations:

- Basic measure line:** Points to a single vertical barline at the end of the first staff.
- Double barline with identical thin lines marks the end of a piece of musical section:** Points to a double barline at the end of the second staff.
- Measure number indicates the number of the first bar of a new line of music:** Points to the measure number '5' at the start of the second staff.
- This is measure 12, based on the reference point at the beginning of this line of music:** Points to the twelfth measure of the third staff.
- Double barline with a thin line followed by a thick line indicates the end of a piece of music:** Points to the ending barline at the end of the fourth staff.

measures in 3/4 time

While most lead sheets convey songs in 4/4 time, there are other time signatures you'll also need to have a handle on. That said, once you get familiar with all the big-picture things that can happen in 4/4, measures in other time signatures aren't going to look much different — they can all feature abstraction, dotted notes, triplets, ties, slurs and of course, all the different note symbols. Ultimately, the main difference between them is how they're counted.

After 4/4, perhaps the next most common time signature is 3/4, which is colloquially known as **waltz time** because songs in that style of music are almost always written in that timing. The only difference between 4/4 and 3/4 is that the 3/4 time signature calls for measures to be divided into three quarter note equivalents instead of four. That means that instead of the quarter note count being **1 2 3 4**, it's **1 2 3**. Let's count up some 3/4 measures.

Measures in 3/4 time

Means a full measure equals three beats, each filled with the equivalent of one quarter note

A whole note doesn't work to cover a full measure in 3/4 because a whole note is worth four quarter notes, which is too many for the rules. But a dotted half equals three quarters.

1 2 3 triplet -let 1 2 and 3 e and a 1 2 3

The image shows a musical staff in 3/4 time with three measures. Measure 1 contains a quarter note, a quarter rest, and a triplet of eighth notes. Measure 2 contains a quarter note, two eighth notes, and four sixteenth notes. Measure 3 contains a dotted half note. Below the staff, the beats are counted: 1, 2, 3 for the first measure; 1, 2, 3 for the second measure; and 1, 2, 3 for the third measure. Annotations explain that a full measure equals three beats and that a dotted half note equals three quarters.

The 3/4 time signature means that full bars equal three beats, each filled with the equivalent of a quarter note. Measure 1, here, starts with a quarter note for beat 1, followed by a quarter rest for beat 2. Then, a triplet covers beat 3. Since we're in 3/4 and not 4/4, this bar is done and counted as **1 2 3 triplet**. Measure 2 starts with beat 1 covered by a quarter, while two eighths handle beat 2. Then, four 16th notes cover beat 3 and end the bar. Measure 2 is counted **1 2 and 3 e and a**. Measure 3 has a dotted half note, which equals three quarter notes, ending the bar by itself. Count measure 3 simply as **1 2 3**.

The dotted half note in 3/4 time

Something to note about measure 3 is that if you go back to 4/4 time, the note that can cover an entire measure is a whole note. But the purpose of a whole note is often misunderstood. Despite its name, a whole note does not equal a whole measure. A whole note equals four quarter notes, which happens to cover a whole measure in 4/4 time. In 3/4, however, the time signature states that at most, you can only have three quarter notes in a measure, so a whole note isn't available for use because it equals too many quarter notes. That means in order to cover three quarter note equivalents and thus, an entire 3/4 measure, you need to find a different solution, and the dotted half note, because it equals three quarters, does the trick.

measures in 2/4 time

In 2/4 time, full bars equal only two beats, and each still gets filled with quarter note equivalents. It's counted simply as **1 2**. Let's study a few 2/4 measures.

Measures in 2/4 time

Play the 16th note represented by the **a of 4** from measure 2 and let it ring over the eighth note that marks the **1** of measure 3.

The musical notation shows four measures in 2/4 time. Measure 1 contains two quarter notes, counted '1 2'. Measure 2 contains a triplet of eighth notes (counted '1 trip-') followed by an eighth rest and an eighth note (counted '-let'). Measure 3 contains four 16th notes (counted '1 e and a') tied to the eighth note of measure 2, followed by a dotted quarter note (counted '1 and 2 and'). Measure 4 contains a single half note (counted '1 2').

It hardly gets more straightforward than measure 1 in this example, which is complete with two quarter notes. Then, a triplet covers beat 1 of measure two. Note that the triplet in this case contains a eighth rest between two eighth notes. Then, four 16ths close out the bar, with the note played on the **a of 4** tied to the eighth note that begins measure 3. Of course, this means to play the note represented by **4 a** in measure 2, and then let it ring over the **1** in measure 3. After the tied eighth note, there's a dotted quarter that gets split into three abstract eighths that are counted as **and 2 and**, and complete measure 3.

Measure 4 features a standalone half note that equals two quarters, so it works to complete the measure by itself. Keep in mind that a whole note wouldn't work to cover this measure because the time signature requires only two quarter note equivalents, and a whole note equals four, which would be too many.



measures that don't count quarters

Up to this point, in all the measures we've studied, we've counted quarter note equivalents. In 4/4, we count up four of them, in 3/4, there are three and in 2/4, there are two.

But time signatures can also instruct us to count up the equivalents of other notes.

In cases like this, your counting system, which includes a numbers, "and" and "e and a" shift to align with whatever note symbol equivalent is called for by the time signature.

Take, for example 2/2 time, which essentially means that measures are divided by two, but the equivalent of a half note fills the beat.

Whereas in 4/4 time, the quarter note level of subdivision takes on the number portion of the count, the eighth note level is indicated by "and," and then "e and a" depicts 16th notes, in 2/2 time, things are shifted. In 2/2, half notes take on the number portion of the beat because that's the note equivalent you're instructed to count. From there, the other counting elements fall into place by subdivision level.

So, in 2/2, "and" indicates the presence of quarter notes, which only cover half of a 2/2 measure, and "e and a" depicts eighth notes, which only cover a quarter of a 2/2 measure.



the difference between 2/2 and 4/4

The difference in the sound between 2/2 and 4/4 are very subtle, and their measures can even look identical. In more traditional settings, 2/2 time is actually pretty common, and it even has a nickname, "**cut time**," which indicates that it basically cuts 4/4 time in half. At faster tempos, cut time can be easier to count, and it also cuts down on the amount of notes that have to be read. Consider that a typical 4/4 bar can contain up to 16 16th notes, but when you shift the counting system to half notes and your lowest subdivision level is eighth notes, the most notes you can have in a 2/2 bar is eight.

The similarities between 2/2 and 4/4 can be very confusing for inexperienced readers, and it doesn't help that some people even count 2/2 simply as 4/4 at a faster pace. Realistically, it's better forget about the similarities and simply follow the time signature's instructions. Let's compare the differences between 4/4 and 2/2, which is often shown with a "C" symbol that has a slash running through it as the time signature, as opposed to the "2/2" symbol.

Measures in 4/4 time

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

Since we're counting quarter note equivalents, the counting system starts with quarter notes. Then, eighth notes are represented by "and," while 16th notes are represented by "e and a."

Same measures, but in 2/2 time, also known as cut time

Half note covers beat 1 Half note covers beat 2 Half note covers beat 1 This quarter only covers half of beat 2... and this one covers the other half. Half note covers beat 1

1 2 1 2 and 1 2 e and a

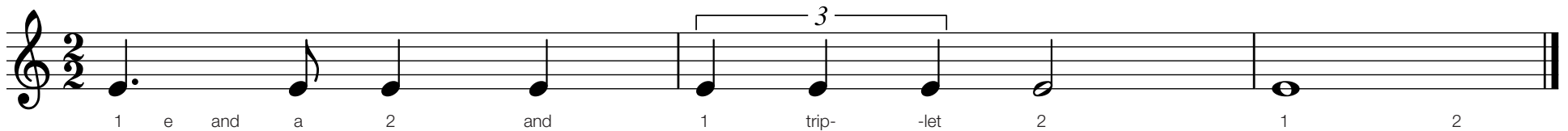
Now we're counting half note equivalents, so the counting system shifts to start with half notes. Then, quarter notes are represented by "and," while eighth notes are represented by "e and a."

The quarter covers half of beat 2, but since eighth notes are present in this beat, and they're counted as "e and a," it's best to split that quarter into abstract eighths for easier counting. The first abstract eighth takes on the 2, and rings over the second, marked by **e**. Then, the two eighth notes written are played normally and counted as **and a**.

cut time in action

Let's study a few cut time bars. Keep in mind that in 2/2 time, half notes take on the number portion of the count, while "and" indicates the presence of quarter notes, and "e and" marks the presence of eighth notes.

Measures in 2/2 time



Measure 1 of this example starts with a dotted quarter note that would automatically get split into three abstract eighth notes. Since eighth notes are counted as "e and a," those three abstract eighths are counted as **1 e and**. Then, another eighth note follows and is counted as **a** to finish beat 1. Beat two is covered by two quarter notes, which add up to a half note. The entire measure is counted **1 e and a 2 and**.

A triplet of quarter notes begins measure 2 and is counted **1 triplet**. That's followed by a half note that covers beat 2 and ends the measure. Measure 2 is counted **1 triplet 2**. Measure 3 features a standalone whole note, which works to cover the entire measure in this case, because a whole note's note value equals four quarter notes, which also equals two half notes — exactly what we need to satisfy the time signature's requirements.

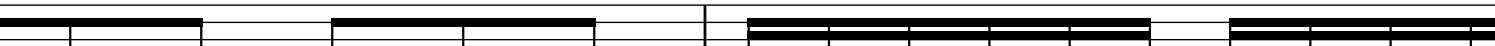


6/8 time

For practical purposes, besides 2/2 time, the only other non-quarter note based time signature that you should be familiar with is **6/8 time**. The 6/8 time signature means that measures are divided into six beats, which each beat being filled by the equivalent of eighth notes.

Similar to the way you handle cut time, in 6/8 time, the eighth note level of subdivision gets the number part of the count because that's what you're instructed to count, while 16th notes are marked by "and." Now, in theory, "e and a" would depict 32nd notes, but since those are pretty uncommon, you can pretty much forget "e and a" in 6/8 time. That means, all you're using to count in 6/8 are numbers for eighth notes and "and" for 16ths.

Measures in 6/8 time



1 2 3 4 5 6

1 and 2 and 3 and 4 and 5 and 6 and

Here, we're counting eighth note equivalents, so the counting system shifts to start with eighth notes. Then, 16th notes are represented by "and," while 32nd notes are represented by "e and a." But since we don't really use 32nd notes, you can pretty much forget about them in 6/8 time.



6/8 time in action

Let's study a few bars in 6/8 time. Keep in mind that in 6/8, eighth notes take on the number portion of the count, while "and" indicates the presence of 16th notes. In practice, you won't usually need to use "e and a" in 6/8 time.

Measures in 6/8 time

The image shows four measures of music in 6/8 time on a single staff. Measure 1 contains a quarter note (beats 1-2), an eighth note (beat 3), and a dotted quarter note (beats 4-5-6). Measure 2 contains an eighth note (beat 1), two 16th notes (beat 2), an eighth note (beat 3), and two 16th notes (beat 4). Measure 3 contains a triplet of 16th notes (beats 1-2), an eighth rest (beat 3), an eighth note (beat 4), a quarter note (beats 5-6), and a dotted half note (beats 7-9). Measure 4 contains an eighth note (beat 1), two 16th notes (beat 2), an eighth note (beat 3), and two 16th notes (beat 4). The counts are written below the staff: 1 2 3 4 5 6 for measures 1 and 2, and 1 triplet 2 3 4 5 6 and 1 2 3 4 5 6 for measures 3 and 4.

Measure 1 of this example starts with a quarter note, which of course, equals two eighths and takes up the **1 2** portion of the count. Then, an eighth note takes up the **3**, while a dotted quarter note split into three abstract eighths to cover the **4 5 6** part of the count. Measure 2 starts with an eighth that's followed by two 16ths and then another eighth. That part of the bar is counted as **1 2 and 3**. The rest of the bar, two eighths followed by two 16ths is counted as **4 5 6 and**. Measure 2's count in its entirety is **1 2 and 3 4 5 6 and**.

Measure 3 begins with 16th note triplets followed by an eighth rest and then another eighth note. That portion of the beat is counted as **1 triplet 2 3**. Then, there's a quarter note that takes up the **4 5** portion of the count, while two 16ths cover **6 and**. Also, the **and of 6** in measure two is tied to a standalone dotted half note that takes up all of measure 4. So basically, that **6 and** note, will get played and then ring over all of measure 4.

Note that a dotted half note works to cover all of measure 4 because a dotted half note equals three quarter notes, each of which can be split into two eighth notes. In total, those eighth notes add up to six eighth notes — exactly what we need to satisfy the time signature's requirements.

pickup measures

Usually, each bar of a lead sheet will follow the time signature's count perfectly, but there is one exception. Many songs start with a partial bar whose notes serve as a brief lead in to the main part of the melody, called a **pickup measure**. A pickup measure is considered to be an unofficial measure, and **the bar that follows it is recognized as the piece's first measure**. As an example, check out the first line of the song, "My Bonnie Lies Over the Ocean."

First line of "My Bonnie Lies Over the Ocean"

Partial bar, called a pickup measure.
This is an unofficial measure.

This is considered the
first bar of this song.

My Bon - nie lies o - ver the o - cean, _____ my

Pickup measures start off so many songs that you absolutely have to know how to handle them. While it's mostly unclear as to how or why pickup measures came about — not to mention why some songs have them and others don't — what's very apparent is that songs that do have them simply don't work without them. Think about it, without the word, "My" before "Bonnie," the first line of "My Bonnie Lies Over the Ocean" just doesn't sound right.

pickup notes and how to count them

While pickup measures don't seem to follow the time signature's parameters, they actually do in an abstract way. In fact, instead of looking at one as a partial bar, it's better to think of it as **a full bar that has abstract rest symbols preceding the actual notes it contains**, which are called **pickup notes**.

As such, all pickup notes in a pickup measure are counted backwards from the end of the time signature's count. For example, in "My Bonnie Lies Over the Ocean," since there's one pickup note — a quarter note — and the time signature indicates a count of three quarter notes for complete measures, you can deduce that the pickup note happens on beat 3 of the measure. You can also presume that two abstract quarter rests precede it in order to fill out the bar.

So to actually play the pickup measure in this song, you would count the two abstract rests as **1 2**. Then, you would play the pickup quarter note on **3** while singing the word, "My." From there, the syllable "Bon-" is the first note of the first official measure, and you're into the main part of the song.

First line of "My Bonnie Lies Over the Ocean"

The first two beats of this pickup measure are represented by abstract quarter rests and are counted **1 2**.

This pickup note is played on beat 3 of the pickup measure.

Pickup measure, which still adheres to the time signature's parameters.

This is considered the first bar of this song.

counting pickup measures in a nutshell

Counting a pickup measure basically requires you to reconstruct it as a full measure by counting backwards. Each pickup note gets played and takes on some portion of the back end of the count, and anything before the first pickup note is some kind abstract rest note that helps fill out the bar.

The result is a complete bar that starts with abstract rests and ends with the pickup notes. Working from a complete bar rather than a partial one is not only more intuitive, it also removes any uncertainty about where to actually start the song.



another pickup measure example

Let's study the pickup measure in the song, "You Are My Sunshine," which is about as complex as pickup measures typically get.

First line of "You Are My Sunshine"

Since the first pickup note of the measure represents the **and of 3** portion of the count, an abstract eighth rest is needed to complete beat 3. It's counted as the **3** portion of the count.

As another eighth note, this takes on the **and of 3** portion of the count.

As another eighth note, this completes beat 4 and takes on the **4** portion of the count.

This is the note you start counting backward from. Since the time signature is 4/4 and this is an eighth note, it takes on the **and of 4** portion of the count.

Two abstract quarter rests fill out the measure and take on the **1 2** portion of the count.

Pickup measure

This is considered the first bar of this song.

1 2 3 and 4 and C

You are my sun - shine, my o - nly sun - shine. You make me

To reconstruct this song's pickup measure as a full bar, start by noting that the time signature requires the equivalent of four quarter notes for complete measures. Then, work backwards from the last pickup note, which coincides with the word, "my." This pickup note is an eighth note and takes on the **and of 4** portion of the count. The next note to deal with is the one that's represented by the word, "are." This is another eighth note, so it completes beat 4 and takes on the **4** portion of the count. Then, you reach the first pickup note, which is also another eighth note. It takes on the **and of 3** portion of the count.

Since the first pickup note of the measure represents the **and of 3**, an abstract eighth rest is needed to complete beat 3. It's counted as the **3** portion of the count. From there, two abstract quarter rests fill out the measure and take on the **1 2** portion of the count.

The full count of the pickup measure is **1 2 3 and 4 and**, and you would start singing and playing this song on the beat represented by the **and of 3**.

adding the chord to a pickup measure

For some reason, pickup measures almost never have a chord shown above them in a lead sheet. But that doesn't mean a chord can't be played over them, and in fact, there's actually plenty of good reasons to know which chord should go over the pickup measure.

For instance, you might want to use a chord to help give you head start into playing the song or, you might want to repeat the song, which requires you to connect the ending back to the beginning.

In any case, if there's no other information in the lead sheet that pertains to the pickup notes, you can **simply use the last chord of the song over the entire pickup measure.**

For example, in "My Bonnie Lies Over the Ocean," a C chord can be used over the pickup measure because C is the song's last chord.



Full lead sheet for "My Bonnie Lies Over the Ocean"

You can play a C chord over this pickup measure because C is the last chord of the song.

My Bon - nie lies o - ver the o - cean, my

5 Bon - nie lies o - ver the sea, My Bon - nie lies

10 o - ver the o - cean, oh bring back my

14 Bon - nie to me, Bring back, bring

20 back, bring back my Bon - nie to me, to me!

25 Bring back, bring back, oh bring back my

30 Bon - nie to me!

Last measure played with a C chord, which carries over from the prior measure.

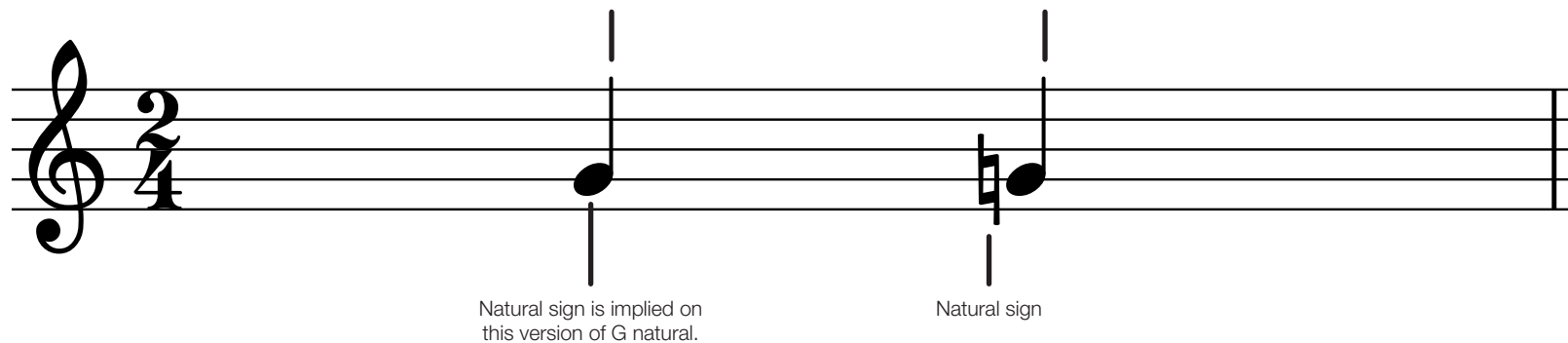
natural notes

By default, note names represented by standalone letters reflect the notes that reside on the lines and spaces of the staff. In music, when a note is represented by a standalone letter, it's known as the **natural** state of the note — simply "natural," for short.

For example, the G that resides on the second line from the bottom of the staff is actually technically referred to as **G natural**. But in practice, using the natural state of a note happens so frequently that the word, "natural," is typically dropped from the name and implied.

Likewise, the music notation symbol that indicates a natural, called a **natural sign**, is also usually implied and only used when necessary. A natural sign kind of looks like a capital letter L connected to an upside down capital letter L and sits to the left of the note's head.

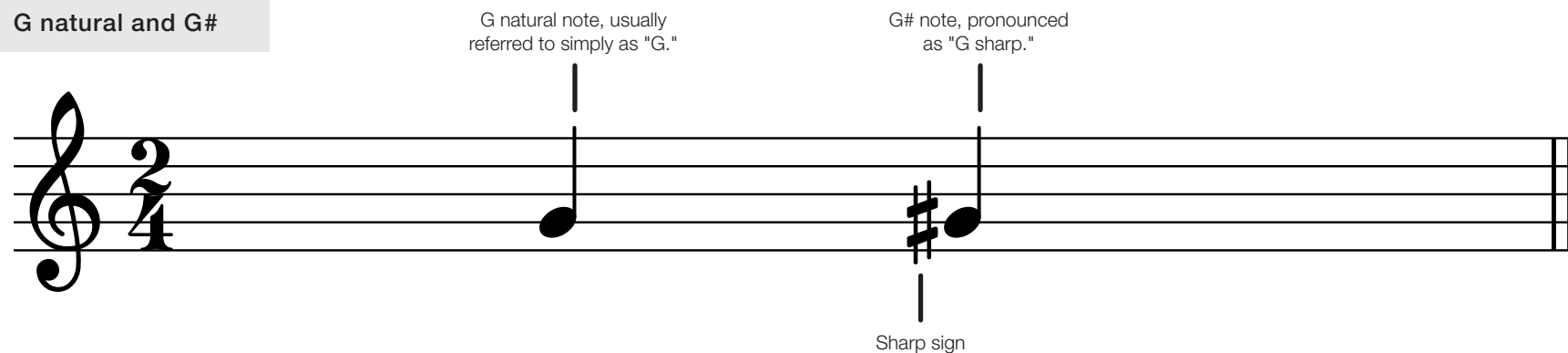
G natural note



sharp and flat notes

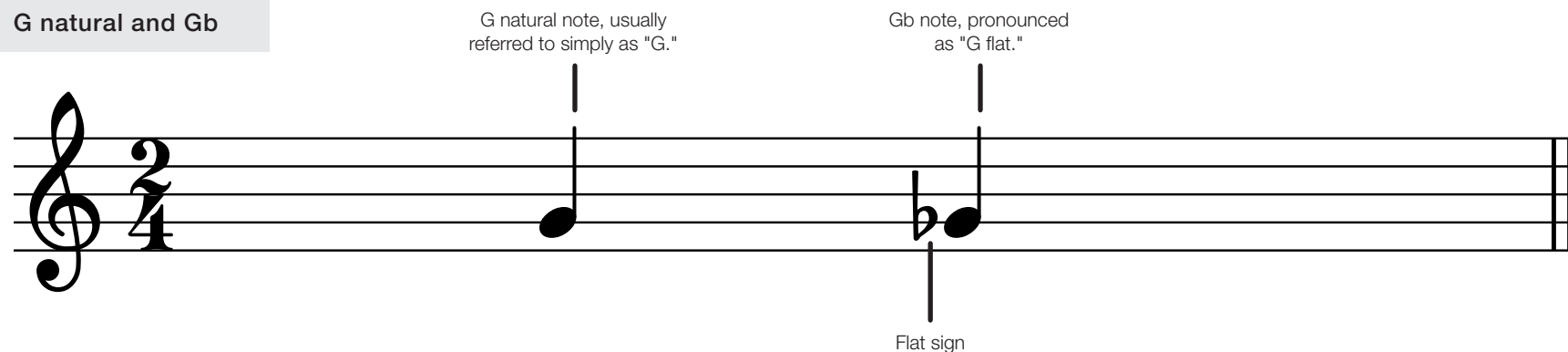
There are two other states of notes besides the natural one — **sharp** and **flat**. Notes in the sharp state are indicated by a letter along with a symbol that looks like a pound or hash sign — called a **sharp sign** — that means "sharp." For example, a G in the sharp state would be read as G# and pronounced, "G sharp." In music notation, sharp notes are marked with a sharp sign that sits to the left of a note symbol, so a G# on the staff, would look exactly like an unimplied G natural note, except instead of a natural sign, it would have a sharp sign.

G natural and G#



Notes in the flat state are shown as a letter along with a symbol that looks like a lowercase letter "b" — called a **flat sign** — that means "flat." For example, a G in the flat state would be read as Gb and pronounced, "G flat." In music notation, flat notes are marked with a flat sign that sits to the left of a note symbol, so a Gb on the staff, would look exactly like a G# note, except instead of a sharp sign, it would have a flat sign.

G natural and Gb



first steps in knowing how notes work

While notes of different states might share a letter, it's important to know that they represent three different sounds, and in all practicality are not related in any obvious way.

We've now reached the point with music notation that having a little context about how notes work in general and how they're organized in music theory is going to help a lot.

So let's take a break from the staff and talk about notes first on a theoretical level. We'll assume you know nothing about music theory, build your knowledge from the ground up and then see how it all gets notated on the staff.

Here goes...scientifically, there are an infinite number of sounds possible on earth.

But somewhere in human history, someone chose 12 particular frequencies — known as **pitches** — and gave each a name. Named pitches are called **notes**, and those 12 notes are the foundation of music.

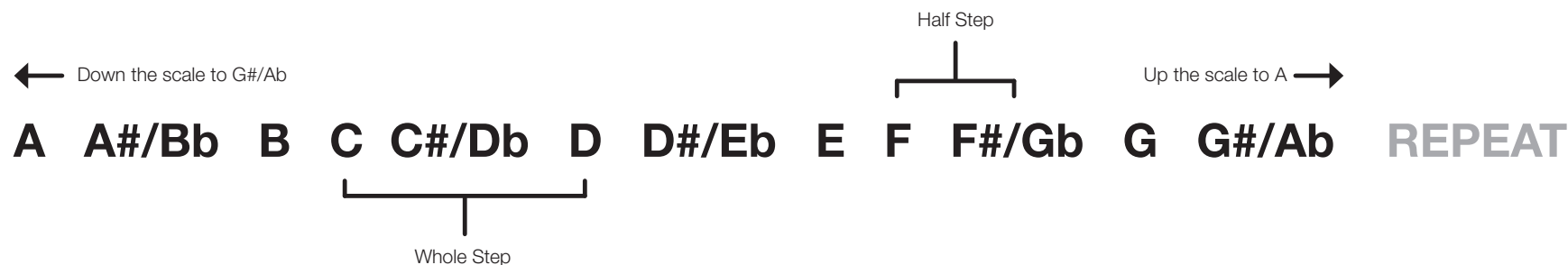
At this point, you should know that when musicians say "music," they mean "Western music," as there are some cultures that use notes beyond the 12 parent notes as their foundations. But for all intents and purposes, Western music is simply, music.



the chromatic scale

Any collection of notes is called a **scale**, and the set of 12 parent notes is called **the chromatic scale**. The notes in the chromatic scale are basically named alphabetically, from A to G, and include all states of the note name — natural, sharp and flat. Here's the whole scale.

The Chromatic Scale



These are the essential things you need to know about the chromatic scale:

- Notes separated by slashes have the same sound (or pitch), but two different names. What you call it depends on context. For example, when you see A#/Bb, it means that A# and Bb sound exactly the same, and as such, are played exactly the same way on an instrument. The note is called one or the other depending on the situation. **For now, just think of the note as "A sharp/B flat" in its entirety, and leave it at that.**
- Moving one note in either direction is called moving a **half step**. So, going from A to A#/Bb is one half step. So is going from C back to B.
- Moving two consecutive notes in either direction is called a **whole step**. So, going from A to B is one whole step. So is going from C back to A#/Bb.
- Anytime you move toward the right, you are moving "up" the scale, which produces a more shrill, or higher-sounding pitch than the previous note. If you go toward the left, you move "down" the scale and produce a deeper, or lower-sounding note than the one you came from.
- The chromatic scale is an infinite loop either way. As you go up the scale, when you hit G#/Ab, the next note is A again and the loop starts over. If you're going down the scale and hit A, the next note is G#/Ab. There is no H note.
- You can start the loop of the scale from any note. Just remember that when you hit G#/Ab, the loop flips over to A. For instance, you might see the scale written like this: **C C#/Db D D#/Eb E F F#/Gb G G#/Ab A A#/Bb B**. Take special note of what happened after G#/Ab.

major and minor scales

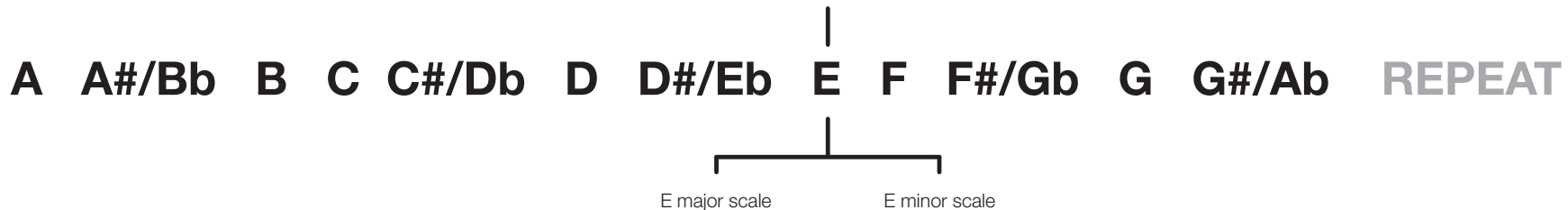
Because it contains all the notes we need to make bits of music, the chromatic scale draws a lot of comparisons to the English alphabet, which likewise, encompasses all the letters we use to create language.

If you think about it, in language, we're pretty selective when it comes to which letters belong together to create words. Letters that work together nicely create words that promote the natural flow of communication, while those that don't are simply incomprehensible.

Music works in much the same way. If you play notes that are supposed to work together nicely, you usually get pleasing sounds to the ear. If you play the ones that don't, you get dissonant sounds that can make people cringe. Each note in the chromatic scale has **two sets of notes** that sound good with it. The first set is called a **major scale**, and the second is called a **minor scale**.

The chromatic scale starting at A

Each note on the chromatic scale produces two sets of notes that sound good with it — one major scale and one minor scale.



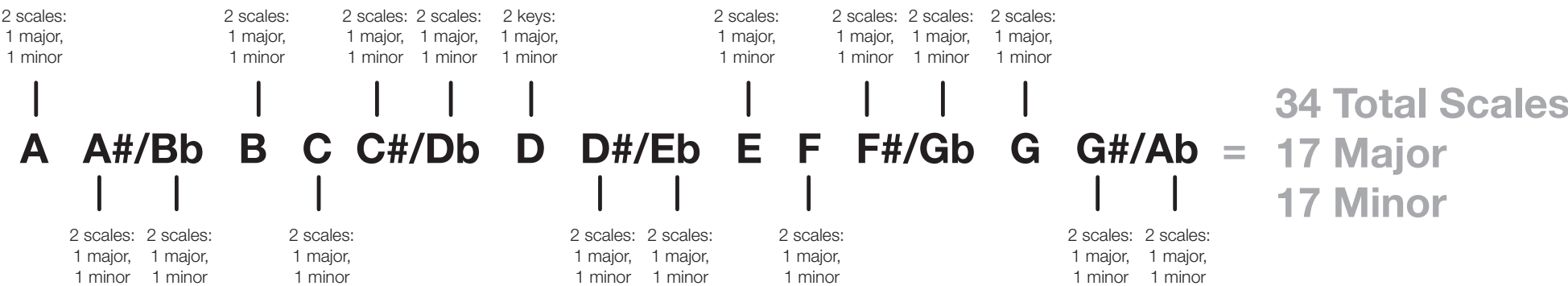
totaling the major and minor scales

At first glance, simple math would say that since the chromatic scale has 12 notes, and each note has two scales, there are 24 total scales. But, remember those slash notes, such as A#/Bb? They complicate things a little bit.

In music theory, even though they sound exactly the same, and you even play them the exact same way on your instrument, they are not related in any other way. In fact, now is a good time to separate them forever in your mind, and the best way to refer to the slash note, using A#/Bb as an example, is "A# **OR** Bb" when going through the chromatic scale.

One full slash note produces four scales — a major and minor scale for the first side of the slash, and a major and minor scale for the other side of the slash. Add everything up, and there are 34 total scales for music theory purposes.

Total major and minor scales from the chromatic scale



major and minor keys

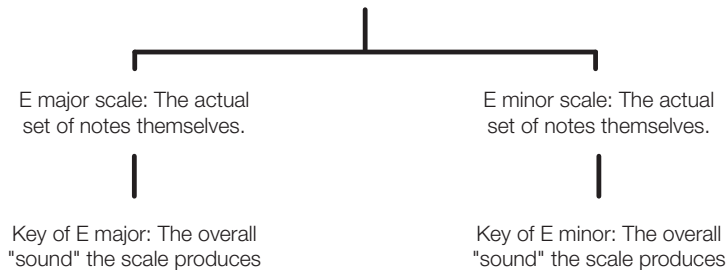
Musical pieces are typically written with one of the 34 scales as a foundation. Sometimes, the people who write those pieces — composers or songwriters — only use notes from that particular scale, but they also often alter it or add notes from some of the other scales to make it more interesting.

Put together, the scale along with its additions and alterations produce a distinct "sound" or "tone" called a **key**. Each major and each minor scale produces a key, and as such, there are 34 keys in music, 17 major keys and 17 minor keys, one each for every note on the chromatic scale.

Now, the difference between major and minor keys and major and minor scales may seem subtle, but it's important; major and minor scales are the foundational tools used to create a key, which is the actual sound you hear when you play them. For example, when musicians want you "to play in the key of E major," what they really mean is, "I want to hear some sounds related to the E note on the chromatic scale. Use the E major scale as a foundation and starting point, alter it or add in other stuff if you want or don't — that's okay, too."

The chromatic scale starting at A

A A#/Bb B C C#/Db D D#/Eb E F F#/Gb G G#/Ab REPEAT



Sound traits of major and minor keys

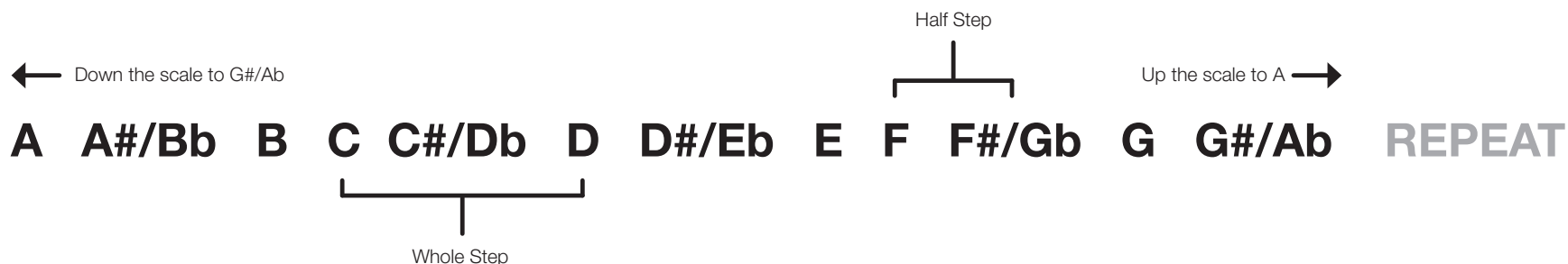
Musicians, composers and songwriters ultimately choose which key to use for a piece of music based on the kind of mood, atmosphere or emotion they want the listener to feel. In general, major keys are used to evoke a bright, happy or uplifting sound, while minor keys are used to give pieces a sad, morose or dark flair. Note, though, that this concept only relates to the actual sound of the music in songs — not the lyrics. In fact, songs written in major keys that have sad or dark lyrics are everywhere, and it's pretty easy to find a song with optimistic lyrics written in a minor key, as well.

the ABCs of major scales

In music theory, major and minor keys share equal billing — in effect, they're twins. But when it comes to understanding the scales within the keys, starting with major scales makes learning the more confusing minor scales a lot easier.

Let's start our deep dive into majors scales by stepping back and taking a closer look at the chromatic scale.

The Chromatic Scale: Starting at A



As we go forward, remember two critical things about the chromatic scale:

1. All the letters from A-G are represented *in alphabetical order*
2. Some letters have three variations, and some have two. For example, the letter A is represented in three ways, as Ab, A, or A#, while the letter B is represented in only two ways, as Bb or B.

The alphabetical nature of the chromatic scale is an important cornerstone of music theory. **At the end of the day, all major scales work alphabetically and contain one type of each letter from A-G.**

For example, in the key of A major, there is some kind of A, some kind of B, some kind of C, and so on all the way to some kind of G. Then it flips back over to some kind of A, similar to how the chromatic scale repeats on an infinite loop.

Now, the trick is figuring out which variation of the letter you need — the flat, sharp or standalone (also known as the natural) version. But the starting point is simply knowing your ABCs — and not even half of them!

the rules of building major scales

Ultimately, constructing major scales can be distilled down to four main rules:

1. Each major scale starts with a note from the chromatic scale.
2. Every major scale must contain at least one type of every letter from A-G.
3. Each note must be listed in alphabetical order from the starting note. (Remember, once you hit G, it's back to A.)
4. Every major scale contains seven notes (because there are seven letters from A-G).

With those rules in mind, let's examine a major scale. The first major scale most people learn about is the key of C because it is the most straightforward. There are only standalone letters — natural notes — in the key of C. There are no sharp or flat note variations.

The C Major Scale

C D E F G A B REPEAT

Now, let's check the C major scale against the rules:

1. Each major scale starts with a note from the chromatic scale. **CHECK.**
2. Every major scale must contain at least one type of every letter from A-G. **CHECK.**
3. Each note must be listed in alphabetical order from the starting note. **CHECK.**
4. Every major scale contains seven notes. **CHECK.**

The thing about music theory is it's very repetitive in its conventions, and while the other major scales will certainly look different and seem more difficult than C major, it's really only glancing. At the end of the day, they all follow the same rules.

Chromatic Scale Reference

A A#/Bb B C C#/Db D D#/Eb E F F#/Gb G G#/Ab REPEAT

major scales with sharps and flats

The C major scale is the only one that features letters of solely the natural type. All of the others contain one or more letters of the sharp or flat variety. Note that a scale that contains sharps and naturals will never also contain flats, and those that contain flats and naturals will never contain sharps. Before we talk about how you figure out which variations of the letter to use, let's take an exploratory look at a couple more major scales, so we can see the four main rules in action.

The G major scale

G A B C D E F# REPEAT

The G major scale starts with the G note of the chromatic scale. It contains one type of letter from A-G, mostly naturals except for the F#, which serves as "some kind of F." It has seven notes, and runs alphabetically from the starting note. Note that since G is the last note of the musical alphabet, the next alphabetical note is A, and then it goes on from there.

The Bb major scale

Bb C D Eb F G A REPEAT

The Bb (B flat) major scale is made up of seven notes and starts with the Bb note on the chromatic scale. Remember, there is no A#/Bb major scale. It's either an A# major scale **OR** a Bb major scale. In this case, it's Bb — the A# major scale would look completely different.

This scale contains one type of letter each from A-G and runs alphabetically from the starting point, Bb. Note that in the "some kind of B" slot, it uses a Bb and in the "some kind of E" slot, it uses an Eb.

4 Rules for Building Major Scales

1. Each major scale starts with a note from the chromatic scale.
2. Every major scale must contain at least one type of every letter from A-G.
3. Each note must be listed in alphabetical order from the starting note. (Remember, once you hit G, it's back to A.)
4. Every major scale contains seven notes (because there are seven letters from A-G).

Chromatic Scale Reference

A A#/Bb B C C#/Db D D#/Eb E F F#/Gb G G#/Ab REPEAT

figuring out major scale letter variations

Each major scale contains a unique number of sharp or flat notes. Realistically, the best way to figure out the exact notes of each scale is to **look it up when you need it**. While there are "music theory" ways to do it, they're not really intuitive enough to make learning them worth it. Certain scales, you'll use all the time and will eventually memorize them. Others you'll hardly use, and will have to look up each time. But, even advanced musicians sometimes have to look up the ones they never use. Here's a chart with all 17 major scales, as well as notes about how often you can expect to come across each one.

Major Scale Name	Number of Sharps or Flats	Scale Notes	Usage Notes
A	3 sharps	A B C# D E F# G#	used often at all levels
A#	4 sharps and 3 double sharps*	A# B# C## D# E# F## G##	almost never used; use Bb major instead
Bb	2 flats	Bb C D Eb F G A	more common from intermediate level on
B	5 sharps	B C# D# E F# G# A#	more common from intermediate level on
C	0 sharps or flats	C D E F G A B	used often at all levels
C#	7 sharps	C# D# E# F# G# A# B#	advanced usage; often substituted with Db major
Db	5 flats	Db Eb F Gb Ab Bb C	more common from intermediate level on
D	2 sharps	D E F# G A B C#	used often at all levels
D#	5 sharps and 2 double sharps*	D# E# F## G## A# B# C##	almost never used; use Eb major instead
Eb	3 flats	Eb F G Ab Bb C D	more common from intermediate level on
E	4 sharps	E F# G# A B C# D#	used often at all levels
F	1 flat	F G A Bb C D E	used often at all levels
F#	6 sharps	F# G# A# B C# D# E#	advanced usage
Gb	6 flats	Gb Ab Bb Cb Db Eb F	advanced usage
G	1 sharp	G A B C D E F#	used often at all levels
G#	6 sharps and 1 double sharp*	G# A# B# C# D# E# F##	almost never used; use Ab major instead
Ab	4 flats	Ab Bb C Db Eb F G	more common from intermediate level on

*Major scales in the key of A#, D# and G# are known as theoretical keys, which means, that while they are necessary to make the rules of music theory work, the flat versions they share a slash with are more practical to use. In other words, while you can use the A# side of an A#/Bb it's uncommon because double sharps make things messy. It's far more common to produce the sound of A# with the key of Bb because it's more friendly from a music theory perspective. For now, you don't need to know anything about double sharps other than that they exist.

first steps with the numbering system

Each of the seven notes in a major scale is assigned a number, called a **scale degree**. The starting note, which **always coincides with the name of the major scale**, is assigned number 1 and is typically referred to as either "the first scale degree" or simply, "the 1."

From there, the next alphabetic letter is the second scale degree (or the 2), the following alphabetic letter is the 3 and so on, until you reach the seventh scale degree — the 7, if you prefer.

Numbering the A major scale

1	2	3	4	5	6	7	REPEAT
A	B	C#	D	E	F#	G#	
The first scale degree	The second scale degree	The third scale degree	The fourth scale degree	The fifth scale degree	The sixth scale degree	The seventh scale degree	
aka "the 1"	aka "the 2"	aka "the 3"	aka "the 4"	aka "the 5"	aka "the 6"	aka "the 7"	

Numbering the C major scale

1	2	3	4	5	6	7	REPEAT
C	D	E	F	G	A	B	
The first scale degree	The second scale degree	The third scale degree	The fourth scale degree	The fifth scale degree	The sixth scale degree	The seventh scale degree	
aka "the 1"	aka "the 2"	aka "the 3"	aka "the 4"	aka "the 5"	aka "the 6"	aka "the 7"	



an overview of minor scales

Since all major scales are built with the same rules, they also follow the same usage rules.

That means that anything that can be done with one major scale can be done with all the others, and the numbering system is the tool that's typically used to navigate that idea. Ultimately, its purpose is to help reflect the one set of rules that applies to every major scale intuitively.

Now, the numbering system is a core principle of music theory, and as such, is a robust and powerful concept. So, while you really should take the time to fully learn it, for the purposes of reading a lead sheet, we're only going to scratch the surface and use it to create a shortcut rule for building minor scales.

Minor scales are kind of an interesting subject in music theory. While they're considered to be just as important as major scales, they're not used nearly as often, and without getting into it too deeply, the music theory behind them seems to suggest that they're actually derivative of major scales rather than separate entities all together. That means they're really more like children of major scales rather than siblings.

Regardless, there are plenty of songs written with minor scales, so you simply have know how to read them in music notation.



a major scale's relative minor scale

While there are more complex ways to build out minor scales, conveniently, there's one hidden in each major scale. To find it, identify any major scale's sixth scale degree, and reorder its notes alphabetically from there.

The note at the sixth scale degree then becomes the first note of the hidden minor scale, and for naming purposes, gets the word, "minor" attached to it, which is usually shortened simply to the lowercase letter, "m."

For example, to find the hidden minor scale in the G major scale, start by identifying the minor scale by name. In the G major scale, find the sixth scale degree, E, and attach the word "minor" to it. The hidden minor scale in the G major scale is called the **E minor scale, or Em scale, for short**. Keep in mind that even when you see this scale named as "Em," it's most common to still pronounce it as "E minor."

To identify the Em scale notes, reorder the G major scale from the E. So, while the G major scale notes are G A B C D E F#, **the Em scale notes are E F# G A B C D**.

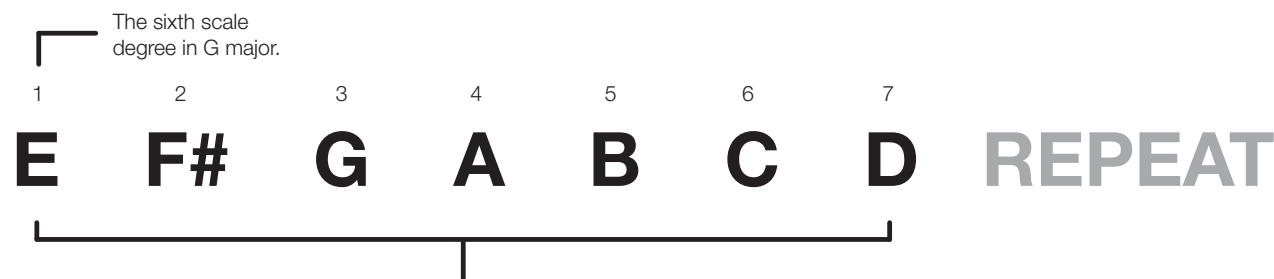
Note that because the Em scale is basically just a reordered version of the G major scale, it also retains the same amount of sharps. Based on this fact alone, a major scale and its hidden minor scale are considered related to each other, and the hidden minor scale is officially known as a major scale's **relative minor scale**.

The G major scale



The sixth scale degree. Build the G major scale's hidden minor scale — its relative minor scale — using this note as a starting point.

The E minor scale (Em scale for short) — the G major scale's relative minor



Reordered G major scale notes from the sixth scale degree, E. A major scale and its relative minor scale have the exact same notes. They're just ordered alphabetically from a different starting point.

Note on the relationship between a major scale and its relative minor scale

Even though a major scale and its relative minor scale share the same notes, the similarities and relationship between the two ends there. They're completely different scales, have completely different sounds and are used differently as well. Because major scales are used far more often, for all practical purposes, the only reason to even consider the relationship is to leverage it to identify minor scales and their notes more quickly when you need to use them.

scale degrees in a minor scale

For the purposes of reading a lead sheet, you don't really have to have a strong handle on the scale degrees as they relate to the numbering system. However, since we're touching on it, we might as well be as complete as possible.

Without diving too deep into the music theory, you can also find minor scales by manipulating the notes in the major scale that starts with the same note, meaning, you can also find the Em scale from the E major scale.

From a knowledge standpoint, learning that process is probably more valuable overall than the one that finds the relative minor, but it also requires more extensive study to understand.

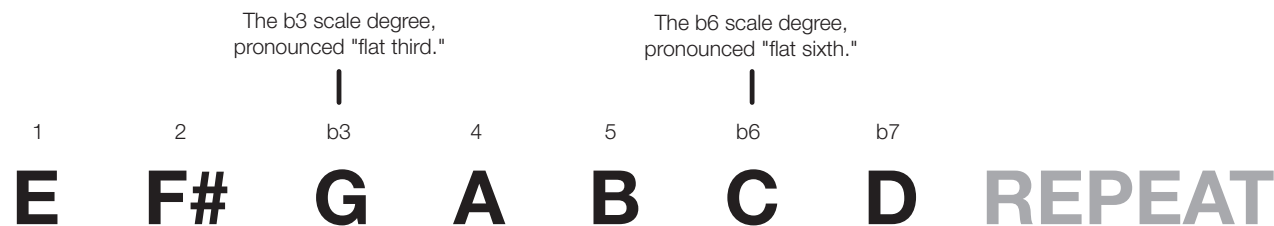
At this point, all you need to know about that process is that it results in a change in how to refer to three scale degrees in the minor scale.

The third note in a minor scale is referred to as a the **"flat third scale degree"** and is usually shortened to "b3," but still pronounced in full.

The sixth note in a minor scale is referred to as the **"flat sixth scale degree,"** which is usually shortened to "b6," and the seventh note in a minor scale is referred to as the **"flat seventh scale degree,"** and usually shortened to "b7."

Whatever process you use to end up with a minor scale, the scale degree terminology is the same. It isn't 1 2 3 4 5 6 7 as with major scales. It's **1 2 b3 4 5 b6 b7** — still seven notes, but a few scale degrees have different names.

Scale degree names on the Em scale



each major scale's relative minor scale

Here's a reference chart with every major scale's relative minor scale, a term that's usually shortened to "**relative minor**." As you study this chart, focus mostly on the concept that each major scale has a minor scale with the same exact notes in it — they're just reordered from the sixth scale degree.

Major Scale Name	Number of Sharps or Flats	Scale Notes	Relative Minor Scale Name	Scale Notes
A	3 sharps	A B C# D E F# G#	F#	F# G# A B C# D E
A#	4 sharps and 3 double sharps*	A# B# C## D# E# F## G##	F##m*	F## G## A# B# C## D# E#
Bb	2 flats	Bb C D Eb F G A	Gm	G A Bb C D Eb F
B	5 sharps	B C# D# E F# G# A#	G#m	G# A# B C# D# E F#
C	0 sharps or flats	C D E F G A B	Am	A B C D E F G
C#	7 sharps	C# D# E# F# G# A# B#	A#m	A# B# C# D# E# F# G#
Db	5 flats	Db Eb F Gb Ab Bb C	Bbm	Bb C Db Eb F Gb Ab
D	2 sharps	D E F# G A B C#	Bm	B C# D E F# G A
D#	5 sharps and 2 double sharps*	D# E# F## G## A# B# C##	B#m*	B# C## D# E# F## G## A#
Eb	3 flats	Eb F G Ab Bb C D	Cm	C D Eb F G Ab Bb
E	4 sharps	E F# G# A B C# D#	C#m	C# D# E F# G# A B
F	1 flat	F G A Bb C D E	Dm	D E F G A Bb C
F#	6 sharps	F# G# A# B C# D# E#	D#m	D# E# F# G# A# B C#
Gb	6 flats	Gb Ab Bb Cb Db Eb F	Ebm	Eb F Gb Ab Bb Cb Db
G	1 sharp	G A B C D E F#	Em	E F# G A B C D
G#	6 sharps and 1 double sharp*	G# A# B# C# D# E# F##	E#m*	E# F## G# A# B# C# D#
Ab	4 flats	Ab Bb C Db Eb F G	Fm	F G Ab Bb C Db Eb

*The F##m, B#m and E#m scales are mainly theoretical only. In practice, F##m is almost always played as the Gm scale, B#m is usually played as the Cm scale and E#m as the Fm scale.

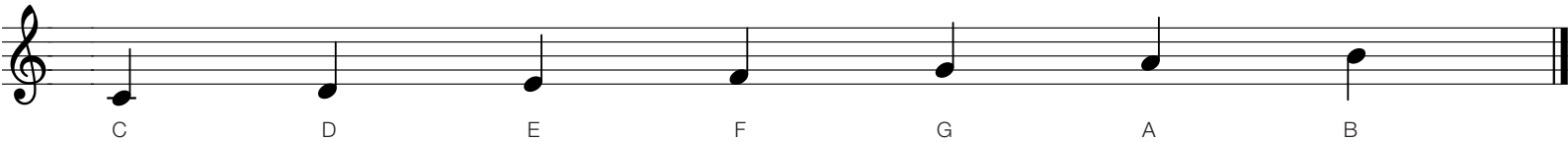
reading your first major scale

When it comes down to it, composers or songwriters use one of the major or minor scales as a foundation to write melodies. In fact, a melody is basically a creative re-ordering of a few of the notes from a particular major or minor scale.

So, when reading a lead sheet, we're mostly reading a major or minor scale that's all mixed up to create a tune. That means, we need to know on a basic level how to read major and minor scales on the staff. Let's start with major scales because it will make learning minor scales more intuitive. First, we'll look at the C major scale. Here it is as a reference chart and then, in notation.

The C major scale as a reference chart and then, in music notation

Major Scale Name	Number of Sharps or Flats	Scale Notes
C	0 sharps or flats	C D E F G A B



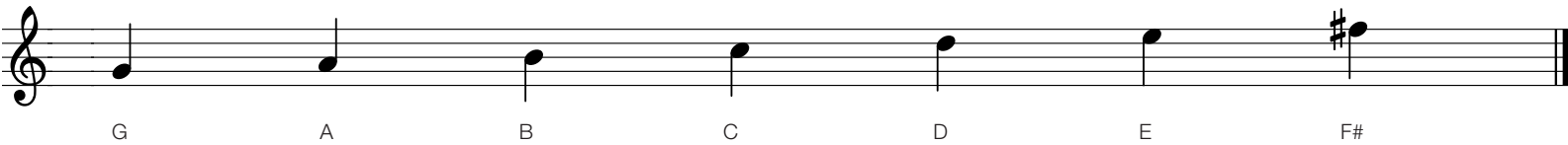
As you're learning how to read music, it's perfectly fine to refer back to a reference that spells out the main information of the scale that's being used. The most important things to know about each scale are the name, the number of sharps and flats, and the actual notes in the scale. In the C major scale, there are no sharps and flats, meaning that all the notes are natural and can be read without making any alterations to how the notes reside on the lines and spaces of the staff by default.

reading major scales with sharps

Of course, the C major scale is the only one that features solely natural notes. All the others contain at least one sharp or flat. Let's take a look at the G major scale, which contains one sharp — F#.

The G major scale as a reference chart and then, in music notation

Major Scale Name	Number of Sharps or Flats	Scale Notes
G	1 sharp	G A B C D E F#



In the G major scale, while most of the notes are natural and can be read without making alterations to the default staff notes, a sharp sign is added to the note symbol that represents F to make it an F#.

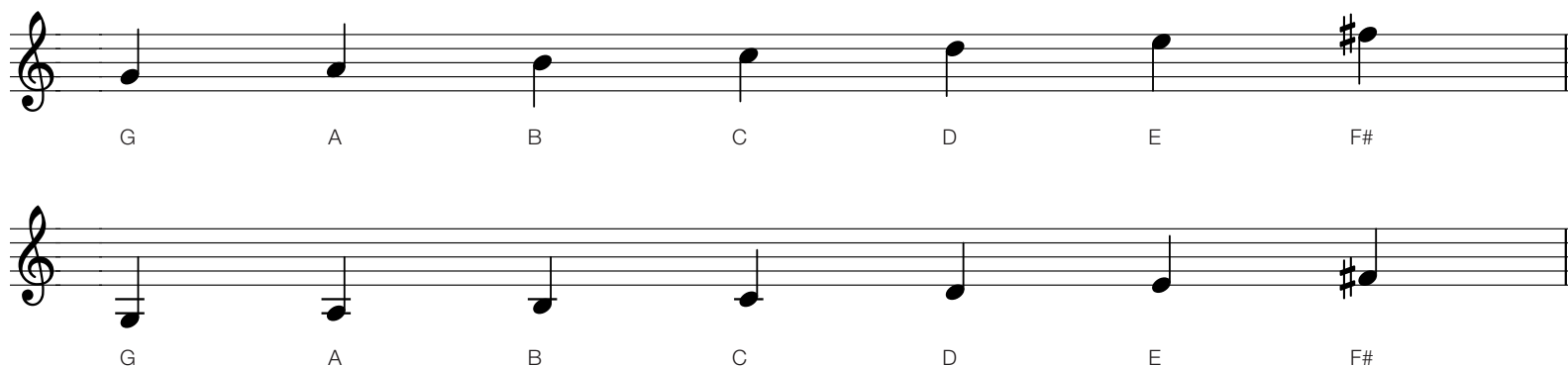


a note about scale starting points

Now's a good time to mention that every scale in music repeats on an infinite loop, meaning once you reach the last note of a scale cycle, it starts over. The staff, of course, does this by default — lines and spaces run alphabetically from A-G, and each time you reach the end of the alphabet, it starts over. When notating a major scale on the staff, the only thing that really changes is that instead of the cycle running from A-G, it runs in the way the musical alphabet presents itself in the applicable major scale.

All of this results in the fact that all scales can be notated on the staff from multiple starting points. For example, the G major scale can be notated with a starting note on the second staff line from the bottom, and it can also be notated from the space below the second ledger line beneath the staff. In fact, it can start from any instance of G, anywhere on the staff.

The G major written out from two different starting points



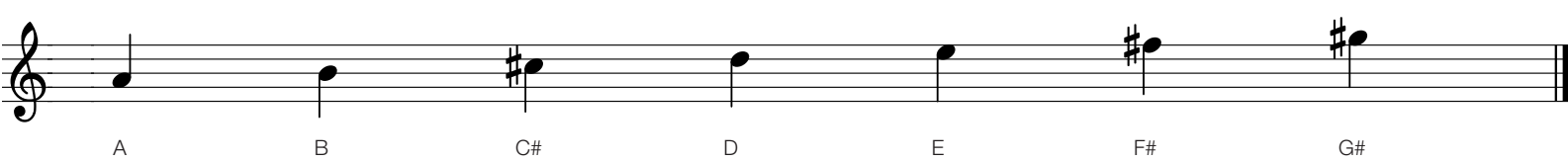
At this point, you really just want to be aware that the cycle can start from multiple places. As we continue to study major and minor scales, going forward, we'll only work from one starting point, usually the one that you're most likely to come across.

more major scales with sharps

Let's look at a couple more major scales with sharps. Here's the A major scale, which has three sharps — C#, F# and G#. In notation, sharps signs appear next to the note symbols that represent these notes, while all the rest are left in their default state.

The A major scale as a reference chart and then, in music notation

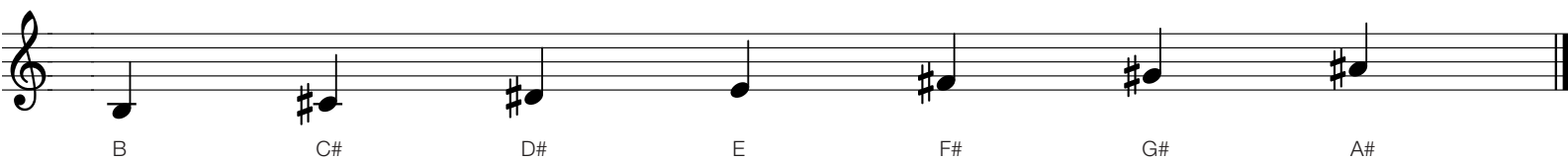
Major Scale Name	Number of Sharps or Flats	Scale Notes
A	3 sharps	A B C# D E F# G#



Here's the B major scale, which has five sharps — C# D# F# G# A#. The other two notes, B and E, stay in their default state.

The B major scale as a reference chart and then, in music notation

Major Scale Name	Number of Sharps or Flats	Scale Notes
B	5 sharps	B C# D# E F# G# A#



major scales with flats

Major scales with flats work similarly to ones with sharps. Here's the Bb major scale, which has two flats — Bb and Eb. In notation, flat signs appear next to the note symbols that represent these notes, while all the rest are left in their default state.

The Bb major scale as a reference chart and then, in music notation

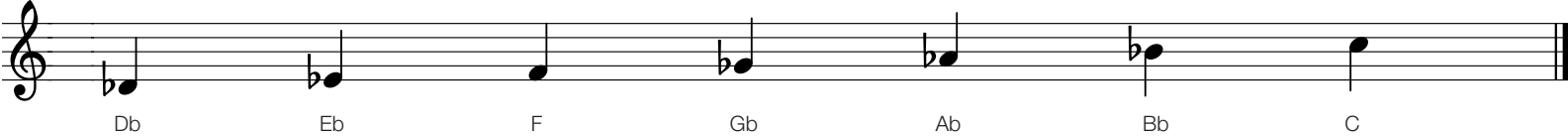
Major Scale Name	Number of Sharps or Flats	Scale Notes
Bb	2 flats	Bb C D Eb F G A



Now, here's the Db major scale, containing five flat notes — Db Eb Gb Ab Bb. Here, the F and C stay in their default state.

The Db major scale as a reference chart and then, in music notation

Major Scale Name	Number of Sharps or Flats	Scale Notes
Db	5 flats	Db Eb F Gb Ab Bb C



an introduction to key signatures

Consider that for most of its history, music notation has been handwritten, so you can imagine how inefficient it would be over the course of a musical piece to have to add sharp or flat signs to each note symbol that indicates the sharp or flat notes of the major or minor scale in use.

This is especially true when it comes to scales that have a lot of sharps or flats, as well as large musical pieces that can be hundreds of pages long.

As a solution, composers and songwriters communicate which notes are sharp or flat throughout the entire musical piece at the very beginning.

But before we get into how it's done, it's important to keep in mind that a major or minor scale is simply the main set of notes that together, create an overarching sound — a tone — called a key.

Practically speaking, when composers or songwriters begin to write a musical piece, usually, they start by noodling around with some notes in a major or minor scale. This action produces the sound of the key that conveniently, has the same name as the scale they're using.

This means that if they start playing a tune with notes from the G major scale, they're producing the sound associated with the key of G major. Colloquially, this action is referred to as "**playing in the key of G major.**"

The notion that a major or minor scale produces a key is crucial for understanding how music notation tells the reader upfront which notes are sharp or flat throughout the entire musical piece.

See, at the end of the day, music is about sound. So, at the very beginning of a piece, composers and songwriters first indicate which key the piece is by using a symbol called the **key signature**.

The key signature is a complex symbol that at once, outlines the key, the major scale in use and the notes on the staff that should be read as sharp or flat by default without the use of a sharp or flat sign.



key signature basics

In notation, a key signature symbol sits to the right of the treble clef. It tells the reader the musical piece's key by stating which major or minor scale is in use throughout the piece.

Because each major scale is unique, each major key has its own key signature. Keys produced by a major scale with sharps have a key signature made up of a variable number of sharp signs. The amount of sharp signs in the symbol is determined by how many sharp notes there are in the key's major scale.

For example, since the key of A major is mainly produced by the A major scale, which has three sharp notes, its key signature is a symbol with three sharp signs.

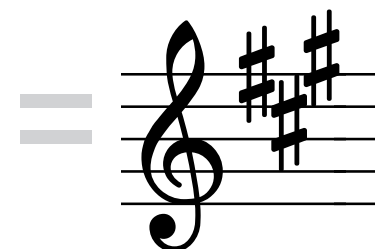
Likewise, keys produced by a major scale with flats have a key signature that's made up of a variable number of flat signs. The amount of flat signs in the symbol is determined by how many flat notes there are in the key's major scale.

So, since the key of Bb major mainly comes from the Bb major scale, which has two flats, its key signature is a symbol with two flat signs.

Key signature indicating the key of A major

Major Key Name	Major Scale Name	Number of Sharps or Flats
A	A	3 sharps

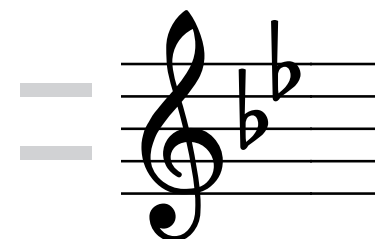
Since the key of A major is produced by the A major scale, which contains three sharps, the key signature symbol for the key of A major consists of three sharp signs.



Key signature indicating the key of Bb major

Major Key Name	Major Scale Name	Number of Sharps or Flats
Bb	Bb	2 flats

Since the key of Bb major is produced by the Bb major scale, which contains two flats, the key signature symbol for the key of Bb major consists of two flat signs.



how to read a key signature

Accurately reading a key signature can be somewhat difficult at first because ultimately, it gives you three pieces of information that are all connected — **what key is being played, which major scale is in use, and which notes on the staff are to be read as sharp or flat throughout the musical piece without the use of a sharp or flat sign.**

Staying within the context of major scales, here's how to read one.

First, count how many sharp or flat signs are in the symbol. From there, you can look at a reference and figure out which major scale is in use.

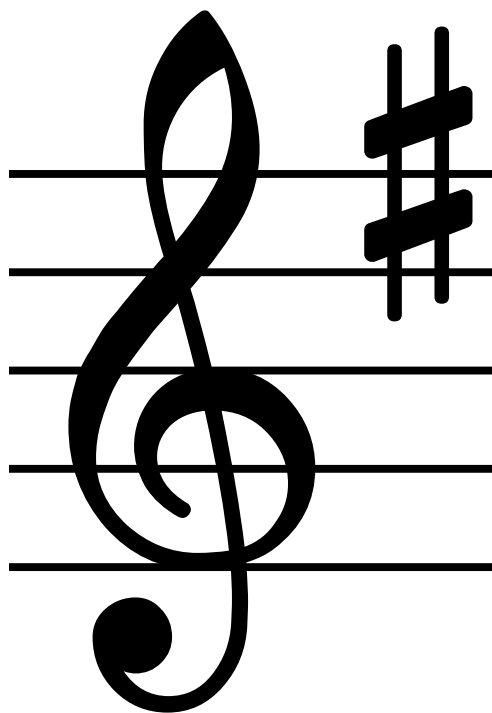
That piece of information is really the linchpin of the whole symbol. At that point, finding the key is straightforward — it has the same name as the major scale in use. So, too, is identifying the notes on the staff that need to be read as sharp or flat within the piece without the use of a sharp or flat sign — they're simply the sharp or flat notes of the major scale in use.

Next, you read the piece according to the key signature's parameters. That means that any time you reach a note that sits on a staff line or space that has the same letter as a note identified by the key signature, you'll read it as a sharp or flat note but it won't have a sharp or flat sign next to it.

So, for example, if a piece has key signature with one sharp, you might use a reference to find out that the G major scale is in use — because it is the only one with solely one sharp. And since the key name is the same as the major scale in use, you can deduce that the piece's key is G major.

From there, you can also glean that since the G major scale has one sharp — F# — any notes within the piece that sit on a staff line or space that represents F will be read as F#, but won't have a sharp sign next to it.

Key signature indicating the key of G major



A key signature with one sharp tells the reader that the G major scale is in use because it's the only one with solely one sharp.

Because keys have the same name as the major scales that produce them, that means that this key signature ultimately indicates key of G major.

Finally, you can also glean that since the G major scale has one sharp — F# — any notes within the piece that sit on a staff line or space that represents F will be read as F#, but won't have a sharp sign next to it.

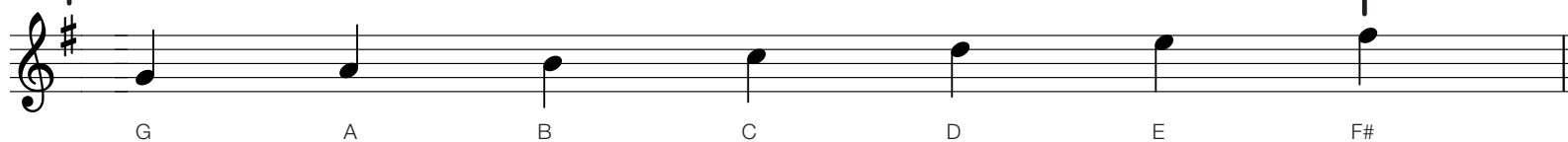
Major Scale Name	Number of Sharps or Flats	Scale Notes
G	1 sharp	G A B C D E F#

key signatures in action: sharp keys

Let's study a couple of major scales that are indicated by key signatures consisting of sharp signs. Here's the G major scale, which produces the key of G major and has a key signature consisting of one sharp. The G major scale's lone sharp is F#, so any note symbols sitting on a staff line or space that represent F will be read as F# but will not have a sharp sign next to it.

The G major scale with its key signature

A key signature with one sharp indicates the G major scale, and in turn, the key of G major. The G major scale's lone sharp is F#, so any note symbols that represent F will be read as F# but will not have a sharp sign next to it.



This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.

G A B C D E F#

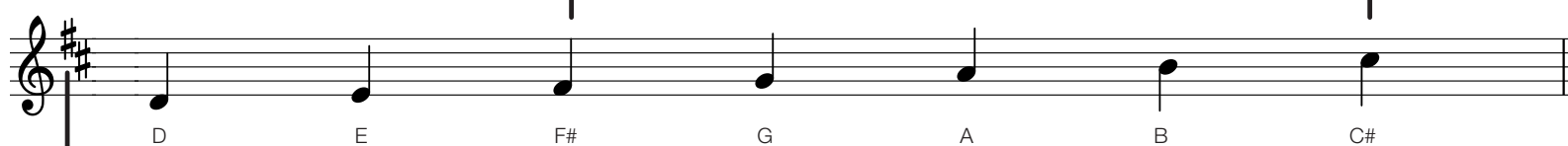
Key of G major reference

Key name: G major
Major scale name: G major
Number of sharps or flats: 1 sharp
Scale notes: G A B C D E F#

Now, here's the D major scale, which produces the key of D major. Its key signature consists of two sharps. The sharps in the D major scale are C# and F#, so any note symbols sitting on staff lines or spaces representing either of those letters will be read as sharp but will not have a sharp sign next to it.

The D major scale with its key signature

This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.



This C note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.

D E F# G A B C#

A key signature with two sharps indicates the D major scale, and in turn, the key of D major. The D major scale's two sharps are C# and F#, so any note symbols that represent either of those letters will be read as sharp but will not have a sharp sign next to it.

Key of D major reference

Key name: D major
Major scale name: D major
Number of sharps or flats: 2 sharps
Scale notes: D E F# G A B C#

key signatures in action: flats keys

Let's study a couple of major scales that are indicated by key signatures consisting of flat signs. Here's the Bb major scale, which produces the key of Bb major and has a key signature consisting of two flats. The sharps in the Bb major scale are Bb and Eb, so any note symbols sitting on staff lines or spaces representing either of those letters will be read as flat but will not have a flat sign next to it.

The Bb major scale with its key signature

This B note symbol has no flat sign, but is still read as flat because of the key signature's parameters.

This E note symbol has no flat sign, but is still read as flat because of the key signature's parameters.



A key signature with two flats indicates the Bb major scale, and in turn, the key of Bb major. The Bb major scale's two flats are Bb and Eb, so any note symbols that represent either of those letters will be read as flat but will not have a flat sign next to it.

Key of Bb major reference

Key name: Bb major

Major scale name: Bb major

Number of sharps or flats:
2 flats

Scale notes:
Bb C D Eb F G A

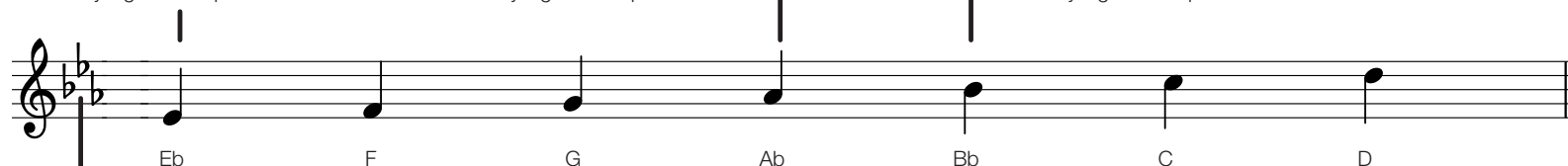
Now, here's the Eb major scale, which produces the key of Eb major. Its key signature consists of three flats, Eb, Ab and Bb. Any note symbols sitting on staff lines or spaces representing any of those letters will be read as flat but will not have a flat sign next to it.

The Eb major scale with its key signature

This E note symbol has no flat sign, but is still read as flat because of the key signature's parameters.

This A note symbol has no flat sign, but is still read as flat because of the key signature's parameters.

This B note symbol has no flat sign, but is still read as flat because of the key signature's parameters.



A key signature with three flats indicates the Eb major scale, and in turn, the key of Eb major. The Eb major scale's three flats are Eb, Ab and Bb, so any note symbols that represent any of those letters will be read as flat but will not have a flat sign next to it.

Key of Eb major reference

Key name: Eb major

Major scale name: Eb major

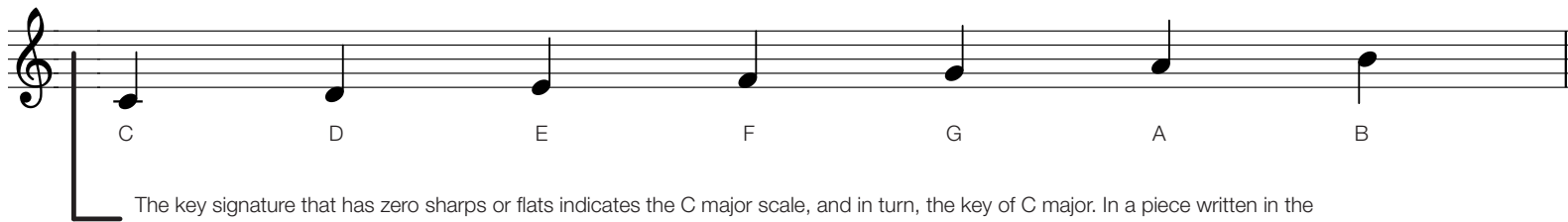
Number of sharps or flats:
3 flats

Scale notes:
Eb F G Ab Bb C D

key signatures in action: C major

The key of C major is a special case when it comes to the topic of key signatures, as it comes from the C major scale, which has no sharps or flats at all. So, the key signature that represents the key of C major is that there isn't one. In fact, any musical piece that doesn't have a key signature is considered to be in the key of C major and uses the C major scale throughout. As such, all note symbols are to be read as natural notes throughout the piece, unless there's specifically a sharp or flat sign next to it. Let's look at the C major scale with its "key signature," in that it doesn't have one.

The C major scale with its key signature



The key signature that has zero sharps or flats indicates the C major scale, and in turn, the key of C major. In a piece written in the key of C major, all note symbols are to be read as natural notes throughout the piece, unless there's a sharp or flat sign next to it.

Key of C major reference

Key name: C major
Major scale name: C major
Number of sharps or flats:
0 sharps or flats
Scale notes:
C D E F G A B

Note

Since the staff inherently comes without a key signature, you can assume that by default, it represents the key of C major and in turn, the C major scale. Realistically, you may only ever need this bit of information on a theoretical level, but it does come up in some situations, mostly academic.

typical key signatures: major keys

Here's a reference chart that outlines all the major key information you need to get from each typical key signature. Since you're unlikely to come across or ever practically need the theoretical keys* made with major scales that have double sharps (A#, D# and G#), we'll leave those off this list.

# of Sharps or Flats in Key Signature	Major Key Name	Major Scale Name	Scale Notes	Sharp or Flat Notes Always Considered Sharp or Flat Within a Piece
1 sharp	G	G	G A B C D E F#	F#
2 sharps	D	D	D E F# G A B C#	F# C#
3 sharps	A	A	A B C# D E F# G#	C# F# G#
4 sharps	E	E	E F# G# A B C# D#	F# G# C# D#
5 sharps	B	B	B C# D# E F# G# A#	C# D# F# G# A#
6 sharps	F#	F#	F# G# A# B C# D# E#	F# G# A# C# D# E#
7 sharps	C#	C#	C# D# E# F# G# A# B#	C# D# E# F# G# A# B#
0 sharps or flats	C	C	C D E F G A B	—
1 flat	F	F	F G A Bb C D E	Bb
2 flats	Bb	Bb	Bb C D Eb F G A	Bb Eb
3 flats	Eb	Eb	Eb F G Ab Bb C D	Eb Ab Bb
4 flats	Ab	Ab	Ab Bb C Db Eb F G	Ab Bb Db Eb
5 flats	Db	Db	Db Eb F Gb Ab Bb C	Db Eb Gb Ab Bb C
6 flats	Gb	Gb	Gb Ab Bb Cb Db Eb F	Gb Ab Bb Cb Db Eb

* If you notice, this list does not contain a key signature of seven flats, even though it contains one for seven sharps. That's because a key signature with seven flats represents another theoretical key, called Cb. For now, all you have to know about the key of Cb is that in theory, it exists. And realistically, you're unlikely to ever need to know anything else about it beyond that.

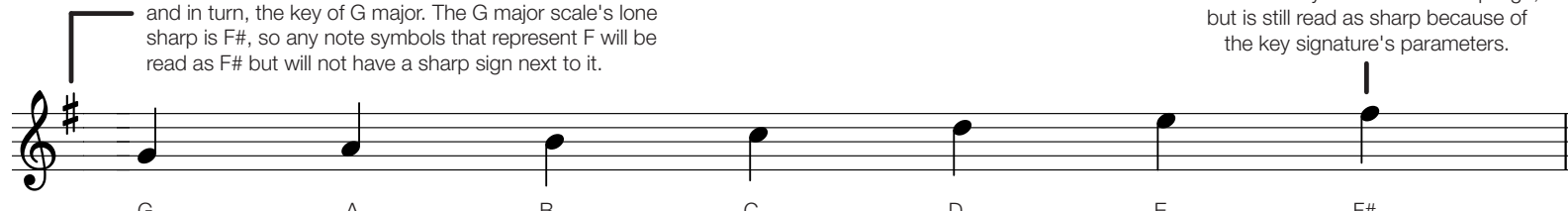
key signatures of minor scales

A key signature can also be used to represent a major key's relative minor key. For example, a key signature of one sharp represents the key of G major, which has one sharp — F#. But it can also represent the key of Em, which is G major's relative minor and as such, also only has one sharp — F#. It makes sense that key signatures work this way because a relative minor scale is basically a major scale that's reordered from the sixth scale degree.

This is a good time to connect the idea that you can work backward from a minor scale to find the major scale that it's relative to, known as a minor scale's **relative major scale**. A minor scale's relative major scale takes its name from the b3 scale degree and is reordered from there. So, since the b3 of the Em scale is G, the relative major scale is G major, and you can find its notes by reordering the minor scale from the b3 note.

The G major scale with its key signature

A key signature with one sharp indicates the G major scale, and in turn, the key of G major. The G major scale's lone sharp is F#, so any note symbols that represent F will be read as F# but will not have a sharp sign next to it.



This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.

Relative minor scale's starting point at the sixth scale degree. To get the notes of G major's relative minor scale, reorder its notes from here.

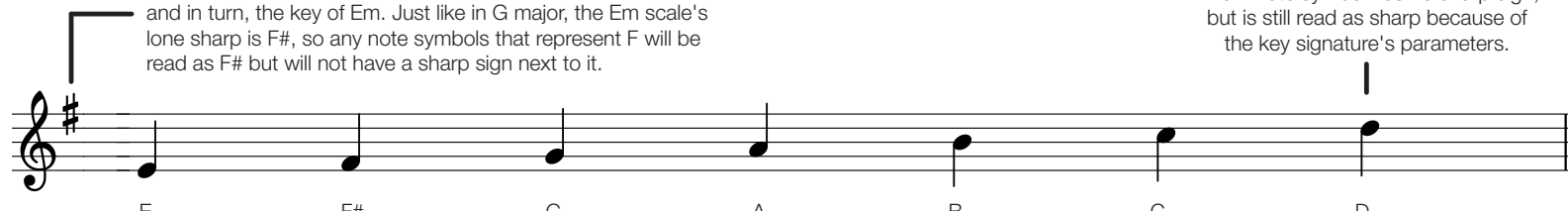
The musical staff shows the G major scale in treble clef with a key signature of one sharp (F#). The notes are G, A, B, C, D, E, and F#. The F# is indicated by a sharp sign on the line. A bracket points to the F# note with the text: 'A key signature with one sharp indicates the G major scale, and in turn, the key of G major. The G major scale's lone sharp is F#, so any note symbols that represent F will be read as F# but will not have a sharp sign next to it.' Another bracket points to the F# note with the text: 'This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.' A vertical line is placed below the E note with the text: 'Relative minor scale's starting point at the sixth scale degree. To get the notes of G major's relative minor scale, reorder its notes from here.'

Key of G major reference

Key name: G major
Major scale name: G major
Number of sharps or flats:
1 sharp
Scale notes:
G A B C D E F#
Relative Minor: Em

The Em scale with its key signature

A key signature with one sharp can also indicate the Em scale, and in turn, the key of Em. Just like in G major, the Em scale's lone sharp is F#, so any note symbols that represent F will be read as F# but will not have a sharp sign next to it.



This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.

Relative major scale's starting point at the b3 scale degree. To get the notes of Em's relative major scale, reorder its notes from here.

The musical staff shows the Em scale in treble clef with a key signature of one sharp (F#). The notes are E, F#, G, A, B, C, and D. The F# is indicated by a sharp sign on the line. A bracket points to the F# note with the text: 'A key signature with one sharp can also indicate the Em scale, and in turn, the key of Em. Just like in G major, the Em scale's lone sharp is F#, so any note symbols that represent F will be read as F# but will not have a sharp sign next to it.' Another bracket points to the F# note with the text: 'This F note symbol has no sharp sign, but is still read as sharp because of the key signature's parameters.' A vertical line is placed below the G note with the text: 'Relative major scale's starting point at the b3 scale degree. To get the notes of Em's relative major scale, reorder its notes from here.'

Key of Em reference

Key name: E major
Minor scale name: Em
Number of sharps or flats:
1 sharp
Scale notes:
E F# G A B C D
Relative Major: G

typical key signatures: major keys and their relative minor keys

Here's a reference chart that outlines all the major key and relative minor key information that can be pulled from each typical key signature. Note that this reference leaves out the purely theoretical keys of A#, D#, G# and Cb, which are really only meant for advanced music theory use.

# of Sharps or Flats in Key Signature	Major Key Name	Major Scale Notes	Relative Minor Key Name	Relative Minor Scale Notes	Sharp or Flat Notes
1 sharp	G	G A B C D E F#	Em	E F# G A B C D	F#
2 sharps	D	D E F# G A B C#	Bm	B C# D E F# G A	F# C#
3 sharps	A	A B C# D E F# G#	F#m	F# G# A B C# D E	C# F# G#
4 sharps	E	E F# G# A B C# D#	C#m	C# D# E F# G# A B	F# G# C# D#
5 sharps	B	B C# D# E F# G# A#	G#m	G# A# B C# D# E F#	C# D# F# G# A#
6 sharps	F#	F# G# A# B C# D# E#	D#m	D# E# F# G# A# B C#	F# G# A# C# D# E#
7 sharps	C#	C# D# E# F# G# A# B#	A#m	A# B# C# D# E# F# G#	C# D# E# F# G# A# B#
0 sharps or flats	C	C D E F G A B	Am	A B C D E F G	—
1 flat	F	F G A Bb C D E	Dm	D E F G A Bb C	Bb
2 flats	Bb	Bb C D Eb F G A	Gm	G A Bb C D Eb F	Bb Eb
3 flats	Eb	Eb F G Ab Bb C D	Cm	C D Eb F G Ab Bb	Eb Ab Bb
4 flats	Ab	Ab Bb C Db Eb F G	Fm	F G Ab Bb C Db Eb	Ab Bb Db Eb
5 flats	Db	Db Eb F Gb Ab Bb C	Bbm	Bb C Db Eb F Gb Ab	Db Eb Gb Ab Bb C
6 flats	Gb	Gb Ab Bb Cb Db Eb F	Ebm	Eb F Gb Ab Bb Cb Db	Gb Ab Bb Cb Db Eb

how to tell whether a key signature represents either a major or minor scale

Because a major key and its relative minor have the same key signature, at first glance, it can be unclear as to which one is actually a piece's key.

For example, a key signature with one sharp indicates either the key of G major **OR** Em. But it doesn't tell you which one.

Now, the reality is, unless you're specifically discussing a song's key or are improvising based around it, it actually doesn't really matter which one the key signature represents because both have the same sharp or flat notes.

This means that if you're playing the piece exactly like it's written in the lead sheet, you can simply play the notes within the parameters of the key signature and can pretty much forget about the key altogether.

Of course, playing ignorant has its limitations, but depending on your goals with the song and overall, as a musician, it really can be a viable option.

As to actually figuring out whether a key signature represents a major key or its relative minor, the best way is to look at the piece's very last note.

See, almost always, a piece ends on the note that coincides with its key name. So, in the case of one sharp, if the last note is a G, you can deduce that the key is G major. If it ends on an E, it's in Em — not E major because that has a different key signature, with four sharps and not one.

The chords above the measures in a lead sheet can be of further assistance, as they follow the same concept. Usually, a piece ends on a chord that coincides with the key name. So, in the case of one sharp, if the last chord is G, then the piece's key is G major. If it ends on Em, it's in Em.

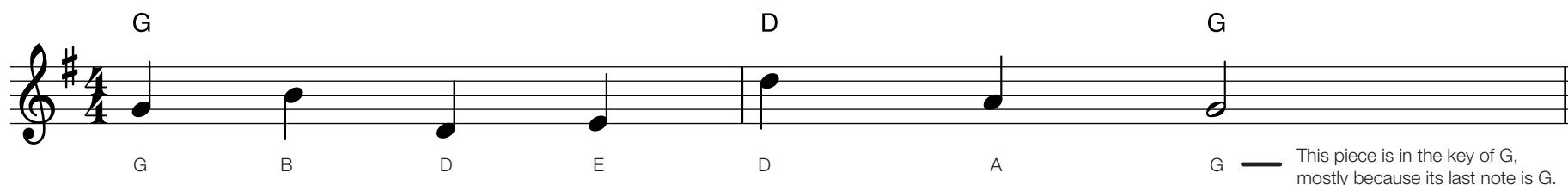
Now, a piece's ending won't give you the key correctly 100% of the time, but between looking at the last note and the last chord, it's pretty close.



figuring out whether the key signature depicts a major or minor scale in action

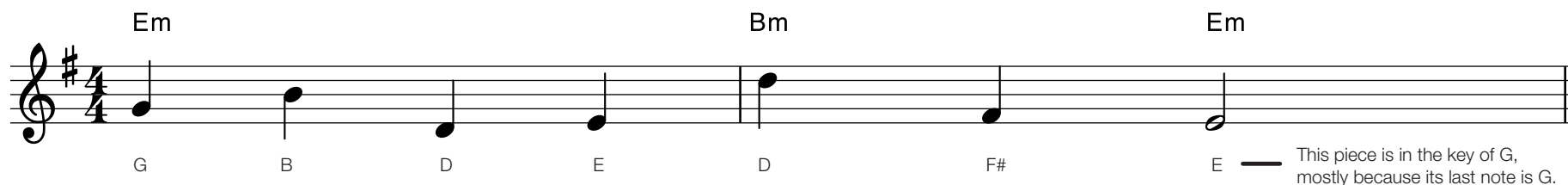
Let's look at a couple of two measure "pieces" that both have a key signature consisting of one sharp. The first example would be considered being in the key of G major mostly because its final note is G. The second piece would be considered being in Em mostly because its last note is an E.

A piece of music in the key of G major



A musical staff in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The melody consists of two measures. The first measure contains four quarter notes: G (first line), B (second line), D (third line), and E (third space). The second measure contains three notes: a quarter note D (third line), a half note A (second space), and a whole note G (first line). Above the staff, the chords G, D, and G are indicated above the first, second, and third measures respectively. Below the staff, the notes G, B, D, E, D, A, and G are labeled under each note. To the right of the staff, a line points to the final G note with the text: "This piece is in the key of G, mostly because its last note is G."

A piece of music in the key of Em



A musical staff in treble clef with a key signature of one sharp (F#) and a 4/4 time signature. The melody consists of two measures. The first measure contains four quarter notes: G (first line), B (second line), D (third line), and E (third space). The second measure contains three notes: a quarter note D (third line), a half note F# (second space), and a whole note E (third space). Above the staff, the chords Em, Bm, and Em are indicated above the first, second, and third measures respectively. Below the staff, the notes G, B, D, E, D, F#, and E are labeled under each note. To the right of the staff, a line points to the final E note with the text: "This piece is in the key of G, mostly because its last note is G."

Note that in these examples, even though a lot of the notes are similar, and in fact, the notes in the first bar are identical, the pieces have a different look to them altogether, mostly because the chords aren't the same. This highlights the notion that even though a major scale and its relative minor share the same notes and key signature, the relationship ends there. Not to mention, if you played both pieces, they would sound completely different as well. This brings us to a few more tricks for figuring out whether the key signature represents a major scale or its relative minor. It often helps to look at the chords. Songs in major keys simply use more major chords. Likewise, songs in minor keys use more minor chords. You can also listen to the piece. Songs where the music — not the lyrics — sound bright and uplifting are probably in major keys. Those that sound dark, mysterious or morose are likely in minor keys. If all else fails, ask someone with more experience — you can really learn a lot by going that route.

an overview of reading key signatures with non-chromatic scale notes

If you've studied the chromatic scale, your understanding of it is probably that it contains all the notes of the musical alphabet. So, it might surprise you that the C# major scale has two notes that don't exist there, E# and B#. Take a second to refresh yourself with both scales.

The C# major scale

Major Scale Name	Number of Sharps or Flats	Scale Notes
C#	7 sharps	C# D# E# F# G# A# B#

The chromatic scale

A A#/Bb B C C#/Db D D#/Eb E F F#/Gb G G#/Ab REPEAT

Now, it's not really that important to completely grasp the theory behind how we end up with a major scale that contains notes that don't exist on the chromatic scale. But the fact is, you're bound to come across notes such as these, and you simply need to know how to handle them.

what sharp and flat signs really mean

To get started with being able to handle notes such as E# and B#, you'll need to understand what sharp and flat signs really mean. At its core, a sharp sign basically means **to start with the natural state of a note, then go up the chromatic scale one half step and play that note.**

So, "D#" means to start with D — the natural state of the note — and go up one half step to D# and play that note.

What a sharp sign means

A A#/Bb B C C#/Db **D D#/Eb** E F F#/Gb G G#/Ab REPEAT



A sharp sign means to start with the natural state of a note, then go up the chromatic scale one half step and play that note. So, "D#" means to start with D — the natural state of the note — and go up one half step to the D# and play that note.

Similarly, a flat sign basically means **to start with the natural state of a note, then go down the chromatic scale one half step and play that note.** So, "Db" means to start with D — the natural state of the note — and go down one half step to Db and play that note.

What a flat sign means

A A#/Bb B C C#/Db **D D#/Eb** E F F#/Gb G G#/Ab REPEAT



A sharp sign means to start with the natural state of a note, then go up the chromatic scale one half step and play that note. So, "D#" means to start with D — the natural state of the note — and go up one half step to the D# and play that note.

the actual note to play for E#

If you pay close attention to the definition of sharp and flat signs, you might have noticed that it instructs you simply to go up or down the chromatic scale one half step from a natural note and **play whatever note is there**. They don't specifically mean that you should play the sharp or flat version of a note. If this was the case, than you couldn't play a note such as E# because it doesn't exist.

Though the difference may seem subtle, the semantics of the definition allow for some flexibility. Let's apply the definition of a sharp sign to E#. First, start with the natural state of the note — E — and then go one half step up the chromatic scale and play that note, which happens to be F. So, this means that **when you see E#, the correct note to play on your instrument is F**.

From E to E#

A A#/Bb B C C#/Db D D#/Eb **E F** F#/Gb G G#/Ab REPEAT



When you see "E#" it means to start with E — the natural state of the note — and go up one half step to the F and play that note.



how to think about E#, a theoretical note

Now that you know to play E# as F on your instrument, it's very important to keep in mind that even though the actual chromatic scale note that you play is F, technically, you shouldn't call the note F or consider it F at all. It's E#, which is a **theoretical note** that helps music theory stay in line with its rules.

Consider that one of the four main rules of building major scales centers around the alphabetic nature of the notes — each one consists of some kind of A, some kind of B, some kind of C and the like.

Well, the way the theory shakes out, the C# major scale has seven sharps, and since there are only seven notes, that means every one of the notes is sharp — C# D# E# F# G# A# B#.

But even though E# is technically played as F on your instrument, if you consider it as F within the context of the C# major scale, then you'll be missing the "some kind of E" note in the scale, which is against the rules. So, the note has to be considered E# and not F.

See, at the end of the day, there are always two things in play when it comes to music — the notes you actually play and how you think about them in context.

Usually, these two concepts squarely align, but the more you study music, the more theoretical notes become necessary to help keep everything together.

With experience, you come to realize that the fact that music always abides by its rules actually makes the theory behind it more intuitive, and while theoretical notes may seem scary at first, handling them is simply a matter of playing one thing and thinking another.



handling other theoretical notes

The other theoretical note in the key of C# major is B#. So, let's apply the definition of a sharp sign to B#. First, start with the natural state of the note — B — and then go one half step up the chromatic scale and play that note, which happens to be C. So, this means that **when you see B#, the correct note to play on your instrument is C**. However, even though you play C on your instrument, be sure to think of it as B#.

From B to B#

A A#/Bb B C C#/Db D D#/Eb E F F#/Gb G G#/Ab REPEAT



When you see "B#" it means to start with B — the natural state of the note — and go up one half step to the C and play that note. Make sure to consider this note as B# and not C.

Note

At this point, you might be wondering when you would even need to know how to handle theoretical notes. The short answer is **simply, when you come across them**. Depending on how challenging the music is that you undertake, you may never have to deal with one. In fact, theoretical notes are actually pretty rare, but if you get into jazz, blues and even some country, they come up from time to time.

In any scenario, just remember to start with the standalone note, go up or down the chromatic scale one half step and play whatever note is there. While you're playing it, resist the urge to think of it as the note it actually is and instead, consider it as the note that it's being called in that particular situation. You may not know why, but it's probably named that way for a good reason.

double sharp notes

The concept of theoretical notes can be extended further through the use of double sharp and flat notes. Again, it's not necessarily important to get into the weeds of why double sharps and flats exist in the first place. All you have to know is how to handle them, and once you know the definition of sharp and flat signs, well, double sharps and flats are fairly straightforward.

When you see a double sharp, start with the natural state of the note, and **go two half steps** — which equals one whole step — up the chromatic scale and play whatever note is there. So, let's apply that definition to C##, which is pronounced, "C double sharp." First, start with the natural state of the note — C — and then go two half steps up the chromatic scale and play that note, which happens to be D. So, this means that **when you see C##, the correct note to play on your instrument is D**. However, even though you play D on your instrument, be sure to think of it as C##.

C##



When you see "C##" it means to start with C — the natural state of the note — and go up one whole step to the D and play that note. Make sure to consider this note as C## and not D.

Note

Note that when you go up the chromatic scale, you do it through the use of sharp signs. That's why, when working out the actual note to play for C##, the first half step you take from C is to C# and not Db. In fact, you could also think of a double sharp's definition as **"figure out what note you would play for a natural note that has a sharp sign next to it, and then go up another half step and play that note."** So, if C had a sharp sign next to it, you would go up one half step up to play C#. To make it a double sharp, go up another half step to play D. In general, use natural and sharp notes when going up the chromatic scale, and natural and flat notes when going down.

double flat notes

Double flat notes are, of course, similar to double sharp notes. When you see a double flat, start with the natural state of the note, and go two half steps — which equals one whole step — down the chromatic scale and play whatever note is there.

So, let's apply that definition to Gbb, which is pronounced, "G double flat." First, start with the natural state of the note — G — and then go two half steps down the chromatic scale and play that note, which happens to be F. So, this means that **when you see Gbb, the correct note to play on your instrument is F**. However, even though you play F on your instrument, be sure to think of it as Gbb.

Gbb



When you see "Gbb" it means to start with G — the natural state of the note — and go down one whole step to the F and play that note. Make sure to consider this note as Gbb and not F.

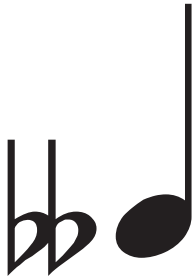


double sharps and flats in notation

In music notation, a double flat note is indicated by a note symbol that has two flat signs on its left.

A double sharp note, though, has its own special symbol. It's indicated by a note symbol that has something that looks like a little "x" to its left.

Double sharp and flat notation symbols



Double flat
note symbol



Double sharp
note symbol



colloquialisms for key-related concepts

Here's a good place to point out that since major keys are used most often, usually when musicians talk about them, they don't say the word "major," instead preferring to leave it implied. For example, mostly, the key of G major would simply be called, "the key of G."

Minor keys, on the other hand, always have the word "minor" in their name — it's never implied.

Another quirk to be aware of has to do with going up or down the chromatic scale.

Sometimes, you'll have a situation where you're playing a song in a key, such as D, and then someone wants to change it to the key of Eb. So, they might say something like, "go up a half step to Eb." Well, technically, going up a half step is done with a sharp sign. So, that would actually put the key at D# as opposed to Eb.

But D# is a theoretical key, and those are somewhat messy to work with. Instead, most of the time, musicians substitute D# with Eb, which is much more user friendly.

So, from D, "going up a half step to Eb" actually means "go up a half step to D#, but since D# is a theoretical key, use Eb instead."

In general, musicians tend to imply a lot of information, and that can be tricky for an inexperienced player to navigate. It probably can't be overstated, though, that if someone with more experience gives you instructions that you don't understand, simply ask for clarity.



an overview of accidentals

While major and minor scales play the biggest role in creating the sound of a key, notes outside the scale can also be used, usually to highlight notes of the main scale in use.

Now, in notation, the key signature outlines which main scale is in use by stating upfront which notes in the piece should be considered sharp or flat with the use of a sharp or flat sign. But as it does that, **it also implies which notes are not sharp or flat throughout the piece.** For example, a key signature of two sharps, essentially says, "find the key with only two sharps — the sharps notes in that key should be considered sharp throughout the piece without the use of a sharp sign, and **all the rest are natural notes.**"

This is an important point because it shows that the key signature itself does not allow for notes outside the main scale. So, to indicate one, you have to override the key signature. A note that results from overriding the key signature is called an **accidental**.

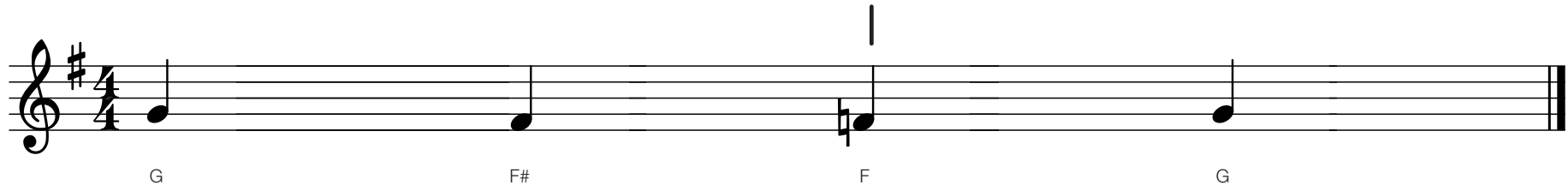


accidentals as a key signature override

When a key signature is present, an accidental is indicated by a note symbol that has a sharp, flat or natural sign to its left. The concept of accidentals is somewhat complex, so we'll break it down piece by piece. When you see an accidental, first and foremost, it instructs you to **ignore the key signature for that particular note and play the exact note written**. Let's look at an example of a measure that contains an accidental.

Example of a measure with accidental

An accidental note that reads as F natural and overrides the key signature.



This example is in the key of G, which has one sharp — F#. While the first two notes follow the key signature exactly, going from G to F#, the third note is an accidental because it has a natural sign next to it. Since it occupies a staff space that represents the letter F, it reads as F natural and overrides the key signature, which calls for notes that represent F to be read as F# by default.

Following the accidental, there's a G note that isn't affected by the accidental and can be read as normal.



how long accidentals remain in effect for

An accidental applies not only to the note that has the sharp, flat or natural sign next to it, **but also — unless otherwise noted — to any subsequent notes that occupy the same staff line or space until the bar ends.** These notes will not carry the same sign as the original accidental, but should be read as though they do. Once the bar ends, the accidental is canceled and the key signature goes back into effect as normal. Let's see this in action.

Example of a piece with accidentals

The example shows a musical staff in G major (one sharp, F#) with a 4/4 time signature. The first measure contains four notes: G (quarter), F# (quarter), F (quarter with a natural sign), and F (quarter). The second measure contains four notes: G (quarter), F# (quarter), D (quarter), and G (quarter). A bar line is placed between the two measures. Annotations explain the reading of each note.

Simply read as F#, according to the key signature's parameters.

An accidental that reads as F natural and overrides the key signature. Remains in effect for any subsequent note occupying this staff space until the bar ends.

Also F natural because it occupies the same staff space as the accidental that precedes it, which is still in effect. Notes like these won't have the same sign as the original accidental, but should be read as though they do.

This reads as F# because the end of measure 1 canceled out any accidentals, and the key signature went back into effect.

Bar line indicates the end of the measure 1. At this point all accidentals in measure 1 are canceled and the key signature goes back into effect.

This example is in the key of G, which has one sharp — F#. While the first two notes of measure 1 follow the key signature exactly, going from G to F#, the third note is an accidental because it has a natural sign next to it. It reads as F natural and overrides the key signature, which calls for notes that represent F to be read as F# by default. It also instructs the reader that unless otherwise noted, for the rest of the measure, any other notes that sit in this staff space should also be read as F natural without the use of a natural sign to indicate that it's also an accidental.

So, since the fourth note sits in that staff space, and the accidental is still in effect, it also reads as F natural, even though it doesn't have a natural sign. Now, once measure 1 is completed, the accidental in it is canceled, and the key signature goes back into effect as normal. That means that the second note of measure 2 is an F# and not an F natural — because the key signature calls for notes that represent F to be read as F# by default.

when accidentals don't affect notes that share its letter name

At this point, take special note that when an accidental is in effect, **it only applies to notes that occupy its exact same staff line or space**. That means that other notes within the measure that share the same letter name but not the same staff line or space are not affected by the accidental and should be read according to the key signature. Let's check out an example.

Example of a piece with accidentals

The example shows a musical staff in 4/4 time with a key signature of one sharp (F#). The notes and their accidentals are: Measure 1: G (quarter), F# (quarter), F (quarter with natural sign), F# (quarter). Measure 2: G (quarter), F# (quarter), D (quarter), G (quarter). A bar line separates the two measures.

Simply read as F#, according to the key signature's parameters.

An accidental that reads as F natural and overrides the key signature. Remains in effect until the bar ends.

Even though this note shares the same letter name as the one with an accidental, it is not affected by the accidental because it is on a different staff line. So, this note is read according to the key signature, as an F#.

This reads as F# because the end of measure 1 canceled out any accidentals, and the key signature went back into effect.

Bar line indicates the end of the measure 1. At this point all accidentals in measure 1 are canceled and the key signature goes back into effect.

G F# F F# G F# D G

This example is in the key of G, which has one sharp — F#. While the first two notes of measure 1 follow the key signature exactly, going from G to F#, the third note is an accidental because it has a natural sign next to it. It reads as F natural and overrides the key signature, which calls for notes that represent F to be read as F# by default. It also instructs the reader that unless otherwise noted, for the rest of the measure, any other notes that sit in this staff space should also be read as F natural without the use of a natural sign to indicate that it's also an accidental.

Now, the fourth note in measure 1 is on a staff line that also represents the letter F, but since it is not in the same staff space as the accidental that precedes it, it's unaffected by the accidental and should read according to the key signature's parameters. That makes it an F# and not an F natural.

canceling accidentals within a measure

While the end of a bar serves as one way to cancel accidentals, they can also be canceled within the measure by another accidental that overrides it. The new accidental changes how the note should be read going forward and remains in effect until either it's overridden or the bar ends. Here's an example.

Example of a piece with accidentals

The example shows a musical staff in 4/4 time with a key signature of one sharp (F#). The notation consists of two measures, each with four quarter notes. The notes and their accidentals are: Measure 1: G (natural), Gb (flat), G (natural), G (natural). Measure 2: G (natural), Gb (flat), G# (sharp), G# (sharp). Vertical lines connect the notes to explanatory text boxes.

Read as G natural, according to the key signature's parameters.

Accidental that cancels the preceding one and reads as G natural. This one stays in effect until either it's overridden by another accidental or the bar ends.

Also G natural because it occupies the same staff line as the accidental that precedes it, which is still in effect.

Accidental that cancels the preceding one and reads as G#. This one stays in effect until either it's overridden by another accidental or the bar ends.

Also G# because it occupies the same staff line as the accidental that precedes it, which is still in effect.

An accidental reading as Gb. It stays in effect until either it's overridden by another accidental or the bar ends.

Bar line indicates the end of the measure 1. At this point all accidentals in measure 1 are canceled and the key signature goes back into effect.

Read as G natural, according to the key signature's parameters.

An accidental reading as Gb. It stays in effect until either it's overridden by another accidental or the bar ends.

This example is in the key of G, which has one sharp — F#. The first note in measure 1 follows the key signature exactly and is read as G natural. The second note is an accidental with a flat sign and reads as Gb. It doesn't stay in effect for long, as the third note is also an accidental and overrides it. The third note has a natural sign, so it reads as G natural and causes the fourth note to also be read as G natural because it occupies the same staff line.

After the fourth note, the bar is over, so all the accidentals in measure 1 are canceled out and the key signature goes back into effect. That means that measure 2 starts with G natural, as the key signature would indicate. Then, the second note is an accidental with a flat sign that reads as Gb. It doesn't stay in effect for long, as the third note is also an accidental and overrides it. This time, the third note has a sharp sign, so it reads as G# and causes the fourth note to also be read as G# because it occupies the same staff line.

what "canceling" an accidental within a measure actually means

There's a common misconception about accidentals that canceling one within a measure means that notes that it would have affected should automatically revert back to being read according to the key signature's parameters. This isn't actually true.

The only time accidentals get canceled and automatically revert notes back to being read according to the key signature's parameters is at the end of the measure it's in. Within measures, the term, "canceling an accidental" would be better described as "overriding an accidental" because you can cancel it to any variation that a sharp, flat or natural sign could make it. This means that the note that you cancel it to does not have to coincide with the key signature's parameters. Let's see this principle in action.

Example of a piece with accidentals

Accidental that cancels the preceding one and reads as G natural. This happens to coincide with the key signature's parameters.

Accidental that cancels the preceding one and reads as G#. This does not coincide with the key signature's parameters.

G Gb G G G Gb G# G#

In measure 1 of this example in the key of G, which has one sharp — F# — the second and third notes are both accidentals. As a Gb, the second one is not in the G major scale. It lasts for one note, as the third one overrides it, setting it to G natural, which is in the G major scale, and coincides with the key signature's parameters. Now, measure 2 is similar in that both the second and third notes are accidentals, and the second one reads as Gb. But this time, the Gb is canceled by a G#, which is not in the G major scale and does not coincide with the key signature's parameters.

In practice, it's far and away most common that accidentals get canceled to notes that do happen to coincide with the key signature's parameters. But the reality is, it doesn't happen that way 100% of the time, and it's important to know the difference simply for the outlier situations.

the five principles of accidentals

Accidentals are an important part of music notation because they show how songwriters and composers add colorful notes to a piece that help accent the notes of the main scale in use. Handling them can be distilled down to five basic principles.

1 When you see an accidental, **ignore the key signature for that particular note and play the exact note written.**

2 An accidental applies not only to the specific note that has the sharp, flat or natural sign next to it, **but also — unless otherwise noted — to any subsequent notes that occupy the same staff line or space until the bar ends.** These notes will not carry the same sign as the original accidental, but should be read as though they do.

3 Accidentals **only apply to subsequent notes that occupy the exact same staff line or space as the original.** That means that other subsequent notes within the measure that share the same letter name but not the same staff line or space are not affected by the accidental and should be read according to the key signature.

4 **The end of a measure cancels all accidentals within it.** After a measure with accidentals ends, the key signature goes back into effect until further notice.

5 **Accidentals can also be canceled within the measure by another accidental that overrides it.** They can be canceled to any variation that a sharp, flat or natural sign could make the note. Most of the time, accidentals get canceled to notes that coincide to the key signature's parameters, but sometimes they don't.

arrangement essentials

By far, the most important pieces of information in a song's lead sheet are its melody and the chords that help support its melody. Once you have a basic idea about how to handle those crucial components, you are actually free to be as creative as you want with the performance of the song.

Now, many lead sheets go beyond the melody and the chords and also offer a suggested way to perform a complete version the song it depicts. A **complete version of a song is called an arrangement**, and all the instructions for how to handle one come through music notation.

Here are some of the most essential notation elements that relate to arrangements. By using them, you can take a lead sheet and perform the song it depicts as a complete version.

how a song and arrangement differ

To understand the concept of arrangements, you have to know how they differ from songs. See, at its core, a song is basically a collection of musical parts that work together in a loose, flexible structure. An arrangement is a version of a song that organizes the song's parts in a particular way. The difference may seem subtle, but it's important — a song is a single entity, but there can be multiple arrangements of the song that order its parts in different ways. Plus, in an arrangement, a song can have musical parts added to it or even taken away for creative purposes.



an example of a song arrangement

A pretty straightforward example of the difference between songs and arrangements comes from jazz music.

Typically, when a composer or songwriter writes a jazz tune, they write two distinct parts for it, **an A part** and **a B part**. That's it — those two parts are considered the entire song, and as far as order is concerned, the intention is that the A part, should be played before the B part.

Now, usually, those parts are pretty short, and playing them once back to back might only take 30 seconds. Of course, performances of songs are usually much longer than that — they're more like three minutes.

To get there, performers might start by playing the whole thing only instrumentally at first and then, play it again, this time with a singer singing the lyrics. That pushes the song to about 60 seconds — the first minute.

Then, they might play the whole thing again instrumentally, perhaps this time to feature a specific instrument, which takes them to 1:30. From there, they could sing the whole song again, taking them to two minutes, and finally, repeating just the A part to give the song some closure.

In the end, the song went from lasting about 30 seconds to a respectable 2:15, just by giving it some structure and an order — an arrangement.

Here's the whole arrangement of the song in a nutshell:

- A part and B part instrumentally (:30)
- A part and B part with lyrics (1:00)
- A part and B part instrumentally (1:30)
- Repeat A part and B part with lyrics (2:00)
- Repeat A part with lyrics (2:15)

Of course, there are multiple ways to arrange songs, and at the end of the day, musicians often take a song that someone else performed and come up with a new arrangement in order to add their own creative touch to it.



how songs became driven by lyrics

In music terms, songs whose main parts are centered around an A part and a B part are considered to have an **A/B structure**.

The A/B structure as form of songwriting had its heyday in the first half of 20th Century.

Back then, popular music was still mostly driven by big bands and instrumental music. When singers did sing, their contributions weren't considered any more important than those of any of the other instrumentalists in the band.

But musical tastes evolved, and singers as well as the lyrics they sang started to become the most important aspects of the music industry.

So, songwriters and composers started writing songs that revolved around lyrics, a practice that continues to this day.



the main parts in songs that contain lyrics

Popular music as we know it today is centered around a section of music that contains a few lines of really catchy lyrics called a **chorus**, also known as a **refrain** or a **hook**.

In most arrangements, a song's chorus is repeated multiple times throughout the piece.

To support the chorus, there's another main section of music and lyrics called a **verse**.

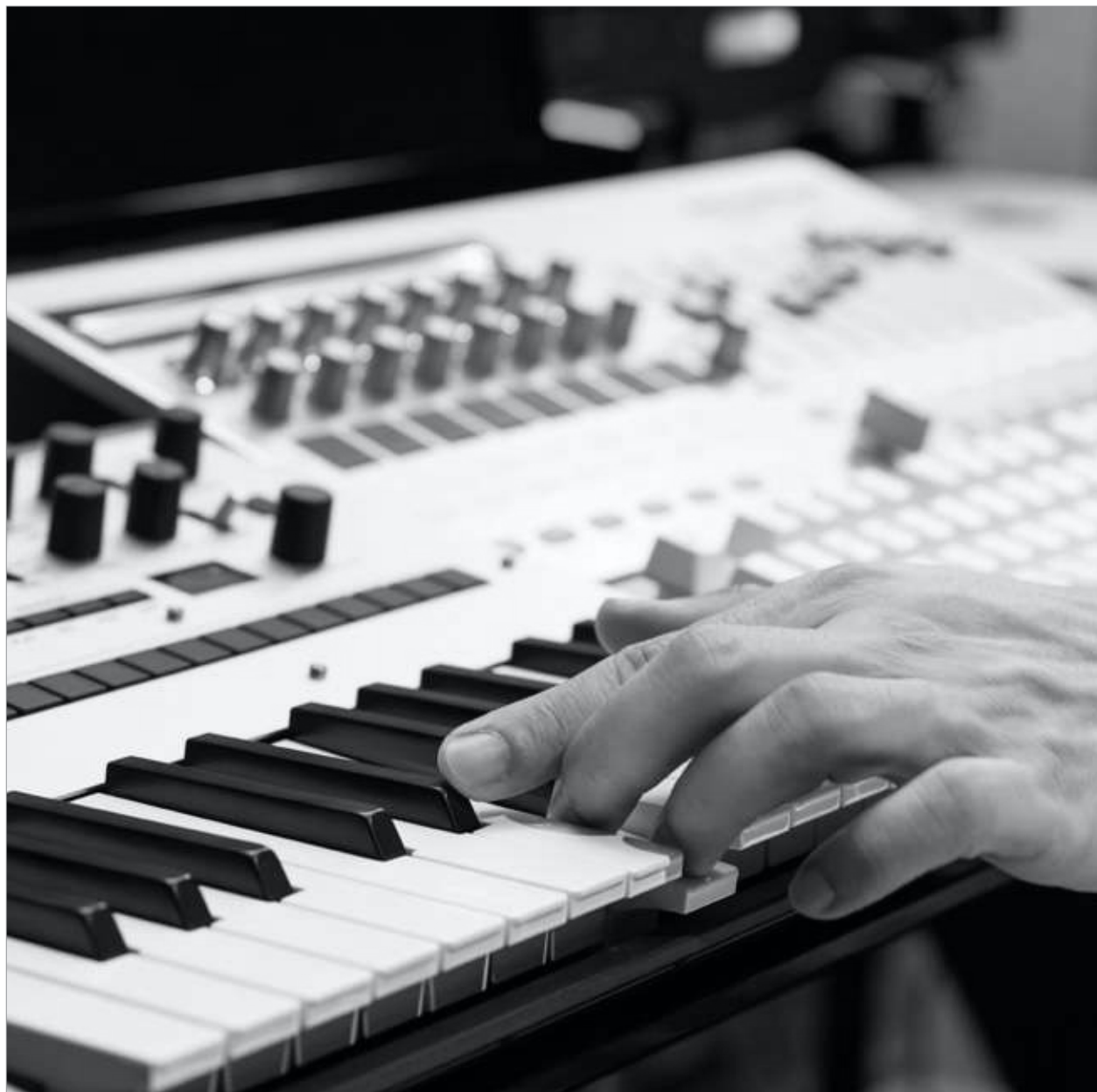
A verse's main function is to help lead into the chorus, and since the chorus is typically repeated multiple times throughout a song, there are usually multiple verses as well.

But while a chorus typically repeats itself in music and lyrics, only the musical aspect of verses stay the same — the lyrics will differ.

Now, note that these are only the most common ways verses and choruses are used in songs. There aren't any hard rules that they follow, and here's a good time to mention that choruses and verses sometimes have the same melody — though they'll always have different words.

Plus, choruses can even have slightly different lyrics as they're "repeated" during the song.

With all that in mind, a general rule you can fall back upon when wondering if something is a verse or a chorus is that if it's the catchiest part of the song and it repeats mostly intact throughout, it's a chorus. If it's a main part that leads to the chorus, then it's a verse.



an arrangement of a song that has lyrics

When a song contains lyrics and has repeated choruses that follow verses, it's considered to be written in a **verse/chord structure**.

Now, many songs that are written in the verse/chord structure have about three verses, a chorus and nothing more.

As far as order is concerned, the songwriter's basic intention is that verse one is followed by a chorus, then verse two is followed by a repeat of the chorus, and finally, verse three is also followed by a repeat of the chorus.

Of course, it would get pretty boring to simply sing all three verses and choruses back to back to back, so, to make things more interesting, a typical arrangement of a three verse song might begin with the chorus being played instrumentally only as a lead in to the song.

Then, verse one and the chorus would be sung, followed by verse two and then another chorus. Next, to break things up, another instrumental chorus might be played, followed by the last sung verse and chorus.

As an ending, it's pretty common to sing the chorus one last time, as it is the most important part of the song.

Here's the whole arrangement in a nutshell:

- Chorus played instrumentally
- Verse one and the chorus sung
- Verse two and the chorus sung
- Chorus instrumentally
- Verse three and the chorus sung
- Chorus sung once more to end

At the end of the day, songs that contain a few verses and choruses are the most common, and arranging them is mostly about ordering them in a way that makes performing them as interesting as possible.



the intro and outro

While verses and choruses are the main parts of songs that have lyrics, they're usually supported by other parts as well.

For starters, anything played as a lead in to the song is called an **introduction**, or intro for short. Most often, intros are played only as instrumentals, but sometimes, there are vocal parts added as well, usually of the "oooo" and "aaah" variety as opposed to specific lyrics.

On the flip side, anything having to do a song's ending is called an **outro**, which can be played instrumentally only or also center around lyrics.

In fact, a very common way to end a song is to repeat its last line or two. A short, repeated section that helps end a song is called a **tag**.

Ultimately, you can think of a song as a story — the intro serves as its beginning, the section containing the verses and its chorus — **the verse/chorus section** — make up the bulk of it's narrative, and the outro helps close it all out.



other parts in the verse/chord structure

While intros and outros respectively cover beginnings and endings, another category of song parts relate to keeping the repetitive nature of the verse/chord section from becoming monotonous.

To help break things up, often after one of the choruses, there's an entirely new section of lyrics that's also completely different musically from either the verse or the chorus called a **bridge**. In a song within the verse/chord structure, bridges are typically sung once and almost always contain lyrics.

Verses and choruses can also be broken up by a section of music that's only played instrumentally, called an **instrumental break**, or break for short. Instrumental breaks are pretty flexible — they can either be completely different musically from either the verse or the chorus, like a bridge, but they can also be identical to one of those parts as well.

In fact, many instrumental breaks are simply a chorus or verse played instrumentally while a musician shows off a little on their instrument — in music terms, the musician is "**taking a solo**."

Now, bridges and instrumental breaks are the most common parts that are used to keep the verse/chorus section from sounding too repetitive, but some songs do have a special section between a verse and a chorus that further emphasizes that the chorus is coming, called a **pre-chorus**.

Pre-choruses are a bit like a few song parts. They're kind of like a verse, in that they specifically lead into a chorus, but also like a bridge in that they usually depart musically from either the verses or the chorus. They're also even reminiscent of a chorus, in that they're often catchy and repetitive.

Of course, songs can have any of these parts or even none of them, but usually, any section that helps keeps the verse/chorus section fresh is going to make the arrangement sound better in a performance.



A note about the term, "bridge"

The term "bridge" can be quite confusing for an inexperienced player because it's played somewhat differently depending on whether you're using the verse/chord structure or the A/B structure.

Within the verse/chord structure, a bridge is specifically called "the bridge," is typically sung once and almost always contains lyrics.

However, in the A/B structure, common in jazz, the bridge almost always means the "B part," which can be repeated as many times as the song calls for. Plus, because the nature of jazz is often instrumental, a bridge won't always contain lyrics.

common arrangement examples

Between all the different song parts available, arrangements can take on a variety of forms.

For example, here's a common arrangement that's used for a three verse song:

- Intro done instrumentally
- Verse 1 and chorus sung
- Verse 2 and chorus sung
- Instrumental break
- Verse 3 and chorus sung
- Outro

Here's another one, with only a slight change:

- Intro done instrumentally
- Verse 1 and chorus sung
- Verse 2 and chorus sung
- Bridge
- Instrumental break
- Verse 3 and chorus sung
- Outro

These two arrangements are very common largely due to their straightforwardness. Their simplicity helps performers connect songs with the skills that they bring to the table, which breathes new life into old songs and makes new ones seem like they've been around forever.



Songwriting versus arranging

Over the years, the terms, "songwriting" and "arranging" have become somewhat synonymous, but it wasn't always that way. See, it used to be that performers didn't typically write their own songs, so the music industry employed people to write ones that everyone was free to record.

Under that structure, the people who came up with the main sections of new songs, such as the verses and chorus or the A and B parts, were credited as the songwriters. Then, someone different, such as a producer, would arrange the song for a specific recording of it.

Nowadays, a lot of acts write their own music that they themselves record, so songwriting and arranging usually happens all at once. But they are different processes. When it comes down to it, songwriting involves creating a new piece, and arranging involves taking a piece — any piece, whether you've written it or not — and giving it a specific, performance-ready structure.

an overview of the notation symbols that indicate arrangement instructions

Usually, lead sheets convey fairly basic arrangements, mostly for the sake of brevity.

In fact, they'll almost never include instrumental breaks or intros, and many even only contain the most minimal instructions for arrangement.

This is particularly true for songs written in the A/B structure, and it's actually more common than not that their lead sheets only depict the A and B parts and not much more.

This provides a certain flexibility, which is appreciated by many types of players, and really, once you get the hang of working with arrangement principles, it's pretty intuitive to build on the lead sheet and add what you need.

Overall, there's a wide range of how detailed a lead sheet will be, but no matter how sparse or complete it is, the music notation symbols that provide instructions for how to navigate the arrangement all have an underlying theme.

Basically, they all start with a symbol that directs you to another point in the lead sheet, and from there, you continue playing.



a lead sheet with no arrangement

The most minimal type of arrangement depicted in a lead sheet is one that really has no arrangement at all to speak of.

It simply contains the main parts of the song written out back to back, with no specific notation symbols to mark their separation.

For example, the song, "My Bonnie Lies Over the Ocean" has two distinct parts. The first one starts with the line, "My Bonnie lies over the ocean, my Bonnie lies over the sea," while the second starts with "Bring back, bring back, oh bring back my Bonnie to me, to me."

Now, it wouldn't be that uncommon to run across a lead sheet that simply connects the two parts without any real indication that the two musical sections are actually two separate parts.

The benefit of lead sheets with no arrangement

Note that a bare bones version of a song doesn't necessarily mean you have a bad lead sheet, especially considering that all you really need out of one is the chords and the melody line.

With a minimal version, you can arrange the song any way you like.

Perhaps, you play the whole thing first as an instrumental intro and then sing the whole song a couple of times through. Then, you can play the first part as an instrumental break and close out by singing the second part one or two more times through.

At the end of the day, arrangements are flexible and lead sheets are only sketches. Sometimes having the minimal amount of instructions from a lead sheet can foster the maximum amount of creativity.

Full lead sheet for "My Bonnie Lies Over the Ocean"

Start of the first part

My Bon - nie lies o - ver the o - cean, _____ my

5 D7 G C

Bon - nie lies o - ver the sea. _____ My Bon - nie lies

10 F C F

o - ver the o - cean, _____ oh bring back my

14 G C C F

Bon - nie to me. _____ Bring back, bring

Start of the second part

20 D7 G C

back, bring back my Bon - nie to me, to me!

25 C F D7 G

Bring back, bring back, oh bring back my

30 C

Bon - nie to me! _____

a lead sheet with section breaks

A minor step up from having no arrangement information in a lead sheet at all is at least having the sections clearly marked.

This is done through the usage of a double bar line that marks the end of a section and in turn, the start of the next. As it's used to break up music sections, a double barline is often referred to as a **section break**.

To see this in action, let's look at, "My Bonnie Lies Over the Ocean," which represents a classic example of the A/B structure. The first part, the A part, uses words from the song title as its first line, while the second part, the B part, starts with "Bring back, bring back."

Now, this song contains a pickup measure that leads into the A part, and keep in mind that pickup measures are unofficial measures.

So, the A part doesn't actually begin on what's usually thought of as the first syllable of the song — the "My" lyric in the pickup measure. It officially starts with the "Bon-" syllable in the first bar after the pickup.

The A part ends in measure 16, shortly after the lyric, "oh bring back my Bonnie to me." In this lead sheet example, the end of measure 16 has a double barline, which clearly shows when the A part ends, and in turn, where the B part begins — in the next measure, measure 17.



Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup measure,
an unofficial bar.

Official start of the A part

4

9

13

17

22

28

Double barline marks the end of the A part

Start of the B part

My Bon - nie lies o - ver the o - cean, _____

my Bon - nie lies o - ver the sea. _____ My

Bon - nie lies o - ver the o - cean, _____ oh

bring back my Bon - nie to me. _____

Bring back, bring back, bring back my

Bon - nie to me, to me! Bring back, bring

back, oh bring back my Bon - nie to me! _____

dual purpose pickup measures

Section breaks are helpful music notation symbols because they take out any uncertainty as to where song parts officially end and begin.

They're particularly useful when you consider the fact that not only can there be pickup notes that lead into the first part of a song, but there can also be pickup notes that lead into other parts of the same song.

Of course, pickup notes that lead into the first part of a song are fairly straightforward to identify — they're shown in partial measures that happen at the very beginning of a lead sheet.

Far less obvious, though, are pickup notes that lead into other parts of a song because **they're found in full measures that have a dual purpose — to help end one section and also, lead into the next.**

For example, it's common in "My Bonnie Lies Over the Ocean" to tack on the word, "oh," right before you sing the B part.

So, the end of the A part is sung, "oh bring back my Bonnie to me," and then you sing the pickup note — another "oh" — right before the first line of the B part, which starts with, "Bring back, bring back."

In this modified lead sheet example, that pickup note that leads into the B part can be found on beat 4 of measure 16, whose first two beats are covered by a half note that helps end the A part.

Now, by nature, double barlines mark the end of sections more than the beginnings of them, so you'll find the section break marker at the end of measure 16, even though it contains both the ending of the first part as well as the pickup note that leads into the following section.

This also further highlights the fact that pickup notes are not officially part of the section they lead into. At the end of the day, section breaks simply make finding all the song parts in a lead sheet more intuitive.

Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup measure,
an unofficial bar.

The lead sheet for "My Bonnie Lies Over the Ocean" is presented in 3/4 time. It begins with a pickup measure (unofficial bar) containing a single quarter note G4. The first section, the A part, starts at measure 1 with the lyrics "My Bon - nie lies o - ver the o - cean,". Measure 16 contains a half note G4 that helps end the A part, followed by the lyrics "oh". A section break is indicated at the end of measure 16. The B part begins at measure 17 with the lyrics "Bring back, bring back, bring back my". The sheet includes various annotations: "Official start of the A part" at measure 1, "Half note that helps end the A part" pointing to the half note in measure 16, "Bar that ends part A and leads into part B" pointing to the section break at the end of measure 16, "Pickup note that leads into the B part" pointing to the quarter note in measure 17, and "Section break" at the end of measure 16. Chord symbols (C, F, D7, G) are placed above the staff to indicate the harmonic structure.

a basic repeat

The majority of songs really only have between one and three sections, and in arrangements, these parts are typically recycled in different ways to construct the best possible version for performance.

So, sometimes, you sing an exact duplicate of what you just sang, and other times, you sing the same melody over — except with different words. Of course, you can even take parts you've already sang and play them instrumentally using no words at all.

All of this requires you to repeat yourself in different ways, and in music notation, the **repeat sign** is the main catalyst for repetition.

A repeat sign can usually be found at the end of a measure and looks like a single, thick barline with a colon to its left.

At its most basic, a repeat sign with no other arrangement instructions to override it **means to go back to the beginning, play the song from that point, and then ignore the sign when you reach it again.**

In this lead sheet example, there's a repeat sign at the very end of the song, "Mary Had a Little Lamb."

Since there are no other arrangement instructions that override it, the repeat sign in this case means to go all the way back to the beginning and play the song until the very end, at which point you can now ignore the repeat sign and stop playing.

Full lead sheet for "Mary Had a Little Lamb"

The lead sheet for "Mary Had a Little Lamb" is written in 4/4 time with a key signature of one sharp (F#). The melody is on a single staff. The lyrics are: "Ma - ry had a lit - tle lamb, lit - tle lamb, lit - tle lamb. Ma - ry had a lit - tle lamb whose fleece was white as snow. And ev - ery where that Ma - ry went, Ma - ry went, Ma - ry went, ev - ery where that Ma - ry went the lamb was sure to go." The sheet includes four lines of music, each starting with a measure number (1, 3, 5, 7). Chords C and G are indicated above the staff. A repeat sign is placed at the end of the final measure.

Repeat sign with no other arrangement instructions to override it. This means to go back to the beginning, play the song from that point, and then ignore the sign when you reach it again. Since this repeat sign is at the end, once you reach this point, you can ignore the sign and stop playing.

the "repeat from here" sign

While you'll often come across lead sheets that have one standalone repeat sign that simply directs you back to the beginning, it's perhaps most common to see a repeat sign with it's sister symbol, the **"repeat from here" sign**.

Now, the "repeat from here" sign is actually technically just called a repeat sign, and usually, it's referred to simply as "the other repeat sign."

But looking at it as the "repeat from here" sign provides more clarity about it's actual function.

See, the "repeat from here" sign works in conjunction with the repeat sign. **When it's present, the repeat sign instructs the reader to find the "repeat from here" sign and continue playing from there.**

Then, the next time you come around to the repeat sign, you can ignore it.

A "repeat from here" sign is typically found at the beginning of a measure and looks like a reflection of the repeat sign — **it's made up of a thick bar with a colon to its right.**

Something else to note is that as you're reading a lead sheet, you would encounter the "repeat from here" sign before you see the repeat sign. At that point, you would simply ignore it, as it doesn't actually mean anything until you come to the repeat sign that directs you toward it.



the "repeat from here" sign in action

Let's see the "repeat from here" sign in a practical situation. In this example, the lead sheet for "My Bonnie Lies Over the Ocean" has been modified to allow for a musician to repeat the B part.

This is done through the usage of a repeat sign at the end of the very last bar of the song, as well as with a "repeat from here" sign at the beginning of the first bar of the B part. So, to navigate this lead sheet, you would start with the pickup measure and play through the entire A part, which ends with a section break at the end of measure 16.

Then, you'd start playing the B part at measure 17, completely ignoring the "repeat from here" sign because at this point, you haven't been directed toward it, so it doesn't actually mean anything yet. From measure 17, you'd play the B part all the way through until you reach the last measure, which ends with a repeat sign.

Now, since a "repeat from here" sign is present at measure 17, this repeat sign directs you toward it, so you would go back to measure 17 and continue playing from there.

In this lead sheet, there are no further arrangement instructions to speak of, so you would end up repeating the entire B part, and at the end, you would ignore the repeat sign and stop playing.



Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup measure,
an unofficial bar.

My Bon - nie lies o - ver the o - cean, _____

Official start of the A part

my Bon - nie lies o - ver the sea, _____ My

Bon - nie lies o - ver the o - cean, _____ oh

bring back my Bon - nie to me, _____

Double barline marks the end of the A part

Bring back, bring back, bring back my

The "repeat from here" sign. First time through the song, ignore it, but when you reach the repeat sign at the end, come back to this point and play from here.

Bon - nie to me, to me! Bring back, bring

back, oh bring back my Bon - nie to me! _____

Repeat sign. The first time you reach this point, go back to the "repeat from here" sign and play from there. The second time you get to this sign, ignore it and stop playing.

handling repeats in a nutshell

In general, handling a repeat sign is a two-step process. When you reach one, first, you to jump to the point it directs you to and continue playing from there. Then, when you return to the repeat sign, you ignore it and simply do the next logical thing that happens in the music. Now, sometimes, there are clear instructions that tell you what to do next, but often, you're left to decide the next step for yourself.

For example, when the repeat is at the end of a piece, and there are no other arrangement instructions in the music, you would first jump to the point you're directed toward, whether that's the very beginning or to the "repeat from here" sign, and continue playing.

Then when you return to the repeat sign, you would ignore it and stop playing. You stop playing at that point because you're at the end, and there's nothing left to play. So, stopping is the next logical action.

A repeat sign, of course, can happen anywhere in the music, and the two-step process still applies, even though the next logical action after returning to and ignoring it will most likely differ from when it happens at the very end.



basic mid-song repeats

Let's apply the two-step process for handling a standalone repeat sign in the middle of a song, something you'll see quite often.

In this lead sheet example, the song "Baa, Baa, Black Sheep" contains a repeat sign in the middle of the song, at the end of measure 4.

Since there's no "repeat from here" sign, this particular repeat sign directs you back to the beginning, where you would continue playing in order to repeat measures 1-4.

Then, when you reach the repeat sign again, this time, you would ignore it and simply move on to measure 5 because that's the next logical action in the music.

From there, you'd continue on to the end, where you'd stop, doing so because there aren't any other instructions directing you to do otherwise.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time. It consists of three staves of music. The first staff contains measures 1 through 4, with lyrics "Baa, baa, black sheep, have you a - ny wool?". The second staff begins with a repeat sign at the end of measure 4, followed by measures 5 through 8, with lyrics "three bags full. One for the mas - ter, and one for the dame, and". The third staff contains measures 9 through 12, with lyrics "one for the lit - tle boy who lives by the lane.".

Repeat sign that directs you back to the beginning because there's no "repeat from here" sign. Repeat measures 1-4 and then...

...when you return to the repeat sign, you can ignore it and go straight to measure 5 because that's the next logical action in the music.



volta brackets

Repeat signs often work in conjunction with other music notation symbols to communicate further arrangement instructions.

For instance, sometimes, the music wants you to repeat a section only to a certain point, and then has you end it differently than you did the first time, essentially conveying alternate endings for the section.

Alternate section endings are depicted through **volta brackets**, which look like brackets flipped on their sides with numbers in their top left corners. Volta brackets can span multiple bars, usually covering between about one and three.

If there are volta brackets in a section of music, there will always be at least two side by side, if not more, and the first one always finishes with a measure that has a repeat sign.

On a basic level, when you encounter the first volta bracket, which is usually referred to as the **first section ending**, or **first ending** for short, at first, you don't do anything — you simply play through to the repeat sign, jump to where it directs you and continue playing from there.

However, when you return to the first volta bracket, you ignore it completely, and skip all the measures that it contains.

Instead, you play the measures in the second volta bracket — the **second ending** — and then continue on from there with the next logical action that comes in the music.



volta brackets in action

Let's look at volta brackets in a practical situation. In this example, the lead sheet for "My Bonnie Lies Over the Ocean" allows for a musician to repeat the entire song without having to deal with the pickup measure the second time around.

This is a common usage of volta brackets — since pickup bars are partial measures, they don't flow naturally within the count on a repeat. So, usually, the pickup notes in a pickup bar are put into the last measure of the first ending, and then, the repeat sends you straight to the first official measure, bypassing the pickup bar altogether.

So to navigate this arrangement, you'd start with the pickup measure, and continue on through the A part, for now completely ignoring the "repeat from here" sign at the beginning of measure 1.

Then, you'd play the B part all the way through the first ending to the repeat sign, which, skipping the pickup bar, sends you back to the first official song measure, where you'll find the "repeat from here" sign.

Now, note that the first measure in the first volta bracket helps end the B part, while the second contains the pickup note that seamlessly leads you back into the A part from the first official song measure.

From there, you'd repeat the rest of the A part and most of the B part, until you return to the first volta bracket. This time, you'd ignore the bars in the first ending and instead, play the two bars in the second volta bracket — the second ending — and then, stop. You'd stop of course, because that's the next logical action in the song.



Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup bar. Play this to start the song, but it will get bypassed on the repeat. The pickup note in this bar also appears in the first ending.

The "repeat from here" sign. Note that the pickup measure is skipped.

The first ending. Play through this to the repeat sign the first time around, and ignore it after the repeat.

The second ending. Play this after the repeat.

Pickup note that leads back into the A part.

Stop after the second ending as it's the next logical action in the music.

volta brackets in the middle of a song

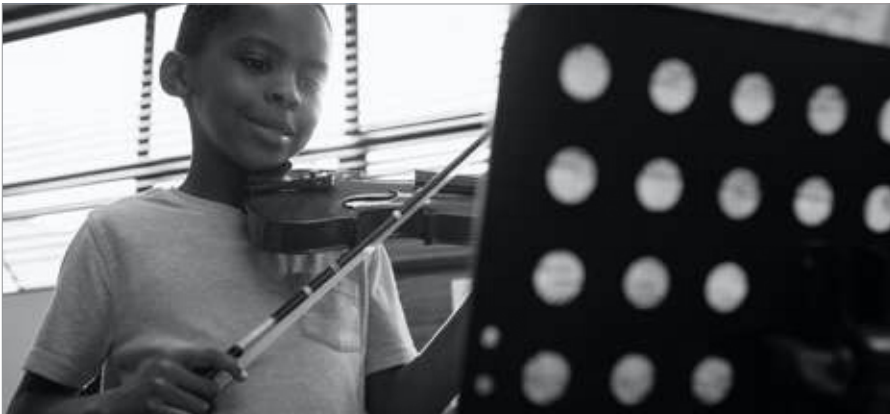
Volta brackets, of course, can happen at any point in the music. In this example, the lead sheet for "My Bonnie Lies Over the Ocean" allows for a musician to play the A part twice before going to the B part.

To navigate this arrangement, you'd start with the pickup bar and play the A part through the first ending to the repeat sign. The repeat sign, skipping the pickup bar, sends you back to the first official song measure, where you'll find the "repeat from here" sign. Note that the last bar of the first ending seamlessly leads you back into the A part.

From there, you'd repeat most of the A part, until you return to the first volta bracket. This time, you'd ignore the bars in the first ending and instead, play the two bars in the second ending.

Now, since you're still in the middle of the song, there are measures that follow the second ending, so the next logical action is to simply continue on with those measures until told otherwise.

So, in this case, you'd next play measure 19, which is the bar that follows the second ending and also coincides with the beginning of the B part. Then, you'd continue on to the end, where, since there are no further arrangement instructions, you'd stop playing.



Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup bar. Play this to start the song, but it will get bypassed on the repeat. The pickup note in this bar also appears in the first ending.

The "repeat from here" sign. Note that the pickup measure is skipped.

The first ending. Play through this to the repeat sign the first time. Ignore it after the repeat.

The second ending. Play this after the repeat.

The next logical action in the music is to play this bar after the second ending and continue.

Pickup note that leads back into the A part.

No further arrangement instructions, so you'd stop playing here.

reading music as a linear process

Repeats can be used in any section of a song, and when lead sheets get complex, there can be multiple throughout the piece.

This might sound like it'd be confusing, but consider that reading music is a linear process — once you've read a measure, inherently, you're done with it and can push on to the next.

Now, a repeat sign or something like it, might send you back to a measure you've already played, but only for the sake of brevity.

See, theoretically, music can be written in such a way that conveys a repeat without the use of an actual repeat sign, done by showing how to play a section the first time through, and then simply using the following measures to also show how to play it the second time through.

The issue with it being written this way, though, is that it makes for a longer piece to read. The advantage of a lead sheet, of course, is that it's short and only gives you a song's bare basics.

Ultimately, repeats, and arrangement ideas that center around them, help lengthen out a song without actually making the music you have to read longer, but it's important to always keep the linear process of reading in mind.

In general, once you read a measure or do an action, you don't do it again unless there's a specific reason — you're either instructed to or it's the next most logical action in the music.



section markers

The underlying idea behind lead sheets is that they're usually intended to be concise, yet easy to read. As arrangements get complex, with multiple repeats or other similar concepts, good lead sheets convey information more clearly and have better instructions in order to make the linear process of reading as intuitive as possible to follow.

One of the most common ways clarity is added to a piece is through the use of big, bold letters that clearly mark the beginning of a section. These letters, which can loosely be referred to as **section markers**, can be really helpful for the reader because they help break up complex arrangements into more accessible chunks.

When section markers, which usually look like big, bold letters in a box, are present, it's somewhat of an indicator that the arrangement might be tricky to navigate. That means that if you see them, you'll want to take extra care to follow the linear process of reading carefully.

Example of a section marker

Section marker for the A part of
"My Bonnie Lies Over the Ocean"

The image shows a musical score for the A part of the song "My Bonnie Lies Over the Ocean". The score is written on a single staff in 3/4 time. It begins with a treble clef and a key signature of one flat (B-flat). The melody starts with a quarter note G4, followed by a half note F4, and then a quarter note E4. The lyrics "My Bon - nie lies o - ver the o - cean, _____" are written below the staff. Above the staff, there are four chords: C, F, C, and D7. A section marker, consisting of a large, bold letter 'A' inside a square box, is placed above the first measure. A line connects the text "Section marker for the A part of 'My Bonnie Lies Over the Ocean'" to the section marker. The melody continues with a quarter note D4, a half note C4, and a quarter note B3. The lyrics "my Bon - nie lies o - ver the" are written below the staff.

My Bon - nie lies o - ver the o - cean, _____ my Bon - nie lies o - ver the

dealing with multiple repeats in a piece

Lead sheets can get challenging once they call for multiple repeats. In this example, "My Bonnie Lies Over the Ocean" is arranged so that you'd play and repeat the A part and then, do the same for the B part.

With this lead sheet, you'd start with the pickup bar and play the A part through the first ending to the repeat sign. Note the section markers.

The repeat sign sends you back to the section's first official measure, where you'll find the "repeat from here" sign — bypassing the pickup bar.

From there, you'd repeat most of the A part, but when you return to the first ending, you'd ignore it and instead, play the second ending.

After the second ending, the next logical action is to play measure 19 which coincides with the beginning of the B part.

Now, take note of the "repeat from here" sign at the start of measure 19. As the second instance of this sign in the piece, you can expect that eventually, a second repeat sign will redirect back to this point.

Of course, due to the idea behind the linear process of reading — if you've played it, you're done with it unless specifically instructed to repeat it — the second repeat wouldn't send you all the way back to the A part's "repeat from here" sign, because you've already played the A part. Plus, it simply makes the most sense that if there's a second "repeat from here" sign, the second repeat sign will redirect back to it.

So, from measure 19, you'd play the B part through its first ending to the repeat sign, which sends you back to measure 19.

Next, you'd repeat most of the B part, but when you return to the first ending, you'd ignore it and instead, play the second ending.

Then, you'd stop playing because you're at the end, and there are no more instructions that send you anywhere else.

Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup bar

Section marker for the A part

The first "repeat from here" sign in the piece. Note that the pickup measure is skipped.

The first ending. Play this the first time. At the repeat sign, jump to the first "repeat from here" sign and ignore this after the repeat.

The second ending. Play this after the repeat.

Section marker for the B part

The second "repeat from here" sign.

The first ending for the B part. Play this the first time. At the repeat sign, jump to the second "repeat from here" sign at measure 19 and ignore this after the repeat.

The second ending for the B part. Play this after the repeat, and then stop playing.

The lead sheet is written in 3/4 time. It begins with a pickup bar (measure 1) containing a quarter note G4. Measure 2 starts with a section marker for the A part and a repeat sign. The A part consists of measures 2 through 12. Measure 12 is the first ending, which has a repeat sign and a first ending bracket. Measure 13 is the second ending, which leads to measure 19. Measure 19 is the start of the B part, marked with a section marker and a repeat sign. The B part consists of measures 19 through 30. Measure 30 is the first ending for the B part, which has a repeat sign and a first ending bracket. Measure 31 is the second ending for the B part, which leads to the end of the piece. The lyrics are: "My Bon - nie lies o - ver the o - cean, my Bon - nie lies o - ver the sea. My Bon - nie lies o - ver the o - cean, oh bring back my Bon - nie to me. My me. bring back my Bon - nie to me, to me! Bring back, bring back, oh bring back my Bon - nie to me! me!"

repeats that usually signal an ending

Basic repeat and "repeat from here" signs are core notation symbols, and you're just as likely to see them in lead sheets that convey the most minimal arrangements as you are in the ones that depict most complex. But there's another category of repeats that are usually only found in the more complete arrangements. While this category of repeats doesn't have a specific technical name, you can consider them **repeats that usually signal an ending**. Repeats that usually signal an ending typically come with more instructions than a basic repeat, and as such, gives music arrangers a bit more flexibility when sending a reader to a different point in the music.

Now, **note that this category of repeats only "usually" signals an ending and not "always."** These types of repeats can actually be used anywhere in the music an arranger sees fit, but they're so often used to signal endings that going forward, we'll mostly look at them through that lens. But in general, if you do happen to come across one of these types of repeats, and it doesn't indicate the ending, just do the next logical action in the music — a good piece of advice that can solve almost any obstacle you encounter while reading music.



da capo

The most basic repeat that usually signals an ending simply sends you back to the beginning to continue playing from there.

This repeat is called a **da capo** repeat. The term, "da capo" is an Italian phrase that literally translates to "from the head," and in music, essentially means "from the beginning."

Now, there's no specific music notation symbol that indicates a da capo repeat. It's either written in as "Da Capo," or, as you'll see it most often, as its abbreviation "D.C."

In a lead sheet, a da capo repeat — usually shortened simply to "da capo" — almost always shows up at the very end of a piece's final bar, and works similarly to a basic repeat that doesn't come with a "repeat from here" sign.

When you see it, first finish out the measure it sits over and then, go back to the beginning and repeat everything you just played, including the measure that contains the da coda. Then, stop playing, as you've likely reached the end.

As an example, this lead sheet of "Baa, Baa Black Sheep," is arranged with a da capo.

To navigate it, you'd start with measure 1 and play all the way through the final measure, which contains a "D.C." instruction. After completing that last measure, you'd jump all the way back to the beginning and repeat the entire song, including that final measure. Then, you'd stop playing, as you've reached the end.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time and consists of 11 measures. The notes are as follows:

- Measure 1: C4 (quarter), E4 (quarter), G4 (quarter), F4 (quarter) - Chord: C
- Measure 2: A4 (quarter), B4 (quarter), C5 (quarter), B4 (quarter) - Chord: F
- Measure 3: A4 (quarter), G4 (quarter), F4 (quarter), E4 (quarter) - Chord: C
- Measure 4: D4 (quarter), C4 (quarter), B3 (quarter), A3 (quarter) - Chord: F
- Measure 5: G3 (quarter), F3 (quarter), E3 (quarter), D3 (quarter) - Chord: C
- Measure 6: C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter) - Chord: G
- Measure 7: G3 (quarter), F3 (quarter), E3 (quarter), D3 (quarter) - Chord: C
- Measure 8: C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter) - Chord: G
- Measure 9: G3 (quarter), F3 (quarter), E3 (quarter), D3 (quarter) - Chord: C
- Measure 10: C4 (quarter), D4 (quarter), E4 (quarter), F4 (quarter) - Chord: G
- Measure 11: G3 (quarter), F3 (quarter), E3 (quarter), D3 (quarter) - Chord: C

The lyrics are: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane." The "D.C." instruction is at the end of the final measure.

The "D.C." stands for "Da Capo." When you see this instruction, first finish out the measure it sits over. Next, go back to the beginning and repeat everything you just played, including the measure that contains the da coda. Then, stop playing, as you've reached the end.



da capo in songs that have repeats

You'll often find a da capo instruction in songs that also contain basic repeats. In these cases, make sure that all the basic repeats have been played before you do the da capo repeat.

Now, whether or not you should redo all the basic repeats during the da capo is somewhat debatable, as there's no official music notation rule that says you have to.

But since da capo literally translates to "from the beginning," most experienced musicians take that to imply that they should simply start the whole process over and in turn, treat the repeats as though they haven't been done yet.

As such, without instruction otherwise, **it's most conventional to redo any basic repeats during the da capo repeat, so you should default to doing it that way, too.**

Furthermore, **you should also redo any basic repeats for any other repeat that usually signals an ending**, unless otherwise instructed.

Of course, the best arrangers might clarify their intentions by adding a special note to the da capo instructions. Something like **"D.C. no repeats"** or **"D.C. with repeats"** leaves little question as to the reader's next steps.

In that vein, if you end up in a situation where it's not 100% clear whether or not you should take the repeats on a da coda, or something similar, and you can ask for clarity, you should do it. It's always better not to assume.



da capo with basic repeats in action

Let's study a lead sheet example that contains both a basic repeat and a da capo repeat.

To navigate this version of "Baa, Baa Black Sheep," you'd start with measure 1 and play through measure 4 to the repeat sign. Since there's no "repeat from here" sign, this repeat sends you back to the beginning.

From there, you'd continue playing on through to the end, ignoring the repeat sign after measure 4 this time around.

The final measure contains a "D.C." instruction. After completing that last measure, you'd jump all the way back to the beginning to start the process over. This time, when you reach the repeat after measure 4, you'd take it.

It sends you back to the beginning where you'd continue playing on through to the end, ignoring the repeat sign after measure 4 this third time around. Once you've completed the last measure, you're at the end and can stop playing — there are no other instructions to follow.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet is written in 4/4 time and consists of 11 measures. The first line contains measures 1-4, the second line contains measures 5-8, and the third line contains measures 9-11. The lyrics are: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane." The sheet includes a basic repeat sign after measure 4 and a da capo instruction "D.C." at the end. Annotations explain the repeat signs: "Repeat sign that directs you back to the beginning because there's no 'repeat from here' sign. Repeat measures 1-4 and then ignore it the second time around and play to the end. Repeat this process during the da capo repeat." and "The da capo sends you back to the beginning to repeat the whole process. Redo the repeat during the da capo."

Chord progression: C, F, C, F, C, G, C, C, G, D.C.

Lyrics: Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane.

da capo as lead into a pickup measure

In fairly rare occurrences, a measure with a da capo is used to transition a reader back to a pickup measure.

Now, since pickup measures are partial measures, **the only way this can logistically happen is if the measure that contains the da capo is also written as a partial measure.**

In this lead sheet example, "My Bonnie Lies Over the Ocean" is arranged in a way that sends the reader back to the beginning via a da capo repeat but doesn't skip the pickup measure.

Navigating this arrangement is fairly straightforward until the last bar, which contains a da capo instruction but is also only a partial bar — it only has two beats instead of three, which is what's required by the time signature. To handle it, simply follow the instructions exactly.

First, play the two beats of the half note, and then follow the da capo repeat. It sends you back to the very beginning — to the pickup bar, which calls for a pickup note to be played on beat 3, in effect, finishing off the last measure and seamlessly leading you back into the song.

Now, note that even though writing music this way does work, you don't see it done like this very often, mostly because it's not very common to use partial bars anywhere other than the pickup measure.

This makes it more likely to get missed, and also requires a pretty trained eye to catch in the first place. Basically, it's not a very user-friendly practice. But it is worth noting because it goes to show that repeats that usually signal an ending are very flexible, and sometimes arrangers have to get creative to keep complex arrangements short.

It's also a good reminder for any music reader to be detailed and deliberate about every song. Every instruction and nuance matters.

Full lead sheet for "My Bonnie Lies Over the Ocean"

Pickup bar. Its note kicks off the song but also in effect serves as beat 3 for the last measure of the song during the da capo repeat.

My Bon - nie lies o - ver the o - cean, _____

my Bon - nie lies o - ver the sea. _____ My

Bon - nie lies o - ver the o - cean, _____ oh

bring back my Bon - nie to me. _____

Bring back, bring back, bring back my

Bon - nie to me, to me! Bring back, bring

back, oh bring back my Bon - nie to me! _____ D.C.

Note that this measure is a partial bar — it only contains two beats instead of three, which is what's required by the time signature. Play the two notes and then, follow the da capo repeat.

da capo al fine

The da capo repeat often comes with further instructions that turn it into **a repeat that actually does send you to the ending.**

One of the most common ones is the repeat that first, sends you to the beginning via a da capo instruction, but also indicates an ending that happens part way through the piece, instead of at the end of a song's final measure.

This repeat is called a **da capo al fine** repeat. The term, "al fine" — pronounced "awl fee-neh" — is Italian and literally translates to "to the end." In music, the whole phrase essentially means "from the beginning to the end."

Handling a da capo al fine instruction is a two-part process. The first part is handled just like the process for a standalone da capo instruction, except instead of it being written in simply as "D.C.," it's written in as "**D.C. al fine.**"

So, when you see the D.C. al fine instruction, you jump back to the beginning, just as you would with a basic da capo instruction.

From there, though, you play until you reach an instruction that marks the ending, which is written in as "**Fine**" above the end of the last measure that should be played.

All said and done, when you come across a D.C. al fine instruction, jump back to the beginning and play until you've finished the measure that has the word Fine over it. Then, stop, as you've reached the piece's end.



da capo al fine in action

Let's see D.C. al fine in action. In this lead sheet example, "Baa, Baa Black Sheep," is arranged so that it ends after repeating the first section.

To navigate it, you'd start with measure 1 and play all the way through the final measure, which contains a D.C. al fine instruction.

After completing that last measure, you'd jump all the way back to the beginning and play through measure 4, which contains a Fine instruction. Because measure 4 has a Fine instruction, once you've played it, you've reached the end and can stop playing.

Note that the first time through the piece, you would ignore the Fine instruction. In music, Fine is always handled after the jump that comes with a repeat that usually signals an ending.

So here, it's ignored until you've jumped as part of the da capo portion of the instructions.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet is written in 4/4 time and consists of three staves of music. The first staff contains measures 1 through 3, with lyrics "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir," and chords C, F, C, F, C. The second staff starts at measure 4 with the lyric "three bags full." and a G chord, followed by a double bar line and the word "Fine". After the "Fine", the music continues with measures 5 through 7, with lyrics "One for the mas - ter, and one for the dame, and" and chords F, C, G. The third staff starts at measure 7 with the lyric "one for the lit - tle boy who lives by the lane." and chords C, F, C, G, ending with a double bar line and the instruction "D.C. al Fine".

After you do the da capo jump, finish after playing measure 4, which has the Fine instruction. First time through the piece, ignore it — Fine only comes into play after the jump that comes with a repeat that usually signals an ending.

Da capo al fine instruction means to jump back to the beginning and play through to the measure that contains the Fine instruction.

da capo al fine with basic repeats

Basic repeats are often part of the equation when it comes to a D.C. al fine instruction. So, let's study an example. Here, "Baa, Baa Black Sheep," is arranged with a repeat sign and a Fine instruction at the end of the first section.

To navigate this lead sheet, simply follow the instructions step by step. First, start with measure 1 and play through to the repeat sign, which takes you back to the beginning because there's no "repeat from here" sign.

Continue on back through measure 4 and now, you can ignore the repeat sign as well as the Fine instruction and push on to measure 5.

Note that at this point, Fine is ignored because it hasn't come after a jump that comes from a repeat that usually signals an ending.

So, from measure 5, play through the last measure, which contains a D.C. al fine instruction, and then jump back to the beginning and continue through measure 4.

Now here, because it is most conventional to redo the repeats on a da capo instruction, before you followed the Fine instruction, you would actually take the repeat sign first. So, jump back again to measure 1 and repeat through measure 4, where you can finally follow the Fine instruction and stop playing.

In a nutshell, this arrangement requires you to play section 1 twice, then section two and finally, section twice again to end it.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet is written in 4/4 time and consists of 11 measures. The lyrics are: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane." The sheet includes a repeat sign at the end of measure 4 and a "Fine" instruction at the end of measure 5. A "D.C. al Fine" instruction is at the end of measure 11. Navigation instructions are provided: "After the D.C. al fine jump, first do the basic repeat, and then follow the Fine instruction." and "Da capo al fine instruction, jump back to the beginning and play through to the word, Fine." A note at the bottom explains that the repeat sign is ignored when following the D.C. al fine instruction.

C F C F C

Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir,

4 G C Fine F C G

three bags full. One for the mas - ter, and one for the dame, and

First time through, Take the repeat as normal, but also redo the repeat during the da capo repeat.

Da capo al fine instruction, jump back to the beginning and play through to the word, Fine.

7 C F C G D.C. al Fine

one for the lit - tle boy who lives by the lane.

Note

Keep in mind with this example that even though it would be most conventional and logical to redo the basic repeat during the D.C. al fine repeat, some players wouldn't do it that way.

If possible, it's always best to ask for clarity in this situation. Otherwise, use your own discretion. Since, lead sheets are only guides, if it sounds better to you to skip the basic repeat during the D.C. al fine repeat, do it. Ultimately, the more experience you get working with lead sheet arrangements, the more liberties you might take in making changes based on your own creative tastes. This helps you add your own personality to the songs you choose to play.

an overview of da capo al coda

When following a piece logically, D.C. al fine essentially has you finish somewhere in the main part of the music, but a different da capo repeat sends you to a special section written in at the bottom of a lead sheet that specifically conveys an ending.

It's called the **da capo al coda** repeat, and is usually written in as **D.C. al coda**.

Now, while D.C. al fine is Italian for "from the beginning to the end," D.C. al coda translates to "from the beginning to the ending," a subtle but important difference. In music, D.C. al fine leads you to an actual stopping point, but D.C. al coda leads you to a section called a **coda** — Italian for "tail" or in music, "ending" — that contains the actual stopping point. A coda section can have multiple measures and even contain basic repeats. Plus, there's really no law against putting in a da capo or D.C. al fine repeat at the end of its last measure, though that's not particularly common, especially in a lead sheet.



handling a da capo al coda instruction

Handling a D.C. al coda instruction is a three part process. The first part is handled just like the process for a standalone da capo instruction, except instead of it being written in simply as "D.C.," it's written in as "D.C. al coda."

So, when you see the D.C. al coda instruction, you jump back to the beginning, just as you would with a basic da capo instruction.

From there, though, you play until you reach an instruction that directs you to the coda section, which is written in as **"To Coda"** above the end of the last measure that should be played.

The To Coda instruction sends you to the coda sign, which is a music notation symbol that kind of looks like target cross hairs.

The coda sign marks the beginning of the coda section and almost always sits above and at the start of the section's first measure.

Usually, once you complete the coda section, you can stop playing, unless of course, there are further instructions that tell you otherwise.

Something else to note is that just like the Fine instruction, the To Coda instruction is always handled after the jump that comes with a repeat that usually signals an ending.

So, ignore it until after you've jumped as part of the da capo portion of the instructions. You can also ignore the section marked by the coda sign until you're specifically directed there.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time. It consists of four staves of music. The first staff contains measures 1-3, the second staff measures 4-6, the third staff measures 7-9, and the fourth staff measures 10-12. The lyrics are: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane. Yes, sir, yes, sir, three bags full." The sheet includes several annotations: 1. A bracket above measures 4-6 with the text "To Coda" above measure 5. 2. A bracket above measure 9 with the text "D.C. al Coda" to its right. 3. A coda sign (a circle with a crosshair) above measure 10. 4. A text box explaining: "To Coda instructions mean to jump to the section marked by the coda sign. Ignore this instruction until directed toward it." 5. Another text box explaining: "A da capo al coda instruction means to jump back to the beginning, and play through the measure that contains the To Coda instruction." 6. A final text box explaining: "The coda sign marks the coda section. Ignore this section until directed toward it. Once you've played all the measures in this section, you've reached the end, barring further instructions."

Note

For those who are not very experienced working with D.C. al coda repeats, some lead sheets have the coda symbol next to the To Coda instruction, as a reminder for where to go next. These resources also usually add the word "Coda" next to the coda sign that marks the coda section, again as a helper. Neither courtesy changes the way you handle either instruction.

da capo al coda in action

Let's see D.C. al coda in action. In this lead sheet example, "Baa, Baa Black Sheep," is arranged so that it ends after repeating the last line of the A section. Keep in mind that a line or two that's repeated at the end of a song is called a tag, and the actual action of repeating the line is usually referred to as **"tagging it."**

To play this piece, you'd start with measure 1 and play all the way through measure 8, which contains a D.C. al coda instruction. Note that you'd ignore the To Coda instruction in measure 4 because you haven't been sent to it yet.

After completing measure 8 — the last one of the main part of the song — you'd follow the D.C. al coda instruction and jump back to the beginning, ignoring the coda section because you haven't been directed toward it yet.

From the beginning, you'd repeat measures 1-4. But this time, you'd follow measure 4's To Coda instruction. It sends you to the coda sign that marks the coda section starting at measure 9.

After you play the two bars in the coda, you'd stop playing, as you've reached the piece's end.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet is written in 4/4 time and consists of 11 measures. The first system (measures 1-4) contains the lyrics: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir,". The second system (measures 5-8) contains the lyrics: "three bags full. One for the mas - ter, and one for the dame, and". Measure 8 includes a "To Coda" instruction. The third system (measures 9-11) contains the lyrics: "one for the lit - tle boy who lives by the lane. Yes, sir, yes, sir, three bags full.". Measure 11 ends with a coda sign. Annotations explain the D.C. al coda instruction and the coda sign.

C F C F C

Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir,

4 G C To Coda F C G

three bags full. One for the mas - ter, and one for the dame, and

7 C F C G D.C. al Coda

one for the lit - tle boy who lives by the lane.

9 F C G C

Yes, sir, yes, sir, three bags full.

The first time through, ignore this instruction. When you return here after the D.C. al coda jump, follow it and go to measure 9, which begins the coda section and is marked by the coda sign.

The D.C. al coda instruction means to jump back to the beginning, and play through the measure that contains the To Coda instruction.

The coda sign marks the coda section. Ignore this section the first time through. Only play after following the To Coda instruction. After playing all the measures in this section, you've reached the end and can stop playing.

da capo al coda with basic repeats

Like any repeat that usually signals an ending, during a D.C. al coda repeat, you'd redo any basic repeats that occur in the repeated section.

Let's look at an example. To play this version of "Baa, Baa Black Sheep," you'd start by playing through measure 4, which contains a To Coda instruction as well as a basic repeat.

Since you weren't specifically sent to the To Coda instruction, ignore it for now, but take the basic repeat. It redirects back to the beginning because there's no "repeat from here" sign.

Continue on from the beginning but this time at measure 4, ignore both the repeat sign, which you've already played, and the To Coda instruction, which you still haven't been sent to, and push on from measure 5.

Now, play through measure 8, which is the last one of the main part of the song, and follow its D.C. al coda instruction, which takes you back to the beginning. At this point, the coda section gets ignored as you haven't been sent to it yet.

From the beginning, you'd play through measure 4 and then, redo the basic repeat, which again, sends you back to the beginning. From there, you'd again play through measure 4 but this time, you'd finally follow the To Coda instruction. It redirects to the coda sign marking the coda section that starts at measure 9.

After playing the two bars in the coda, you can stop playing, as you've reached the piece's end.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time and consists of 11 measures. The key signature is one flat (Bb). The lyrics are: "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir, three bags full. One for the mas - ter, and one for the dame, and one for the lit - tle boy who lives by the lane. Yes, sir, yes, sir, three bags full."

Measure 4 contains a basic repeat sign and a "To Coda" instruction. A callout explains: "Only follow the To Coda instruction after redoing the basic repeat during the D.C. al coda repeat. Then jump to the coda section."

Measure 8 contains a "D.C. al Coda" instruction. A callout explains: "D.C. al coda instruction has you return to the beginning to play through the measure that contains the To Coda instruction."

Measure 9 is the start of the coda section, marked by a coda sign (a circle with a cross). A callout explains: "The coda sign marks the coda section. Ignore this section until directed toward it by the To Coda instruction. After playing all the measures in this section, you've reached the end and can stop playing."

coda sections with basic repeats

Coda sections can help facilitate some pretty creative endings, and it's not uncommon to see them contain basic repeats.

Handling them is fairly straightforward because when there's a basic repeat in the coda, there's almost always also a "repeat from here" sign in the coda that it redirects back to.

So, when you see a basic repeat sign in the coda, simply go to the "repeat from here" sign that's most likely also in the coda.

Now, of course, it's possible that a repeat sign in the coda could send you elsewhere in the piece, but it's fairly unconventional — there are simply better ways that the music could have been written so that it's more intuitive to follow.

But if you ever do encounter a repeat sign in the coda that does not pair with a "repeat from here" sign that's also in the coda, really, the best way to handle it is to simply follow the lead sheet as logically as possible. Or, if you're in a position to ask someone for clarity, then do so.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time. It consists of four staves of music. The first staff contains the first line of the song, with lyrics "Baa, baa, black sheep, have you a - ny wool? Yes, sir, yes, sir,". The second staff contains the second line, with lyrics "three bags full. One for the mas - ter, and one for the dame, and". The third staff contains the third line, with lyrics "one for the lit - tle boy who lives by the lane." and ends with a double bar line and the instruction "D.C. al Coda". The fourth staff contains the fourth line, with lyrics "Yes, sir, yes, sir, three bags full." and ends with a repeat sign. Above the notes are chord symbols: C, F, C, F, C, G, C, To Coda, F, C, G, D.C. al Coda, F, C, G, C. The lyrics are written below the notes.

The "repeat from here" sign that the coda's repeat sign redirects back to.

A repeat sign in the coda section almost always redirects to a "repeat from here" sign that's also in a coda section.

handling codas with basic repeats

Let's follow an example of a lead sheet that has a coda section containing a basic repeat.

To navigate this version of "Baa, Baa Black Sheep," you'd first play measures 1-4 and then take the repeat sign back to the beginning.

Next, you'd play through measure 8 and then follow the D.C. al coda back to the beginning to play through measures 1-4 again.

At this point, you'd redo the repeat and again, go back to the beginning and play through measures 1-4. After this iteration of playing measure 4, you'd finally follow the To Coda instruction which sends you to measure 9, where you'll find the coda sign that marks the start of the coda section.

After playing measures 9 and 10, you'd take the basic repeat sign back to measure 9, which contains the "repeat from here" sign for the coda section. After repeating measures 9 and 10, stop playing as you've reached the end.



Full lead sheet for "Baa, Baa, Black Sheep"

Only follow the To Coda instruction after redoing the basic repeat during the D.C. al coda repeat. Then jump to the coda section.

Follow the basic repeat the first time through the piece and then, redo it during the D.C. al coda repeat.

D.C. al coda instruction has you return to the beginning to play through the measure that contains the To Coda instruction.

The coda sign marks the coda section. Ignore this section until directed toward it by the To Coda instruction. After playing all the measures in this section and following the repeat, you've reached the end and can stop playing.

The "repeat from here" sign that the repeat sign in measure 10 redirects back to.

This repeat sign redirects to the "repeat from here" sign that's also in the coda section at measure 9.

a coda section with a D.C. instruction

Even though you rarely see it, it's worth looking at an example of a coda section that contains a da capo instruction, if only for the mere possibility that you should encounter it.

Besides, handling this situation is pretty straightforward if you simply follow the lead sheet's roadmap step by step.

In this version of "Baa, Baa Black Sheep," you'd first follow all the logic that takes you to the coda, making sure during the D.C. al coda repeat to redo the basic repeat at measure 4 before following the To Coda instruction.

Next, you'd play measures 9 and 10 and follow the basic repeat sign back to measure 9, where you'll find the coda's "repeat from here" sign.

When you finish repeating measure 10, you'd follow the D.C. instruction, which redirects back to the beginning to redo everything you just did.

That means **you'd re-follow all the logic that takes you back to the coda section.**

After playing and redoing the coda's basic repeat, you can ignore the da capo instruction — because you've already followed it — and stop playing, as you've finally reached the end.

Full lead sheet for "Baa, Baa, Black Sheep"

The lead sheet for "Baa, Baa, Black Sheep" is written in 4/4 time and consists of 10 measures. The notes are as follows:

- Measure 1: C (Baa, baa, black sheep, have you a - ny wool?)
- Measure 2: F (Yes, sir, yes, sir,)
- Measure 3: C (Yes, sir, yes, sir,)
- Measure 4: G (three bags full.)
- Measure 5: C (To Coda)
- Measure 6: F (One for the mas - ter, and one for the dame, and)
- Measure 7: C (one for the lit - tle boy who lives by the lane.)
- Measure 8: G (D.C. al Coda)
- Measure 9: F (Yes, sir, yes, sir,)
- Measure 10: C (three bags full.)

Annotations and instructions:

- Measure 4:** "Follow the basic repeat the first time through the piece and then, redo it during the D.C. al coda repeat."
- Measure 5:** "Only follow the To Coda instruction after redoing the basic repeat during the D.C. al coda repeat. Then, jump to the coda section."
- Measure 8:** "The D.C. al coda instruction has you return to the beginning to play through the measure that contains the To Coda instruction."
- Measure 9:** "The coda sign marks the coda section. Ignore this section until sent to it by the To Coda instruction."
- Measure 10:** "The D.C. instruction sends you back to start to replay the whole piece. After following all the logic to get back to this point, ignore the instruction the second time around and stop playing, as you've reached the end."
- Measure 10:** "The 'repeat from here' sign that the repeat sign in measure 10 redirects back to. This repeat sign redirects to the 'repeat from here' sign that's also in the coda at measure 9. Follow this before the D.C. instruction."

codas with further D.C. instructions

The fact that it's possible to come across a lead sheet with a da capo instruction in the coda also opens the door for the possibility of there being codas with further D.C. instructions, such as D.C. al fine and even, a second D.C. al coda. But while it's theoretically possible for an arranger to write music in this way, it just doesn't really happen because there are simply better ways to write things out.

But, if you ever do come across unconventional D.C. instructions in the coda, the only thing you can do is to try to follow it as logically as possible. **Ultimately, navigating even the most complex lead sheet is all about following the instructions step by step.**



dal segno

While da capo sends you back to a piece's beginning, another repeat that usually signals an ending redirects back to any measure that precedes it.

This repeat is called a **dal segno** repeat. The term, "dal segno" means "from the sign" in Italian. Like the da capo instruction, there's no specific music notation symbol that indicates a dal segno repeat. It's either written in as "Dal Segno," or more often, as its abbreviation "D.S."

A dal segno repeat — usually shortened to "dal segno" — almost always shows up at the very end of a piece's final bar and pairs with a music notation symbol simply called **the sign**, though sometimes, it's referred to as the **segno** or, redundantly, as the **segno sign**.

The sign looks like a percent sign crossed with a slanted capital letter "S" and almost always appears at the beginning of a measure. Like with a Fine or To Coda instruction, you come across the sign before the dal segno instruction, and in the same way, you ignore it until you're sent to it.

In general, a dal segno instruction and the sign it points to work similarly to a basic repeat that pairs with a "repeat from here" sign.

When you see a dal segno instruction, first finish out the measure it sits over and then, go back to the sign. Repeat from there, including the measure that contains the dal segno instruction, which you'd ignore the second time around. Then, stop playing, as you've likely reached the end.

As an example, to navigate this version of "My Bonnie Lies Over the Ocean," you'd first play all the way through the final bar, ignoring the sign at measure 17 because you haven't been sent to it yet.

After completing that last measure, you'd follow the dal segno instruction and go back to measure 17, where you'll find the sign. Continue playing from there, and after repeating the last bar, ignore the dal segno instruction — you've already played it — and stop playing, as you've reached the end.

Full lead sheet for "My Bonnie Lies Over the Ocean"

My Bon - nie lies o - ver the o - cean, _____

4 _____ my Bon - nie lies o - ver the sea _____ My

9 Bon - nie lies o - ver the o - cean, _____ oh

13 bring back my Bon - nie to me, _____

The sign that a dal segno instruction redirects to. When sent to it, come back to this point and play from here. Ignore the sign until you're sent to it.

17 Bring back, bring back, bring back my

22 Bon - nie to me, to me! Bring back, bring

28 back, oh bring back my Bon - nie to me! _____ D.S.

The D.S. is short for "dal segno" and redirects back to "the sign." After following this instruction, it can be ignored when you return to it. At that point, you can stop playing as you've reached the end.

similarities between dal segno and da capo

In general, you handle dal segno almost exactly like da capo. The only difference is that dal segno redirects to the sign and not back to the beginning. This is notable because da capo and dal segno situations are very similar, and **all the logic and rules that apply to da capo also apply to dal segno.**

This especially means that if there are basic repeats during a dal segno repeat, as a general rule, you should redo them. So as we study dal segno, we'll simply touch on its main principles, but keep in mind that everything you've learned about da capo and its main principles also factor into the equation.



dal segno al fine

A dal segno instruction often pairs with a Fine instruction, signaled by the phrase **D.S. al fine**, which is usually written over the lead sheet's last bar. A D.S. al fine instruction works almost exactly like a D.C. al fine instruction except it redirects to the sign and not the beginning.

When you see D.S. al fine, go back to the sign and continue from there. Play through the bar that contains the Fine instruction. Then, stop playing, as you've reached the end.

As an example, let's follow a version of "My Bonnie Lies Over the Ocean" that has a D.S. al fine instruction. As you start playing, the sign shows up immediately after the pickup. Ignore it for now since you haven't been sent to it yet. The same goes for the Fine instruction at the end of measure 16.

The first time through the piece, play all the way through the song's last measure, and then follow the D.S. al fine instruction back to measure 1 — not the pickup measure — where you'll find the sign.

From there, play through measure 16 and follow the Fine instruction by stopping, as you've reached the piece's end.

Now, note how the lead sheet's last bar has the pickup note that takes you back into the song's first official measure, allowing you to bypass the pickup bar in a way that often happens with first endings in volta brackets.

In general, all versions of the dal segno instruction are often used in this manner — not always, but often enough to be worth noting.



Full lead sheet for "My Bonnie Lies Over the Ocean"

The sign that D.S. al fine redirects to. When sent to it, come back and continue from here to the Fine instruction. Ignore it until you're sent to it.

The pickup bar. Skip this after following the D.S. al fine instruction.

After going to the sign following the D.S. al fine instruction, play through this bar and follow the Fine instruction by stopping, as you're at the end. Ignore Fine until sent to it.

With D.S. al fine, go back to the sign and continue from there. Play through the bar that has the Fine instruction and stop playing, as you've reached the end.

This note allows you to bypass the pickup bar and flow back into the song's first official measure. All dal segno versions are often used like this.

dal segno al coda

A dal segno instruction also often pairs with a To Coda instruction, signaled by the phrase **D.S. al coda**, which is usually written over the last bar of the main part of the song.

A D.S. al coda instruction works almost exactly like a D.C. al coda instruction except it redirects to the sign and not the beginning.

When you see D.S. al coda, go back to the sign and continue from there. Play through the bar that has the To Coda instruction. Then, play the coda section and stop, as you've likely reached the end.

As an example, let's follow a version of "Happy Birthday" that has a D.S. al coda instruction.

The first time through the song, play through measure 9, ignoring the sign at measure 1 and the To Coda instruction at measure 7 because you haven't been sent to them yet.

After playing measure 9, follow the D.S. al coda instruction back to measure 1, where you'll find the sign. Note that you ignore the coda section at this point because you haven't been sent to it yet. Also, the pickup bar is skipped, which works because its notes are played in measure 9 before you follow the D.S. al coda instruction.

From there, play through measure 7 and follow the To Coda instruction. Then, play the coda and stop playing, as you're at the piece's end.

Full lead sheet for "Happy Birthday"

The sign that D.S. al coda redirects to. When sent to it, come back and continue from here to the To Coda instruction. Ignore it until you're sent to it.

The pickup bar. Skip this after following the D.S. al coda instruction.

To Coda instruction sends you to the coda section. Ignore this instruction until sent to it.

With D.S. al coda, go back to the sign and continue from there. Play through the bar that has the To Coda instruction and then go to the coda section.

The coda sign marks the coda section. Ignore this section until directed toward it by the To Coda instruction. After playing all the measures in this section, you've reached the end and can stop playing.

verse/chorus arrangement principles

To this point, we've only looked at arrangement principles through the lens of the A/B structure, but those same concepts also apply to songs in the verse/chorus structure. Let's start exploring this idea by looking at how verses are written out in music.



verses and systems

Verses are typically shown in music notation as **stacked lines of lyrics below the treble clef staff**. Usually, they're numbered, but sometimes they're not, and the verse number is implied.

In any piece of music, including songs with no lyrics or just one line of lyrics, each instance of the treble clef staff, the lyrics and anything else that is associated with it is called a **system**, a term that groups all the components together, so you can refer to everything all at once.

In lead sheets, systems usually include an instance of the treble clef staff and all the chords and lyrics that are associated with it.

For example, this version of "Hush Little Baby" has four systems, as there are four instances of the treble clef staff, and each one has chords and four lines of lyrics associated with it.

The four lines of lyrics in each system represent the fact that the song has four verses.



Full lead sheet for "Hush Little Baby"

System 1
Includes an instance of the treble clef staff, which has some chords and multiple lines of lyrics associated with it.

System 2
Includes an instance of the treble clef staff, which has some chords and multiple lines of lyrics associated with it.

System 3
Includes an instance of the treble clef staff, which has some chords and multiple lines of lyrics associated with it.

System 4
Includes an instance of the treble clef staff, which has some chords and multiple lines of lyrics associated with it.

Full lead sheet for "Hush Little Baby" showing four systems of music notation (treble clef staff, chords, and lyrics) for the song. The lyrics are presented in four lines per system, representing four verses.

System 1: Chords C and G. Lyrics: 1. Hush lit - tle ba - by don't say a word, 2. If that dia - mond ring turns brass, 3. If that bil - ly goat won't pull, 4. If that dog named Rover won't bark.

System 2: Chord C. Lyrics: Pa - pa's gon - na buy you a mock - ing - bird. And, Pa - pa's gon - na buy you a look - ing - glass. And, Pa - pa's gon - na buy you a cart and bull. And, Pa - pa's gon - na buy you a horse and cart. And,

System 3: Chord G. Lyrics: if that mock - ing - bird don't sing, if that look - ing - glass gets broke, if that cart and bull turn over, if that horse and cart fall down,

System 4: Chord C. Lyrics: Pa - pa's gon - na buy you a dia - mond ring. Pa - pa's gon - na buy you a bil - ly goat. Pa - pa's gon - na buy you a dog named Rover. You'll still be the sweetest lit - tle baby in town.

Note

While systems in lead sheets usually only include the treble clef staff, chords and lyrics, they can be quite complex in other types of written music. Sometimes they contain the bass clef staff and even other treble clef staves that are meant for multiple instruments. There's really no limit on what or how many components can go into a system.

how to follow verses in music notation

When following verses in written music, whatever lyric line in any system you start with you stick with until it ends, usually in a system further down in the music.

So, if you're on a particular lyric line and the system ends, the next step is to move on to the next system, where if possible, you'll continue with the same lyric line you were on in the previous system.

For example, to follow verse 1 of "Hush Little Baby," you would start with the top line of lyrics in the first system.

After measure 2, you reach the end of the first system, and the next step is to move on to measure 3 in the second system, where you'd continue with the top line of lyrics, which represents the continuation of verse 1.

When you reach the end of the second system, you'd move on to the third and again, continue with the top line of lyrics. At the end of the third system, you'd move on to the fourth and once again, continue with the top lyric line.

After reading the lyrics in measure 8 — in the fourth and final system — you've completed verse 1.

Now, note that inexperienced music readers often start correctly with the top lyric line, but when they reach the end of the first system, they make the mistake of trying to go back to the beginning to read the second line of lyrics.

It makes sense that they would do this, as it's how people naturally read. But you don't read lyrics that way. In music, you basically read all the top lines of lyrics in each system first. Then, all the second from the top lines, followed by the third and so on until you've read them all.

Full lead sheet for "Hush Little Baby"

First System

Start of verse 1

End of verse 1 lyric line in system. Move on to next system

Second System

Verse 1 continued

End of verse 1 lyric line in system. Move on to next system

Third System

Verse 1 continued

End of verse 1 lyric line in system. Move on to next system

Fourth System

Verse 1 continued

End of verse 1, as this is the end of the top lyric line in the last system.

how verses imply repeats

In general, the presence of multiple verses implies that after you finish the first verse, you should repeat the music using the lyrics from the next verse and continue doing so until you're done with all the verses.

As such, in the most basic types of lead sheets that convey songs with multiple verses, an actual repeat sign is not typically used to send you from verse to verse.

For example, to follow this basic version of "Hush Little Baby," which contains four verses, you'd first play verse 1 by playing all the top lyric lines in each of the lead sheet's four systems.

After playing measure 8, you're done with verse 1, and even though there's no repeat sign, since there are multiple verses, you'd go back to the beginning to play verse 2, doing so by playing all the second from the top lyric lines in each system.

After verse 2, you'd play verse 3 by playing all the second from the bottom lyric lines in each system, and then move on to verse 4 by playing all the bottom lyric lines in each system.

After completing verse 4, you've played all the verses and can stop playing as you've reached the song's end.



Full lead sheet for "Hush Little Baby"

Full lead sheet for "Hush Little Baby"

Chords: C, G

1. Hush lit - tle ba - by don't say a word,
2. If that _____ dia - mond ring turns _____ brass,
3. If that _____ bil - ly goat won't _____ pull,
4. If that _____ dog named Rover won't _____ bark,

3

Pa - pa's gon - na buy you a mock - ing - bird. And,
Pa - pa's gon - na buy you a look - ing glass. And,
Pa - pa's gon - na buy you a cart and bull. And,
Pa - pa's gon - na buy you a horse and cart. And,

5

if that mock - ing - bird don't sing,
if that look - ing glass gets broke,
if that cart and bull turn over,
if that horse and cart fall down,

7

Pa - pa's gon - na buy you a dia - mond ring.
Pa - pa's gon - na buy you a bil - ly goat.
Pa - pa's gon - na buy you a dog named Rover.
You'll still be the sweetest lit - tle baby in town.

At the end of each verse, go back to the beginning and play the next. After the end of verse 4, you've reached the end.

reading a song with verses and a chorus

Perhaps the most common type of lead sheet for modern popular music is one that simply contains a song's verses and its chorus.

Without further arrangement instructions, it's implied that an instance of the chorus is to be played after each verse in the song.

Now, there's typically only one chorus, and the lyrics don't usually change as it's repeated from verse to verse. So, most of the time, choruses are shown in a lead sheet after the verse section as a section that contains one line of lyrics that are meant to be played following each verse.

To navigate a basic lead sheet with separate verse and chorus sections, start by playing verse 1 and then, play the chorus.

From there, if there are more verses, go back to the beginning to play the next verse. After that verse, play the chorus again, and continue the process until all the verses are completed.

Note that with basic lead sheets that convey songs that have multiple verses, it's unlikely that a repeat sign will guide you from verse to verse.

Let's follow an example of a basic lead sheet with separate verse and chorus sections. In this version of "Oh My Darling, Clementine," the verse section contains four verses and is followed by a chorus section.

To play it, start with verse 1 and then, the chorus. Next, since there are more verses to be played, even though there's no repeat sign, go back to the beginning and play verse 2, followed by another instance of the chorus.

Repeat the process for verses 3 and 4, and then stop playing as you've reached the piece's end.

To complete the entire arrangement, you play verse 1, chorus, verse 2, chorus, verse 3, chorus, verse 4, chorus and then, you're finished.

Full lead sheet for "Oh My Darling, Clementine"

Start of verses section

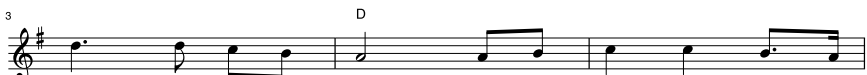
G



1. In a cav - ern in a can - yon ex - ca -
2. Light she was and like a fai - ry, and her
3. Drove she duck - lings to the wa - ter ev - 'ry
4. Ru - by lips a - bove the wa - ter, blow - ing

3

D



va - ting for a mine, lived a min - er, For - ty -
shoes were num - ber nine. Her - ring box - es with - out
mor - ning just at nine. Hit her foot a - gainst a
bub - bles soft and fine. But a - las I was no

6

G D G



nin - er and his daugh - ter Clem - en - tine. Oh my
top - ses, san - dals were for Clem - en - tine.
splin - ter, fell in - to the foam - ing brine.
swim - mer, so I lost my Clem - en - tine.

Official start of chorus section. Sing an instance of the chorus after each verse.

9

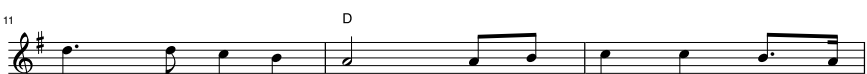
G



dar - ling, oh, my dar - ling, Oh my

11

D



dar - ling Clem - en - tine! Thou art lost and gone for -

14

G D G



e - ver; dread - ful sor - ry, Clem - en - tine!

Pickup notes that lead to chorus section. Play these after each verse.

After each chorus, if there are more verses, go back to the beginning and play the next. After playing the chorus following the last verse, you've reached the end.

playing pickup bars during implied repeats

The implied repeats that come with multiple verses can make it tricky to flow from verse to verse when a song begins with a pickup measure.

For example, the song, "Oh My Darling, Clementine," begins with pickup notes that start on beat 3 of the pickup measure.

This is pretty straightforward at the beginning, but can become a little confusing at the end — measure 15 has a dotted half note that covers all three beats of the bar, and because there are multiple verses, it's implied that you go back to the beginning to play verse 2.

But, since the music starts with a pickup bar, going from the last measure back to the beginning doesn't work seamlessly with the time signature, as the pickup bar only contains part of a full measure.

Now, **the safest way to handle this situation is to finish the final measure, and then add in abstract rests to the beginning of the pickup bar to fill it out and turn it into a complete measure.**

So in this version of "Oh My Darling, Clementine," to seamlessly get from the chorus after verse 1 into verse 2, you'd first, play measure 15 as it's written. Then, you'd add in and play two abstract quarter rests to start the pickup bar, which lead to verse 2's pickup notes that start on beat 3.

Note

While adding in abstract rests to the beginning of the pickup bar to turn it into a full measure is perhaps the safest way to handle pickup measures during implied repeats, it's not the only way.

Some people might decide to abstract in the pickup notes of the pickup bar into the last measure of the chorus, which takes a little more experience but is also a viable solution.

Full lead sheet for "Oh My Darling, Clementine"

First pickup note of pickup bar starts on beat 3. Between verses, add in two abstract quarter rests on beats 1 and 2 to turn it into a full bar, which will allow you to seamlessly go from the end of the chorus back into another verse.

1. In a cav - ern in a can - yon ex - ca -
2. Light she was and like a fai - ry, and her
3. Drove she duck - lings to the wa - ter ev - 'ry
4. Ru - by lips a - bove the wa - ter, blow - ing

3
va - ting for a mine, lived a min - er, For - ty -
shoes were num - ber nine. Her - ring box - es with - out
mor - ning just at nine. Hit her foot a - gainst a
bub - bles soft and fine. But a - las I was no

6
nin - er and his daugh - ter Clem - en - tine. Oh my
top - ses, san - dals were for Clem - en - tine.
splin - ter, fell in - to the foam - ing brine.
swim - mer, so I lost my Clem - en - tine.

9
dar - ling, oh, my dar - ling, Oh my

11
dar - ling Clem - en - tine! Thou art lost and gone for -

14
e - ver; dread - ful sor - ry, Clem - en - tine!

choruses that complete verses

Chorus sections are often completely separate entities from verse sections. But sometimes, a chorus works as an extension of all the verses. Take, for example, the song, "This Old Man."

Here, the chorus begins with the lyric, "with a knick-knack paddywhack, give a dog a bone...", which helps finish off each verse. The chorus, in this case, is necessary — stopping before it would leave any verse with a sense of incompleteness.

In lead sheets that depict songs with choruses that complete verses, as long as the lyrics don't change, the chorus will only have one line of lyrics that's meant to finish off every verse. It really looks just like a chorus that's separate from the verses.

So, to follow this lead sheet for "This Old Man," first play verse 1 and finish it off with the chorus. Since there are more verses to be played, even though there's no repeat sign, go back to the beginning and play verse 2 along with its chorus.

Repeat the process for verses 3-10 and then, you're at the end.

Choruses that do have changing lyrics

In many songs, the lyrics of the chorus do change, if only slightly. When this happens, it's most common that the arranger of the sheet music will write everything out in a way that allows the reader to intuitively follow the arrangement.

That means that ultimately, if you're playing a song where the lyrics of the chorus are supposed to change, you'll know it.

Full lead sheet for "This Old Man"

C



1. This old man, he plays one.
2. This old man, he plays two.
3. This old man, he plays three.
4. This old man, he plays four.
5. This old man, he plays five.
6. This old man, he plays six.
7. This old man, he plays seven.
8. This old man, he plays eight.
9. This old man, he plays nine.
10. This old man, he plays ten.

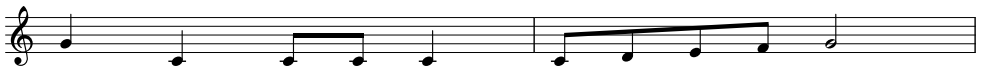
3 F G



He played knick - knack on my thumb with a
He played knick - knack on my shoe
He played knick - knack on my knee
He played knick - knack on my door
Don't play knick - knack on that hive!
He played knick - knack with my sticks
He played knick - knack up to heav'n
He played knick - knack on my gate
He played knick - knack on my spine
He played knick - knack ov'r a - gain!

Start of chorus, which is an extension of the verses. Finish off each verse with this section.

5 C



knick - knack pad - dy - whack, give a dog a bone!

7 G C G C



This old man comes rol - ling home.

choruses that start songs

While it's perhaps more common that chorus sections follow verse sections, some songs are written in the opposite fashion. Take, for example "Skip to My Lou," a song where the chorus is usually sung before verse 1.

Navigating songs that start with a chorus section use exactly the same principles as navigating those that start with a verse section.

As long as there are multiple verses, keep alternating between chorus and verse until all the verses have been played.

With that in mind, to follow this lead sheet of "Skip to My Lou," you'd first play the chorus, and then, verse 1. From there, you'd go back to the chorus and follow it with verse 2, continuing the process until you've played all the verses.

The whole arrangement is played: chorus, verse 1, chorus, verse 2, chorus, verse 3, chorus, verse 4 and then, the end.

Note

Usually with songs that start with the chorus, it feels natural to go back to the chorus once more after the last verse, perhaps because choruses follow verses so often. So, while you don't technically have to do it that way, most experienced players probably would, as it tends to make the song feel more complete.

Full lead sheet for "Skip to My Lou"

The lead sheet for "Skip to My Lou" is written in 4/4 time with a key signature of one sharp (F#). The melody is presented on a single staff with treble clef. Chords are indicated by letters C and G above the staff. The lyrics are written below the staff, with some lines having multiple verses. The sheet is divided into four systems, each starting with a measure number (1, 5, 9, 13). The first system (measures 1-4) contains the chorus. The second system (measures 5-8) contains the chorus and the first line of the verse. The third system (measures 9-12) contains the chorus and the next three lines of the verse. The fourth system (measures 13-16) contains the chorus and the final line of the verse, followed by a double bar line and a repeat sign.

1. Fly's in the but - ter-milk; shoo, fly, shoo! Fly's in the but - ter-milk; shoo, fly, shoo!
2. Cat's in the cream__ jar; oooh, oooh, oooh! Cat's in the cream__ jar; oooh, oooh, oooh!
3. Lost my__ part - ner, what'll I do? Lost my__ part - ner, what'll I do?
4. I'll get a - noth - er one pretty as you. I'll get a - noth - er one pretty as you.

At the end of each verse, go back to the beginning and play the chorus. After the end of verse 4, you've officially reached the end, but experienced players would likely play the chorus once more, as doing so tends to feel more complete.

lyrical liberties in verses

In general, lyrics are a representation of musical notes in words. Specifically, **musical notes represent the syllables that make up the lyrics in verse 1 and the chorus.**

In fact, in those two sections, there's a one to one relationship between musical notes and the lyrical syllables they represent. That means that on a basic level, **in verse 1 and the chorus, you can expect each syllable of the lyrics to be represented by one musical note.**

Sometimes, though, in other verses or in choruses with different lyrics, there's a word with more syllables than are represented by the musical note it's tied to.

For example, in the first line of verse 1 in "Hush Little Baby," the word "don't" at the start of measure 2 is represented by a single quarter note — aligning perfectly with the idea that a single lyrical syllable would be represented by a single note.

But in verse 4, that same quarter note is used to represent a two-syllable word, "Rover," and the same thing happens in measure 7 with the lyrics, "buy" and "sweetest." This is problematic if you try playing verse 4 using the single, original quarter note over those words — it doesn't sound right because you need two notes to cover two syllables.

Now, these are simply creative liberties taken by the songwriter for a variety of reasons. **The best way to handle these situations is to subdivide the original note once, into abstract notes that equally cover all the syllables.**

In both verse 4 cases, you need two notes to cover two syllables, so subdividing the quarter note once into abstract eighths gets the job done. Realistically in these situations, you almost always only need to turn one note into two.

Full lead sheet for "Hush Little Baby"

C

1. Hush lit - tle ba - by don't say a word,
2. If that dia - mond ring turns brass,
3. If that bil - ly goat won't pull,
4. If that dog named Rover won't bark,

For this two syllable word that's represented by one quarter note, subdivide it to two abstract eighth notes — one for each syllable.

3

C

Pa - pa's gon - na buy you a mock - ing - bird. And,
Pa - pa's gon - na buy you a look - ing glass. And,
Pa - pa's gon - na buy you a cart and bull. And,
Pa - pa's gon - na buy you a horse and cart. And,

5

G

if that mock - ing - bird don't sing,
if that look - ing glass gets broke,
if that cart and bull turn over,
if that horse and cart fall down,

7

C

Pa - pa's gon - na buy you a dia - mond ring.
Pa - pa's gon - na buy you a bil - ly goat.
Pa - pa's gon - na buy you a dog named Rover.
You'll still be the sweetest lit - tle baby in town.

For this two syllable word that's represented by one quarter note, subdivide it to two abstract eighth notes — one for each syllable.

additional lyrics

For songs that contain multiple verses, lead sheets can be written so that only select verses and the chorus are shown with the staff, while the rest of the verses are put after the music in a section usually called **additional lyrics**.

The additional lyrics section appears below the song's last system and shows verses in paragraph form. It's implied that verses in the additional lyrics section should be played with the same music as verse 1, just as if they appear beneath it in the song's systems.

Usually, lead sheets with additional lyrics have minimal arrangement instructions, and if the first verse is the only one depicted on the staff — which is really common — it's often shown without the "1." that it's usually identified by.

Plus, sometimes the chorus isn't specifically marked either, leading to lead sheets that have a single verse flowing right into the chorus without any real separation — if you didn't know the song, you wouldn't even know there was a difference between the two sections.

In many ways, a minimal arrangement with an additional lyrics section typifies why someone with a lot of music experience would choose to use lead sheets over other resources — in its simplest form, it offers an uncluttered reference that only contains a song's basic essentials.

This keeps the music notation concise and promotes maximum freedom for creativity.



an example of a song with additional lyrics

A common type of lead sheet you're bound to encounter is one that only has verse 1 and the chorus on the staff while the other verses are shown as additional lyrics. Take, for example, this version of "Oh My Darling Clementine."

Now, when you first look at this lead sheet, it's not immediately clear that it begins with verse 1, but you can deduce that it does because for one, the chorus is clearly marked with a written-in note at the end of measure 8, and choruses usually follow verses.

Plus, the additional lyrics section starts with verse 2, and since the first song section is the only one that's unidentified, it makes the most sense that it would be verse 1.

Of course, it would be more considerate if verse 1 was simply marked as such, but the reality is, lead sheets with additional lyrics often come in this format.

Even the fact that the chorus is clearly marked is a mere courtesy, but you'll see it often enough that you can expect it.

Another courtesy you see often is the "chorus" instruction at the end of the additional lyrics verses, which means that after playing the verse, you should play the chorus.

When this note isn't there, it's either implied that you should play the chorus after the verse or it's left to the player's discretion whether or not to do so.

To follow this lead sheet, you'd play verse 1 and then, the chorus. Next, you'd go to the additional lyrics section and play verse 2 using the verse 1 music, just as if it were right below verse 1 on the staff. From there, you'd play the chorus, and repeat the verse 2 process for verses 3 and 4.

Full lead sheet for "Oh My Darling, Clementine"

In a cav - ern in a can - yon ex - ca - va - ting for a

mine, lived a min - er, For - ty - nin - er and his

daugh - ter Clem - en - tine. Oh my dar - ling, oh, my

dar - ling. Oh my dar - ling Clem - en - tine! Thou art

lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

Additional Lyrics

2. Light she was and like a fairy,
And her shoes were number nine.
Herring boxes without topses,
Sandals were for Clementine.

Chorus

Chorus note means to play a chorus after the verse. If note there, use your discretion as to whether or not to do so.

3. Drove she ducklings to the water
Every morning just at nine.
Hit her foot against a splinter,
Fell into the foaming brine.

Chorus

4. Ruby lips above the water,
Blowing bubbles soft and fine.
But alas, I was no swimmer
So, I lost my Clementine.

Chorus

Play each verse in the additional lyrics section with the verse 1 music, then go to the chorus, per the instruction at the end of the verse.

the three-verse song

When creating arrangements, arrangers and songwriters are typically trying to outline what makes for the best possible performance of the song with which they're working. Getting there includes taking into account how long their arrangement might take to perform or even questioning whether or not all of the song's lyrics work for their specific version.

As such, part of the verse/chord arrangement process requires them to assess a song's verses and decide which ones to use and which ones to leave out. Historically, songs arranged with only three verses have had much success, and over the years, **the three-verse song** has become one of the most preferred arrangement formats for arrangers and songwriters alike.

In fact, as lead sheets get more detailed about how to perform songs that have a chorus and some verses, it's perhaps most common that you'll come across one that depicts a three-verse song, as it's a tried and true format that keeps performances concise, while helping to ensure that the repetitive nature of the verse/chord structure doesn't sound redundant.



an example of a basic three-verse song

Navigating a three-verse song arrangement is almost as difficult as it gets when it comes to reading a lead sheet.

But, at this point, if you understand how basic repeats, da capo repeats and dal segno repeats work on a general level, you only need to extend that knowledge a little bit further to be able to handle a three-verse song.

In fact, this version of "Oh My Darling, Clementine," represents a typical example of how a three-verse song might be arranged in a lead sheet, and following it requires understanding exactly those arrangement principles.

However, navigating repeats and repeats that usually signal an ending within the verse/chord structure as opposed to the A/B structure does present some challenges that aren't obvious at first glance, so let's take a closer look at how these music notation devices work in this example.

Once you can read this lead sheet, you'll be well on your way to being able to handle not only a three-verse song arrangement, but also, just about any other type of arrangement a lead sheet can convey.



Full lead sheet for "Oh My Darling, Clementine"

Full lead sheet for "Oh My Darling, Clementine"

Chord: G

1. In a cav - ern in a can - yon ex - ca -
2. Drove she duck - lings to the wa - ter ev - 'ry
3. Ru - by lips a - bove the wa - ter blow - ing

Chord: D Chord: G

3 va - ting for a mine, lived a min - er, for - ty nin - er and his
mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in -
bub - bles soft and fine. But a - las I was no swim - mer, so I

Chord: D Chord: G Chord: G

7 daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my
to the foam - ing time. tine.
lost my Clem - en -

Chord: D

11 dar - ling. Oh my dar - ling Clem - en - tine! Thou art

Chord: G Chord: D Chord: G Chord: D.C.

14 lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

the basics of repeats in songs with verses

The biggest difference between applying repeats and repeats that usually signal an ending to arrangements within the verse/chord structure as opposed to the A/B structure is that you have to factor in the idea that when a song contains multiple verses, it's implied that when you're done with verse 1, you move on to the next until all the verses are done.

It's at this point that you should understand that repeats and repeats that usually signal an ending are music notation devices that only help you navigate through the actual musical notes on the staff, and technically, have nothing to do with the lyrics themselves.

This is notable because in songs with verses, **if you've already played a verse, and a repeat or repeat that usually signals an ending sends you back to a place where verses start, it's implied that you should repeat the music of the verses with the next possible verse.**

You can see this concept in action by looking at how the basic repeat at the end of measure 8 works in this version of "Oh My Darling Clementine."

To get to that point, you play verse 1 from the beginning. After measure 7, since this is the first time through the song, you use the first volta bracket to play measure 8, which ends with a repeat sign that takes you back to the beginning.

From there, since you've already played verse 1, you replay the music on the staff, but this time, follow the verse 2 lyrics.

This takes into account the concept that after finishing a verse, it inherently pushes you to the next one and generally means that you don't repeat verses unless specifically instructed to do so.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in G major, 3/4 time. It consists of four staves of music. The first staff (measures 1-2) has a G chord and lyrics: 1. In a cav - ern in a can - yon ex - ca - 2. Drove she duck - lings to the wa - ter ev - 'ry 3. Ru - by lips a - bove the wa - ter blow - ing. The second staff (measures 3-4) has D and G chords and lyrics: va - ting for a mine, lived a min - er, for - ty nin - er and his mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in - bub - bles soft and fine. But a - las I was no swim - mer, so I. The third staff (measures 5-8) has D, G, and G chords. It includes a first ending bracket (measures 6-7) and a second ending bracket (measures 7-8). Lyrics: daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my to the foam - ing time. lost my Clem - en -. The fourth staff (measures 9-12) has G, D, G, and D.C. chords. Lyrics: dar - ling. Oh my dar - ling Clem - en - tine! Thou art lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

Because verses inherently push you to the next one after you finish them, after following this repeat back to the beginning, use the music on the staff but play verse 2, as you've already played verse 1. In general, don't repeat verses unless specifically instructed to do so.

volta brackets as endings, not verses

As with songs within the A/B structure, volta brackets are used often in verse/chord arrangements, where they help guide the reader through alternate section endings.

Now, it's a common misconception in songs with verses that the numbers in volta brackets are verse numbers, but they actually represent an instance of an alternate section ending.

This is a subtle, but important distinction to keep in mind because in songs with verses, the numbers in volta brackets often do coincide with the number of verses — especially when they come at the end of a verse section.

But they don't always coincide with the verse numbers, especially when they're used in sections that don't have verses, such as the chorus or even, the coda.

Plus, differentiating between volta bracket numbers as endings rather than verses keeps the notation concepts surrounding them consistent whether you're working within the verse/chord structure or the A/B structure.

Something else to note about volta brackets in songs with verses — though it does happen within the A/B structure as well — is that you often see brackets with multiple numbers that are separated by a comma. This is simply a space-saving device that means that you should reuse the bars in that volta bracket for each of the indicated endings.

So, in this version of "Oh My Darling, Clementine," even though the numbers in the volta brackets coincide with the number of verses, the first volta bracket over measure 8 should be considered as the verse section's first ending and not verse 1. The second volta bracket — over measure 9 — contains the music for both the second and third endings of the verse section and do not mean verse 2 and verse 3.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in 3/4 time with a key signature of one sharp (F#). The music is presented in four systems, each with a treble clef and a key signature of one sharp.

System 1 (Measures 1-3): Chord G. Lyrics: 1. In a cav - ern in a can - yon ex - ca -
2. Drove she duck - lings to the wa - ter ev - 'ry
3. Ru - by lips a - bove the wa - ter blow - ing

System 2 (Measures 4-6): Chords D and G. Lyrics: va - ting for a mine, lived a min - er, for - ty nin - er and his
mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in -
bub - bles soft and fine. But a - las I was no swim - mer, so I

System 3 (Measures 7-9): Chords D, G, and G. Lyrics: daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my
to the foam - ing tine. lost my Clem - en -

System 4 (Measures 10-14): Chords D, G, D, G, and D.C. Lyrics: dar - ling. Oh my dar - ling Clem - en - tine! Thou art
lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

Annotations: A bracket labeled "1." spans measures 8 and 9, indicating the first ending. A bracket labeled "2., 3." spans measures 9 and 10, indicating the second and third endings.

shifting lyric lines after completed verses

Because of the fact that when you finish a verse, you're inherently done with it, at a certain point in the music, the lyric line that a completed verse occupies in the system is no longer needed for that particular verse.

Now, rather than leave an awkward, empty lyric line on all the systems for the rest of the piece, arrangers often shift the lyrics of subsequent verses up a line to take up that space.

This happens in this version of "Oh My Darling, Clementine." Here, after playing verse 1 and taking the first ending's repeat back to the beginning, you replay the verse section's music, this time with the lyrics of verse 2.

Following measure 7, since this is the second time through the section, you'd skip measure 8 and go to the second ending at measure 9, where you'll find the last lyric of verse 2 — the word, "brine" — on the first lyric line instead of the second as it had been prior to that point.

This shift up in verse 2 lyrics works, of course, because you've already played verse 1 and have moved on to verse 2, so the top lyric line isn't needed for verse 1 anymore.

From there, you can deduce that the second lyric line in measure 9 is now being used for verse 3.

That means that when you're playing verse 3 and finish measure 7, you'd jump to measure 9 and use the "-tine" syllable on the second lyric line to finish off the verse.

Full lead sheet for "Oh My Darling, Clementine"

1. In a cav - ern in a can - yon ex - ca -
2. Drove she duck - lings to the wa - ter ev - 'ry
3. Ru - by lips a - bove the wa - ter blow - ing

va - ting for a mine, lived a min - er, for - ty nin - er and his
mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in -
bub - bles soft and fine. But a - las I was no swim - mer, so I

1. G 2., 3. G G
daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my
to the foam - ing tine.
lost my Clem - en -

At this point, the top lyric line isn't needed for verse 1 anymore because it's already been played, so verses 2 and 3 have shifted up one line to fill what would have been empty space. From this point, use the top lyric line for verse 2 and the second lyric line for verse 3.

dar - ling. Oh my dar - ling Clem - en - tine! Thou art

lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine! D.C.

playing verses with da capo and dal segno

Even though repeats and repeats that usually signal an ending only deal with the music on the staff and technically, not the lyrics, they still play a major role in the process of moving the reader from verse to verse.

Crucially, they send you back to the point where verses start, where the inherent nature of verses takes over by dictating that when you finish one you should move on to the next.

Now, movement from verse 1 to verse 2 is most often done through a basic repeat, which is usually the first redirection device used in any piece of music because it works well and leaves the more complex repeats available for future use.

Movement from verse 2 to verse 3, 4 and even 5, however, is typically facilitated by either a da capo or a dal segno repeat — a repeat that usually signals an ending.

This makes sense because if most songs are arranged for three verses, once you reach the third verse, you're likely nearing the end of the arrangement.

You can see how this works in this version of "Oh My Darling, Clementine." After playing the second ending of the verse section during verse 2, you'd move on to the chorus, which eventually takes you to the song's last measure.

There, the da capo instruction sends you back to the very beginning to start replaying the verse section's music.

But, keeping in mind that a repeat that usually signals an ending only affects the music on the staff and not the lyrics, since you've already played verses 1 and 2, over this instance of the verse section's music, you'd use the verse 3 lyrics.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in G major (one sharp) and 3/4 time. It consists of five systems of music, each with a key signature change indicated above the staff.

System 1 (Measures 1-2): Key signature change to G major. Lyrics: 1. In a cavern in a canyon ex - ca - 2. Drove she duck - lings to the wa - ter ev - 'ry 3. Ru - by lips a - bove the wa - ter blow - ing

System 2 (Measures 3-4): Key signature change to D major. Lyrics: va - ting for a mine, lived a min - er, for - ty nin - er and his mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in - bub - bles soft and fine. But a - las I was no swim - mer, so I

System 3 (Measures 5-6): Key signature change to G major. Lyrics: daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my to the foam - ing time. lost my Clem - en -

System 4 (Measures 7-8): Key signature change to D major. Lyrics: dar - ling. Oh my dar - ling Clem - en - tine! Thou art

System 5 (Measures 9-10): Key signature change to G major. Lyrics: lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

The sheet includes a "1." and "2., 3." repeat sign in measure 5, and a "D.C." (Da Capo) instruction at the end of the piece.

You reach the da capo instruction after playing the chorus that follows verse 2. It sends you to the beginning, where you'll start replaying the verse section's music with verse 3 because you've already played verses 1 and 2.

da capo, dal segno and section endings

Typically, during a repeat that usually signals an ending, you'd redo any prior repeats unless told to do otherwise.

Now, a common way arrangers tell you not to redo the basic repeats during a repeat that usually signals an ending is by writing in a section ending that's specifically intended for you to make use of during a da capo or dal segno repeat.

In a three-verse song, this often happens when a da capo or dal segno repeat sends you to the verse section for the third time, and there's a third ending volta bracket at the end of it.

For example, in this version "Oh My Darling, Clementine," the first time through the verse section, you'd play verse 1 and take the repeat in the first ending back to the beginning to replay the verse section's music a second time for verse 2.

Then, after playing the verse section's second ending to finish off verse 2, you'd move on to the chorus, which eventually takes you to the song's last measure.

At that point, the da capo instruction sends you back to the very beginning to start replaying the verse section's music a third time, which you'd do using the lyrics of verse 3.

From there, once you finish measure 7, because this is the third time through the verse section and there's a third ending volta bracket that can be used, you've essentially been told not to redo the basic repeat in measure 8 and can jump to measure 9 to continue playing from there.

In general, a good rule to remember is that unless otherwise noted, if there's a section with a third ending, either a da capo or a dal segno repeat is likely going to make use of it, and you won't be redoing any basic repeats for that section.

Full lead sheet for "Oh My Darling, Clementine"

1. In a cav - ern in a can - yon ex - ca -
2. Drove she duck - lings to the wa - ter ev - 'ry
3. Ru - by lips a - bove the wa - ter blow - ing

3

D G

va - ting for a mine, lived a min - er, for - ty nin - er and his
mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in -
bub - bles soft and fine. But a - las I was no swim - mer, so I

7

D

1. G 2., 3. G G

daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my
to the foam - ing time.
lost my Clem - en -

At the end of measure 7, you won't redo the basic repeat in measure 8 as part of the da capo instruction because of the fact that there's a third ending and this is the third time through the verse section. Instead, jump to the third ending at measure 9 and continue playing from there.

11

D

dar - ling. Oh my dar - ling Clem - en - tine! Thou art

This da capo instruction sends you to the beginning, where you'll start replaying the verse section's music with verse 3 because you've already played verses 1 and 2.

14

G D G D.C

lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

navigating a basic three-verse song

At this point, if you understand how section endings, basic repeats and repeats that usually signal an ending generally work within the verse/chord structure, you really have all the tools you need to navigate a three-verse song arrangement.

So, let's follow one, but this time and going forward, there'll be no extra notes on the lead sheet example because in real-world situations, you won't have those to help you.

At the end of the day, you simply have to be able to look at an arrangement and start following its instructions.

Now, in this version of "Oh My Darling, Clementine," note that measure 1 isn't a pickup bar, so be sure to play the half rest it starts with any time you end up back at the beginning.

You start navigating this arrangement by playing verse 1 through the first ending to the repeat sign, which takes you back to the beginning to play verse 2.

After measure 7, since this is the second time through the verse section, you take the second ending, where you'll continue verse 2 with the top lyric line — since you're done with verse 1, the top lyric line is no longer needed for that verse, so verses 2 and 3 have shifted up to fill in the space.

From there, you play through the last bar and follow the D.C. instruction back to the beginning, this time to play verse 3.

Once you finish measure 7 again, since this is the third time through the verse section and there's a third ending to make use of, you're being told to skip the basic repeat in measure 8 as part of the da capo repeat and can jump to measure 9 to finish off verse 3 with the second lyric line. From measure 9, play through the last bar and then, you're done.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in G major (one sharp) and 3/4 time. It consists of 14 measures. The first measure is a half rest, serving as a pickup bar. The sheet includes three verses of lyrics. Verse 1 spans measures 1-7, ending with a first ending (measures 6-7) that repeats back to the beginning. Verse 2 starts at measure 8 and continues through measure 10, with a second ending (measures 9-10) that continues the verse. Verse 3 starts at measure 11 and continues through measure 14, ending with a third ending (measures 13-14) that leads to a D.C. (Da Capo) instruction, returning to the beginning of the song.

Verse 1 (Measures 1-7):

1. In a cav - ern in a can - yon ex - ca -
2. Drove she duck - lings to the wa - ter ev - 'ry
3. Ru - by lips a - bove the wa - ter blow - ing

Verse 2 (Measures 8-10):

va - ting for a mine, lived a min - er, for - ty nin - er and his
mor - ning just at nine. Hit her foot a - gainst a splin - ter fell in -
bub - bles soft and fine. But a - las I was no swim - mer, so I

Verse 3 (Measures 11-14):

daugh - ter Clem - en - tine. brine. Oh my dar - ling, oh, my
to the foam - ing time.
lost my Clem - en -

Final Verse (Measures 14-15):

lost and gone for - e - ver; dread - ful sor - ry, Clem - en - tine!

a more complex three-verse song

When you can follow a three-verse song arrangement with a da capo repeat, you're well set up to play even the most complex lead sheets, such as this version of "Oh My Darling, Clementine," which is pretty involved.

To navigate it, start with the pickup measure and play verse 1 through the first ending, which leads you into verse 2 via the top lyric line. This works because at this point, you're done with verse 1, so the verse 2 lyrics have shifted up to the top line to take its place. Note that the arranger here has clearly marked the verse 2 lyrics as a courtesy, which often happens when verse/chorus arrangements get complex.

At the end of the first ending, the repeat sign redirects you to the repeat from here sign at the start of the song's first official bar. Now, since you've begun verse 2 in the first ending, stick with it after the repeat, but go back to following it on the second lyric line because here, verse 1 is still at the top.

After measure 7, use the second ending and also, go back again to reading verse 2 from the top lyric line, which here, doesn't need to be occupied by verse 1 anymore, so verses 2 and 3 have shifted up to fill in the space.

Continue on through the last bar and follow the D.S. al coda instruction back to the sign, which you'll find at the start of the song's first official bar. Note that the last bar has the start of verse 3 on the top lyric line, where it has shifted to because at this point, you've already played verses 1 and 2. But after the sign, you'll go back to reading verse 3 on the third lyric line as there, both verses 1 and 2 are still occupying their original places.

From the sign, continue with verse 3, and after playing measure 7 yet again, since this is the third time through the verse section and there's a third ending to make use of, you're being told to skip the basic repeat in measure 8 as part of the dal segno repeat and can jump to measure 9 for the third ending, where you'll finish off verse 3 with the second lyric line, as verse 2 is still occupying the top line at this point.

Then, play through measure 15 and follow the To Coda instruction to the coda sign at measure 18. Finally, play the coda and then, you're done.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in 3/4 time with a key signature of one sharp (F#). It consists of 18 measures. The first measure is a pickup measure. The first ending (measures 1-4) leads to the second ending (measures 5-7). The second ending (measures 8-10) leads to the third ending (measures 11-13). The third ending (measures 14-15) leads to the coda (measures 16-18). The lyrics are arranged in three lines, with the first line starting at measure 1, the second line starting at measure 4, and the third line starting at measure 7. The first line ends at measure 10, the second line ends at measure 13, and the third line ends at measure 15. The first line of lyrics is: "1. In a cavern in a canyon ex-cav-ating for a duck-lings to the wa-ter ev-'ry mor-ning just at lips a-bove the wa-ter blow-ing bub-bles soft and". The second line of lyrics is: "mine, lived a min-er, for-ty nin-er and his nine. Hit her foot a-gainst a splin-ter fell in fine. But a-las I was no swim-mer, so I". The third line of lyrics is: "daugh-ter Clem-en-tine. 2. Drove she brine. Oh my to the foam-ing time. lost my Clem-en-". The first line of lyrics is: "dar-ling, oh, my dar-ling. Oh my dar-ling Clem-en-tine! Thou art". The second line of lyrics is: "lost and gone for-e-ver; dread-ful sor-ry, Clem-en-tine! 3. Ru-by". The third line of lyrics is: "sor-ry, Clem-en-tine!".



a four-verse song arrangement

Though the most common type of lead sheet conveys a three-verse song arrangement, you're bound to encounter ones that have more verses.

Let's look at an example of one that has a detailed arrangement for a song with four verses. Realistically any more verses than four, and the arranger would probably put them in the additional lyrics section and also leave how to specifically use them in the arrangement to the discretion of the reader.

To play this version of "Oh My Darling, Clementine," start by honoring the half rest in the first bar — which is not a pickup bar — and remember to do so any other time you get sent back to the beginning.

Follow verse 1 through the first ending to the repeat sign, which sends you back to the beginning to play verse 2. Play verse 2 through measure 7 and then, use the second ending, where the lyric lines have shifted up and are marked with verse numbers for clarity.

From there, continue on to the last bar, where at the end, you'll find a D.C. instruction with an added Take Repeats note that specifically tells you to redo any basic repeats during the da capo repeat.

This redirects you back to the beginning, where you'll play verse 3. Since this is the third time through the verse section, you'll use the third ending, and per the D.C. (Take Repeats) instruction, you'll redo the basic repeat.

The basic repeat leads, of course, back to the beginning, where you'll play the verse section a fourth time, now with verse 4. Follow verse 4 through measure 7 and then use the fourth ending, finishing it off with the second lyric line, which is clearly marked for that purpose.

Finally continue through the chorus, play the last bar and then, you're done.

Full lead sheet for "Oh My Darling, Clementine"

The lead sheet for "Oh My Darling, Clementine" is written in 3/4 time with a key signature of one sharp (F#). It features four verses of lyrics and musical notation. The first verse starts with a half rest in the first bar, followed by a G major chord. The second verse starts with a D major chord. The third verse starts with a G major chord and includes a first ending (1., 3.) and a second ending (2., 4.). The fourth verse starts with a G major chord and includes a D.C. (Take Repeats) instruction. The sheet also includes a D.C. (Take Repeats) instruction at the end of the fourth verse.

1. In a cav - ern in a can - yon ex - ca -
2. Light she was and like a fai - ry, and her
3. Drove she duck - lings to the wa - ter ev - 'ry
4. Ru - by lips a - bove the wa - ter, blow - ing

va - ting for a mine, lived a min - er, For - ty -
shoes were num - ber nine. Her - ring box - es with - out
mor - ning just at nine. Hit her foot a - gainst a
bub - bles soft and fine. But a - las I was no

1., 3. 2., 4.
G G

nin - er and his daugh - ter Clem - en - tine. 2. time. Oh my
top - ses, san - dals were for Clem - en - 4. time.
splin - ter, fell in - to the foam - ing brine.
swim - mer, so I lost my Clem - en -

dar - ling, oh, my dar - ling. Oh my

dar - ling Clem - en - tine! Thou art lost and gone for -

e - ver; dread - ful sor - ry, Clem - en - tine!

D.C. (Take Repeats)

the bridge and pre-chorus in a lead sheet

While arrangements within the verse/chord structure most commonly feature verses and a chorus, you'll also come across other types of song parts, such as the bridge and the pre-chorus. But handling these parts in music notation doesn't require you to learn anything new.

In fact, a bridge will typically look a lot like a chorus, and when both are present, each one is likely to be clearly marked so as to avoid confusion. A pre-chorus might also look just like a chorus, and in that case, it too would be clearly marked. Sometimes though, a pre-chorus functions more like an extension of the verses, and when that happens, it may not specifically be noted as such and will probably just be included in the verses themselves.

Ultimately, though, if you can follow a lead sheet that conveys a basic three-verse song, complete with repeats and repeats that usually signal an ending, you'll probably have no trouble navigating an arrangement that has a bridge and/or a pre-chorus as long as you simply follow it as logically as possible.



adding in intros and instrumental breaks

At the end of the day, even lead sheets that convey full, detailed arrangements are still only meant to contain a song's crucial essentials.

This helps keep lead sheets as concise as possible, but it also results in the fact they almost never come with an introduction or a defined place to play an instrumental break.

So really, it's up to the performer to add them in using their best discretion.

Now, if you've never come up with an intro or an instrumental break before, the best place to get them is usually from the music itself.

For example, as an intro, it's common to play the last half — or even, the last phrase — of the chorus instrumentally right before the song's first bar. The last phrase of the verse as an instrumental also works as a serviceable intro.

As far as the instrumental break, it's probably most common to play the whole chorus instrumentally, but sometimes, the whole verse as an instrumental fits well, too.

Usually, the instrumental break sounds best after about three or four sections — in a three verse song, you might play verse 1, verse 2, the chorus and then, add in the instrumental break.

Of course, since a lead sheet doesn't typically offer any direction as to what you should play for an intro or an instrumental break, you're free to explore all the creative ideas you can think of.



building on this foundation

Learning to read a lead sheet is basically an exercise in learning to read music as a whole.

All of the main principles of music notation come into play, and realistically, once you can confidently play a song from a lead sheet, learning to read more complex pieces of music becomes much more approachable.

Sure, you'll have to learn some new things, but music notation will always center around identifying notes, counting through measures and logically navigating arrangements.

Taking music notation further really depends on your goals. Truthfully, unless you want to play classical music, you don't even have to — a lead sheet usually has everything you need to play almost any kind of popular music well if you're good enough on your instrument.

But ultimately, the more you know about music notation, the more music it opens up for you to play, and some people find joy in learning songs from all genres. So from here, the next step is to learn how the bass clef staff works and then, how chords are written out in music. You might also learn a lot by figuring out how to write out lead sheets for your own arrangements.

Either way, the number one way to build on this foundation is to actually use lead sheets to play songs. When it comes down to it, a lead sheet is simply a sketch that's there for you to breathe life into it with your own personal touch.



next steps

A lead sheet is merely a reference that conveys a song that you actually have to play on an instrument, which in and of itself, can be a pretty challenging task.

The thing is, you can learn or get better at an instrument a lot more efficiently if you're using instructions designed to make your practices as focused as possible.

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