

# **ALPHA-CHOICE SCHOOLS**

## **GRADE 8**

### **MUSIC**

#### **MASTER NOTE**

#### **SYNOPSIS**

**WEEK 1&2    VOICE TRAINING**

**WEEK 3&4    KEY SIGNATURE**

**WEEK 5&6    TABLE OF MAJOR  
KEYS AND SHARPS**

**WEEK 7&8    INTERVAL**

**WEEK 9&10                  PRACTICAL  
INSTRUMENT**

# WEEK 11&12 REVISION

## WEEK 1&2: VOICE TRAINING/VOCAL EXERCISE/SINGING BELT

### INTRODUCTION/DEFINITION:

A **voice type** classifies a singing voice by vocal range, vocal weight, tessitura, vocal timbre, vocal transition points (*passaggia*) like breaks and lifts, and vocal register. Voice classification was developed for European classical music and seldom applies to other kinds of singing; voice classification is in the opera to pair roles with voices. Several different voice classification systems are available to identify voice types, including the German *Fach* system and the choral music system among many others; no system is universally applied or accepted.

Voice classification is a tool for singers, composers, venues, and listeners to categorize vocal properties and to associate roles with voices. While choral singers are classified into voice parts based on their vocal range, solo singers are classified into voice types based more on their tessitura – where their voice feels most comfortable for the majority of the time.

### CLASSIFICATION OF VOICE

Voice type
Female
<ul style="list-style-type: none"><li>• Soprano</li><li>• Mezzo-soprano</li><li>• Contralto</li></ul>
Male

- **Countertenor**
- **Tenor**
- **Baritone**
- **Bass**

## Soprano



Soprano voice range (C4–C6) indicated on piano keyboard in green with dot marking middle C (C4)

### *Soprano*

**Soprano range:** The soprano is the highest singing voice. The typical soprano voice lies between C4 (middle C) and C6 (*high C*). The low extreme for sopranos is roughly A3 (just below middle C). Most soprano roles do not extend above C6 although there are several standard soprano roles that call for D6. At the highest extreme, some coloratura soprano roles may reach to G6 (the G above *high C*).

**Soprano tessitura:** The tessitura of the soprano voice lies higher than all the other voices except the sopranino. In particular, the coloratura soprano has the highest tessitura of all the soprano subtypes.

**Soprano subtypes:** As with all voice types, sopranos are often divided into different subcategories based on range, vocal color or timbre, the weight of voice, and dexterity of the voice. Sopranos are often broken down into five subcategories: coloratura soprano, soubrette, lyric soprano, spinto soprano, and dramatic soprano.

Two types of soprano especially dear to the French are the *Dugazon* and the *Falcon*, which are intermediate voice types between the soprano and the mezzo-soprano. A

Dugazon is a darker-colored soubrette. A Falcon a darker-colored soprano drammatico. **Mezzo-soprano**



Mezzo-soprano voice range (A3–A5) indicated on piano keyboard in green with dot marking middle C (C4)

### *Mezzo-soprano*

Mezzo-soprano range: The mezzo-soprano voice is the middle-range voice type for females; it lies between the soprano and contralto ranges, over-lapping both of them. The typical range of this voice is between A3 (the A below middle C) to A5 (two octaves higher). In the lower and upper extremes, some mezzo-sopranos may extend down to F3 (the F below middle C) and as high as C6 (*high C*).

Mezzo-soprano tessitura: Although this voice overlaps both the contralto and soprano voices, the tessitura of the mezzo-soprano is lower than that of the soprano and higher than that of the contralto.

Mezzo-soprano subtypes: Mezzo-sopranos are often broken down into three subcategories: lyric mezzo-soprano, coloratura mezzo-soprano and dramatic mezzosoprano. **Contralto**



Contralto voice range (F3–F5) indicated on piano keyboard in green with dot marking middle C (C4)

### *Alto and Contralto*

Contralto range: The contralto voice is the lowest female voice. A true operatic contralto is rare, so much so that often roles intended for contralto are performed by mezzo-sopranos. The typical contralto range lies between F3 (the F below middle C) to F5 (the second F above middle C). In the lower and upper extremes some contralto voices can sing from D3 (the D below middle C) to B $\flat$ 5 (the second B-flat above), one whole step short of the soprano *high C*.

Contralto tessitura: The contralto voice has the lowest tessitura of the female voices.

Contralto subtypes: Contraltos are often broken down into three subcategories: coloratura contralto, lyric contralto, and dramatic contralto. A soprano sfogato is a contralto who has an extended high range reaching the soprano *high C*.

Male voices

### Countertenor



Countertenor voice range (E3–E5) indicated on piano keyboard in green with dot marking middle C (C4)

### *Countertenor*

Countertenor range: The countertenor is the highest male voice. Many countertenor singers perform roles originally written for a castrato in baroque operas. Except for a few very rare voices (such as the American male soprano Michael Maniaci or singers with a disorder such as Kallmann syndrome), singers called countertenors generally sing in the falsetto register, sometimes using their modal voice for the lowest notes. Historically, there is much evidence that the countertenor, in England at least, also designated a very high tenor voice, the equivalent of the French *haute*<https://en.wikipedia.org/wiki/Haute-contre>. Until about 1830, all male voices used some falsetto-type voice production in their upper range. Countertenor voices span a broad range, covering E3 to E5.

Countertenor subtypes: Countertenors are often broken down into three subcategories: sopranist or "male soprano", the *haute-contre*, and the castrato. The last actual castrato singer, Alessandro Moreschi, died in 1922. **Tenor**



Tenor voice range (C3–C5) indicated on piano keyboard in green with dot marking middle C (C4)

### *Tenor*

Tenor range: The tenor is the highest male voice within the modal register. The typical tenor voice lies between C3 (one octave below middle C) to C5 (one octave above middle C). The low extreme for tenors is roughly B $\flat$ 2 (the second B-flat below

middle C). At the highest extreme, some tenors can sing up to F5 (the second F above middle C).

**Tenor tessitura:** The tessitura of the tenor voice lies above the baritone voice and below the countertenor voice. The *leggero* tenor has the highest tessitura of all the tenor subtypes.

**Tenor subtypes:** Tenors are often divided into different subcategories based on range, vocal color or timbre, the weight of the voice, and dexterity of the voice.

Tenors are often broken down into seven subcategories: *tenore contraltino*, *leggero* tenor or *tenore di grazia*, lyric tenor, spinto tenor or *tenore spinto*, dramatic tenor, heldentenor, and baritenor.<sup>[7]</sup> Famous tenors include Enrico Caruso, Juan Diego Flórez, Alfredo Kraus, and Luciano Pavarotti. **Baritone**



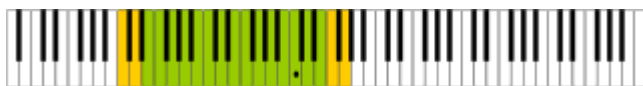
Baritone voice range (A2–A4) indicated on piano keyboard in green with dot marking middle C (C4)

### *Baritone*

**Baritone range:** The baritone voice is the middle-range voice type for males; it lies between the bass and tenor ranges, overlapping both of them. The typical baritone range is from A2 (the second A below middle C) to A4 (the A above middle C). A baritone's range might extend down to F2 or up to C5. The baritone voice type is the most common male voice.

**Baritone tessitura:** Although this voice range overlaps both the tenor and bass ranges, the tessitura of the baritone is lower than that of the tenor and higher than that of the bass.

**Baritone subtypes:** Baritones are often divided into different subcategories based on range, vocal color or timbre, the weight of the voice, and dexterity of the voice. Baritones are often broken down into nine subcategories: baryton-Martin, lyric baritone, bel canto or coloratura baritone, *kavalierbariton*, heldenbaritone, Verdi baritone, dramatic baritone, *baryton-noble*, and bass-baritone. **Bass**



Bass voice range (E2–E4) indicated on piano keyboard in green with dot marking middle C (C4) *Bass (voice type)*

**Bass range:** The bass is the lowest singing voice. The bass voice has the lowest tessitura of all the voices. The typical bass range lies between E2 (the second E below middle C) to E4 (the E above middle C). In the lower and upper extremes of the bass voice, some basses can sing from C2 (two octaves below middle C) to G4 (the G above middle C).

**Bass subtypes:** Basses are often divided into different subcategories based on range, vocal color or timbre, the weight of the voice, and dexterity of the voice. Basses are often broken down into six subcategories: basso profondo, basso buffo, bel canto bass, basso cantante, dramatic bass, and bass-baritone.

Children's voices

### **The voice from childhood to adulthood**

The human voice is in a constant state of change and development just as the whole body is in a state of constant change. A human voice will alter as a person gets older moving from immaturity to maturity to a peak period of prime singing and then ultimately into a declining period. The vocal range and timbre of children's voices does not have the variety that adults' voices have. Both boys and girls prior to puberty have an equivalent vocal range and timbre. The reason for this is that both groups have a similar larynx size and weight and a similar vocal cord structure and color. With the onset of puberty, both men and women's voices alter as the vocal ligaments become more defined and the laryngeal cartilages harden. The laryngeal structure of both voices change but more so in men. The height of the male larynx becomes much greater than in women. The size and development of adult lungs also changes what the voice is physically capable of doing. From the onset of puberty, the human voice is in an in-between phase where it is not quite a child's voice nor an adult one yet. This is not to suggest that the voice stops changing after puberty. Different singers will reach adult development earlier or later than others, and as stated above there are continual changes throughout adulthood as well. **Treble**



Treble voice range (A3–A5) indicated on piano keyboard in green with dot marking middle C (C4)

## *Treble voice and Boy soprano*

Treble can refer to either a young female or young male singer with an unchanged voice in the mezzo-soprano range. Initially, the term was associated with boy sopranos but as the inclusion of girls into children's choirs became acceptable in the 20th century the term has expanded to refer to all pre-pubescent voices. The lumping of children's voices into one category is also practical as boys and girls share a similar range and timbre.

Most trebles have an approximate range from A3 (the A below middle C) to F5 (the F one and a half octaves above middle C). Some trebles, however, can extend their voices higher in the modal register to C6 (*high C*). This ability may be comparatively rare, but the Anglican church repertory, which many trained trebles sing, frequently demands A5.

## **VOCAL EXERCISE**

### **1. Lip Buzz**

To do this vocal warm up, simply vibrate your lips together without pitch, at first. This will help build up your breath support and stamina while singing.

Next, try adding a pitch to your lip buzz, and hold it anywhere from 3-5 seconds. Pitch can go up, down, or stay on one note. There should be a funny, tickling sensation in your nose and other resonators (the forehead, cheeks, etc.). If you do not feel this, try harder!

### **2. Solfege**

We all should be familiar with “Do Re Mi Fa Sol La Ti Do” from the *The Sound of Music*. Starting on middle C, sing through the solfege up and down the scale, taking your time and really listening to each pitch.

See if you can try this vocal warm up without a piano (acapella), as this will help with ear training! Practicing solfege is not only a great tool for your ears, but it will also help you with sight reading.



### **3. “Mah-May-Me-Mo-Moo”**

This is another one of our favorite vocal warm ups that will help you sing better. Remaining on one note (monotone), sing “mah-may-me-mo-moo” nice and slow, really pronouncing the Ms. It should sound like the first exercise in the video below.

Start low, perhaps at A3, and sing up the scale to an octave above. Take your time and see if you can sing this exercise all in one breath. While you don’t have to sing the warm up well, focus on your intonation to create the best vocal sound. Don’t push – this exercise should be nice and relaxed.

### **4. “I Love to Sing”**

This is one of the vocal exercises you can use to help with your range, as it includes an arpeggio. Starting low at around Bb3, you are literally going to sing “I love to sing” with a smile on your face! You will start at the root, then hit the octave, and come back down on the 5th, 3rd, and root of the chord again.

This is a great way to test your range through big jumps. It can be done fast and should be done all in one breath. Smiling while you sing will help you develop a more clear and bright sound. Give it a try!

### **5. The Siren**

This is the easiest vocal exercise of all the vocal warm ups on this list. Think of the sound of a fire engine passing by, and imitate it with your voice. Start at the lowest note in your range, and slide through every note to the top of your range. If you can sing the low notes and high notes, then you know you are in good vocal shape!

Sirens are a good way to tell if you are vocally fatigued. If you’re unable to hit the low or high notes, then it’s best not to push too hard. You can try this warm up in reverse too, by starting with your mouth open wide, going from high to low.

These vocal exercises take as little as 10 minutes a day, and they will help you sing better tremendously. If you need more guidance and are ready to take your singing to the next level, book singing lessons with an expert instructor today!

## **WEEK 3-4: KEY SIGNATURE DEFINITION:**

Key signatures are symbols which indicates the key of music. This means that the symbols show the keys in which music is written.

### **What is a Key?**

A **key** is the major or minor scale around which a piece of music revolves.

Every key has a unique set of seven notes. For example, the key of C Major uses the notes C, D, E, F, G, A, and B. The key of C Major uses no sharps or flats. It is the only major key using no sharps or flats.

As another example, the key of D Major uses the notes D, E, F#, G, A, B, and C#. The key of D Major has two sharps — F# and C#. Again, D is the only major key with two sharps.

As a third example, the key of Eb Major uses the notes Eb, F, G, Ab, Bb, C, and D. Eb Major has 3 flats — Bb, Eb, and Ab, and it's the only major key with 3 flats.

### **What is a Key Signature?**

The key signature is a group of sharps or a group of flats that tells you the key of the written music. The key signature shows the unique group of sharps or flats contained in the key. The key signature is written on the staff after the clef symbol and before the time signature.

There are 12 possible keys and 15 different key signatures for identifying them. At this point in the lessons don't worry about memorizing the keys just yet. We will cover them in more detail later.

Using our key examples above, the key of D would show 2 sharps as its key signature.



The key of Eb would show 3 flats as its key signature.



The key of C would show nothing since it has no sharps or flats.

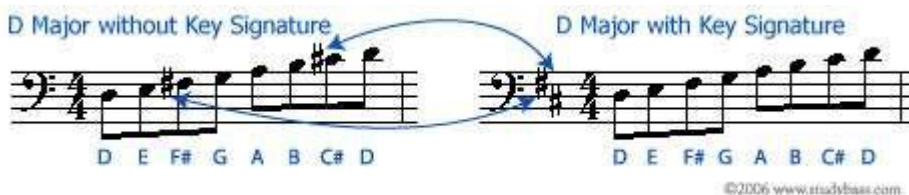


With time and practice you will memorize all 15 key signatures. This will go hand in hand with learning scales and harmony.

### How Do Key Signatures Work in Written Notation?

In music notation, the key signature tells the reader which notes to play sharp or flat throughout the music. If you are playing a song in a certain key, the same notes will be sharp or flat throughout the entire song. Instead of writing sharps or flats for each note every time it occurs in the music, the sharps or flats of the key are placed at the beginning of the music in the *key signature*. The reader is expected to remember to sharp or flat those notes as he or she plays.

In this example, you can see the notes of the D Major scale written without a key signature. Next to it is the very same notes using the key signature for D Major — 2 sharps. That means every F and C you encounter in the music are to be played as F# and C#. All key signatures work the same way.



### The Order of Sharps and the Order of Flats

The sharps and flats of the key signature always follow a specific order and are always written in that order. There is a logic for this order, but we will look at this later.

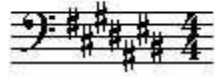
The order of flats is: Bb, Eb, Ab, Db, Gb, Cb, Fb

The order of sharps is: F#, C#, G#, D#, A#, E#, B#

The Order of Flats



The Order of Sharps



You might notice they are the same order of notes only reversed. When we discuss keys and harmony I will explain why you want to memorize these orders of flats and sharps. For now, it's enough that you know there is a specific order in which the flats and sharps are always written. **Key Signature Summary**

This key signature system may seem like more work than less, but it's not. As you begin to memorize keys like every musician should, you will see it makes more sense this way and written music is neater and easier to read. Once again, reading music will force you to learn the basics of music just a little bit better.

Here is a list of all of the different key signatures:

•	 <i>Key of C</i> (no <input type="checkbox"/> flats)	 <i>Key of E</i>
	 <i>Key of F</i> (1 flat)	 <i>Key of A Flat</i> (4 flats)
	 <i>Key of B Flat</i> (2 flats)	 <i>Key of D Flat</i> (5 flats)



*Key of G Flat(6 flats)*



*Key of C Flat(7 flats)*



*• Key of G(1 sharp)*



*• Key of D(2 sharps)*



*Key of A(3 sharps)*



**Tricks to Remember Key Signatures**

**Flats**

*• Key of E(4 sharps)*



*• Key of B(5 sharps)*



*Key of F Sharp(6 sharps)*



*Key of C Sharp(7 sharps)*

For key signatures with flats, the key signature is the second to last flat.



This is the key of E flat because E flat is the second to last flat in the



key signature.  
the key of D flat.

This is the key of D flat because D flat is the second to last flat in the key signature. It is not the key of D because there is a D flat in the key. Therefore, it is

### Sharps

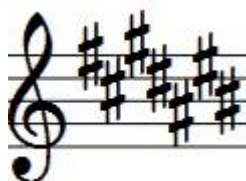
For key signatures with sharps, the key signature is the note name half step above the last sharp.



This is the key of G because F# is the last sharp in the key signature.



G is half step above F#. This is the key of E because E is half step above D#, which is the last sharp in the key signature. It is not the key of E# because



there is no E# in this key signature.

This is the key of C#. Why? The last sharp in this key signature is B#. Half step above that is C#. Remember that there is a naturally occurring half step between B and C, which means B# is the same pitch

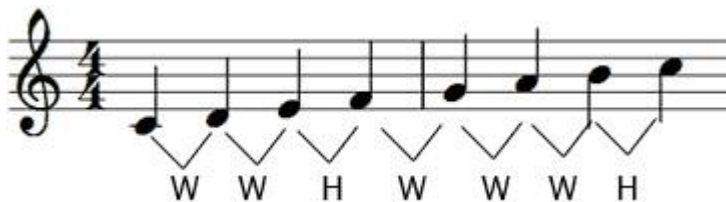
as C. This means that half step above B# is C#. The quicker way to determine this is to look at the sharps already in the key signature. In this case, there is already a C# in the key signature, so this key is the key of C#.

### What about the key of C or the key of F?

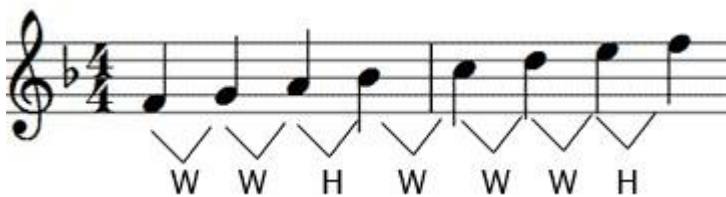
This little trick will help you quickly determine the name of the key signature when there are multiple sharps or flats in the key signature, but you may have noticed that this trick doesn't work for the key of F or the key of C. Let's discuss what all of these key signatures have in common.

### Whole & Half Step Pattern in a Major Scale

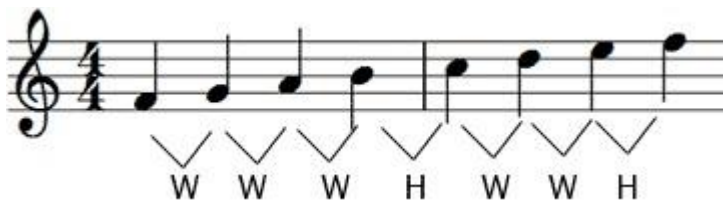
In the last lesson, we discussed that the W W H W W W H step pattern is the same for all major keys. The key of C has no sharps or flats because it naturally follows this pattern.



The key of F, for example, has 1 flat (B flat). The B is flatted so that the scale follows the same W W H W W W H pattern.

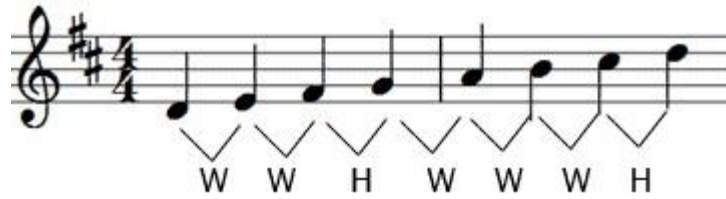


Here's what it would look like without the B flatted. Notice that the pattern changes, which means that this is no longer a Major scale.

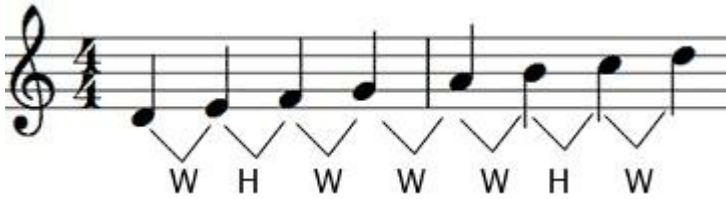


Here's another example of this.  
This

image shows that the key of D Major follows this same pattern.



pattern and, therefore, not a Major scale.



## WEEK 4&5: TABLE OF MAJOR KEY WITH SHARPS

### Major Key Signatures

### Key Signature Table

Major Key	Number of Flats	minor key
F	1	d
B flat	2	g

Major Key	Number of Sharps	minor key
G	1	e
D	2	b



<b>E flat</b>	<b>3</b>	<b>c</b>
<b>A flat</b>	<b>4</b>	<b>f</b>
<b>D flat</b>	<b>5</b>	<b>b flat</b>
<b>G flat</b>	<b>6</b>	<b>e flat</b>
<b>C flat</b>	<b>7</b>	<b>a flat</b>

<b>A</b>	<b>3</b>	<b>f sharp</b>
<b>E</b>	<b>4</b>	<b>c sharp</b>
<b>B</b>	<b>5</b>	<b>g sharp</b>
<b>F sharp</b>	<b>6</b>	<b>d sharp</b>
<b>C sharp</b>	<b>7</b>	<b>a sharp</b>

<b>Major Scale</b>	<b>Relative</b>	<b>No. of Sharps</b>	<b>of Enharmonic Key Signature</b>	<b>Parallel Key</b>
<b>C maj</b>	<b>A min</b>	<b>0</b>		<b>C minor</b>
<b>G maj</b>	<b>E min</b>	<b>1</b>		<b>G minor</b>
<b>D maj</b>	<b>B min</b>	<b>2</b>		<b>D minor</b>
<b>A maj</b>	<b>F# min</b>	<b>3</b>		<b>A minor</b>
<b>E maj</b>	<b>C# min</b>	<b>4</b>		<b>E minor</b>
<b>B maj</b>	<b>G# min</b>	<b>5</b>	<b><i>Cb major / Ab min</i></b>	<b>B minor</b>

<b>F# maj</b>	<b>D# min</b>	<b>6</b>	<i>Gb major / Eb min</i>	<b>F# minor</b>
<b>C# maj</b>	<b>A# min</b>	<b>7</b>	<i>Db major / Bb min</i>	<b>C# minor</b>
		<b>No. of Flats</b>		
<b>F maj</b>	<b>D min</b>	<b>1</b>		<b>F minor</b>
<b>Bb maj</b>	<b>G min</b>	<b>2</b>		<b>Bb minor</b>
<b>Eb maj</b>	<b>C min</b>	<b>3</b>		<b>Eb minor</b>
<b>Ab maj</b>	<b>F min</b>	<b>4</b>		<b>Ab minor</b>
<b>Db maj</b>	<b>Bb min</b>	<b>5</b>	<i>C# major / A# min</i>	<b>No Db minor (C# min)</b>
<b>Gb maj</b>	<b>Eb min</b>	<b>6</b>	<i>F# major / D# min</i>	<b>No Gb minor (F# min)</b>
<b>Cb maj</b>	<b>Ab min</b>	<b>7</b>	<i>B major / G# min</i>	<b>No Cb minor (B min)</b>

## Minor Key Signatures

<b>Minor Scale</b>	<b>Relative Key</b>	<b>No. of Sharps</b>	<b>Enharmonic Key Signature</b>	<b>Parallel Key</b>
<b>A min</b>	<b>C maj</b>	<b>0</b>		<b>A major</b>
<b>E min</b>	<b>G maj</b>	<b>1</b>		<b>E major</b>
<b>B min</b>	<b>D maj</b>	<b>2</b>		<b>B major</b>
<b>F# min</b>	<b>A maj</b>	<b>3</b>		<b>F# major</b>
<b>C# min</b>	<b>E maj</b>	<b>4</b>		<b>C# major</b>
<b>G# min</b>	<b>B maj</b>	<b>5</b>	<i>Ab minor / Cb maj</i>	<b>No G# major (Ab maj)</b>

<b>D# min</b>	<b>F# maj</b>	<b>6</b>	<i><b>Eb minor / Gb maj</b></i>	<b>No D# major (Eb maj)</b>
<b>A# min</b>	<b>C# maj</b>	<b>7</b>	<i><b>Bb minor / Db maj</b></i>	<b>No A# major (Bb maj)</b>
		<b>No. of Flats</b>		
<b>D min</b>	<b>F maj</b>	<b>1</b>		<b>D major</b>
<b>G min</b>	<b>Bb maj</b>	<b>2</b>		<b>G major</b>
<b>C min</b>	<b>Eb maj</b>	<b>3</b>		<b>C major</b>
<b>F min</b>	<b>Ab maj</b>	<b>4</b>		<b>F major</b>
<b>Bb min</b>	<b>Db maj</b>	<b>5</b>	<i><b>A# minor / C# major</b></i>	<b>Bb major</b>
<b>Eb min</b>	<b>Gb maj</b>	<b>6</b>	<i><b>D# minor / F# major</b></i>	<b>Eb major</b>
<b>Ab min</b>	<b>Cb maj</b>	<b>7</b>	<i><b>G# minor / B major</b></i>	<b>Ab major</b>

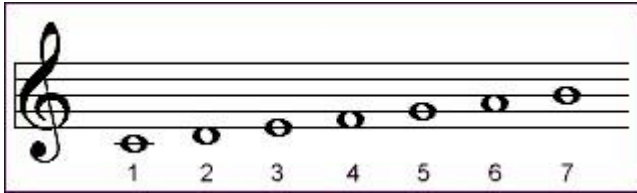
## **WEEK 6-8          INTERVAL**

An interval is the distance in pitch between two notes. It is also defined as the difference in pitch between two notes or sounds. These two definitions means the same. An interval can be melodic or harmonic, depending on how it is written or sounded

### **General definition**

Intervals are a fundamental part of musical structures, and therefore a central part of ear training. All harmonies or melodies can be considered as a sequence or layering of intervals. As a beginner you should therefore begin with Intervals and later continue with, for example, Melody dictation to identify a sequence of intervals, or Chord identification to identify harmonies with more than two tones.

An interval is the distance in pitch between two tones. It is labeled by its numerical value and its quality. The numerical value indicates the number of tones of the diatonic scale it includes.



In the staff above, the diatonic tones are shown (i.e. the white keys of the piano) and they are numbered after their position in the C-major scale. C=1, D=2, E=3 etc.

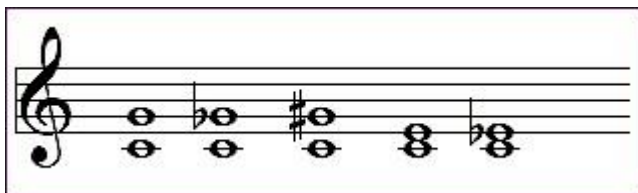
Examples of interval naming: The interval from C (1) to D (2) is a "Second" because it includes two tones, the interval from C (1) to E (3) and the interval from E (3) to G (5) are both a "Third" because they include three diatonic tones.

About interval qualities

The quality of an interval can be Perfect, Diminished, Augmented, Major, or Minor.

Unison, fourth, fifth and octave are called perfect intervals. Each of them can be diminished (one chromatic tone smaller) or augmented (one chromatic tone larger). The rest of the intervals within an octave are: second, third, sixth and seventh. Each of them can be major or minor.

Below is an example of a perfect fifth, diminished fifth and augmented fifth and a major and minor third.



## TYPE OF INTERVAL

**In this lesson we will look at inverted intervals. All intervals are a measure of distance between two notes. This is the case whether you are analyzing simple, compound or inverted intervals.**

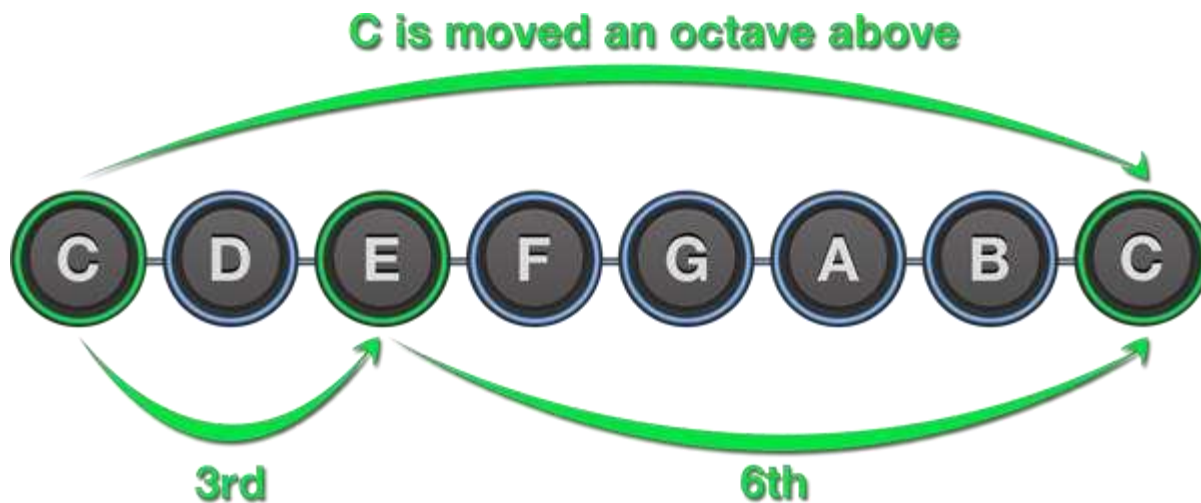
What is important to remember before tackling inverted intervals is that intervals are given a numeric value, such as a 4th or 5th, and a quality value which is either major, minor, diminished or augmented.

### Inverting Intervals

Inverting an interval is simply flipping the order of the top and bottom notes. The top becomes the bottom and the bottom becomes the top. The lower note of the interval is placed one octave above. Conversely, the upper note is placed one octave below.

When the arrangement of notes within the interval are switched around, this interval is known as an inverted interval.

For example: The interval of C - E with C as the lower note is inverted to E - C. The inverted interval makes E to the new lowest note.



There are no hard and fast rule as to which note is flipped. There are two choices:

1. The bottom note, C, is moved an octave above the E
2. The upper note, E, is moved an octave below the C

The important fact to understand is that one of the note positions has been displaced or relocated by one octave.

### Measuring Inverted Intervals

The diagram above shows the major 3rd inverted to E - C, a 6th. The quality of this inverted interval is now minor. Lets investigate why this is so.

We accept undoubtedly that C - E is a major 3rd. It would be safe to assume that the inversion of the major 3rd is also major, as these two notes, regardless of their arrangement, belong to the C major scale. What can also add to the confusion is that the letter names of the inversion remain the same, all be it flipped around.

The answer to this can be settled by reciting the golden rule for naming intervals.

All intervals are named from the lowest of the two notes.

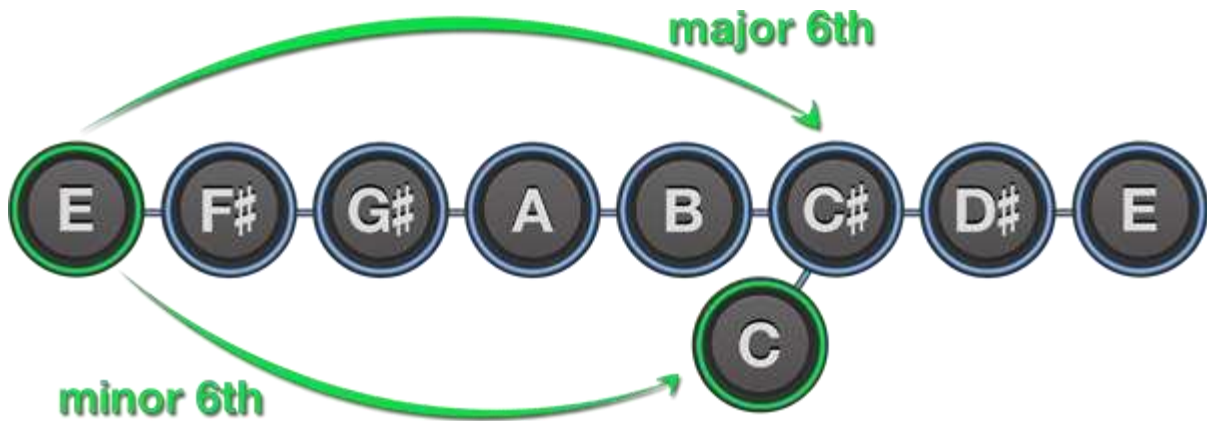
The interval E - C must be measured from the lowest note, E, and compared to its relationship with the tonic key, E major.

*The E Major Scale*



E - C is a 6th. When comparing this interval to E major, the note C is a halfstep lower than C#.

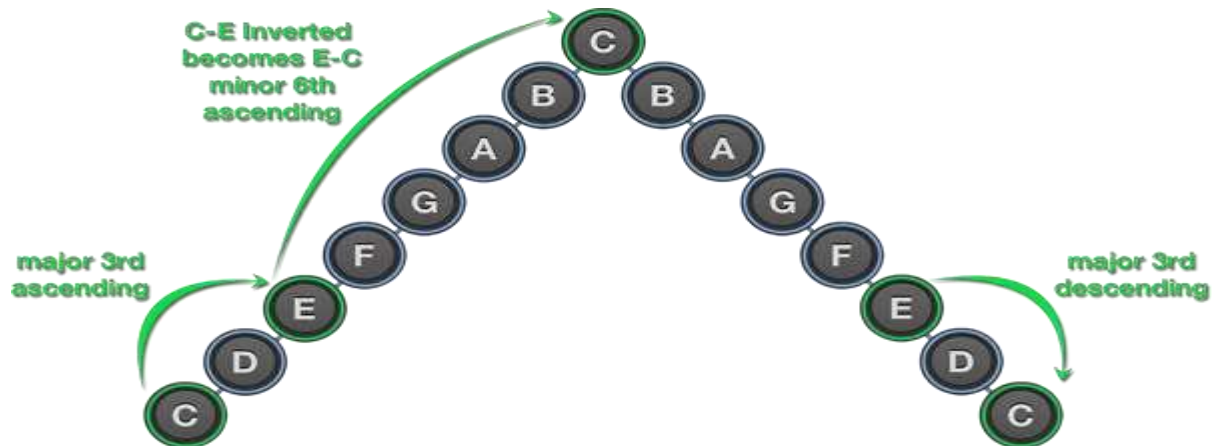
In order to arrive at our interval of E - C, we must lower the C # to C, resulting in a minor interval. Therefore, the interval E - C is indeed a minor 6th.



Descending intervals are NOT inverted interval

Some students may be confused when it comes to differentiating between an inverted interval and a descending interval. A descending interval is not an inverted interval.

When measuring intervals, the direction of the melody, be it ascending or descending, is not in question. The distance of C - E is four half-steps whether you approach it ascending from C or descending from E. The distance remains the same.



When we invert an interval, we are changing the pitch of one of the notes by an octave.

### Naming Inverted Intervals

When you invert an interval, both the number value and the quality are inverted. The interval of C - E is a major 3rd. Inverting this major 3rd results in E - C, a minor 6th. The quality value of major has been inverted to minor. When you invert the quality of an interval, the following patterns are observed:

- Major becomes minor
- Minor becomes major
- Diminished becomes augmented
- Augmented becomes diminished

When we invert the major 3rd, C - E, the resulting interval is a minor 6th, E - C. An interesting discovery is that if you add the numeric value from each interval together, the sum equals 9. When you invert the numeric value of an interval, the following patterns are observed:

- 2nd plus 7th equals 9
- 3rd plus 6th equals 9
- 4th plus 5th equals 9

- 5th plus 4th equals 9

### Inverting Perfect Intervals

As with any rule, there are exceptions. When a perfect interval is inverted, it remains perfect by quality only. The numeric value of the interval continues to be inverted. For example:

- Inverting a perfect 4th results in a perfect 5th
- Inverting a perfect 5th results in a perfect 4th

### Inverted Interval

Below is a table of diatonic intervals and their inversions:

Starting Interval	
Perfect Unison	Perfect Octave
Minor 2 <sup>nd</sup>	Major 7 <sup>th</sup>
Major 2 <sup>nd</sup>	Minor 7 <sup>th</sup>
Minor 3 <sup>rd</sup>	Major 6 <sup>th</sup>
Major 3 <sup>rd</sup>	Minor 6 <sup>th</sup>
Perfect 4 <sup>th</sup>	Perfect 5 <sup>th</sup>
Aug. 4 <sup>th</sup>	Dim. 5 <sup>th</sup>
Dim. 5 <sup>th</sup>	Aug. 4 <sup>th</sup>
Perfect 5 <sup>th</sup>	Perfect 4 <sup>th</sup>



**Minor 6<sup>th</sup>**

**Major 3rd**

**Major 6<sup>th</sup>  
Minor 7<sup>th</sup>**

**Minor 3rd**

**Major 2nd**

**Major 7<sup>th</sup>**

**Minor 2nd**

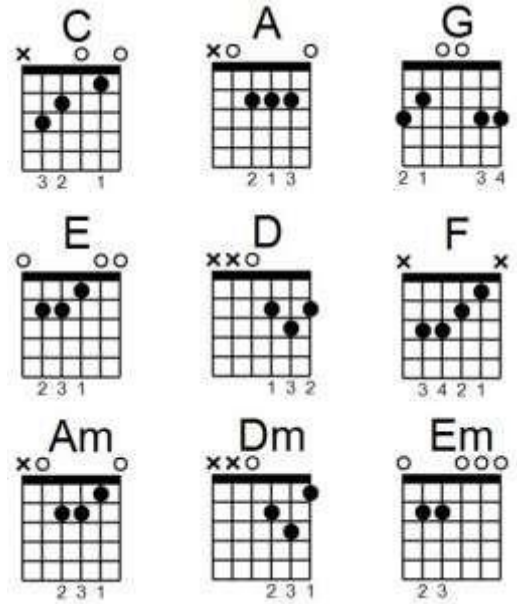
**Perfect Octave**

**Perfect Unison**

## **WEEK 9 – 10: PRACTICAL ON INSTRUMENTS**

### **PRACTICAL ON THE FOLLOWING INSTRUMENTS:**

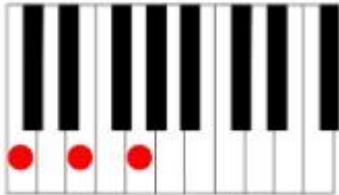
- **GUITAR**



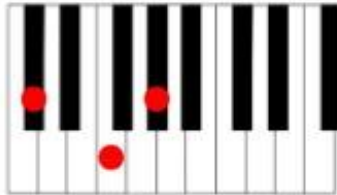
## • PIANO



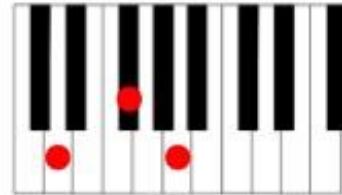
## Major Chords



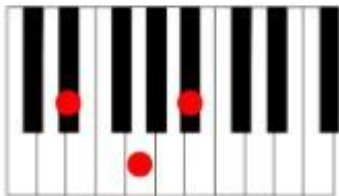
C



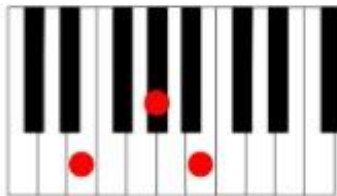
C#/Db



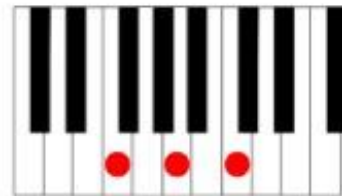
D



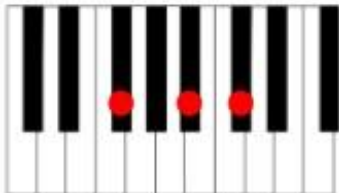
D#/Eb



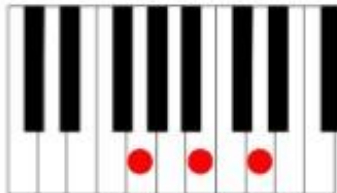
E



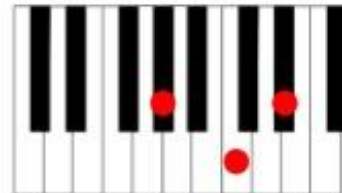
F



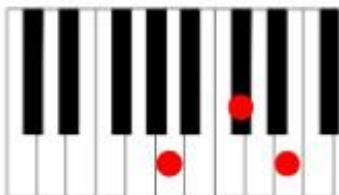
F#/Gb



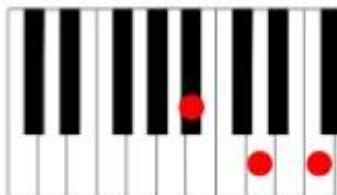
G



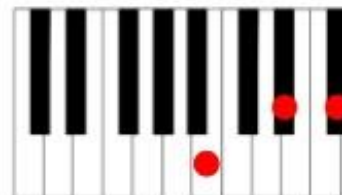
G#/Ab



A

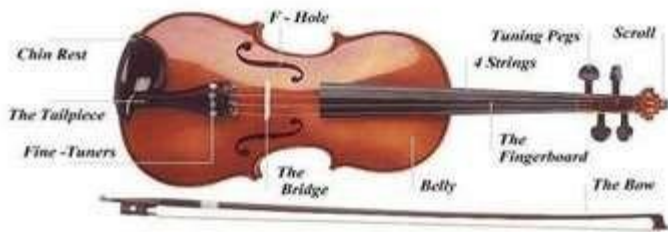


A#/Bb



B

## □ VIOLIN



	<b>G D A E</b>				Open strings
	G $\sharp$ A $\flat$	D $\sharp$ E $\flat$	A $\sharp$ B $\flat$	F	
	<b>A</b>	<b>E</b>	<b>B</b>	<b>F<math>\sharp</math></b> G $\flat$	<b>1st (index) finger</b>
	A $\sharp$ B $\flat$	<b>F</b>	<b>C</b>	<b>G</b>	Low 2nd finger
	<b>B</b>	F $\sharp$ G $\flat$	C $\sharp$ D $\flat$	G $\sharp$ A $\flat$	<b>2nd (middle) finger</b>
	<b>C</b>	<b>G</b>	<b>D</b>	<b>A</b>	<b>3rd (ring) finger</b>
	C $\sharp$ D $\flat$	G $\sharp$ A $\flat$	D $\sharp$ E $\flat$	A $\sharp$ B $\flat$	
	<b>D</b>	<b>A</b>	<b>E</b>	<b>B</b>	<b>4th (little) finger</b>

## SAXOPHONE ETC.



**Add Octave key (left thumb)** →

The diagram illustrates the placement of the octave key on a 61-key piano keyboard. The keyboard is represented by a grid of circles, with black circles indicating keys that are pressed. The octave key is located on the left side of the keyboard, between the C and C# keys. A large arrow points to the right, indicating the direction of the octave key's movement. Below the keyboard diagram, a musical scale is shown on a staff, with notes corresponding to the keys: C, C#/Db, D, D#/Eb, E, F, F#/Gb, G, G#/Ab, A, A#/Bb, B, and C. The notes are written in a treble clef, and the scale is marked with a treble clef and a key signature of one sharp (F#).

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