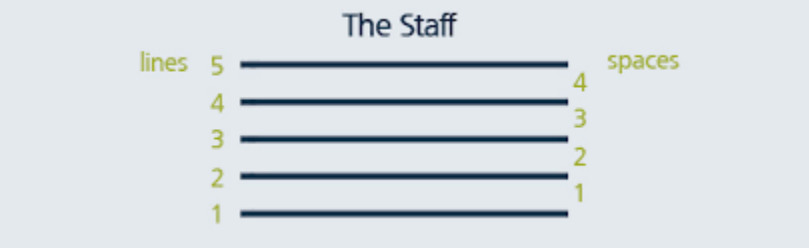
Chart Reading for Singers

The key to “reading” music is to understand and apply music notation to your performance. Music notation is the representation of sound using **symbols**, from basic notations representing pitch, duration and timing, to more detailed descriptions of expression and special effects. While it helps, singers **do not** need to play keyboard or another instrument to “read” music created for vocal performance. As a matter of fact, highly skilled singers “read music” so well, they can pick up a chart for the first time and sing it with remarkable accuracy. This is called “sight singing”. You only need to use your music and the written notations over time to discover you are developing that ability to “read music” as well!

This presentation will cover what you need to know to use your music to SING, both the “what” and the “how”. It will cover definitions of terms you need to know (including: staff; clefs; key signatures; notes, parts of the notes, measure lines, timing/meter, ties and dots, rests, whole tones and semi tones (steps and half steps), illustrations and descriptions that will help you understand how the piece is to be performed.

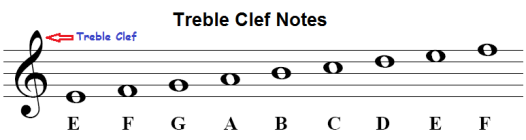
The Staff

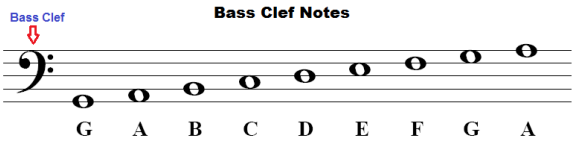
The staff consists of five lines and four spaces. Each of those lines and each of those spaces represent a different letter, which in turn represents a note. In our barbershop arrangements, two staffs are stacked and connected with a bracket. It is called a **grand staff.** Middle C is the invisible note between the two staves.

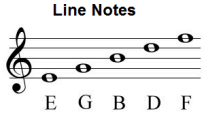


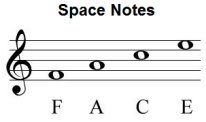
The TREBLE and BASS Clefs

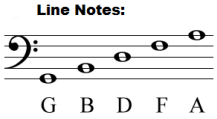
The **treble clef** has the ornamental letter G on the far left side. The G’s inner swoop encircles the “G” line on the staff. The treble clef notates the higher registers of music, so tenor and lead notes are scripted on this clef. To help remember the names of the notes on the clefs, we use common mnemonics (“Every Good Boy Does Fine” and “FACE”, and “Good Boys Do Fine Always” and “All Cows Eat Grass”).

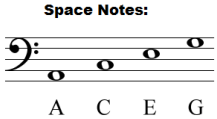












The bass clef notates lower registers of music, and the baritone and bass notes are scripted on the bass clef. The bass clef is also known as the F clef, because the line between the two bass clef dots is the “F” line on the bass clef staff. Lower notes on your keyboard also are notated in the bass clef. It is important to know that in barbershop, arrangements voiced for women are sung an octave higher than written on the bass clef. Arrangements voiced for men are sung an octave lower than written on the treble clef. This is done to minimize using “ledger lines”, which are the notes above and below the range of the staff.

There are two notations commonly used in barbershop arrangements. A very small “8” at the top of the bass clef indicates the notes on that clef should be sung an **octave higher** than written (female voicing). When the “8” is placed at the bottom of the treble clef, it means the notes in that clef should be sung an **octave lower** than written (male voicing).

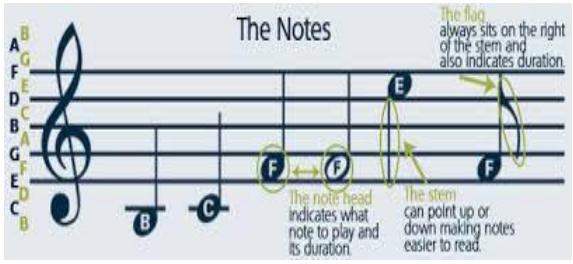
Notes and Note Values
Notes placed on the staff tell us which note letter to sing and how long to sing it.

There are three parts of notes: the **note head**, the **stem** and the **flag.** The **note head** is either filled (black) or open (white). Where the note head sits on the staff (either on a line or a space) determines which note you will sing.

Sometimes, note heads will sit above or below the five lines and four spaces of a staff. In that case, a line is drawn through the note, above the note or below the note head, to indicate the note letter to sing, as in the B and C notes above. These are notes on are **ledger lines.** Barbershop arrangements are scripted (with voices raised or lowered an octave from where written) to minimize the need to use ledger lines.

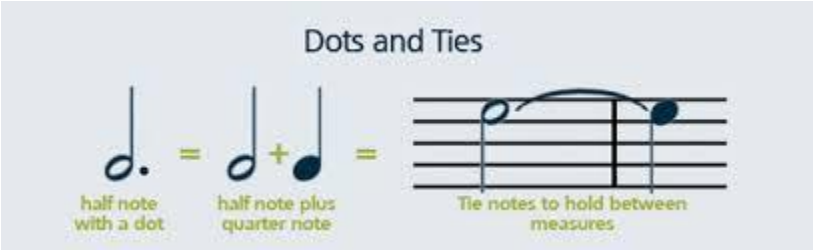
The **note stem** is a thin line that extends either up or down from the note head. In barbershop arrangements, the stems go UP for tenors and baritones on their relative clefs. Stems go DOWN for leads and basses. The **note flag** is a curvy mark to the right of the note stem. Its purpose is to tell you how long to hold a note. We’ll see below how a single flag shortens the note’s duration, while multiple flags can make it shorter still.

What happens when there isn’t a note taking up each beat? It’s easy, we rest! A rest, just like a note, shows us how long it should be held based on its shape. This is where singers typically breathe.



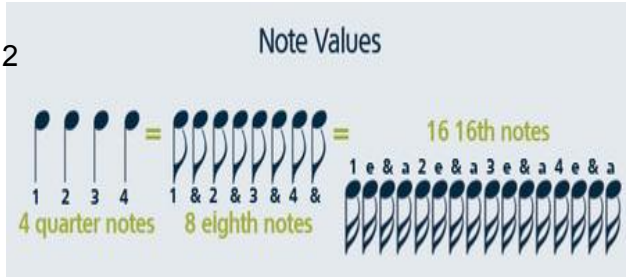
Dots and Ties

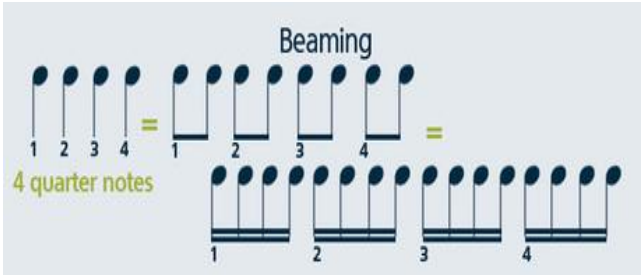
Whether a note head is filled or open shows us the note's **value,** or how long that note should be held. There are other ways to extend the length of a note. A **dot** after the note head, for example, adds another half of that note's duration to it. So, a half note with a dot would equal a half note and a quarter note; a quarter note with a dot equals a quarter plus an eighth note. A **tie** may also be used to extend a note. Two notes tied together should be held as long as the value of both of those notes together, and ties are commonly used to signify held notes that cross measures or bars... in our chorus we call that an "energy bridge".



Flags and Beams

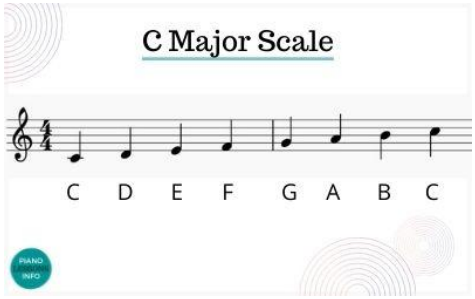
We can also shorten the amount of time a note should be held, relative to the quarter note. Faster notes are signified with either **flags**, like the ones discussed above, or with beams between the notes. Each flag halves the value of a note, so a single flag signifies 1/2 of a quarter note, a double flag halves that to 1/4 of a quarter note, et cetera. Beams do the same, while allowing us to read the music more clearly and keep the notation less cluttered.

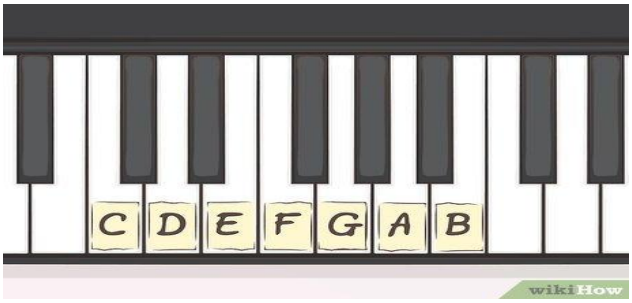




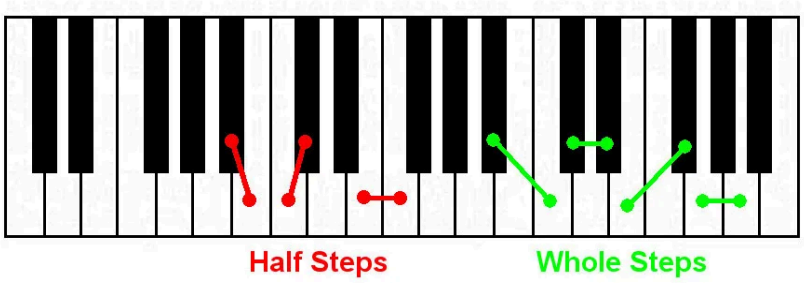
Scales, Whole and Half Notes (Semi-Tones)
Even if you are not able to find your notes on a keyboard, visualizing the scale, whole and half notes is essential in approximating pitch relative to other parts and relative pitch note to note – whether they are higher or lower.

A scale is made of eight consecutive notes. For example, the C major scale is composed of C, D, E, F, G, A, B, C. The interval between the first note of your C major scale and the last is an example of an **octave.** Each of the notes of a C major scale corresponds with a white key on your keyboard. Here's how a C major scale looks on a staff and how that corresponds to the keys on your keyboard:

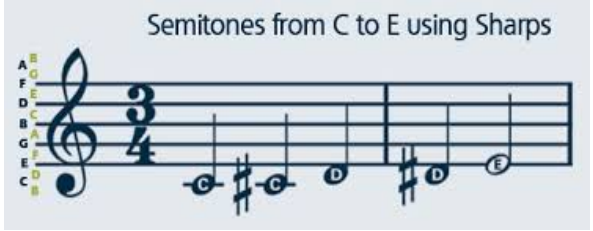


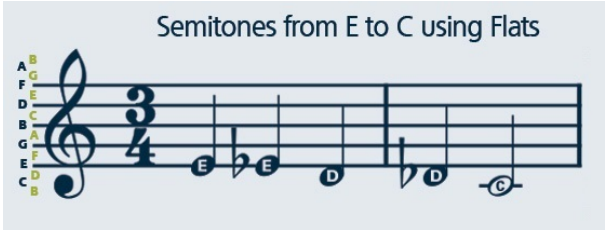


The distance between the C and the D keys in your C scale is a whole step, however the distance between the E and the F key is a half step, because the E and the F keys don't have a black key in between them. Every major scale you'll play on a keyboard has the same pattern, whole-whole-half-whole-whole-whole-half.

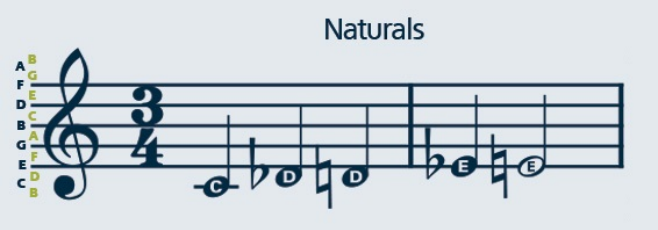


Semitones, or **half steps**, allow us to write an infinite variety of sounds into music. A **sharp**, denoted by the ♯ symbol, means that note is a semitone (or half step) higher than the note head to its right on sheet music. Conversely, a **flat**, denoted by a ♭ symbol, means the note is a semitone lower than the note head to its right. The staff below shows half steps between C and E. You will notice sharps are used for ascending half step intervals, where flats are used on descending intervals.





There's one more symbol to learn regarding semitones, and that's the **natural**, denoted by a ♮. If a note is sharp or flat, that sharp or flat extends throughout the measure, unless there's a natural symbol. A natural cancels a sharp or flat within a measure or a song. Here's what playing C to E would look like with natural symbols.

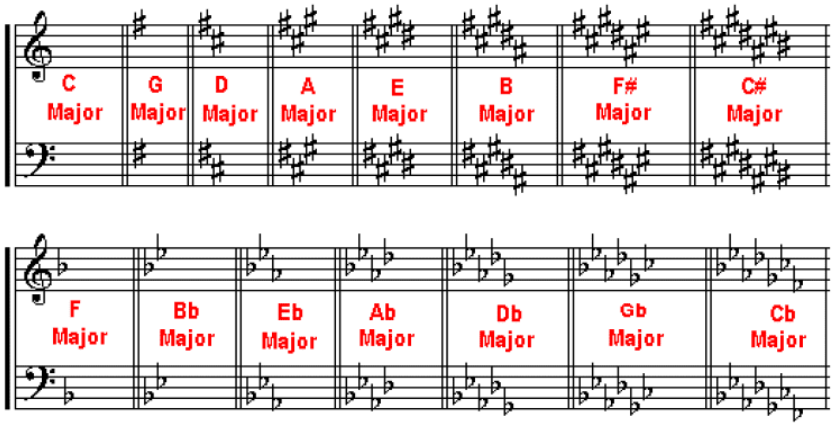


Accidentals and Double Accidentals

The naturals, sharps and flats in the previous illustrations are called "accidentals". An accidental changes the note in the key signature, raising or lowering the note immediately following it. That note remains raised or lowered for that entire measure for all parts. It is canceled at the bar line. Naturals cancel a previous accidental. Occasionally arrangers will use a double accidental - a double sharp – notated by an "x" - or a double flat (♭ ♭). A double sharp or double flat means the note is sharped or flatted TWICE. A **sharp** or **flat** note will be raised or lowered ONE additional time. A **natural** note will be raised or lowered TWICE.

Major and Minor Key Signatures

The key signature of a song indicates the scale... including the sharps or flats in that particular key, that you will use to sing the music. Scales are named after their **tonic,** the preeminent note within the scale. You can start a major scale on any note, so long as you follow the whole-whole-half-whole-whole-whole-half pattern. The sharps or flats for your song's key signature are notated right before the meter and after the clef on the sheet music. You will maintain those sharps or flats throughout the music, unless **accidental** symbol overrides it.



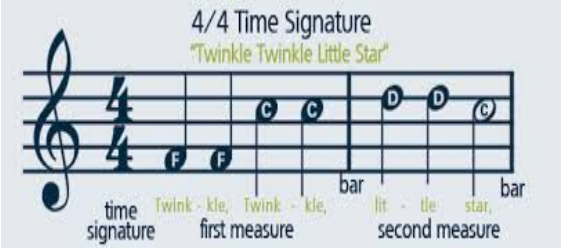
A song with no sharps or flats is in the key of C. A song with one flat is in the key of F (major). For all other keys, there is an easy formula: To find the name of a key with **sharps**, the key is the note name a **half step above** the last sharp (to the right). To find the key signature for a **flat** key, the key is simply the **second to the last flat.**

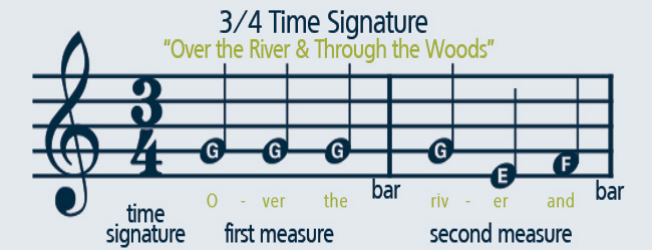
Wait a minute... Is this song in minor mode?

If you have ever blown a key and could not find your starting note, it is probably because the song is in a minor key. Determining whether a song is major or minor is mostly done by listening. Does the song feel bright (major) or dark (minor)? Listen for the **"tonic"** - the note which the song's key and scale are built on. The tonic note will feature strongly in the melody, and often beginning and coming to rest on that note. When you play the tonic note throughout the song it will sound like it fits, like it's home base. If the song is minor, it is in an entirely different – minor – key. To find the minor key, find the name of the key in major, then count backward three half steps.

Time Signatures, Meter and Beat

In order to read and perform music, you need to know its meter, the beat you use when clapping or tapping your foot along with a song. This is indicated by the **time signature.** The time signature looks similar to a fraction. The top number tells you how many beats to a measure. The bottom number tells you the note value for a single beat, the pulse your foot taps along with while listening.





If the time signature is 4/4, there are 4 beats per bar and every quarter note gets one beat. In the time signature is 3/4, there are 3 beats per bar and that every quarter note gets one beat.

Tempo

Tempo tells you **how fast** or **slow** a piece is intended to be sung, and often is shown at the top of a piece of sheet music, even in a cappella music. A tempo of 60 BPM (beats per minute) would mean you'd play 60 of the signified notes every minute or a single note every second. Likewise, a tempo of 120 would double the speed at 2 notes every second. You may also see Italian words like "Largo," "Allegro" or "Presto" at the top of your sheet music, which signify common tempos. Metronomes are used to help establish and maintain tempo.

Tempo Markings

Tempo Marking	Definition
Prestissimo	Very Very Fast (>200bpm)
Presto	Very Fast (168-200bpm)
Allegro	Fast (120-168bpm)
Moderato	Moderately (108-120bpm)
Andante	Walking Pace (76-108bpm)
Adagio	Slow and Stately (66-76bpm)
Lento/Largo	Very Slow (40-60bpm)
Grave	Slow and Solemn (20-40bpm)

Downbeat, Backbeat, Upbeat and Syncopation
The **downbeat** is the first beat of the measure/bar, i.e. beat 1. The **upbeat** is the last beat in the previous measure which immediately precedes, and hence anticipates, the downbeat. Backbeats are the second and fourth beats in a 4/4 time. The term “syncopation” often refers to pulsing the backbeat, but it can also mean pulsing a note which is between two beats, such as pulsing the offbeat. An **offbeat** is the beat between beats, such as 1 **AND** 2 **AND** 3 **AND** 4 **AND**.

Intervals and Special Tuning
Understanding and reading **intervals** is important because they are the principles of relative pitch, your sense of how high or high low a note is compared to another note. **An interval is the distance in pitch between two notes.** Intervals are named by the distance between the first and second note. Distance measured by whole notes are **major**. When a major interval is lowered by one half step, it becomes **minor**. Major intervals are spelled with a **uppercase M** (i.e. M3 – major 3rd). Minor intervals are spelled with a **lowercase m**. (i.e. m3).

Perfect fourth and fifth are called **“perfect”** because they are neither major nor minor, they just ARE. They are perfect just like a unison and octave interval.

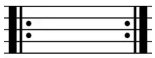
Understanding how to read and sing intervals is especially important when singing barbershop harmony. In barbershop a cappella singing, tuning is based on **“just intonation”** (versus the fixed “equal temperament” of a piano or organ) and are fine-tuned using **Pythagorean or “P” tuning,** a theory of intonation based on frequencies. The human voice and unfretted stringed instruments have flexibility to fine tune to this degree.

Using just intonation and P tuning, the pitch on certain intervals in the scale and certain notes within a chord are adjusted higher, lower, lighter or darker. Because the pitch you sing on an interval may need to be adjusted higher or lower, it is important to know the interval you are singing and the adjustment that is needed.

Intervals in the scale that need to be sung slightly higher are 2nds, 3rds, 6th and 7ths as well as any intervals that move to a sharp. Octaves and 5ths should be sung solidly in the middle, with an upper octave sung slightly lighter. **Notes in the chord** that need to be adjusted are voices on the 3rd (sing higher and lighter), as well as voices on sharped notes (sing slightly higher) and flatted notes (sing slightly “darker” or on the low side of the note). As with singing “scale” tuning, 5th and octaves should be sung solidly in the middle, with upper octaves sung slightly lighter.

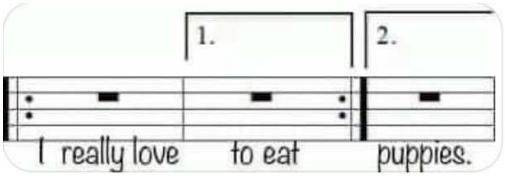
The following page has singing examples of how to execute different ascending (upward) and descending (downward) intervals.

Repeats, Multiple Endings and Codas
While many arrangers lay out a song beginning to end, some include verses and repeats to reduce pages.



Repeat signs
Enclose a passage that is to be played more than once. If there is no left repeat sign, the right repeat sign sends the performer back to the start of the piece or the nearest double bar.

Volta brackets (1st and 2nd endings, or 1st- and 2nd-time bars)
A repeated passage is to be played with different endings on different playings; it is possible to have more than two endings (1st, 2nd, 3rd ...).



Da capo ("From top") Tells the performer to repeat the music from its beginning. This is usually followed by al fine (lit. "to the end"), which means to repeat to the word fine and stop, or al coda (lit. "to the coda (sign)"), which means repeat to the coda sign and then jump forward.

Dal segno ("From the sign") Tells the performer to repeat playing of the music starting at the nearest segno. This is followed by al fine or al coda just as with da capo.

Segno Mark used with dal segno.

Coda Indicates a forward jump in the music to its ending passage, marked with the same sign. Only used after playing through a D.S. al coda (Dal segno al coda) or D.C. al coda (Da capo al coda).

Special Symbols
Finally, there are special notations used by arrangers to suggest **interpretation.** These include commas (breath marks); fermatas (or “birds eyes” to indicate that note will be sustained); wavy ties (which indicate glissandos and swipes); dynamics (p, mp, mf, f, ff indicating a five step scale from soft to very loud) as well as crescendos and decrescendos (< indicates the passage will become louder; > indicates the passage will become softer.) Arranger’s may suggest use of different approaches and vocal qualities as well as articulation (a dot above or below a note to indicate staccato). Dotted line indicates the melody is switching from one to another part.

Singing Examples of Intervals

(Minor intervals are indicated by a small letter m. Major intervals with a capital letter M)

Ascending Intervals

Unison MY COUN (try, tis of thee)
m2 YOU MUST remember this (As Time Goes By); I LEFT my heart in San Francisco; Theme from "Jaws"
M2 DOE a deer; hap PY BIRTH day to you; PEO PLE people who need people
M3 A LAS my love you do me wrong; WHY DO birds suddenly appear; TO DREAM the impossible dream
M3 CAM-E-lot; FROM THE halls of Montezuma; HAVE YOUR self a merry little Christmas
P4 HERE COMES the bride; DAY is DONE ("Taps); A MA zing grace
Tritone (an interval of three whole steps, also an augmented 4th) MAR-I-a (West Side Story);
P5 HEY THERE Georgie Girl; YO EE oh (Wizard of Oz)
m6 FOR PA pa make him a scholar (Fiddler on the Roof)
M6 MY WILD Irish rose; DASH-ING through the show; MY BON nie lies over the ocean
m7 THERE'S A place for us (West Side Story); Theme from Star Trek
M7 BAL (li) HIGH (South Pacific)
Octave BAL LI high; WHEN YOU wish upon a star; SOME WHERE over the rainbow

Descending Intervals

m2 DOE TEA la so (descending scale); BEAU-TI ful dreamer
M2 SWEET AD-el line; WHIS-TLE while you work; THREE BLIND mice
m3 OH OH say can you see; LOOK AT me (Misty)
M3 SWING LO, sweet chariot; GOOD NIGHT ladies; SUM-MER time and the livin' is easy
P4 BORN FREE; MY GIRL (talking 'bout my girl); I'VE BEEN working on the railroad
Tritone DEAR KIND-ly Sergeant Krupke (West Side Story); European police siren
P5 FEEL – INGS (nothing more than feelings)
m6 WHERE DO I begin (Love Story)
M6 OV-ER there; SCHOOL DAYS school days, good old golden rule days
m7 DOE A deer (lead on doe, bass picks up melody an octave lower
M7 YOU MUST remember this (As Time Goes By); I LEFT my heart in San Francisco; Theme from "Jaws"but with lead singing first note and bass singing second an octave lower
Octave WIL-LOW weep for me; YOU ARE my lucky star

Summary:

The key to "reading" music is to translate music notation into understanding, and turn understanding into performance. This applies to performing with any instrument, including the voice. Accomplished sight singers can pick up a piece of music, and effectively read it and perform it with amazing accuracy! While chart reading is a skill developed over time, knowledge of music notation, used along with the tools of recorded learning tracks and rehearsal, will provide everything you need to be an accomplished performer. Enjoy!