

# COMPREHENSIVE PIANO LESSONS & MUSIC THEORY

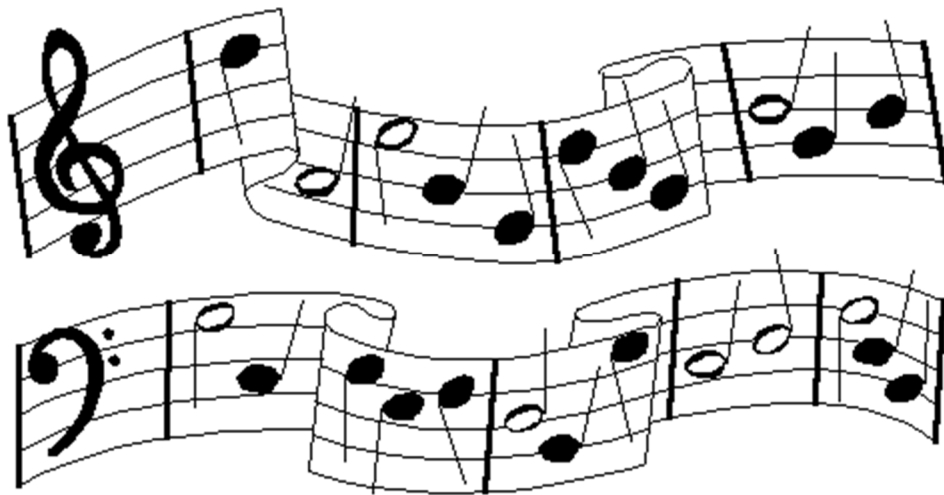
*By: John Stallworth, Pianist & Composer*

*Watch, Learn, Apply*

*John's*  
**Comprehensive Piano Lessons  
and Music Theory  
Lessons 1-8**

*Including bonus courses:*

**Ear Training  
Chord Improvement  
Sight Reading**



## Table of Contents

<b>Introduction.....</b>	<b>3</b>
<b>Lesson 1</b>	
Parts of the Piano.....	5
Posture.....	9
<b>Lesson 2</b>	
Notes on the Keyboard.....	15
Introduction to Written Music.....	25
Practice Songs 1-3.....	32
<b>Lesson 3</b>	
Scales: The Basics.....	35
Chords: The Basics.....	38
<b>Lesson 4</b>	
Music Relationships.....	42
Reading Music.....	46
Practice Songs 4-8.....	53
<b>Lesson 5</b>	
Rhythm and its importance in Music.....	67
Essentials of Rhythm.....	70
Practice Songs 9-12.....	78
<b>Lesson 6</b>	
Chord Building.....	88
<b>Lesson 7</b>	
Music Relations and Intervals.....	97
<b>Lesson 8</b>	
Scales and Modes.....	107
Arpeggios and Note Arrangements.....	121
Practice Songs 13-17.....	128
<b>Ear Training Lessons.....</b>	<b>137</b>
Lesson 1 – Sound, Noise and Tone.....	138
Lesson 2 – The Responsible Ear.....	142
Lesson 3 – Tone/Pitch Memory.....	149
Lesson 4 – Absolute Pitch.....	153
Lesson 5 – Playing What You Hear.....	155
Lesson 6 – Harmony.....	156
<b>Chord Improvement Lessons.....</b>	<b>161</b>
Lesson 1 – Chord Building.....	162
Lesson 2 – Fingering.....	171
Lesson 3 – Chord Tones and Voicing.....	177
Lesson 4 – Chord Alterations.....	184
Lesson 5 – Chords with Scales.....	186
Lesson 6 – Chord Theory.....	190
<b>Sight Reading Lessons.....</b>	<b>194</b>
Lesson 1 – Symbols and Uses.....	195
Lesson 2 – Writing Practice.....	213
Lesson 3 – Key Signatures.....	222
Lesson 4 – Sounding Rhythm.....	237
Lesson 5 – Application of Memorization.....	243
Lesson 6 – Advance Rhythms.....	251
<b>Glossary.....</b>	<b>255</b>

## Introduction

I am so thankful that you have decided to take the journey in learning piano. Whether you are a beginner or advanced player, you can benefit from these collections of lessons. Starting as a self-taught musician, I know firsthand the challenges we can face when we lack guidance and education in music. The beauty of learning about music is that it opens up our eyes to exciting possibilities and explorations in the world that we did not have before. We can see how the composition of music directly relates to the creation of the world, how everything is knit together with a purpose and operates in harmony. Learning music is like finding out how and why things come together. This understanding can be as basic as how you connect emotionally when your favorite band plays, to what is required to compose a symphony, and therefore connect relative structures of music together.

Learning music is directly related to daily life, in a way that it is an essential beneficiary to using our brains in the most efficient way that they were created. It is a fact that musicians or people who play musical instruments activate their entire brain at once when they are doing the activity. This is why music is so important for children. Music education is the unsung hero of our ability to reach the greatest potential in life, so this is why it is so essential. It is also proven when you listen to music, that it takes you to a place other than where you are. It has the ability to influence you, motivate you, and change your mood and your mind in a matter of seconds just from hearing the first few stanzas. This ability is extremely powerful and as human beings, it exists in all of our experiences with music. This evidence is just a small taste of the truth that music education improves your abilities in anything that you do, whether you are a doctor, teacher, warehouse worker, etc. Playing a musical instrument improves your focus, memory, cohesiveness, and helps you better connect emotionally with the world.

Music education is not solely for people who want to learn to be a professional musician, but is also for people who will not take their musicianship to a professional level. I think music education is for everyone, but being a professional musician is not. The difference between the two is simple; music education is good for your personal growth in just you being you. If you want the greatest potential in your craft whatever it may be, learn music.

Music education has other benefits as well, such as assistance in learning disabilities and other mental hindrances that we all may face from time to time. Music has been found to be a crucial tool in working with children with mental disabilities. This is because music seems to unlock a special part of our being when we engage it. Music has been proven to improve mood, lower stress, reduce depression, help memory, relax, reduce physical pain, help Alzheimer's patients remember, raise IQ, and keep your brain more alert even in old age. The benefits of music are never ending, and this is why I am happy you have decided to see how music education can benefit your life! Welcome to my piano lessons.

### Lessons 1-8

These lessons are geared toward teaching you the basic piano theory. These 8 lessons will cover all the need-to-know topics on music theory and general knowledge of playing the piano. Learn posture, technique, tone, and much more to help you get on the right track toward playing the piano effortlessly! Work on the exercises at the completion of each lesson to ensure that you have a handle on what you learn. At the completion of this course, you will have the skills to play the piano, but more importantly



you will be educated and will be able to have the knowhow of music as a whole and playing the piano efficiently.

### **Ear Training Lessons**

These lessons are geared toward helping you improve your musical ear by exposing it to two main categories: recognition and response. Ever wish you can just hear a melody then immediately play it on the piano? Or if you have a song idea but just can't put what you hear to practice? This 6 lesson bonus course will train your ear to be a master of pitch.

### **Chord Improvement Lessons**

These lessons are geared toward helping you increase your piano chord library. There are many ways you can expand in your chords. In this 6 lesson course, learn ways to improve in your fingering, stretching, adding and subtracting notes in chords to make every application a right one. Chords can be tricky, but in this session all your chord questions, from basic to advanced, will be answered! Supplement these lessons with the Comprehensive Chord Book.

### **Sight Reading Lessons**

These lessons are geared toward improving your ability to sight read. No matter what level you are on in your sight reading ability; expect to gain great results with this 6 lesson course on sight reading! You are guaranteed to be able to sight read an entire song at the completion of this course. Fact: On average, Pianists that can sight read make 300% or more money than pianists that can't read!

### **About The Author:**



John Stallworth is a pianist/composer from Southern California, USA. He has been playing piano since the year 2001, and teaching privately since the year 2005. He was born in Fontana, California in 1986 and grew up in San Bernardino, California. He attained an engineering degree and pursued a profession as a professional engineer, as well as a professional pianist. He got married in 2011, and has since had two children. He continues his career in music as a teacher, composer, and performer. The venues he performs vary from churches to concert venues. John has composed his own projects such as *Unleashed*, which has its roots in his Christian faith. John also heads a Non-Profit Organization called Concert of Hope Community Outreach in which he desires to help the homeless and less fortunate. John believes that God has called him to help others with what God has given him.

## Lesson 1

### Parts of a piano part:

These are the parts of the piano. You have the **music rack**, the **fall** which covers the piano keys, the **keyboard**, and the **pedals**, as shown in figure 1.01.

#### DIFFERENT TYPES OF PIANOS

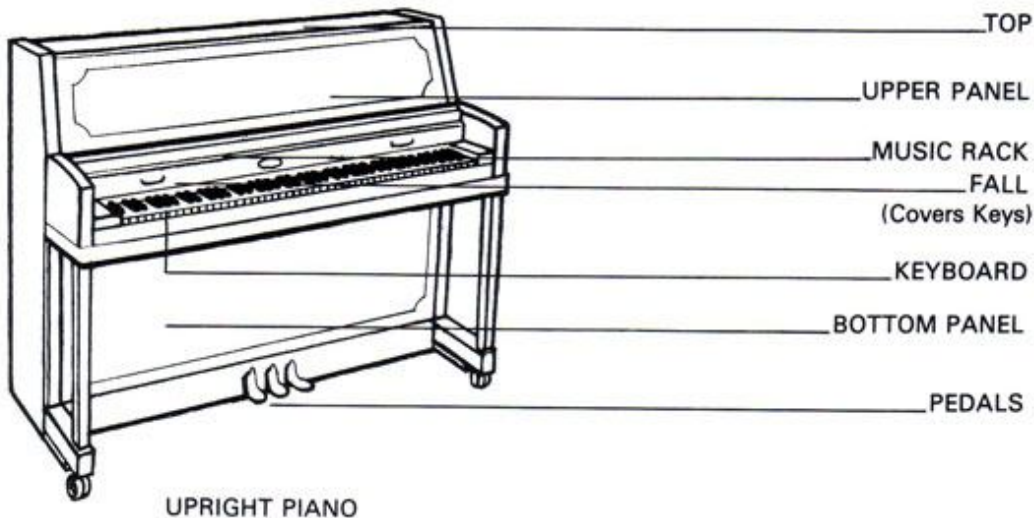
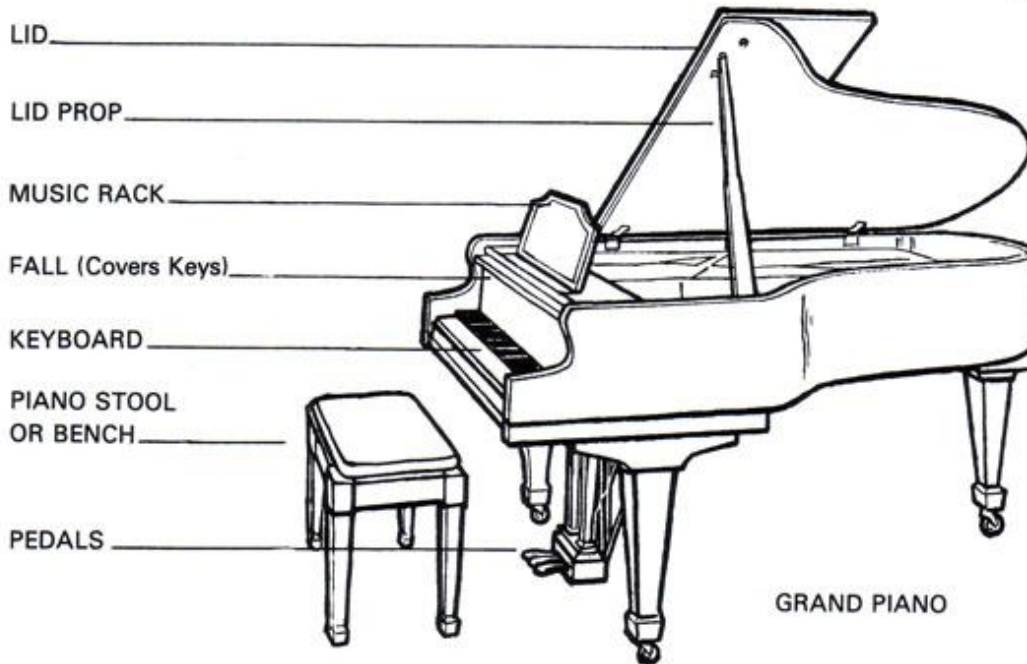


Figure 1.01

## Parts of a piano:

Here are the different parts of a piano. Using **Figure 1.01**, each piano part is described in more detail:

The **piano lid** is the adjustable cover that opens on top of the instrument, revealing its strings, hammers, and soundboard.

The **lid prop** is an adjustable stick that holds up the lid.

The **music rack** serves as the prop up for sheet music paper of any kind. This is where the sheet music can be read by the pianist.

The **fall** is the cover that goes over the keys or keyboard of a piano to protect the keys from dust or anything else when piano is not in use.

The **keyboard** is where the keys sit on the piano in order from low notes to high notes.

The **piano stool** or **bench** is the proper name of the seat that the pianist sits on.

The **pedals** are the mechanisms located at the bottom activated by the foot to change the sounds produced by the piano.



**Figure 1.02**

There are three piano pedals as shown in figure 1.02:

1. Sustain or damper pedal- The sustain pedal is the pedal on the far right, and when it is initiated allows the notes to have a continuous sound as long as the pedal is held.
2. Sostenuto pedal- The sostenuto pedal is the middle pedal, and when it is initiated can sustain (or hold) selected notes while others remain unaffected.
3. Una corda or soft pedal- The una corda pedal is the pedal on the far left, and when it is initiated mellows the piano sound, giving it a warmer and quieter tone. It modifies the timbre and color of the tone.

The pedals are used to make the piano sound in different ways when they are pushed down by your foot, such as quieting and sustaining.

## Music Theory as a whole:

Music is composed of three parts: **rhythm**, **harmony** and **melody**. Some musicologists argue that there are two parts to music: rhythm and melody. It can be either, but for the most part, melody and harmony are so closely related, because they both rely on pitch and tone. So the two main parts of music are the melodic side, in which you can audibly hear a note or series of notes, and the rhythmic side, where you audibly hear the cadence or beat of the song. The two work together to produce a song.

Rhythm can be considered the skeleton of the song; the support that holds the song together. The melody and harmony can be referred to as the meat and blood of the song that gives the song life. When the two are combined, you have a song. **Harmony** is the combination of more than one tone played at the same time.

When hearing a note, it can be defined by two words, **tone** and **pitch**. **Pitch** is the range of high and low notes heard on the piano and **tone** is the quality of the note played or heard. There is a wide range of tones an instrument can produce in its lifetime, due to not only the changing or tweaking of its sound, but also the way the instrument is played by the musician. Tone is very important to have and harder to develop by the musician, and must be practiced often. The greater tone and accurate pitch the musician can play by, the greater music the musician can play. In other words, tone is very important when you want to sound good. Pitch is equally important, because it has to do with hitting the correct note that you want. Acoustic pianos can go out of tune fast and develop poor pitch and tone depending on the brand and type, but electric pianos have the capability of staying in tune at all times. Even though staying in the right pitch is easier for pianists because of the layout of the keys, it is still equally important to have good tone and pitch and to know how to use them.

**Exercise:** Label the parts of the piano below and list their functions in one or a few words:



**Quiz #1**

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**Which part of a grand piano covers the keyboard?**

- Fall
- Hammer
- Lid Cover
- Lid

**Which part(s) of a piano does the grand piano have that the upright piano doesn't?**

- Pedals
- Stand and Prop
- Lid and Lid Prop
- Piano Bench and Stool

**In a short sentence, define the function of each pedal:**

- a) Sustain Pedal-
- b) Sostenuto Pedal-
- c) Una Corda Pedal-

**What is another name for the Una Corda Pedal?**

- Grand Pedal
- Soft Pedal
- Breaker Pedal
- Hold Pedal

**What is another name for the Sustain Pedal?**

- Hard Pedal
- Median Pedal
- Damper Pedal
- Right Pedal

**Music is made up of rhythm, harmony and melody. What role does harmony play in it? Choose the closest answer.**

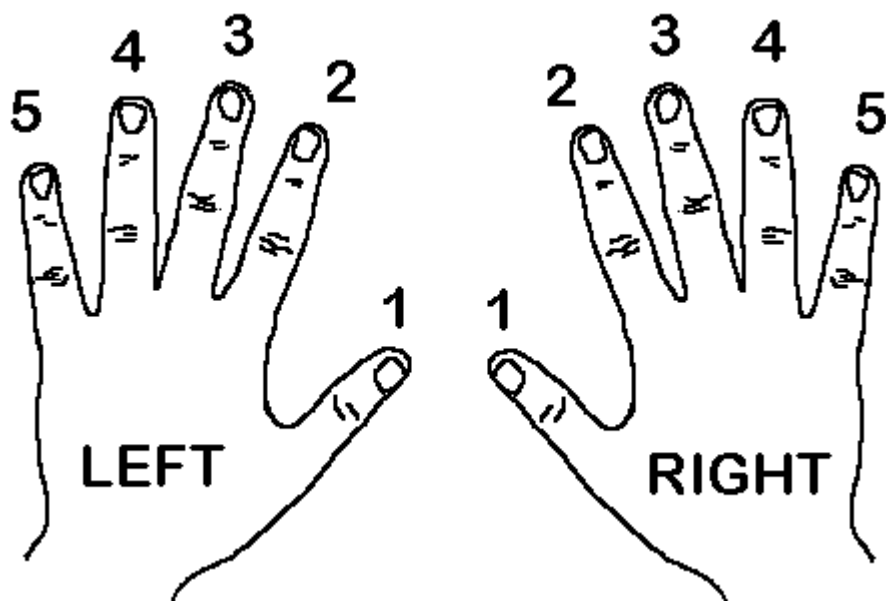
- Harmony is the leading sound in music, and is what makes up the song
- Harmony is the rhythm of sounds that work together to produce the cadence
- Harmony is when more than one tone is played at the same time and goes together
- Harmony is when the song works together to produce melodies that are closely related

**Pitch and Tone have different meanings. Which single word defines tone?**

- Sound
- Range
- Harmony
- Quality

**Sitting/Hands/Posture when playing piano:**

When you play the piano, you obviously use your hand. We number the fingers on the hand from 1-5, as a way to classify each finger and identify them. (see figure 1.03)

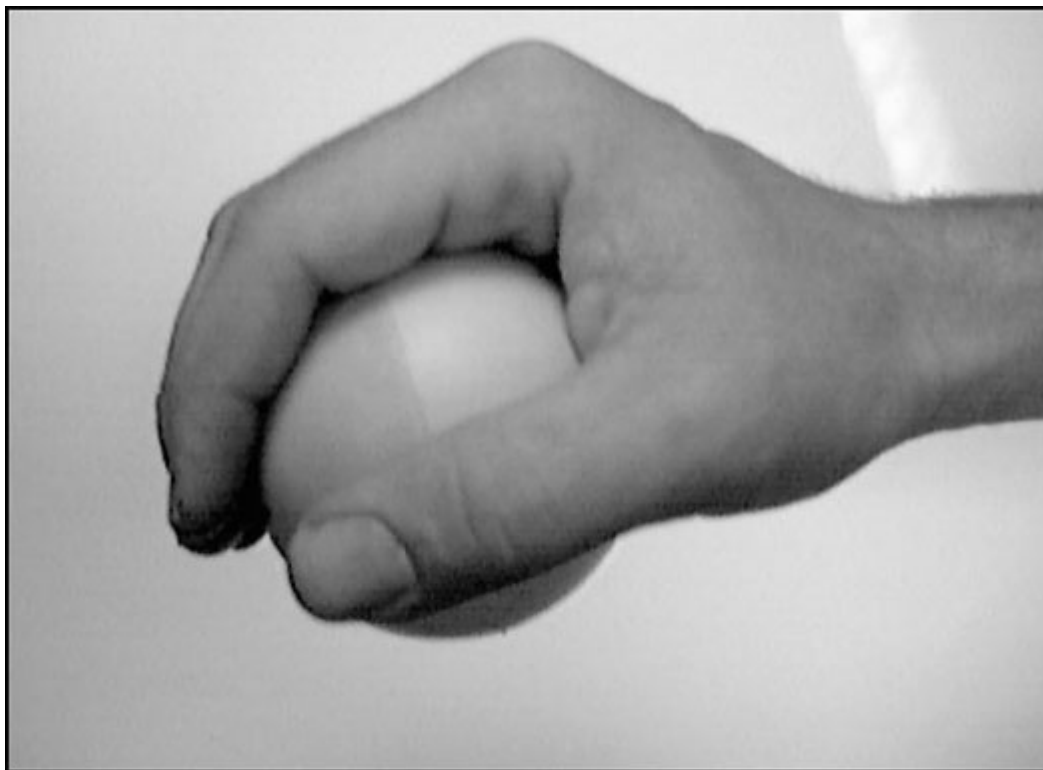


**Figure 1.03**

Finger number 1 is and will always be your thumb, finger number two is your index finger, finger number three is your middle finger, finger number four is your ring finger, and finger number five is your pinky. The same classification is noted for both hands, meaning the numbering system goes in the opposite direction.

When you put your hands on the piano, your fingers must be slightly bent. Try practicing this by using a tennis ball. Carefully wrap your hand around the tennis ball as shown in figure 1.04. Make sure you use as little of a grip as possible; just enough to hold up the tennis ball. This will allow you to get used to staying relaxed whenever you put your hand in position on the piano. The word that describes how your hands should be positioned on the keyboard is the word graceful, and that is how it should be at all times.

Before playing the piano, attaining proper **posture** is very important. You can start by sitting at the piano and placing your hands on the keyboard in a very relaxed position. Make sure your back is straight when sitting, just like you are sitting in a chair, because it is very easy to slouch on the piano if you don't train yourself to sit up right. If your arms are level with the ground, then you have good bench height. You don't want your arms to be at a slant going down toward the keys, or at an incline to the keyboard like shown in figure 1.05. It is very important in proper technique to make sure you have as relaxed of a position as possible as shown in figure 1.06. Having good technique is effortless playing due to being relaxed and free to fully exercise your song. The best technique is technique that uses the least amount of body movement and physical energy to execute the music.

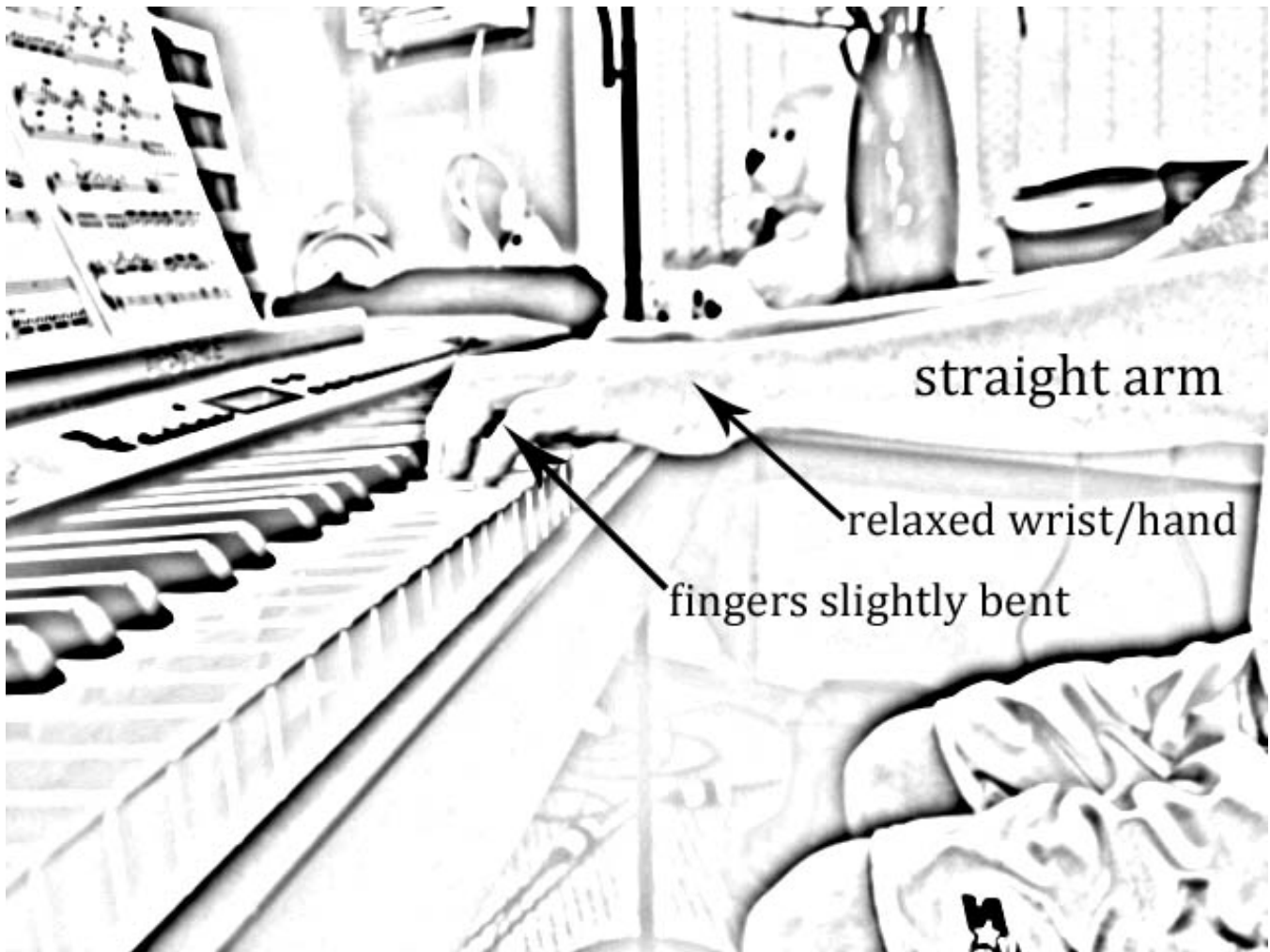


**Figure 1.04**



**Figure 1.05**





**Figure 1.06**

Whenever you are playing a tune, it requires that sometimes you play loud notes, and sometimes soft notes, and sometimes somewhere in between. This action is referred to as **hammer striking**. Hammer is a term used for the hammer like device inside of the piano that strikes the strings when a key is pressed, causing it to make a sound. Compare this to the strings on an acoustic guitar. Ideally, the harder the key is pressed, the harder the hammer will hit the string causing it to make a more **forte**, or louder sound. On the contrary, playing the piano note softer will cause it to make a more **piano**, or softer sound. The idea on playing the piano notes hard or soft (dynamics) is not to be taken literally though, when trying to exercise proper technique. Always remember that the best technique is technique that uses the least amount of body movement and physical energy to execute the music. So when playing louder when needed, it is important that you don't use any more stress on your joints and muscles than when you are playing softer.

When you have the idea in your head that you want to play harder, or louder, your muscles will tighten up and that makes it harder to move over the keys. It is important to always keep your hand motion loose, and that will guarantee you the best result in your song. You can always tell when your arm and hand are too stiff by the way you play. When striking a key, you have to make the motion as stress-free as possible. The wrist, fingers, arm, and hand all work together to produce a hammer strike



**velocity** that is pre-conceived in your mind. The speed/power used to execute a hammer strike can be referred to as the velocity.

*It is harder to play a song or notes faster when your arms and hands are stiff. That is why it is so important to be loose when you are playing.*

### **Arm, Wrist, Hand and Fingers**

The fingers and the wrist are the two main players in making a note sound. The hand body and the arm are fixtures of foundation.

The goal of the **fingers** is to stretch in position to the note that needs to be played.  
The goal of the **wrist** is to give the leverage needed in order to strike the note.  
The goal of the **arm** and **hand** is to hold and direct each application of notes.  
(see figure 1.06)

### **The wrist leverage**

Like in most instruments, the goal of the wrist is a very vital piece in playing the piano. How you apply your wrist movements when playing can make or break your playing technique. The idea of using your wrist allows you to remain relaxed when playing and therefore helps your technique. The wrist is your anchor in playing your note, and the fingers are merely fixtures that are used to hit the note, kind of like the hammer inside of the piano. It takes years of practice to perfect wrist movements, but it is very much worth it to pursue as it is key in proper technique. Here are a few exercises to work on wrist technique as you begin to play the piano.

### ***Exercise***

1. Breathe in and then raise one of your hands above the keyboard in a relaxed position.
2. Breathe out as you carefully bring your hands down to the keyboard and relax your hand on the keyboard.
3. Make sure that your arms are level with the keyboard, and your fingers are properly bent.
4. Slightly move your wrist up and down without moving your fingers. Do this for both of your hands.
5. Now try to do something that is a little harder, but for every wrist motion, play a note per finger. Such as with the first wrist motion, play the #1 finger, or the thumb. For the second wrist motion, play the note with the #2 finger or the index finger, and so on.

It doesn't matter which note you play, this is just about getting used to the wrist-finger action. *The only movement in the finger should be the slight stretch to get to the note, and the power of striking the note should come from the wrist motion.*

The primary job of the arm is to carry the hand over the note so that you can move your hand quickly over the keyboard when playing a song. While playing, the arm must be light and not tense, so that you can easily move your arm to direct your hand over the keyboard. Practice moving your wrist while you move your arms over the keyboard.

Quiz #2

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**Which hand in piano theory is labeled 1, 2, 3, 4, 5 starting from the thumb?**

- Right
- Left
- Both
- None of the above

**On the right hand, which finger is labeled as “3”?**

- Middle Finger
- Thumb
- Pinky Finger
- Ring Finger

**Having good piano playing technique is what?**

- Effortless playing due to being relaxed and free to fully exercise your song
- Careful efficient playing allowing your hands to aggressively find the right notes in songs
- The speed you are able to play a song
- The ability to play a song without hitting any wrong notes and being perfect

**Briefly explain the proper posture for the arm, wrist and fingers.**

**What single word is defined by the terms piano and forte?**

- Loud
- Even
- Soft
- Dynamics

**When playing the piano, you are trying to avoid:**

- Stress on joints
- Loose, relaxed, and weak hands
- A bent arm
- Shuffling the wrist

**Is it easier or harder to play faster when you have stiff arms, hands and wrists? Explain.**

**The motion of striking a key is referred to as?**

- Note Striking
- Hammer Striking
- Pitch
- Keyboard Playing

**The goal of the wrist is to what?**

- To take control of your playing and remain tight
- Provide the leverage needed in order to strike the note
- Shift from left to right so that you can get across the keyboard easier
- Hold your hands and arms together while playing

**The goal of the arm and hand is to what?**

- To move up and down so that you can strike the note more effectively
- To be stiff so that your fingers can play the keys rapidly
- To be a fixture so that you are tight and aren't wobbly
- To hold and direct each application of notes

**The goal of the fingers is to what?**

- To press the key by striking it with force
- To move around and to press the keys using the finger muscles
- To push the keys on the piano
- To stretch in position to the note that needs to be played

**Define Wrist Leverage in your own words.**

*Extra Credit*

**Since you know the proper posture of your hands, wrist, arm, fingers and body, what is the posture of the feet and what task is involved? Explain.**

**Why is posture so important? Choose the closest answer.**

- To make piano playing so much easier
- To ease the stress on your body while you play
- To ensure that every note is properly and effortlessly executed
- To save you from future injury

## Lesson 2

### Notes on the Keyboard:



Now we will move to the keyboard. The keyboard is composed of repetitive visible patterns at first glance. Just looking at it and not knowing much about it, the first thing you will probably notice is the series of 2 and 3 black keys, alternating over the face of the keyboard. You may also notice that the two separate series of black keys give a visual impression of a single section of the keyboard. If you manage to see that, then learning the names of the notes will become much easier to you. First I will start by getting you familiar with the basic pattern of the keyboard.



*Bartolomeo Cristofori*



*Harpsichord Plectrum*



*Piano hammers*

The piano started off with 60 keys, and it was called a harpsichord. Around 1700, the piano was invented when the harpsichord maker, Bartolomeo Cristofori, came up with the idea that instead of having a **plectra** or **plectrum** pluck the inner strings when a note is played, a **hammer** would hit the strings to make the sound. The piano was then birthed. But as musical composers wrote more complex music, the need for more notes on the piano increased. So as a result to the need of the composers at the time, piano makers began expanding the keyboard. By the mid-19<sup>th</sup> century, the piano had a total of 85 keys. Then a little time after that, three more keys were added to the piano and 88 keys became a standard.

Within the 88 keys, there is a constant pattern of 12 notes which are easily distinguished by the pattern of the black keys. You may be thinking that the number 88 is not evenly divided by twelve, and you would be right to think that. The pattern of the keys and number of keys available are not related because of one simple truth: the number of high pitches and low pitches are unlimited. So really a

keyboard on a piano can also have 205 keys, all very functional. So understanding that, the fact that the keyboard has 88 keys should not be a focal point in you recognizing patterns on the keyboard. What I want you to focus on is the repetitive pattern of twelve notes that happen over and over again.

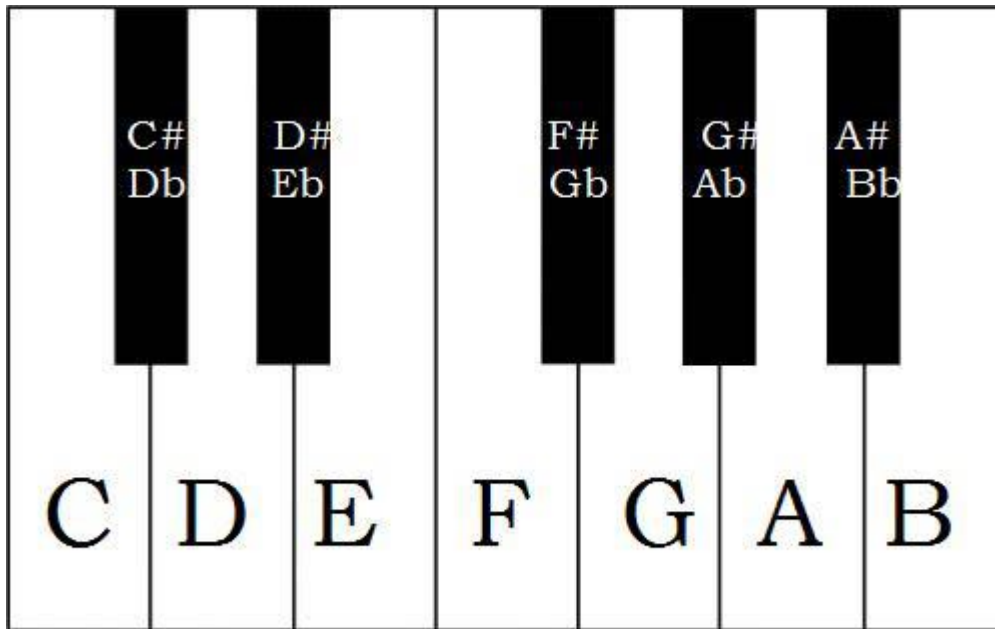


Figure 1.07

Just like your fingers are identified by a number, the keys are identified by a letter. The letters go sequentially starting from A and ending on G. There are only 7 possible notes that you can play or sing in pitch. All of these major notes are labeled on the white keys, or the natural notes. They are called naturals because of the 7 original notes; A B C D E F and G are represented by them. Those are your natural notes. Moving a little further, there are 5 possible notes that are actually able to be sung or played in between the natural notes that, like in math, denote half of the value of the proceeding natural note. This is what the black keys represent; see as there are only 5 black notes that rest between the twelve note sections. So this is what makes up the twelve note section, composed of 7 white keys and 5 black keys as shown in figure 1.07. The white keys are called **naturals**, and the black keys are called **sharps** and **flats**. We will talk more about this later in the lesson.

## Pitch

I'm going to talk to you a little bit about how a keyboard is patterned. You already know how it is patterned visibly, but more importantly, it is patterned audibly. The quality of sound depending on the rate of vibrations is called **pitch**. The lower the note is, the slower the vibrations of sound are, and the higher the pitch is, the more rapid the vibrations are. Pitch is very important to understand because it was what you hear when a note is played. The keys are also classified by the pitch that they produce. In **scientific pitch notation**, which is one of many names for pitch classification, the pitches are numbered sequentially starting from 0 and ending on 10. The pitches are measured in HZ. The lowest pitch in

scientific pitch notation is C0, which produces 16HZ. The highest pitch in scientific pitch notation is B10, which produces 31608HZ.

As you now know, note pitches range from low to high. So audibly, you can always tell what pitch a note is by hearing it, not necessarily by seeing it on the keys. Ear training is a crucial part of learning the piano. It is important as a pianist to know the difference between the right and the wrong note to play in a song, and that is distinguishable easily by ear. Without ear training, it is hard to find a problem quickly, and the pianist can and will play wrong notes in a sequence without correcting the note. Violinists know all about this, because unlike the guitar, the violin has no frets so you can't tell where the correct pitch is just by looking at the instrument. But this is just as crucial for the pianist to know.

### Exercise

As a beginner, a good way to begin your ear training is to start to recognize which notes are higher than others. Play around on the piano by experimenting with different keys and saying in your head or audibly which keys are higher than the others. It is also good to step away from the piano and have someone test you on this, where they play a note and you have to tell them if the note was higher or lower than the previous note played. This should get you started in the right direction.

### Middle C

There are high and low notes, but when it comes to note position, no one note is paid attention to more closely than middle C. **Middle C** is considered to be the middle C on the 88 keyed keyboard. There are 8 C's on the standard keyboard, so it would make since that middle C is called out as C4 in the scientific pitch notation chart, which produces around 440HZ when played.

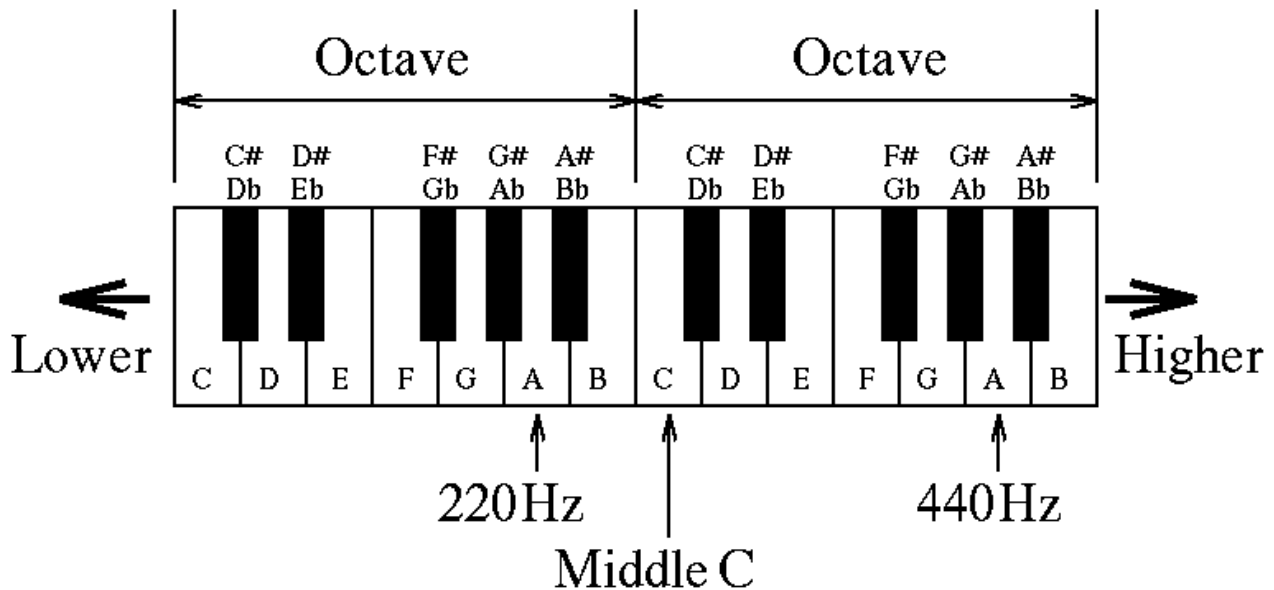


Figure 1.08



It is very important as a beginner to learn middle C, because middle C will help you advance on the piano by giving you guide for your hand positions. As you know, you have two hands. (ha ha). The right and left hand have a designated place on the piano. Technically, when you sit at the piano, it is wise to use middle C as your guide of where to sit. When you sit at the piano, pretending middle C is an arrow, should point directly to the middle of your body. This will help with your hand positions.

Now place your right hand on the right side of middle C, and place your left hand at the left side of middle C. Now you should know where I'm going with this. As a rule of thumb, when playing your song, any keys that need to be played to the right of middle C should be played with the right hand, and any keys that need to be played on the left side of middle C should be played with the left hand. You should find it rather comfortable to go by this rule of thumb; however it is not always used in music. Sometimes, depending on the song, you are required to use both hands to play on either the right of middle C or the left, so that would mean your body position would need to shift in either direction. However, it is never wise to shift your bench to the right or the left while playing, because it would make your playing experience too uncomfortable.

## Intervals

### For Thought

If you think of the keyboard like a travel destination, it can help you understand more how it works. Think of it as if for every two notes that you pass, you have just traveled a mile. When you pass four notes, you traveled two miles. But if you travel just one note, it is a half a mile. That can help you understand how they work. So in music, instead of calling it a mile, it is called a step. So when you travel two notes, you travel one step. If you travel four notes, you traveled two steps. But when you travel one note, then you have traveled a half a step. That is the theory of the **whole step** and **half step**.

#### *Example:*

1 Whole step up from A is B

1 half step up from A is B $\flat$  or A $\sharp$  (see figure 1.07 for reference)

2 whole steps down from C is A $\flat$  or G $\sharp$

1 and 1 half steps down from C is A

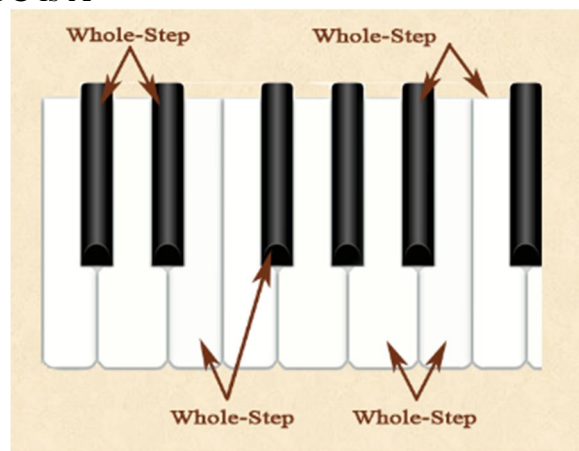
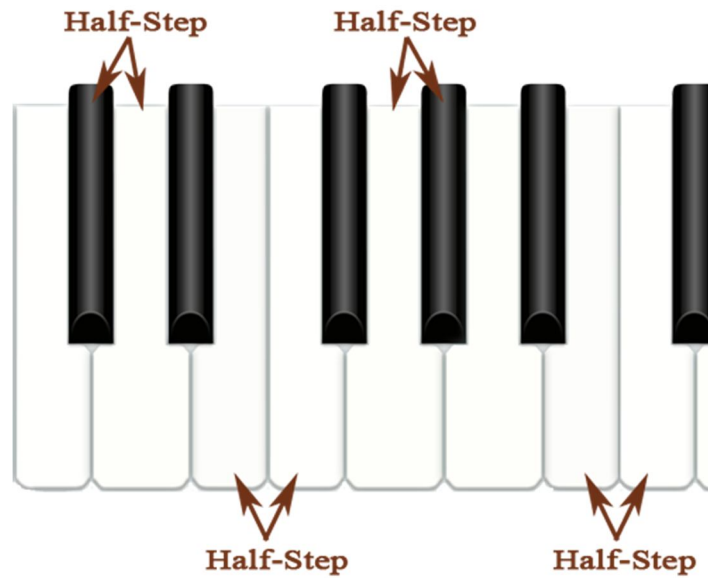


Figure 1.09



**Figure 1.10**

So we will start by talking about the whole step. You have gone one whole step when you skip over one note, or in other words travel two notes, on the keyboard in either direction (see figure 1.09). On the contrary, a half step tells you not to skip any notes, and to always play the next available note no matter if it is to the right or left (see figure 1.10).

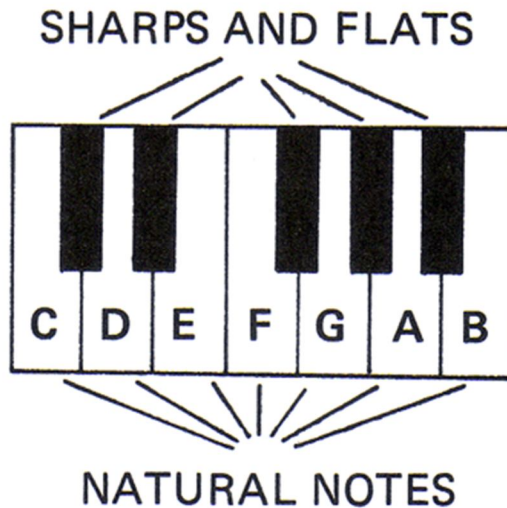
Technically, every space between any note is referred to as an **interval**. Whole steps and half steps are how each interval is named. Another name for whole steps played on a keyboard is whole tone. Another name for half steps played on the keyboard is semitone. Another important interval to know is the **octave**. An **octave** is equal to 6 whole steps and begins the next set of keys (see figure 1.08). It is important to understand the types of intervals, so you can get even more familiar with the keyboard and how it works. Before we go any further, I want you to see the correlations and comparisons that can help you understand music faster.

Music first of all is very mathematical, but don't worry, even if you hate math, you can still love to play music! You can compare many math equations to the way music adds up. But it is not a proven fact that learning music helps you get better at math, or vice versa, so I wouldn't press your luck there. You can also think of music as various travel destinations that are to be achieved at a certain time and place. Speaking of time, you can also think of it as a time clock in which certain notes are played in a certain amount of seconds or minutes in a specific repetitive sequence, known as the **beat** or **pulse**. Maybe you can even think of it as a varying heartbeat, depending on if the song gets slower and faster while it is played. There are many fun ways to think of music as you learn it, and I would encourage that because it keeps you even more entertained when learning, and that entertainment turns into interest, and the interest turns into passion.



## Understanding and Knowing the Notes

As a beginning student to the piano and music theory, it is fundamental to learn the construction of the notes on a keyboard. It is equally important for any musical interest to have an adequate understanding of natural notes, sharps, and flats.



**Figure 1.11**

**Sharp** means that the note is moved up a half step. The symbol for sharp is a # pound sign. **Flat** means that the note is moved down a half step. The symbol for flat is a lowercase b. **Double sharp** means the note is moved up a whole step. **Double flat** means it is moved down a whole step. When music is referred to as up or down, up means the pitch increases in value, meaning that it has a higher frequency than the previous note, while down means it decreases in value, in which it has a lower frequency than the previous note.

If you go back to figure 1.07, you can see how the relationships of the sharps and flats work with the natural notes. Simply, the sharps and flats are added to the name of the natural note, such as D flat or F sharp. Each black key can either be a sharp or flat, meaning that they are neutral until specified (as shown in figure 1.11). Look at the black key in between the C and the D. That black key can either be a C sharp or a D flat. This is defined by the term **enharmonic tones**, in which one note can be defined by more than one pitch. Usually the note name is determined by the dominate scale. The dominate scale, or prevailing key of a song makes all notes subject to the rules applied to that scale, making it easy to classify each note, depending on how irregular the scale is.

Using this keyboard, Identify both the sharps and flats for each black key shown:



### Quick Review

Ok let's review what you have learned so far:

- So you should be familiar with all of the parts of the piano, the music rack, the fall which covers the piano keys, the keyboard, and the pedals.
- Next you should know how to sit properly at the piano, and what to do with your arms, hands, wrist and fingers.
- Next you should know how to relax before you play every note by making sure you breath in and exhale at the right times.
- Next you should know how to execute your note by pressing it and how to use your wrist and your fingers.
- Next you should somewhat know how to recognize and name all of the natural notes and sharps and flats on the keyboard in order.
- You should also understand pitch and how it is measured in scientific pitch notation.
- You should know how to find middle C, and how to use it to position yourself before you begin to play the piano.
- You should have a basic understanding of how intervals on the keyboard work.

### **WARM-UP ROUTINE**

Using what you know so far, it is important to start working on a warm up routine so that every time you get ready to practice, you can warm up your fingers, hands, and posture in playing. At this point, you should spend approximately 10 minutes warming up before you practice a song. To access a suggested warm up routine, go to the free resources page at [www.johnspianolesson.com](http://www.johnspianolesson.com) and pick the appropriate lesson.

Quiz #3

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**What are the names of the internal mechanisms inside of a harpsichord used to pluck strings?**

- Plucktrum
- Hammer
- Plectrum
- Theorum

**What are the names of the internal mechanisms inside of a piano used to strike the strings?**

- Plucktrum
- Hammer
- Plectrum
- Theorum

**How many keys does a harpsichord have?**

- 20
- 61
- 88
- 60

**How many keys does a modern day grand piano have?**

- 20
- 61
- 88
- 60

**What is the easiest way to memorize the keyboard keys?**

- Study the pattern of the black keys
- Study the pattern of the notes
- Study the sound of each note
- Learn a song on the keyboard

**Which word best describes the value of each key on a keyboard from low to high?**

- Tone
- Pitch
- Sound
- Note

**What are the white keys called on a keyboard?**

- Naturals
- Sharps and Flats
- Regular Notes
- White Notes

**What are the black keys called on a keyboard?**

- Naturals
- Sharps and Flats
- Regular Notes
- White Notes

**How many notes are there?**

- 7
- 6
- 5
- 4

**Where can you find middle C on a standard 88 keyed piano?**

**How many C notes are there on a standard 88 keyed piano?**

- 6
- 10
- 7
- 8

**When you sit at the piano, generally which note should be pointing to the middle of your body?**

- A
- B
- C
- D

**How many notes do you travel when you go a whole step?**

- 3
- 5
- 2
- 1

**How many notes do you travel when you go a half step?**

- 3
- 5
- 2
- 1

**Which word is a synonym to half step?**

- Whole Tone
- Medium Tone
- Semi Tone
- Mediant Tone

**What does a natural note do when it is sharped?**

- Rise by one semitone
- Rise by two semitones
- Lower by one semitone
- Stays the same

**What does a natural note do when it is flatted?**

- Rise by one semitone
- Rise by two semitones
- Lower by one semitone
- Stays the same

**What would the space between a C note and a D note be referred to as?**

- An Interval
- A Whole Step
- C Major Step
- All of the above

*Extra Credit*

**Roughly how many Hertz does a D4 produce in scientific pitch notation?**

- 620
- 560
- 440
- 380
- 220
- None of the above

**Which group of notes can be referred to as enharmonic tones?**

- C and D
- F# and Bb
- C# and Db
- F and Cb
- G and A
- F and B

**How would you describe an interval with 11 semitones?**

**Introduction to written music:**

Without learning and understanding the way notes are written on paper, you will have a harder time understanding music theory. A lot of music theory is wrapped around notation and expressed by various symbols in sheet music, allowing the pianist to grasp what is needed in the song. When you understand written music, terminology becomes easier and understanding rhythm becomes smoother. Knowing how to read and write music also increases your virtuosity as a pianist by at least 100%. I will go over a brief history of music notation, so you can grasp a little bit of the idea.

Simple, and flowing

Piano

Cantando il tenore

Ped.

Figure 1.12

## Music Notation

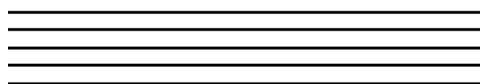
Music notation has been a part of music culture since the beginning, and has evolved as music has evolved. The way music was written varied from culture to culture, as each culture created its own methods. Despite the many various forms of music notation, European music notation has become the most prominent in the world today. Between the years of about 1200 and 1600, music notation took on a more complex identity, fitting to the needs of the ever-changing music culture. A notation adopted by European music in that time period was called **Mensural Notation**. This form of notation has British roots, and after the early 1600's it began to die out as European music adopted new forms of music terminology. Most terms in music are written in Italian, and the reason is because during the **Renaissance Period** (roughly between 1300 and the mid 1600's) the most prominent composers of all time were Italian. Being as it is, the music terminology followed wherever the most popular music was; a lot like our culture today. The British forms adopted from the 1200's faded out due to, funny as it may sound, a popularity contest, however, just because it is not dominant today doesn't mean it is not being used. Today music has evolved and at the rise of the western world, the influence on music changed once again. Now when reading music, you can see that the majority of terms used in music are English and Italian.

The way music evolves overtime depicts a stretch for freedom, independence and *rebellion*. The newer popular music gets, the more limits are pushed in the messages that are delivered. How society will end up in the future is determined by messages sent through popular music. And music tends to be one of the most influential forces in shaping the culture of the world.

Styles that are newer or more current than **classical music** have roots in **jazz** and **blues** for the most part. These newer arts tend to stray away from reading and writing fundamentals that the popular classical methods have introduced, and create more of a "feeling" or "mood" based method. However even these styles are greater expressed through music theory, as these arts introduce a more advanced rhythmic pattern that is more irregular than before. Even though **improvising** and mood setting is nothing new to music, a jazz and blues form directly emphasizes and requires these components making it unique. At the creation of these styles, one can sit at the piano making a **chord progression** or series of notes that vary from time to time to set the mood of a song on a regular basis, rather than relying on a traditional written piece. This allows the musician to further express individual musicianship without performing original music.

It is quite possible to learn how to play the piano without even cracking a book open to learn music theory. But the difference is obvious, even to the point where you divide a line and on one side are the pianists that know what they are doing, the other side they have no clue and just go with the flow. But obviously it is much better to actually know what you are doing.

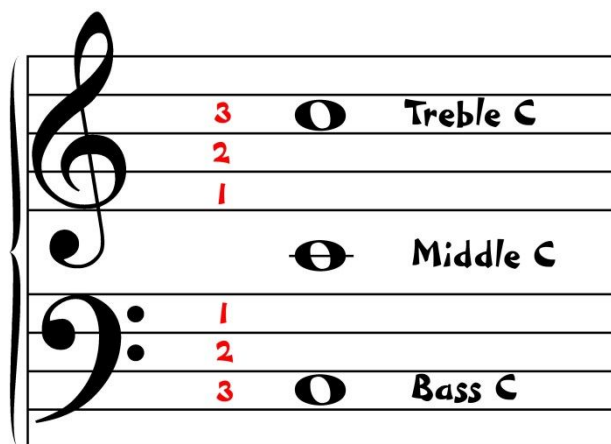
## Sheet Music



A standard **staff** is made up of 5 lines and 4 spaces. Each of these lines and spaces symbolize the note played on the piano, and whenever they are filled in by a note indication, that means the pianist is required to play it.



This is your common piano **grand staff**. The grand staff is made up of two **staves**, one on the upper and lower, with a space between the two. The upper staff represents the higher notes, while the lower staff represents the lower notes. The grand staff represents sheet music written for the piano.

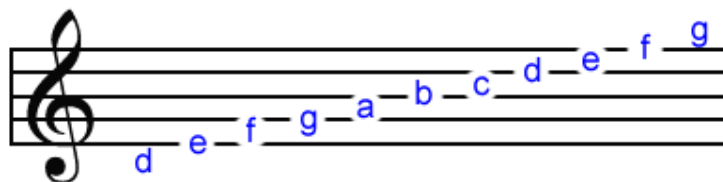


**Middle C** is found right in between the treble and bass staves. It is an imaginary line drawn right in the middle of the staves.

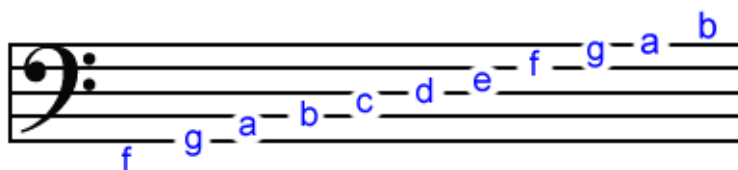


The space between each divided line in sheet music is called a measure. A **measure** is an amount of time, most commonly 4 beats, that divides the music into equal sections per the rhythmic pattern. The lines that separate each measure are called **bar lines**. The notes that add up the time are inserted in between the bar lines, within the measure. A **double bar line** indicates a separation of a phrase of music, in which the music changes tempo or most commonly changes keys.

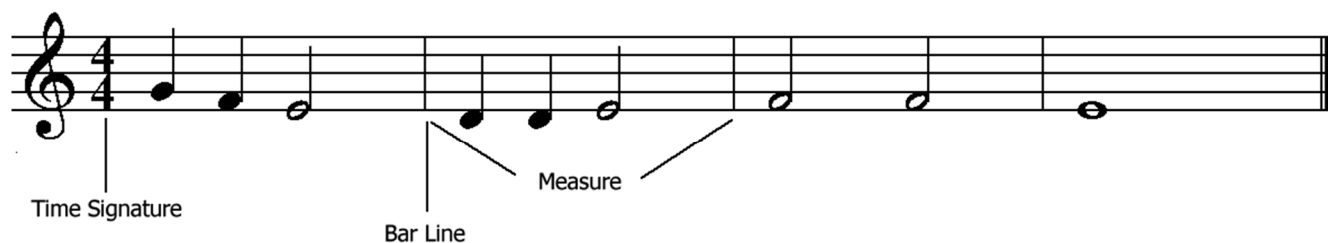




The symbol at the beginning of this staff is called a **treble clef**, also known as the **G clef**. The treble clef indicates that notes on this staff are played above middle C. Basically notes that will be shown on this staff are your higher notes on the keyboard (in the right-ward direction). The letters indicate which notes each line and space represent.



The symbol at the beginning of this staff is called a **bass clef**, also known as the **F clef**. The bass clef indicates that notes on this staff are played below middle C. Basically notes that will be shown on this staff are your lower notes on the keyboard (in the left-ward direction). The letters indicate which notes each line and space represent.



Here is an example of a musically noted staff. In this staff, you have the following components from left to right: the **clef**, **time signature**, **note** indications, **bar lines**, **measures**, and **final double bar**. The **treble clef** at the beginning tells us these notes are played above middle C. The **time signature** tells us how many beats are to be in each measure (space between each bar line). The **note indications** (circles or circles with the lines) tell us which note is played by which line or space the circle is in. They also tell us how much time we have to hold the note by what kind of note they are. The **bar lines** separate each measure into even time (depending on the key signature). The **measures** are shown in between each bar line. The **final double bar** line indicates the end of the song.

What's not shown in the staff above is the **key signature**. A key signature tells the pianist or musician which prevailing key that the song is written for. A standard key signature sits right before the time signature and after the clef symbol. The sharps or flats sit on a designated line or space.






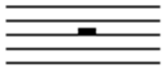



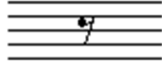

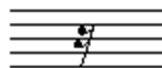
Name	Note	Rest
Whole Note		
Half Note		
Quarter Note		
Eighth Note		
Sixteenth Note		

Figure 1.13

There are five different note types that I will teach you about in this session. Each note type indicates two things, which note (on the keyboard) and speed (how long you hold it). It is determined that whatever line or space that the note is shown on determines what note is played on the keyboard.

Each line and space represents a designated note on the keyboard, relative by pitch. An example, right in the middle of both staves is middle C. Middle C is found in notation by drawing an imaginary middle line in between the top and bottom of the grand staff. Any note that is above middle C means that the pitch is going up or higher, and the opposite if any note is noted below middle C. Middle C helps a lot in figuring out where you are on the keyboard when reading notes. Ok, so we have the **quarter note**, and this is always your counting note. This note is equal to one beat. If you listen to a song, every time you are tapping your feet to the beat of the song, you are tapping quarter notes. These notes are most commonly your “1,2,3,4” notes. More evidently, when you see a quarter note, you know in your head that it only gets one count. An **eighth note** is exactly half of a quarter note, so it gets half of the holding time played. A **sixteenth note** is exactly half of an eighth note. A **half note** is double the quarter note, meaning it gets double the time that a quarter note would get when played. A **whole note** has 4 counts. So it is basically equal to two half notes, or four quarter notes.

This is just a basic introduction to sheet music. There is a lot more to learn and we will cover that in a later session!

Quiz #4

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**How many lines does a single staff have in it?**

- 10
- 3
- 8
- 5

**What type of song does a Grand Staff best represent?**

- An orchestra piece
- A solo piano piece
- A drum piece
- A piece that requires two instruments

**How is middle C noted in sheet music?**

- Rests above the F clef and below the G clef
- An imaginary line that is drawn under the bass clef
- An imaginary line that is drawn above the treble clef
- None of the above

**What is the duty of a bar line?**

- To separate notes
- To divide the timing of a song
- To divide the song into 4 or 5 consecutive pieces
- All of the above

**Two half notes are equal to how many quarter notes?**

- 8
- 6
- 4
- 2

**How many counts does a whole note have?**

- 3
- 4
- 5
- None of the above

**Another name for the F clef is:**

- The treble clef
- The bass clef
- The staff clef
- None of the above

**How many counts does a whole note have?**

- 3
- 4
- 5
- None of the above

**Check the two words that are closest related**

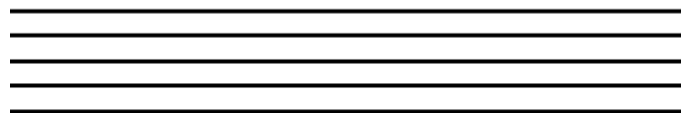
- Staff, Treble Clef
- Bar, Measure
- Bass Clef, Quarter Note
- Pitch, Note

**What does a final double bar line mean?**

- To start a new song
- To divide a song in half
- To change key signatures
- None of the above

*Extra Credit*

**What would be a key signature for a Bb major? Draw it at the beginning of this staff, or type the number of sharps/flats and where they will be on the staff.**



**How many counts does a whole note have in a time signature of 2/2?**

- 3
- 4
- 5
- 6
- 7
- None of the above

# Ode to Joy

LUDWIG VAN BEETHOVEN

Piano

The first system of music for 'Ode to Joy' consists of four measures. The treble clef staff contains the melody with notes E, E, F, G, G, F, E, D, C, C, D, E, E, D, D. The bass clef staff contains the bass line with notes C, G, C, G. The key signature is C major and the time signature is common time (C).

5

The second system of music consists of four measures. The treble clef staff contains the melody with notes E, E, F, G, G, F, E, D, C, C, D, E, D, C, C. The bass clef staff contains the bass line with notes C, G, C, G, C. The key signature is C major and the time signature is common time (C).

9

The third system of music consists of four measures. The treble clef staff contains the melody with notes D, D, E, C, D, E, F, E, C, D, E, F, E, D, C, D. The bass clef staff contains the bass line with notes G, G, G, G, G. The key signature is C major and the time signature is common time (C).

13

The fourth system of music consists of four measures. The treble clef staff contains the melody with notes E, E, F, G, G, F, E, D, C, C, D, E, D, C, C. The bass clef staff contains the bass line with notes C, G, C, G, C. The key signature is C major and the time signature is common time (C).

### JINGLE BELLS

Moderato  
3  
*mf*  
Piano  
1  
5

The musical score for 'Jingle Bells' is presented in four systems. The first system is marked 'Moderato' and 'mf' (mezzo-forte). It features a treble clef with a triplet of eighth notes (G4, A4, B4) and a bass clef with a 1-5 fingering. The melody in the treble clef consists of quarter notes: G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bass line consists of a steady accompaniment of quarter notes: C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2. The second system continues the melody in the treble clef: D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bass line continues with quarter notes: C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2. The third system continues the melody in the treble clef: D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bass line continues with quarter notes: C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2. The fourth system concludes the piece with the melody in the treble clef: D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. The bass line concludes with quarter notes: C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2, C3, G2.

# Minuet in G

Johann Sebastian BACH

Piano

The image displays the musical score for the Minuet in G by Johann Sebastian Bach. It is written for piano in G major and 3/4 time. The score is presented in six systems, each with a treble and bass clef staff. The first system starts with a treble clef and a key signature of one sharp (F#). The piece begins with a treble clef melody and a bass clef accompaniment. The score includes measure numbers 7, 12, 17, 23, and 28. The piece concludes with a final cadence in the sixth system.

## Lesson 3

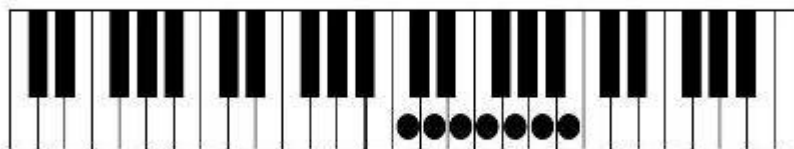
### Scales: Playing C major scale

A **scale** is a collection of notes that are related by pitch. Scales are a very important fundamental that every developing and established pianist must incorporate. Scales sharpen technique, train your ear to recognize pitch, and strengthen fingers by improving speed and accuracy. Scales are very substantial, but unfortunately are commonly overlooked, due to being a repetitive exercise, and pianists are naturally more interested in playing a song than playing a scale. But it is more important to get your necessary warm-up and technique in order first before you play a song, so that you can play it right.

The collection of notes for a scale is related to whatever chord is played. So if I were to play a C major chord, I will play a C major scale. If an F minor chord, then an F minor scale, and so on. A scale can range from 2 different notes to 12 different notes (obviously 12 notes is the maximum amount of notes you can put in a scale due to there are only 12 notes to choose from, including the sharps and flats). There are technically hundreds of different types of scales, but the scale we will start learning first is the major scale. The major scale is composed of 7 notes that are played in order from low to high, or high to low. The major scale is one of the two foundational scales, in which all other scales are basically built from. The other foundational scale is the minor scale, which we will learn about later.

Every scale has a name. An easy way to know the name of what scale you are playing is to see which note you start with when you play the scale. This is called the root note of the scale. We are going to start with the C major scale, one hand at a time at first, and then combine both hands together to practice **syncopation**. Playing the C major scale means that we are going to start on C, the root note, and we are going to play the major pattern starting from that note. The major pattern is 2 2 1 2 2 2 1. Remember when we learned about half steps and whole steps? Well here is where we will start applying that knowledge. The number represents how many notes you are to skip when playing the scale pattern, so when you see a 2, you count two notes going up from the note that you start from, meaning you go a whole step. So if we play the first note in the C major scale which is C, and we want to go two notes up, we count one...two....then we are at D. So let me walk you through the notes you play in a C major scale using the major scale pattern.

## C Major Scale



The notes in a C major scale in order are as follows: C, D, E, F, G, A, B. Now another very important thing is fingering, and fingering for the scale is very important. I don't want you to be one of those pianists that are limited due to poor fingering technique. Playing scales with the wrong fingering combinations can and will hinder your current and future piano playing. The fingering for a C major scale for the right hand is 1 2 3 1 2 3 4 5. Fingering for the left hand is 5 4 3 2 1 3 2 1. My goal is to



have you play this scale with both hands, but for now we will play one hand at a time, starting with the right hand.

Remember proper posture when you are playing your scale. Sit up straight and arch fingers, and make arm level with the keyboard, then press the key. So remember, we are starting in C.

### *Exercise*

- ❖ Play the C major scale one hand at a time, and once you have a handle on it, play it with both hands at once.
- ❖ Play the C major scale with both hands going up the keyboard.
- ❖ Play the C major scale with both hands going the opposite direction (backwards), and remember, it is the same fingering, but everything is just reversed.

Once you complete that, then you are ready to start learning the other scales. If you would like to move ahead and start practicing other scales, feel free to check out the charts in **Lesson 8 “Scales and Modes”** while you move along the upcoming lessons.

Quiz #5

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**What best defines a scale?**

- Notes that are progressed in order starting from low to high
- A collection of notes which are note related played together
- A group of notes that are related by pitch
- Notes played together that include a sharp or a flat

**How many notes does a full piano keyboard have?**

- 88
- 12
- 36
- None of the above

**What is the first note in a scale called?**

- 1<sup>st</sup> note
- Main Note
- Root Note
- None of the above

**What are the names of the notes in order that make up a C major scale?**

- C D E F G C
- C D B A B C D E
- C D E F G A
- C D E F G A B C

**Assuming you are playing a C major scale with both hands ascending, which finger will be played when you make it to the E?**

- Left Hand 3, Right Hand 1
- Left Hand 4, Right Hand 5
- Left Hand 2, Right Hand 3
- Left Hand 3, Right Hand 3

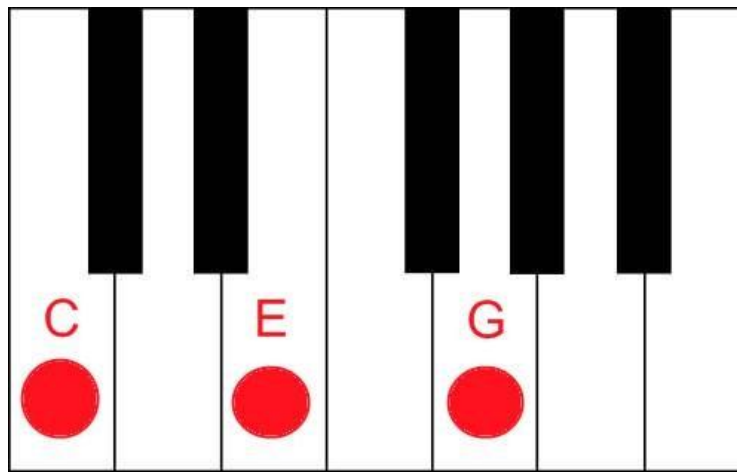
*Extra Credit*

**Which 4 ways does playing scales improve your ability to play the piano well?**

## Chords: Playing the C Major Chord

A **Chord** is a set of two or more related notes of different pitch played together at the same time. Some scholars believe that in order to make a complete chord you have to play at least three notes at once and it is true in a sense, but there is also argument that a chord can also be defined by playing 2 notes. But that kind of speculation is irrelevant. Chords are very important to understand when you want to play the piano because quite simply, they are what make a song full. Chords define **harmony**.

The most common chord by definition is a **triad**, which is the make-up of three notes played at the same time. No matter what three notes are played, it will always be called a triad. In a perfect major chord, there are three notes that are played. Remember, the two most basic chord groups are major and minor chords, and both of these are defined as triads. At this point, we will start learning the C major chord, which can also be called the C major triad.



**Figure 1.14**

We are going to start by playing the C major triad. Just like in scales, fingering is very monumental in executing a perfect chord. It is very important to have good fingering because you don't want your playing to be sloppy. The better your fingering technique is the better you will play the piano. Playing with good fingering technique makes piano playing a whole lot easier for you.

A perfect C major chord executes the following three notes at once: C, E, and G. These three notes are played at once, no matter where on the keyboard. The fingering for a C major chord for your right hand is 1, 3 and 5. So your 1 finger plays the C, the 3 finger plays the E, and the 5 finger plays the G simultaneously. On the left hand, the fingering from left to right is 5, 3, and 1. The same rules apply to your left hand.

When you play your chord, once again it is important to have proper posture. When you execute the note, make sure your arm is level, wrist is your anchor, hand is relaxed, and your fingers are slightly bent. Practicing perfect posture is very important. In playing your chord, you may or may not find it hard to play all the notes at the same time at first. It may end up sounding a little sloppy, but don't worry though, just keep practicing pushing all of the notes at the same time and it will come together. Remember the more you practice, the faster you will see results. Continue to play the C major triad with

each hand at a time until you can get all of the notes to play in unison and at once. That is your goal, to play them all at one instant.

Keep practicing this chord until you get it down. After you are able to play each of the notes at once you are ready to move on to playing both hands at the same time. This is always tricky for a beginner, because you have to focus on both hands at the same time instead of one.

### Exercise

- ❖ Practice playing the C major Chord one hand at a time.
- ❖ Practice playing the C major Chord with both hands at one time.

### Chords

A triad is constructed with these three components: a root, a 3<sup>rd</sup>, and a 5<sup>th</sup>. Each of these names refers to a note in the chord. The root is always used as the first note played in the scale of the chord. In the C major chord, the root is C. The third describes the 3<sup>rd</sup> note of the scale. In the C major chord, the third note is E. And finally the 5<sup>th</sup> describes the 5<sup>th</sup> note of the scale played. In the C major chord, the fifth note is G. These three notes make up a triad.

To further understand a chord, it is good to understand the term **diatonic**. **Diatonic** means that each note of the scale involves only notes that are proper to the key played. It is quite obvious that a C major chord is diatonic to the notes in the C major scale, since the prevailing key for both the scale and the chord is C major.

In **chord building**, the first note in the scale is always called the **root**. The second note is called the 2<sup>nd</sup>, the third note the 3<sup>rd</sup>, and so on. This system goes on until it reaches the 13<sup>th</sup> note in the scale where the numbering ends, due to chord octaves creating a relapse requiring the chord numbering system to restart. With chords, the number system is very important to understand, because you can figure out which note goes with which chord. In the case of building chords based on the diatonic notes of the scale, we refer to the notes sounding “right to the ear.” Anyone can tell just by listening if a chord is regular or irregular.

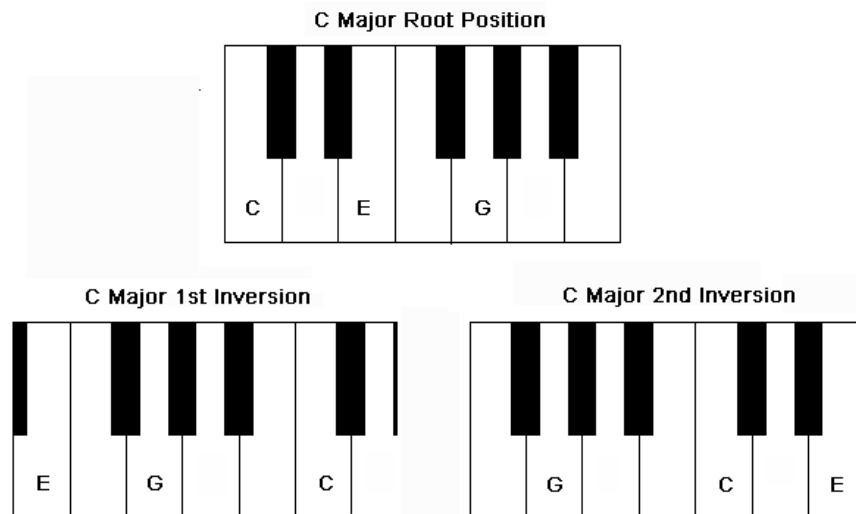


Figure 1.15

A chord can also have different root positions, in which the base note of the chord is moved up to another position in the chord. This action is called **invert**. An **inversion** is when the denominator of a chord is switched with another note in the chord, basically moving all of the notes up or down one position on the keyboard. An example is C major. Since there are only three notes in a C major scale that means there are only 3 possible positions that this chord can have (see figure 1.15). The first position in a chord is called the **root position**, which in the C major scale is C. The second position in a chord is called the **1<sup>st</sup> inversion**, which in the C major scale is E. The third position in a chord is called the **2<sup>nd</sup> inversion**, which in the C major scale is G. These are how all the inversions look on a C major scale.

### Exercise

Understanding inversions gives you the possibility of even further chord building. Practice inverting the C major scale, starting with the root position, and then following that by playing the 1<sup>st</sup> and 2<sup>nd</sup> inversions of the chord. The fingerings for these two additional chords in C major are the same as the root position. Make sure to apply the proper posture while playing the inversions.

If you would like to learn more chords, check out some of the chords displayed in **Lesson 6 “Chord Building.”**

## WARM-UP ROUTINE

Using what you know so far, it is important to start working on a warm up routine so that every time you get ready to practice, you can warm up your fingers, hands, and posture in playing. At this point, you should spend approximately 15 minutes warming up before you practice a song. To access a suggested warm up routine, go to the free resources page at [www.johnspianolesson.com](http://www.johnspianolesson.com) and pick the appropriate lesson.

Quiz #6

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**When you play a chord, you are producing:**

- Pitch
- Harmony
- Notes
- Sound

**A chord is a set of \_\_\_ or more \_\_\_ played at the same time.**

- 3, Harmonies
- 2, Notes
- 3, tones
- None of the above

**A triad is a chord-makeup of how many notes played at the same time?**

- 3
- 4
- 5
- None of the above

**The three notes found in a C major chord are:**

- C, E, F
- C, G, E
- C, A, D
- C, D, E

**Which finger plays the middle note of a C major chord? Which hand?**

- Left Hand 2, Right Hand 3
- Left Hand 3, Right Hand 3
- Left Hand 4, Right Hand 4
- None of the above

**Which notes in order are found in a C Major 3<sup>rd</sup> inversion chord?**

- C, E, G
- E, G, F
- G, C, E
- None of the above

## Lesson 4

### Musical Relationships

The most common assumption is that music is just a good guess and anything goes. To an untrained ear, music is just sounds that come together in an amazing way. There would be no understanding of patterns, rather “it just sounds good.” It would shock most people, and some musicians, how consistently patterned music is. Having a solid know-how of the way music is constructed really accelerates your ability to recognize pattern, and immediately becomes very lucrative for you if you are a songwriter or composer of any kind.

In scales, the notes are patterned by letters and numbers for one reason: organization. For example, one can call out a series of notes, such as “1, 2, 4”, and a musician can understand and play it. How does that turn into music? Well in this instance, the numbers can represent at least three things, fingering, note in a scale, or chord position. Having an understanding of the number and lettering system is a great starting point to wrapping your head around music.

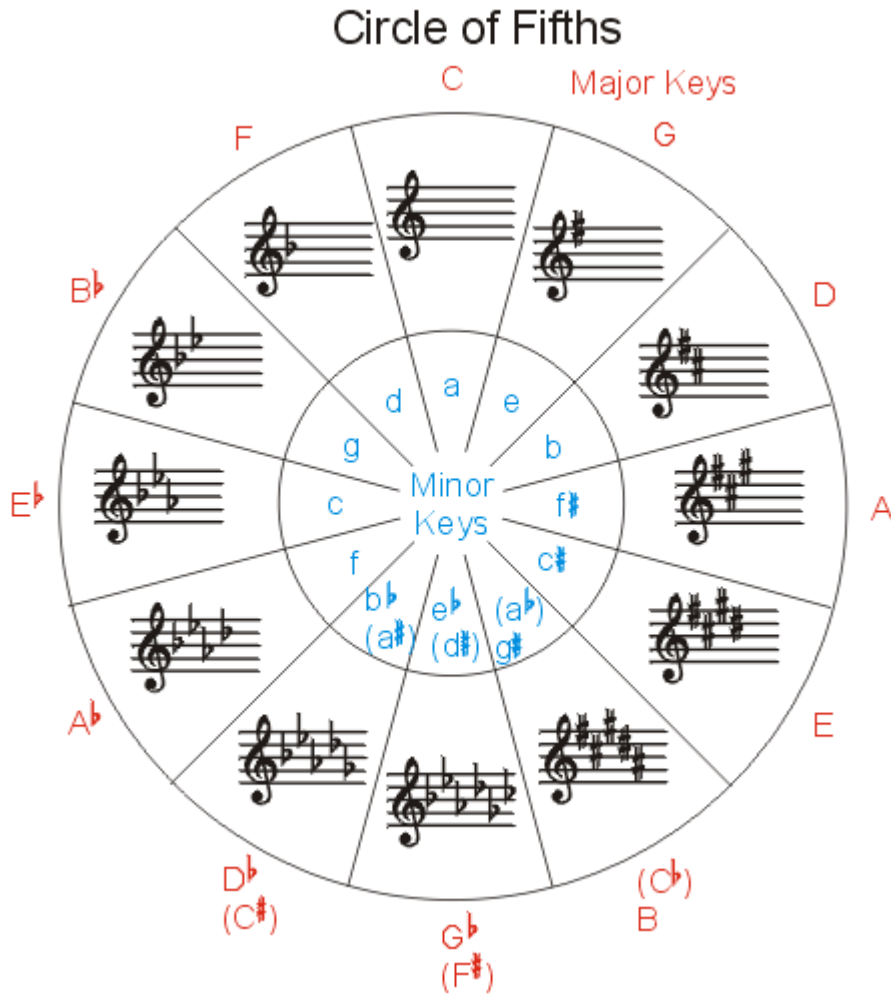


Figure 1.16

Each note and chord is connected in one way or another. This is what allows music to form and notes and harmony to work together to make a full song. One of the fundamental ways to know musical relationships is to be familiar with the **circle of fifths**. In the **circle of fifths**, the 5<sup>th</sup> note of every major or minor scale becomes the first note of the next major or minor scale in sequence. For example, the 5<sup>th</sup> note of a C major scale is G. Once you get to G, you then find the 5<sup>th</sup> note of G, which is D. Then for D, the 5<sup>th</sup> note is A. This pattern continues until you end up right back at C, after playing all 12 notes. In the circle of fifths, you can do the counting. This pattern can only work in the clockwise direction, or the raising of the pitch, due to the fact that we are using the 5<sup>th</sup> note of every scale root that we play. However, every pattern in music is also reversible, so instead of going up, you can also go down. In this case, the first note you play will have to be the 5<sup>th</sup> note of the scale; i.e. instead of playing a 1 – 5 pattern, you would play a 5 – 1 pattern (reversed).

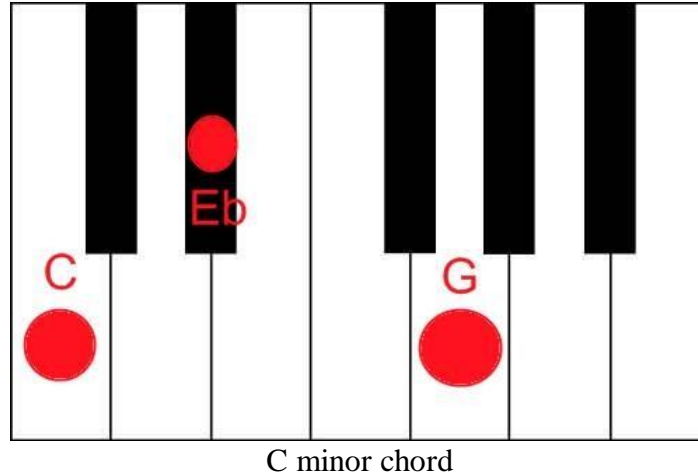
Try this yourself, using figure 1.15. Play each note then the proceeding 5<sup>th</sup> note in its scale; making a full cycle called the circle of fifths. Note that this is one of the major ways that notes are related, and predominately used in song creation.

This same circular pattern known as the circle of fifths in reverse can be called the **circle of fourths**. The circle of fourths is when the 4<sup>th</sup> note of each major or minor scale becomes the 1<sup>st</sup> note of the next major or minor scale in the sequence. This pattern instead goes counter-clockwise as opposed to the circle of fifths. An example of the circle of fourths could be C to F, then to B flat, then to E flat and so on. The pattern continues until you are back to the original note that you started on, which was C. One thing to remember is that the pitches in the circle of fourths rise, so even though it goes in the opposite direction of the circle of fifths on the circle diagram, it is still defining notes that are rising in pitch on the keyboard.

### Major/Minor and their Relationship/Uses

The key of a song or a chord can always easily be defined as being in a **major key** or a **minor key**. These are arguably the two main chord groups that relate to any harmony produced. There is only one note that determines whether or not the key is a major or minor. This note is the 3<sup>rd</sup>. In a C major scale, we learned that the 3<sup>rd</sup> note is an E. In a C major chord, we learned that the middle note is in fact E. That third note is monumental in categorizing that the chord is a major chord. This also works for the minor. In a minor chord, the only change is the 3<sup>rd</sup> note is flattened. So instead of playing an E natural, you will play an E flat in the chord, as shown below.





A chord can be built to have an infinite number of notes, but it will always be classified as either being in a major or minor key. No matter how many notes a chord has in it, the song that it defines can always be called out as major or minor.

A major key usually produces the mood of a happier uplifting tune, and most tunes of that nature are in a major key. The minor key produces a more saddened, dramatic, or aggressive tune. A way to look at this is listening to some of your favorite tunes. If the tune fits any of the categories for a major or a minor, you should be able to pick it out just by listening to the tune. Writers like Johann Sebastian Bach will have you confused though, in which tunes can be written to portray multiple moods, allowing you to hear both in one song. In the case of many songs though, major and minor chords in a song work together to create a masterpiece.

Quiz #7

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**How many keys are defined in the circle of fifths?**

- 10
- 11
- 12
- 15

**What is the difference between the circle of fourths and the circle of fifths?**

- The circle of fourths is for minor chords, the circle of fifths is for major
- The circle of fourths goes counter clockwise, circle of fifths clockwise
- The circle of fourths is a collection of notes that contain a sharp or a flat
- None of the above

**What are the two main chord groups?**

- Diatonic and Major
- C and G
- Major and minor
- None of the above

**What is the difference between a C major and a C minor triad?**

- C major is used for sadder type songs, C minor is used for grateful songs
- Flatten the 6<sup>th</sup> to make a C minor
- Flatten the 3<sup>rd</sup> to make a C minor
- None of the above

**What note is a fifth higher than D?**

- C
- F
- B
- None of the above

*Extra Credit*

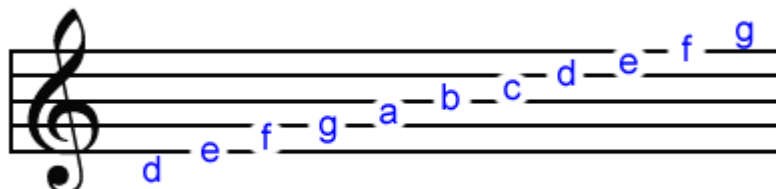
**What is another name for a major 3<sup>rd</sup> lower than the root note of a major chord?**

- Minor 5th
- Minor 7th
- Lowered 6<sup>th</sup>
- Lowered 4<sup>th</sup>
- Sharpened 3<sup>rd</sup>
- None of the above

## Reading Music:

In previous lessons we have learned how music is notated. Now it is time to really take the time to learn how to read music. As a pianist, it is very important to learn how to read music. It helps sharpen your skills and, if you want to be a full time musician, gets you up to 3x more work in the music field.

Let's start by learning the notes that each line and space represent in the treble clef, as shown below.



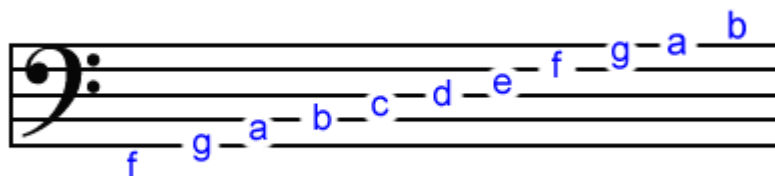
As you can see from above, the lines on a treble staff represent E, G, B, D, and F notes. The spaces on the treble clef represent F, A, C, and E notes. When beginning to memorize these notes, it is helpful to use acronyms that help you quickly identify the note represented for any line or space on the staff.

For the notes on the lines of the treble clef, we can use this acronym to remember them:

**Every Good Boy Does Fine**

For the notes in the spaces between the lines of a treble clef, we can use this word to remember the notes: **FACE**

Now let's look at the notes shown on the base clef, shown below.



As you can see from above, the lines on the bass clef represent G, B, D, F, and A notes. The spaces on the base clef represent A, C, E and G notes.

For the notes on the lines of a bass clef, we can remember them by the following acronym:

**Great Big Dogs Fight Animals**

For the notes in the spaces of the bass clef, we can remember them by the following acronym:

**All Cows Eat Grass**

If you have trouble remembering the acronyms above, you can always create your own so you can start memorizing the notes on the staves. Using acronyms is a proven tool to increase your ability to remember the notes. Before you decide to learn how to sight read, you must make a foundational commitment to learning the note names on every position of the grand staff.

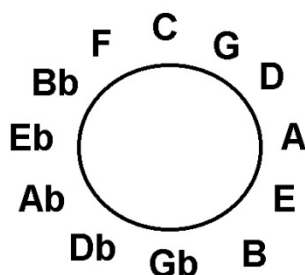
Both clefs represent the 7 major notes, A B C D E F and G. We also are aware of the sharp and flat notes. Where does this come in? Sharps and flats are indicated by their own individual symbol, where flats are noted by a b, and sharps are noted by a #. These symbols are placed right before the note on the staff to let us know that note is sharped or flatted.

When writing music on a staff that is in a prevailing key other than C, it can get cluttered when we think of all the sharps and/or flats that we have to add to each note in the song. Instead, we can put a **key signature** in the front of the song, in order to certify that this song is in that key. This also alleviates a lot of writing, due to the fact that when the key signature is noted at the beginning of the piece, if the note occupies the line that has a sharp or a flat shown, that note becomes a sharp or a flat.

Key signatures are directly related to the major or minor scale they represent. For example, an A major scale has 3 sharp notes in it. The key signature for A also has those three sharps, C, F, and G.

Let's look at all the major scales in perspective, and figure out how we can find their key signature. The G major has 1 sharp, the D major has two sharps, A major has 3, E major has 4, B major has 5, F# major has 6, and C# major has 7. Another way to memorize this pattern is to go down the circle of fifths. As each note passes through the circle of fifths, a sharp is added (going clockwise).

The flats are found out in the same way. The F major has 1 flat, the Bb major has 2 flats, the Eb major has 3 flats, the Ab major has 4 flats, the Db major has 5 flats, the Gb major has 6 flats, and the Cb major has 7 flats. If you look at the circle of fifths, these flats are noted in the clockwise order starting from F.



At the glance of this basic circle of fifths shown above, we can figure out how many sharps and flats each note has. The first thing we do is start from C, which (C) as we know has all natural notes. The sharps go clockwise and the flats go counter clockwise. If we want to find the sharps, we can find them by starting with all natural C, then G, then D, then A, and all the way until we reach C#(Db). If we want to find the flats, we go counterclockwise from C until we reach Cb(B). As we progress at each note, whether clockwise or counter clockwise, 1 sharp or flat is added.

Key signatures are very important to familiarize yourself with if you want to know how to sight read. It is monumental.

## Flats

Below is a list of the flats in order, so you can see how they are notated on the staff.



**C major**  
All Naturals

**F major**  
Bb

**Bb Major**  
Bb, Eb

**Eb Major**  
Bb, Eb, Ab

**Ab Major**  
Bb, Eb, Ab, Db



**Db Major**  
Bb, Eb, Ab, Db, Gb

**Gb Major**  
Bb, Eb, Ab, Db, Gb, Cb

**Cb Major**  
Bb, Eb, Ab, Db, Gb, Cb, Fb

## Sharps

Below is a list of the sharps in order so you can see how they are notated on the staff.



**C major**  
All Naturals

**G major**  
F#

**D Major**  
F#, C#

**A Major**  
F#, C#, G#

**E Major**  
F#, C#, G#, D#



**B major**  
F#, C#, G#, D#, A#

**F# major**  
F#, C#, G#, D#, A#, E#

**C# Major**  
F#, C#, G#, D#, A#, E#, B#

When you are just learning, the circle of fifths can help you remember how many sharps and flats are in each key signature for the major scale. You can also use acronyms to help you remember the order in which the sharps and flats are organized. An Example:

For the sharps:

**F**ather **C**huck **G**oes **D**own **A**nd **E**nds **B**attle

F# C# G# D# A# E# B#

For the flats:

**B**attle **E**nds **A**nd **D**own **G**oes **C**huck's **F**ather

Bb Eb Ab Db Gb Cb Fb

## Symbols in Sheet music:

### Accidentals



Double Flat



Flat



Natural















Sharp



Double Sharp

Additional Symbol Meanings:

Note symbol	Note name (American/English)	Rest symbol	Rest name (American/English)
	Whole-note <i>Semi-breve</i>		Whole-note rest <i>Semi-breve rest</i>
	Half-note <i>Minim</i>		Half-note rest <i>Minim rest</i>
	Quarter-note <i>Crotchet</i>		Quarter-note rest <i>Crotchet rest</i>
	Eighth-note <i>Quaver</i>		Eighth-note rest <i>Quaver rest</i>
	Sixteenth-note <i>Semi-quaver</i>		Sixteenth-note rest <i>Semi-quaver rest</i>
	Thirty-second-note <i>Demi-semi-quaver</i>		Thirty-second-note rest <i>Demi-semi-quaver rest</i>
	Sixty-fourth-note <i>Hemi-demi-semi-quaver</i>		Sixty-fourth-note rest <i>Hemi-demi-semi-quaver rest</i>

Notation symbol	Notation name	Equivalent value	Description (May include written examples)
	Dotted note		If a note is followed by a dot, its time value is increased by half again. A quarter-note would have the combined value of a quarter-note plus an eighth-note. Dotted notes are often found in 3/4 time. Dots can also be added to rests.
	Tie		A small curved line connecting two notes of the same pitch indicates the tie. The note is held for the duration of both note values and is often used to extend an uninterrupted note across a bar line.
	Triplet (count = 1 + a)		When a beat is divided into three equal parts, it is notated as a triplet. A triplet of eighth-notes will be equal to one quarter-note.
	Staccato		The <i>Staccato</i> is represented by a dot either above or below the note. <i>Staccato</i> means 'short and sharp' and each note should be played for around half its note value. <i>Staccato</i> is often found in reggae and ska.
	Legato (or Slur)	 (Pick 1st note only)	The <i>Legato</i> (or <i>Slur</i> ) is the opposite of <i>staccato</i> . Each note should be held for its full time value and should be played with minimal gaps in between (i.e. using note pull-offs on guitar). The <i>legato</i> connects notes of differing pitches, whereas the tie connects notes of the same pitch.
	Accent		The arrow above or below a note demonstrates that the note must be 'emphasized' or 'accented'. This is achieved by playing the note louder and harder than un-accented notes in order to make it stand out.
	Grace note		A note printed in small type next to a note is called a grace note. Its time value is not counted in the rhythm of the bar and it is often used as an information note (e.g. where to bend or slide from).

## Practice

Now let's put all that we have learned so far into application. Practice the songs below by your knowledge of the notes of the lines and spaces, key signatures, and the rhythm exercises.



Quiz #8

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**True or False: The note names in the spaces on a bass clef staff spell the word FACE**

- True
- False

**To figure out the number of #'s that a key has, what is a good starting method?**

- Circle of 4ths
- Circle of 5ths
- Diatonic Chords
- Memorization

**How many sharps are shown in an F# key signature?**

- 3
- 5
- 6
- None of the above

**How many flats are shown in a G key signature?**

- 1
- 3
- 5
- None of the above

**How many sharps are shown in a B key signature?**

- 3
- 5
- 6
- None of the above

**A C minor key signature is the same as a \_\_\_ Major key signature.**

- Eb
- F
- Bb
- D

**In sheet music, at a glance what would describe a small note and a normal size note adjacent to each other?**

- Quarter Note
- Connected Note
- Grace Note
- Accented Note

**In sheet music, at a glance what would describe a set of beamed notes with a numeral 3 at the top of the beam?**

- 3 Beamed Notes
- Beamed Notes
- Connected Notes
- Triplet

**In sheet music, at a glance what would describe two notes that are connected by an arced line even though they are in different measures?**

- Tied
- Legato
- Beamed
- Connected

*Extra Credit*

**What is the opposite of a staccato note?**

# Minuet in C

Haydn

Measures 1-5 of the Minuet in C. The piece is in 3/4 time and C major. The right hand features a melody with eighth and sixteenth notes, including two triplet eighth notes. The left hand provides a simple accompaniment of quarter notes.

Measures 6-10 of the Minuet in C. The right hand continues the melody with a slur over measures 7-8 and a triplet eighth note in measure 9. The left hand accompaniment remains consistent.

Measures 11-15 of the Minuet in C. The right hand features a slur over measures 12-13 and a triplet eighth note in measure 14. The piece concludes with a double bar line in measure 15.

# CANON IN D

Johann Pachelbel  
Piano Arrangement by L. Oborin

Andante moderato

Musical notation for measures 1-8. The piece is in D major (two sharps) and common time (C). The tempo is Andante moderato. The dynamic marking is *pp* (pianissimo). The notation shows a simple harmonic accompaniment in the bass clef and chords in the treble clef.

Musical notation for measures 9-14. The notation continues the harmonic accompaniment from the previous system, with some chords in the treble clef and a steady bass line.

Musical notation for measures 15-20. The treble clef begins to feature a more active melodic line, while the bass clef continues with a steady accompaniment.

Musical notation for measures 21-24. The treble clef continues its melodic development, and the dynamic marking changes to *p* (piano). The bass clef accompaniment remains consistent.

Musical notation for measures 25-28. The treble clef features a more complex melodic pattern with some grace notes, while the bass clef accompaniment continues.

2/2

29

*mp*

Musical notation for measures 29-32. The piece is in 2/2 time with a key signature of two sharps (F# and C#). The right hand features a rhythmic pattern of eighth notes with slurs, while the left hand plays a simple bass line of quarter notes.

33

*mf*

Musical notation for measures 33-36. The right hand continues with eighth-note patterns, and the left hand plays a steady quarter-note bass line.

37

Musical notation for measures 37-40. The right hand has a more complex eighth-note pattern with slurs, and the left hand continues with quarter notes.

41

*f*

Musical notation for measures 41-43. The right hand features a dense sixteenth-note texture, and the left hand plays quarter notes.

44

*ff*

Musical notation for measures 44-46. The right hand has a very active sixteenth-note pattern, and the left hand plays quarter notes.

47

*tr*  
*ritenuto*

Musical notation for measures 47-49. The right hand has a triplet of eighth notes in measure 47, followed by a trill (tr) in measure 48. The piece concludes with a *ritenuto* marking and a final chord in measure 49.

# VON FREMDEN LÄNDERN UND MENSCHEN

(About Foreign Lands and Peoples)

Kinderszenen - Opus 15, No 1

Robert Schumann

$\text{♩} = 108$



# For Elise

L.v.Beethoven

**Poco moto**

*pp*

5 4 1 2

1. 2.

*mf*

*dim. rit. a tempo*

*pp*

Red. \*

2

1. 2.

*ped.* \*

*dolce*

This system contains the first two measures of the piece, followed by a first ending (marked '1.') and a second ending (marked '2.'). The first ending leads back to the beginning, while the second ending concludes the section. A 'ped.' marking with an asterisk is placed below the first two measures. The word 'dolce' is written above the final measure of the second ending.

*cresc.*

This system contains measures 3 through 6. It features a 'cresc.' (crescendo) marking above the fourth measure. The right hand plays a melodic line with slurs and fingerings, while the left hand plays a rhythmic accompaniment.

*p*

This system contains measures 7 through 10. It begins with a 'p' (piano) dynamic marking above the first measure. The right hand has a complex melodic line with many slurs and fingerings, while the left hand plays a steady accompaniment.

*a tempo*

*dim.* *poco rit.* *pp*

This system contains measures 11 through 14. It includes a 'p' marking above the first measure. The right hand has a melodic line with slurs and fingerings. The left hand has a bass line with slurs. The system concludes with 'a tempo', 'dim.', 'poco rit.', and 'pp' markings.

*pedal: simile*

This system contains measures 15 through 18. It features a 'pedal: simile' marking below the fourth measure. The right hand has a melodic line with slurs and fingerings, and the left hand has a bass line with slurs.



First system of musical notation. The treble clef contains a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bass clef contains a rhythmic accompaniment of eighth notes. Dynamics include *mf*. Fingerings 5, 4, 3, 2, and 3 are indicated above the treble clef notes.

Second system of musical notation. The treble clef contains a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bass clef contains a rhythmic accompaniment of eighth notes. Dynamics include *p* and *pp*. Fingerings 5, 1, 1, 1, 1, 1, 1, 1 are indicated above the treble clef notes.

Third system of musical notation. The treble clef contains a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bass clef contains a rhythmic accompaniment of eighth notes. Dynamics include *pp*.

Fourth system of musical notation. The treble clef contains a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bass clef contains a rhythmic accompaniment of eighth notes. Dynamics include *p* and *cresc.*. Fingerings 1, 2, 1, 2, 1, 2 are indicated above the treble clef notes. The word "Red." is written below the bass clef notes.

Fifth system of musical notation. The treble clef contains a melodic line with notes G4, A4, B4, C5, B4, A4, G4, F4, E4, D4. The bass clef contains a rhythmic accompaniment of eighth notes. Dynamics include *dim.*, *p*, and *cresc.*. Fingerings 5, 1, 5, 4, 1, 1, 4, 1, 5, 1, 4, 1, 3, 1 are indicated above the treble clef notes. The word "Red." is written below the bass clef notes.

4

The sheet music consists of five systems of piano notation. Each system has a treble and bass staff. The first system features a treble staff with chords and a bass staff with a steady eighth-note accompaniment, with the word "Lied" written below the bass staff five times. The second system shows a treble staff with chords and a bass staff with eighth notes, including dynamics *p*, *pp*, and *pp*, and a "loco" section indicated by a dashed line. The third system features a treble staff with complex sixteenth-note passages and a bass staff with chords, including markings for *rall.*, *pp*, and *a tempo*. The fourth system has a treble staff with eighth-note patterns and a bass staff with eighth notes, with "Lied" written below the bass staff. The fifth system features a treble staff with eighth-note patterns and a bass staff with eighth notes, including dynamics *mf*, *dim.*, and *p*.

The image displays a musical score for piano, consisting of two systems of music. Each system features a grand staff with a treble clef on the upper staff and a bass clef on the lower staff. The first system includes dynamic markings: *dim.* (diminuendo) in the first measure and *pp* (pianissimo) in the second measure. The second system includes the marking *morendo* (ritardando) in the third measure. The music is written in a key signature of one sharp (F#) and a 3/4 time signature. The notation includes various rhythmic values, slurs, and articulation marks.

# Sonata No. 14 “Moonlight”

## 1st Movement

L. VAN BEETHOVEN  
Op. 27, No. 2

ADAGIO SOSTENUTO

The musical score is presented in four systems, each with a grand staff (treble and bass clefs). The key signature is three sharps (F#, C#, G#) and the time signature is common time (C). The first system includes the instruction *sempre pp e senza sordino*. The second system begins with a triplet of eighth notes in the treble clef and ends with a *pp* dynamic marking. The third and fourth systems continue the melodic and harmonic development of the piece.

12

15

18

21

24



27

*p*  
*decresc.*

30

33

36

39

*decresc.*

42 *pp*

45

48 *cresc.* *p*

51

54

57

*cresc.* *p*

60

63

66

*pp* *pp* *attacca subito il seguente*



## Lesson 5

### Rhythm and its importance in music

**Rhythm** can be simply described as the structure of sound. Sound or noise is produced by irregular impulses in the air, or vibrations, which are propagated over a certain period of time. Regular impulses in the air produce a tone, because they are impulses that are constant. An example of an irregular impulse is a car starting, and an example of a regular impulse is a single toned alarm. Even in irregular impulses, there is regularity. But the only differences are irregular impulses produce multiple pitched and between-pitched tones at once, with no constant or dominate tone.

With the regular impulses you have tone, and with tone you find pitch, and with pitch you have music. Rhythm is foundational in music because without it, there is no sound. It is considered to be the skeleton of a note. When you hear a note, regardless of how it is played, rhythm is playing a key role in creating it.



The duration of a tone that is created is referred to in music as a **note**. The duration of a note is first determined by the **beats per minute (BPM)** of the song and then the beat classification. Most music, especially popular music of today, is played in 4/4 time (time signature), meaning that there are four **beats** for every cycle in the song. Just like on a circular clock, there are four quadrants. If you look at a clock, it can be most easily divided into four sections, the 15 minute mark, the 30 minute, the 45 minute and the hour. So the hour is not complete until the hand completes the full cycle on the clock. This same concept is applied to music. A full cycle in 4/4 time is not completed until the timing of the beats add up to a full cycle. The timing of the beats can be referred to as the beat classification. Every beat is classified in whole, half, quarter, eighth, sixteenth, and thirty-second times. The meaning of each is defined in their name. The whole time classification means that note is equal to one whole cycle, the half time means the note is equal to half of a whole cycle, and so on. Each classification is considered to be fractions of time, all adding up to create the total length of the song.

Beats per minute refers to the speed or **tempo** of a song. BPM's are measured numerically, starting with one. There are 60 seconds in a minute, so that helps you easily find the tempo of a song. If the BPM of a song is 120, then you know that when every second passes by, two beats have happened. If it is 60, then that means with every second that goes by, one beat happens at the same time. The beats per minute can be defined by any note classification, but as a standard the BPM is referred to how many quarter classifications happen. When this occurs, every single time a quarter note is classified, then that note is equal to 1 beat. Then the other notes that are classified will add up with that note to make a full cycle.



A **metronome** is used by musicians to easily find a specified BPM for a song. This device produces a click like sound to illustrate the specified BPM. This makes it easier for a musician to find the BPM as opposed to listening to the seconds on a clock. Metronomes today are built in to electronic keyboards and other instruments, but originally started as standalone devices. They can still be purchased separately as well as digitally and online today. Metronome is very important to include with your practicing of the piano or any other instrument. It trains your mind to get used to playing songs in their proper time. This is very important as you will find in further lessons.

Quiz #9

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**Regular impulses produce a \_\_\_\_\_, because they are impulses that are \_\_\_\_\_. Fill in the blanks.**

- Sound, Continual
- Tone, Constant
- Tone, Natural
- Pitch, Regular

**Rhythm is most profoundly defined as:**

- The mapping of music
- The division of music
- The cadence of music
- The structure of sound

**With regular impulses you create what?**

- Rhythm
- Tone
- Pitch
- None of the above

**With irregular impulses in the air you create:**

- Noise
- Tone
- Pitch
- None of the above

**The duration of a tone is referred to in music as a \_\_\_\_\_**

- Sound
- Impulse
- Noise
- Note

**What does BPM stand for?**

- Beats Per Minute
- Bottom Pitch Music
- Basic Pattern Minute
- Doesn't stand for anything

**In a speed of 120 BPM, how many beats are in one minute?**

- 20
- 60
- 5
- None of the above

## Essentials of Rhythm:

It would be a crime for us to continue our more in-depth music theory study without covering rhythm. Rhythm is just as important if not more important than a melody. All melodies and harmonies cannot exist without rhythm. When you play your instrument, it is very important to understand patterns with rhythm. If you have no rhythm, your song will not make sense.

## The Basics

Rhythm defined is the sound or noise produced by irregular impulses in the air, or vibrations, which are propagated over a certain period of time. Rhythm is noted by the following symbol types:


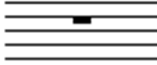

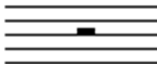



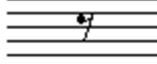

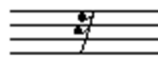
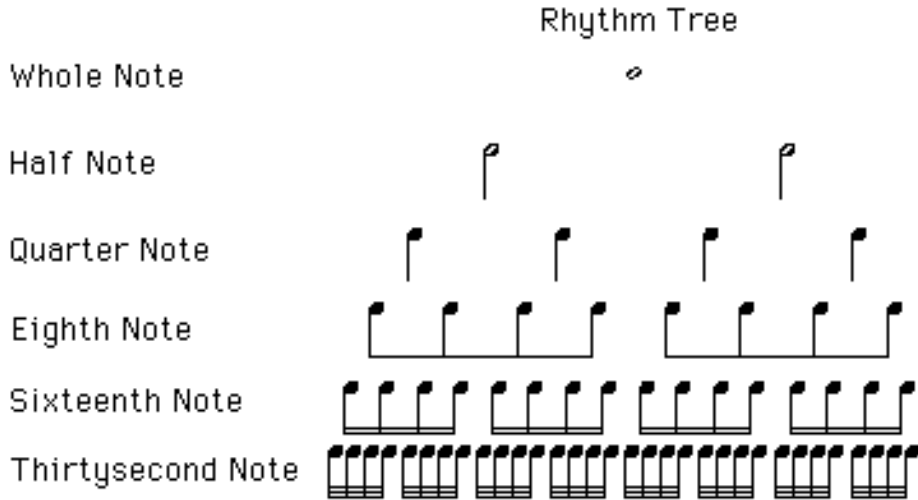
Name	Note	Rest
Whole Note		
Half Note		
Quarter Note		
Eighth Note		
Sixteenth Note		

Figure 2.4

The duration of tone is indicated by symbols called notes. Whenever there is silence or a suspension of a note, it is indicated by a **rest**. The note value is indicated by the note name. A whole note when initiated gets one whole measure or bar. A half note gets a half of a measure or bar; a quarter, an eighth; and a sixteenth note all get just as much time as they are named. In figure 2.4, you can see that each note has a value. Next to the note column are the rests, and the rests that correspond with each note get the same amount of value. A whole rest means there is silence for a whole bar or measure, a half, a quarter, an eighth, and a sixteenth all get their respective amount of rest.

These notes are written on a staff (as shown in the rest column). The staff consists of 5 lines and 4 spaces. The duration of the tone is determined by which note used (quarter, half etc.) and the pitch is determined by which position the note is on the staff. Every space and line represents a pitch, which we will discover more later in this session.



Example of notated rhythm



Figure 2.5

Each note has a value and that value is expressed in half time. This means that it is easier to tell which note gets how much time by determining their relationship with one another. The example is shown in figure 2.5. You can see that one whole note is equal to two half notes, two half notes equal to four quarter notes, and so on. Note that the thirty second note is also shown in this chart. This note is not commonly used in today’s music but should not be ignored. Take note how from the eighth note to the thirty second note, they are connected. The line that connects a note with another is called a **beam**. **Beams** can only be used to connect notes with flagged stems. Quarter notes can’t be connected by a beam.



Figure 2.6

When a note has a dot next to it, that means the time of that note is extended by a half of the value of the note itself. This is called a **dotted duration**. A note with a double dot adds one half and one fourth of the value of the note to that note, as shown in figure 2.6. This is called a **double dotted duration**.

As we learned in the previous lessons, bar lines separate the music into measures. And the time or value that each measure gets depends on the fraction, called the time signature, shown at the beginning of the staff. Refer to figure 2.7, and let's look at this a little further.

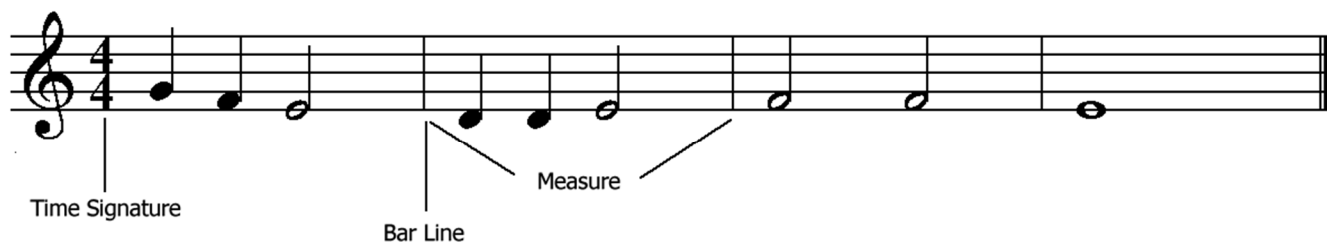
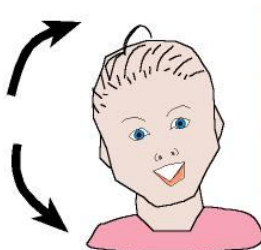


Figure 2.7

The time signatures are always shown as fractions in the beginning of the staff. All songs whether written on paper in notation or not have a time signature. The denominator of the time signature fraction tells us the type of notes to go by. The numerator of the time signature fraction tells us the number of that type of notes to be in each measure. In figure 2.7, you can see that the time signature is 4/4. This means that every measure (space separated by the bar line) gets four quarter notes. This is how we found that out, the denominator tells us that the types of notes to put in the measure are quarter notes, because  $\frac{1}{4}$  is 25% and a quarter of 100%. The numerator is four so that tells us that we need four quarter notes per measure. This time signature is the very most common in music. Other common time signatures include 2/2, 3/4, 2/4, 5/8 and so on.

### The benefits of clapping, nodding or tapping

The denominator of the time signature is distinctively your tapping beat. If the denominator is a 4, then that means you will be clapping to quarter notes. If the denominator is an 8, that means you will be clapping to 8<sup>th</sup> notes. The numerator is how many claps you will make to complete a full measure. So if the time signature is 4/4, you will clap four quarter notes to complete a measure. If the time signature is 5/8, you will clap five 8<sup>th</sup> notes to complete a full measure. The counting on each is simple: 1,2,3,4,5, then 1,2,3,4,5 again, and again. Once you get to five, you always restart from 1 again. If it is 4/4, then the counting is simply 1,2,3,4.

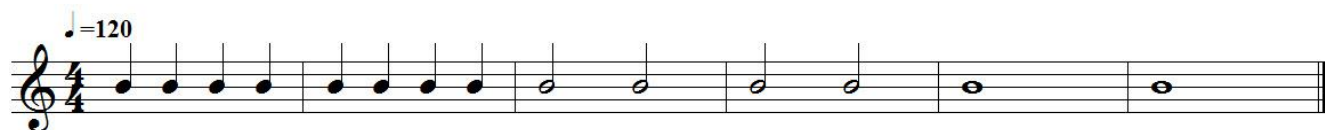


When practicing rhythm, there is no more efficient way than to get your body involved. It is not by coincidence that drummers have to activate most of the limbs in their body on a constant cadence in

order to produce a proper beat. In order to produce rhythm, you have to be the rhythm. In the case of your playing, no one else but you creates the cadence of the song, because you are the one playing it. In essence, it is important, especially as a beginner to rhythm, to get your body involved when producing rhythm. A suggestion is to clap along to a metronome, nod your head to a beat, or tap your foot in a constant response to a pulse.

### ***Exercise***

Looking at figure 2.8, clap, nod, or tap to the rhythm shown. Note that it is written in 4/4 time. Also note that there are 8 quarter notes, 4 half notes, and 2 whole notes in the whole song. Think about how each note group adds up to make a full measure.



**Figure 2.8**

Using figure 2.8, you should have been able to clap, nod, or tap a total of fourteen times. However, how many actual counts are shown in the entire staff? That answer would be 24 counts. We know that each measure (shown between each separating bar line) has 4 counts. So we can add up the entire time of the song to have 24 counts since there are a total of 6 measures shown ( $6 \times 4 = 24$ ). We clap, nod, or tap whenever we see a note, but that doesn't mean that we stop counting. Even though we clapped 14 times, there are still 24 counts in the whole song. In essence, when we count the half notes or the whole notes, we clap once per note, but we still give them the amount of time that they demand.

Here is how your clap should sound when you clap to the example song shown in figure 2.8:

*Measure 1*

**Clap 1, Clap 2, Clap 3, Clap 4**

*Measure 2*

**Clap 1, Clap 2, Clap 3, Clap 4**

*Measure 3*

**Clap 1, 2, Clap 3, 4**

*Measure 4*

**Clap 1, 2, Clap 3, 4**

*Measure 5*

**Clap 1, 2,3,4**

*Measure 6*

**Clap 1, 2, 3, 4**

Every time the word clap is used, that indicates that you clap, nod, or tap. Every time you see a number, that means you count in your head. Counting is very important in music. The good thing about counting though is once you get a hang of it, it comes natural.

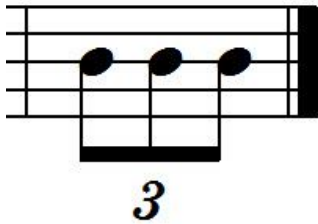
Here is an example of counting per note, where the number indicates number of counts:




## Irregular Rhythms



Artificial groups are groups of notes that are played in a modified fractional value. The most common artificial groups are the **triplet** and the **sextuplet**. A triplet is a group of three notes played in a value equal to two of its kind. A sextuplet is a group of six notes that are played in a value of four of its kind. A group of five notes are played in a value of four of its kind. A group of seven notes are played in a value of six of its kind. Occasionally there is a group of two notes. As opposed to the other artificial groups, the groups of two notes are played slightly slower than the note value normally would allow them.

Each artificial group is defined by a number over the connecting bar of a group of notes. If that number is a 3, then it is a triplet. If that number is a 6, then it is a sextuplet.



Irregularities in music other than artificial groups are marked in different ways. A **ritardando**, marked with a symbol like this , means to lessen the speed of a given point in the song. The length of time that the lessening of speed is indicated by a series of period marks like this.....after the symbol. **Accelerando** means to quicken the speed of a given point in the song. These symbols are used to add flavor to the song and to be executed as long as the music taste dictates it to.

## Speed

The speed of a song is noted in few different ways. The beats per minute, or bpm, is a standard way to calculate the exact speed of a song. But every beat per minute must have a note value, such as a quarter or an 8<sup>th</sup> note. Remember how the denominator of the time signature tells us what notes to use in a measure? This number will also tell us what note to use for the beat value. If the denominator is a 4, then the bpm value is a quarter note, shown like this: =120. If the denominator is an 8, then the bpm value is an 8<sup>th</sup> note, and it will be shown like this: =240..

The rapidity of the occurrence of pulses is called **tempo**. Put simply, tempo is the music term equivalent to speed. Tempo is measured in beats per minute, but is also noted by terms. These terms, along with the bpm, are found in the beginning of the song so that the pianist can know how fast to play the song. Here are a few of the terms used to describe the tempo of a song:



**Grave** means slow and solemn.

**Largo** means slow, but a little faster than grave.

**Larghetto** means a little faster than largo.

**Adagio** means slow, but faster than Larghetto.

**Lento** means slow.

**Andante** means moderately slow.

**Moderato** means the mediate between fast and slow.

**Allegretto** means cheerful.

**Allegro** means quick.

**Vivo** means fast and lively.

**Presto** means very quick.

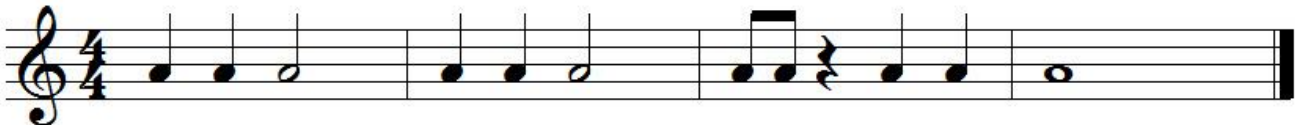
In many of the Italian terms above, when the suffix –issimo is added to them, this gives the term a much higher degree than its original meaning. Such as **adantissimo** is slower than andante and **prestissimo** means the song is to be played faster than presto.

At this point you should be able to apply all that you have learned about rhythm to your practicing of chords and scales.

### *Exercise*

Instead of tapping, this time try to press a note on the keyboard every time that you see a note in the exhibit below. Make sure to count in your head and give every note the proper amount of hold when you press a key. Remember also to take note of the time signature. And don't worry; you can do this with any key and with any hand. The concept here is to be familiarized with the rhythm of the notes.

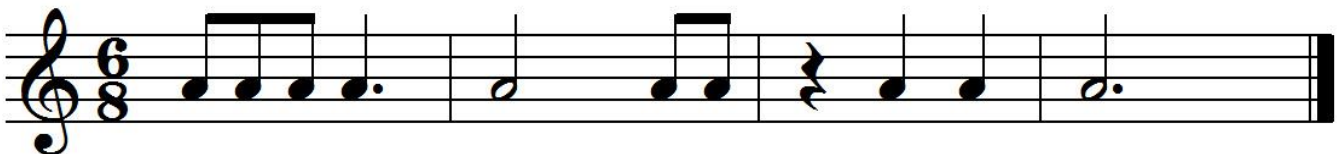
**Exhibit 1**



**Exhibit 2**



**Exhibit 3**



Quiz #10

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**Which term is closest related to rhythm?**

- Notes
- Sound
- Impulses
- Beat

**True or False: a half note is equal to 4 eighth rests.**

- True
- False

**True or False: One whole rest is equal to 4 quarter notes.**

- True
- True

**True or False: 2 Quarter notes can be beamed together.**

- True
- False

**A dotted duration adds how much time to the value of a note?**

- An additional half its value
- Double its value
- An additional 1-1/2 times its value
- 1/4 the notes value

**In a time signature of 4/4, which kind of notes is used for the beat?**

- Eighth
- Quarter
- Half
- Whole

**A beamed triplet is equal to how many regular-timed notes of its kind?**

- 4
- 3
- 2
- 1

**This time signature and bpm value would tell you a songs speed of 60 quarter notes per minute.**

- 4/4, Quarter note=120
- 3/4, Quarter note=60
- 4/4, Eighth note=140
- All of the Above

**Adding the suffix “issimo” to a term for tempo means what?**

- Raise the value of the term
- Lower the value of the term
- Change the meaning of the term
- Reverse the value of the term

**What does the term Allegro mean?**

- Solemn
- Hard
- Cheerful
- Stubborn

*Extra Credit*

**In a time signature of 5/16, how many eighth notes can fit into each measure?**

- 2
- 1-1/2
- 2-1/4
- 3

## **WARM-UP ROUTINE**

Using what you know so far, it is important to start working on a warm up routine so that every time you get ready to practice, you can warm up your fingers, hands, and posture in playing. At this point, you should spend approximately 20 minutes warming up before you practice a song. To access a suggested warm up routine, go to the free resources page at [www.johnspianolesson.com](http://www.johnspianolesson.com) and pick the appropriate lesson.

# INVENTION 1

in C-major, BWV 772

Johann Sebastian Bach

1 5 3 3 2 1 1 3 2

3 4 1 2 1 1 3

5 3 5 2 1 2 3 1 3 2

7 1 3 2 4 2

9 4 4 5

2/2

Musical score for piano, measures 11-22, in 2/2 time. The score is written for both hands on grand staff notation. Measure numbers 11, 13, 15, 17, 19, and 21 are indicated at the start of their respective systems. Fingerings (1-5) and accents are provided throughout. The piece concludes with a double bar line and a fermata over the final chord in measure 22.



# INVENTION NO 8 IN F MAJOR

Johann Sebastian Bach

Vivace. (♩ = 144.)

The musical score is presented in two systems of grand staff notation (treble and bass clefs). The first system includes the tempo marking 'Vivace. (♩ = 144.)' and the time signature of 3/4. The score contains various musical notations such as slurs, accents, and dynamic markings including *f*, *dim.*, *cresc.*, and *p*. Fingerings are indicated by numbers 1-5. The piece concludes with a *mf* dynamic marking.

The sheet music is arranged in six systems, each with a treble and bass staff. The key signature has one flat (B-flat). The time signature is 2/2. The music includes various musical techniques and dynamics:

- System 1:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *f*.
- System 2:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *f*.
- System 3:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *dim.* and *cresc.*
- System 4:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *f* and *dim.*
- System 5:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *cresc.*
- System 6:** Treble staff has a triplet of eighth notes. Bass staff has a triplet of eighth notes. Dynamics: *f* and *dim.*

# THE DOLL'S BURIAL

From Album for the Young

Opus 39 No 8

Peter Ilyitch Tchaikovsky

8. Grave.

The musical score is presented in five systems, each with a grand staff (treble and bass clefs). The key signature is two flats (B-flat major), and the time signature is 2/4. The tempo is marked 'Grave'. The score includes various dynamic markings: *pp* (pianissimo) at the beginning and end, *p* (piano) in the second system, and *f* (forte) in the fourth system. Fingering numbers (1-5) are indicated throughout the piece. The score concludes with a final cadence in the fifth system.



Adagio cantabile.

The musical score is written for piano in a 2/4 time signature with a key signature of three flats (B-flat major or D-flat minor). It consists of six systems of music, each with a treble and bass staff. The tempo is marked 'Adagio cantabile'. The first system begins with a piano (*p*) dynamic. The score includes various musical notations such as slurs, ties, and ornaments. Fingerings are indicated by numbers 1-5. Dynamics like *cresc.* and *p* are used throughout. The piece concludes with a fermata and a final chord. The page number '82' is visible at the bottom right of the score.

The sheet music consists of six systems, each with two staves. The key signature has two flats (B-flat and E-flat). The first system begins with a *pp* dynamic and includes a sequence of fingerings: 5, 4, 1 2 1 2 1 2 1. The second system continues with a *p* dynamic. The third system features a *pp* dynamic and includes triplets in both staves. The fourth system shows a *cresc.* (crescendo) and *sf* (sforzando) dynamic. The fifth system includes *sf*, *fp* (fortissimo piano), *decresc.* (decrescendo), and *pp* dynamics. The sixth system concludes with a *pp* dynamic. The music is characterized by intricate rhythmic patterns and detailed fingering instructions.



The sheet music consists of six systems of staves. The first system shows a complex rhythmic pattern in the right hand with slurs and fingerings (5, 4, 3, 2, 1, 2) and a *cresc.* marking in the left hand. The second system features a *p* dynamic marking and intricate fingerings (2, 1, 4, 2, 1, 4, 2, 1, 4, 2, 1, 4). The third system continues with similar rhythmic complexity and fingerings (2, 1, 2, 2). The fourth system includes a *cresc.* marking and fingerings (5, 4, 3, 4). The fifth system has a *cresc.* marking and fingerings (2, 3, 4, 2, 3, 4, 2, 3, 4, 2, 3, 4). The sixth system concludes with a *pp* dynamic marking and fingerings (3, 3, 1, 2, 3, 2, 1, 3, 2, 1).

The image displays two systems of piano music. The first system consists of two staves. The upper staff is in treble clef with a key signature of two flats (B-flat and E-flat). It features a melodic line with eighth-note patterns, including a triplet of eighth notes and a sequence of notes with fingerings 2, 3, 2, 1, 8, 5, 1. The lower staff is in bass clef, providing a rhythmic accompaniment with eighth-note chords and fingerings 4, 1, 2, 3, 2, 1, 3, 2, 1. The second system also has two staves. The upper staff continues the melodic line with various articulations and fingerings (4, 3, 4, 4, 4, 4, 5, 5). The lower staff features a bass line with dynamic markings: *mf* (mezzo-forte), *rf* (ritardando-forte), and *pp* (pianissimo). Fingerings 4, 1, 2, 3, 2, 1, 3, 2, 1, 4, 5, 4, 5 are indicated throughout the system.

# TRÄUMEREI

(Dreaming)

Kinderszenen - Opus 15, No 7

Robert Schumann

$\text{♩} = 100$

*p*

Ped.

The first system of the score shows measures 1 through 5. It begins with a treble clef, a key signature of one flat (F major/D minor), and a common time signature. The tempo is marked as quarter note equals 100. The piece starts with a piano (*p*) dynamic. The right hand features a melodic line with various fingering instructions (2, 3, 1, 2, 3, 2, 3, 1, 2, 3, 2, 3, 1, 2, 3, 2, 3, 1, 2). The left hand provides a harmonic accompaniment with chords and single notes. A pedal point is indicated by 'Ped.' below the bass staff.

6

*rit.*

2 3 4

The second system covers measures 6 to 10. Measure 6 starts with a *rit.* (ritardando) marking. The right hand continues its melodic development with complex fingering (2, 1, 2, 4, 5, 4, 5, 4, 3, 2, 1, 2, 3, 4). The left hand accompaniment includes chords and moving lines. A 'Ped.' marking is present below the bass staff.

11

*rit.*

*p*

5 4 3 2 1 4 5 4 3 2 1 4 5

The third system covers measures 11 to 15. It continues the *rit.* marking. The right hand has a descending melodic line with fingering (5, 4, 3, 2, 1, 4, 5, 4, 3, 2, 1, 4, 5). The left hand accompaniment features chords and moving lines. A 'Ped.' marking is present below the bass staff.

16

*rit.*

*p*

5 4 3 2 1 4 5 4 3 2 1 4 5

The fourth system covers measures 16 to 20. The *rit.* marking continues. The right hand has a descending melodic line with fingering (5, 4, 3, 2, 1, 4, 5, 4, 3, 2, 1, 4, 5). The left hand accompaniment features chords and moving lines. A 'Ped.' marking is present below the bass staff.

21

*rit.*

*p*

5 4 3 2 1 4 5 4 3 2 1 4 5

The fifth and final system covers measures 21 to 24. It continues the *rit.* marking. The right hand has a descending melodic line with fingering (5, 4, 3, 2, 1, 4, 5, 4, 3, 2, 1, 4, 5). The left hand accompaniment features chords and moving lines. A 'Ped.' marking is present below the bass staff.

## Lesson 6

### Chord Building:

In subsequent sessions you have learned about the C major chord and how it is constructed. Let's take those lessons a bit further and build an understanding of how a chord is built.

Every chord played on the piano has a name. The name consists of the following: key of chord and type of chord. Chords with further suffixes will include chord additions such as #9, b5, etc. The basic chords, such as the major chords, will give you those two basic identifications though. Here are a list of triads that are identified only by key and type:

#### Major/minor Triad Chords

C Major is abbreviated as CMaj or in some cases CM

C minor is abbreviated as Cmin or in some cases Cm

C diminished is abbreviated as Cdim or C<sup>o</sup>

C augmented is abbreviated as Caug or C+

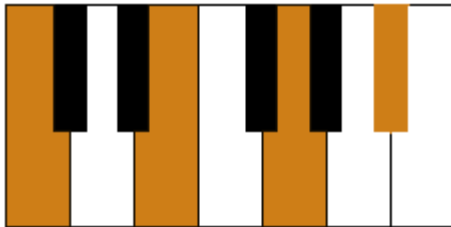
C **suspended** is abbreviated as Csus or Csus4

## Chord Compositions

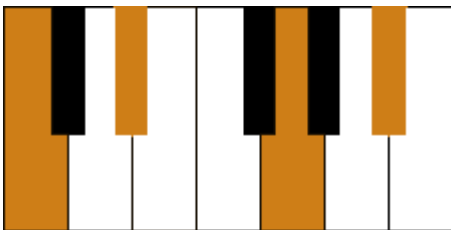
### 7<sup>th</sup> Chord

7<sup>th</sup> chords are **combination chords** that include a minor 7<sup>th</sup> degree. These chords are added to a major or a minor triad. If we were to add it to C, the chord name would be C7. If we were to add it to C minor, the chord name would be Cm7. 7<sup>th</sup> chords are always added to a major or minor triad.

#### Piano C7 Chord



Major 3rd (2 tones)    Minor 3rd (1 1/2 tones)    Minor 3rd (1 1/2 tones)



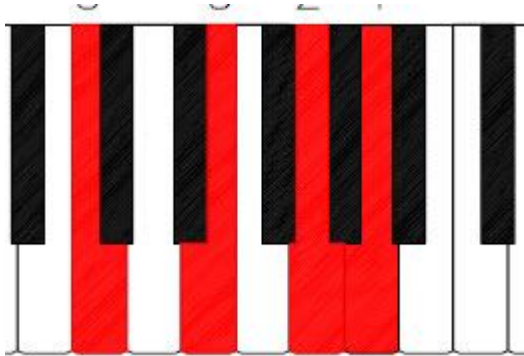
C Minor 7<sup>th</sup> chord



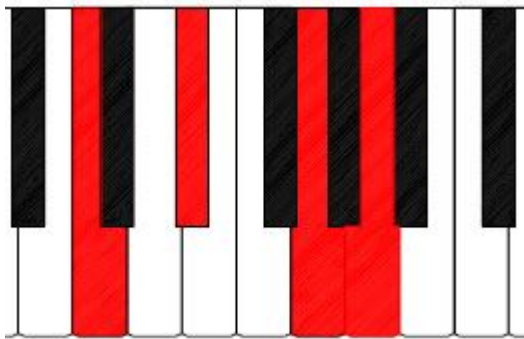
7<sup>th</sup> chords are commonly used to make the chord sound more bluesy and bring more interest and color to the sound. 7<sup>th</sup> chords can spark a number of scales, such as the **pentatonic scale**.

### 6<sup>th</sup> Chord

6<sup>th</sup> chords are major or minor triads that include the sixth note degree. So in a C6, you would play the normal C major triad and add the six to the note, making the notes that you play C, E, G, and A. Minor 6<sup>th</sup> chords are the same, you add the sixth note to the minor triad.



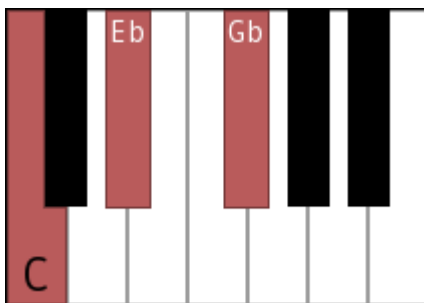
**C6 chord**



**C minor 6<sup>th</sup> chord**

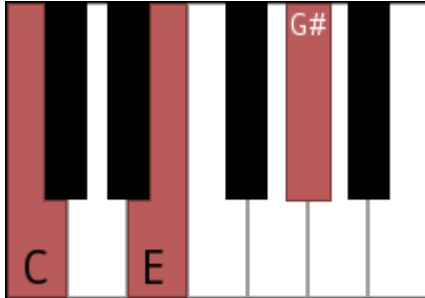
### Diminished Chords

A diminished chord is of the minor family of chords with the only difference of a flatted 5<sup>th</sup>. If you were to start with a major chord, you would flat both the 3<sup>rd</sup> and the 5<sup>th</sup> to make it a diminished chord. In the diminished chord, the intervals between each note played are equal. Diminished chords are triads.



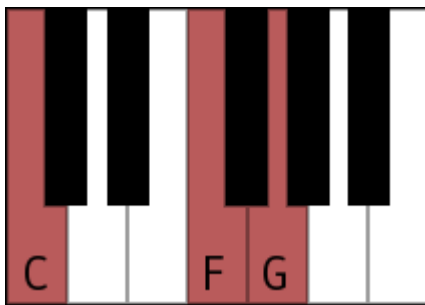
### Augmented Chords

An augmented chord is of the major family of chords with the only difference being a sharpened 5<sup>th</sup>. If you were to start with a major triad, all you do is sharp the fifth to make an augmented chord. Augmented chords are triads.



### Suspended Chords

A suspended chord is the only neutral chord that can either belong to the minor or major family, depending on the prevailing key of the song. You can accomplish a suspended chord by “suspending” the third and adding a perfect fourth. The perfect fourth replaces the third, whether it is a minor or major third. Suspended chords are triads.



## Chord Families

Each chord can be categorized into 5 groups. Keep in mind that there are hundreds of thousands of different types of chords. However all of these chords share something in common, but you have to learn it in order to apply it. Otherwise chords can become very confusing. Here is a list of the types of chords and their definitions.

**Triads-** include the major, minor, diminished, augmented, and suspended chords.

**Combination Chords-** include 6<sup>th</sup>, 7<sup>th</sup>, Maj6, Maj7, and any chords within the octave.

**Extended Chords-** include chords that extend beyond the octave that have 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> notes.

**Altered Chords-** include chords that are modified by flattening or sharpening note(s) in the chord other than the root.

**Added Tone Chords-** are regular triads with an added note above the octave, such as a 9<sup>th</sup>, 11<sup>th</sup>, or 13<sup>th</sup> note.



## How to read a chord

At first glance, it is rather difficult to read complex chords and immediately play them. However, with much practice, chords will become easier for you to understand. It is very important to know how to read a chord when it is written, or when you need to play it. Here are some examples with descriptions.

### CMajb5 add9

Chords are like equations, and if you know how they are constructed, you can easily pick them apart. Look at the above C chord and see if you can play it. The “C” at the beginning indicates that the root note is C. The “Maj” tells us that the chord (C) is a major chord. The b5 (flat 5) tells us that we are to take the natural 5 and move it down a half step. And finally the add9 tells us to add a 9<sup>th</sup> note of the scale to the chord.

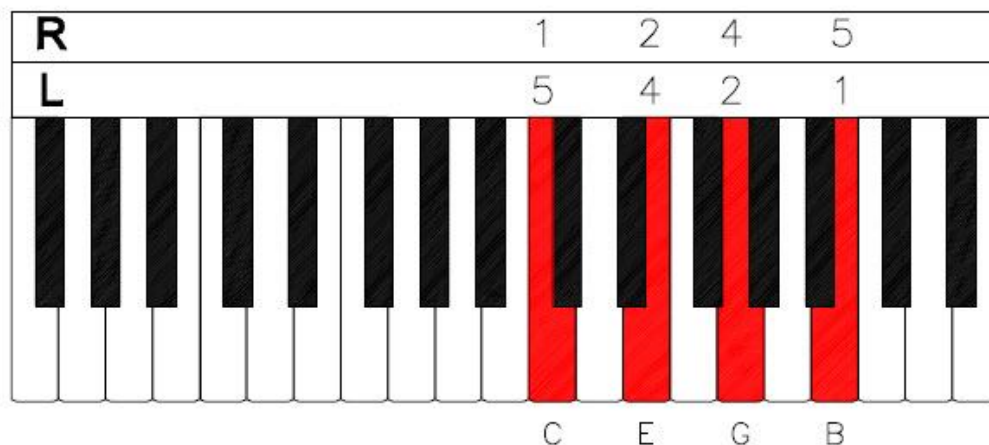
### Cm9

This chord tells us that the key is in C minor, and the 9 tells us to add a 9<sup>th</sup> and a minor 7<sup>th</sup> to the chord. This chord is considered to be an extended chord due to the 9<sup>th</sup> note being added to the 7<sup>th</sup> chord. As a rule, all extended chords that have a 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> will also include the minor 7<sup>th</sup> note unless it is specified as a major root. For example, adding the 9<sup>th</sup> note to make a C9 will allow these notes to be played: C, E, G, Bb, and octave D (1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, m7<sup>th</sup>, 9<sup>th</sup>). This rule applies also to notes that are played beyond the 9<sup>th</sup> and 11<sup>th</sup>. For example, a full C13 has these following notes: C, E, G, Bb, D, F and A (1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, m7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup>). Sometimes this rule isn't followed and sometimes certain notes are excluded from the bunch. But what is important is that the correct notes per the chord definition are played.

### Examples:

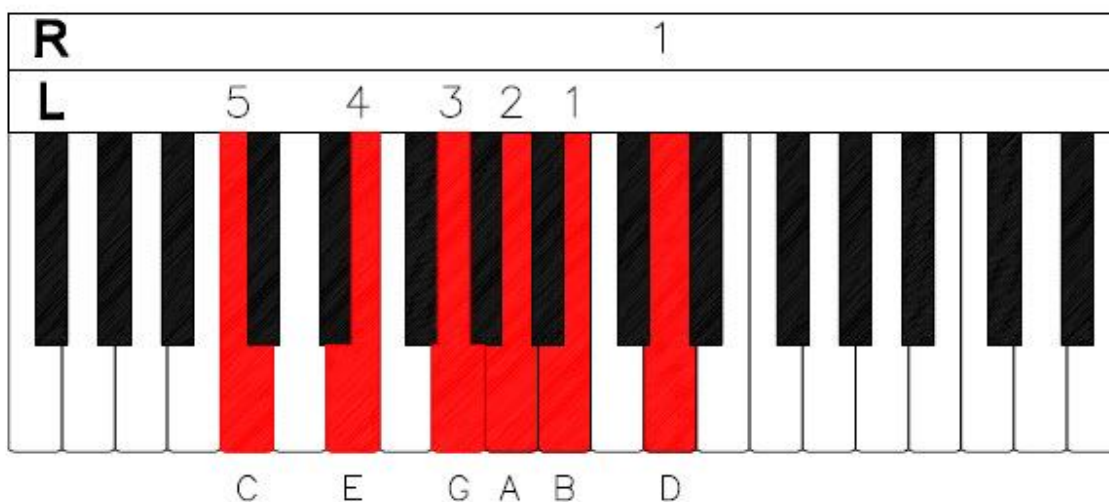
Here are some examples of chords with explanations of how they are constructed for visual reference.

## Cmaj7



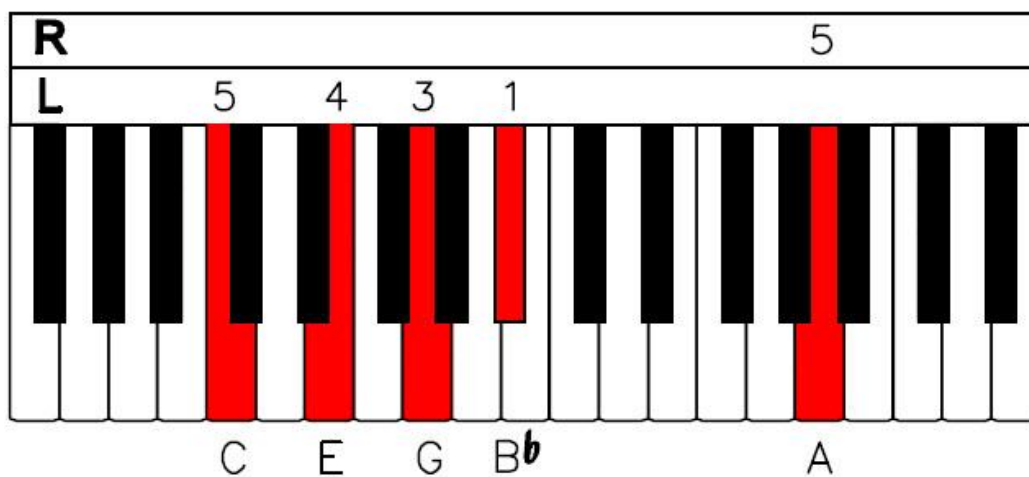
*This chord tells us that C is the root, the chord is major and we are to play the major 7<sup>th</sup> in the chord. The C Major is C, E and G. The major 7<sup>th</sup> note in the C scale is B*

# Cmaj6,9



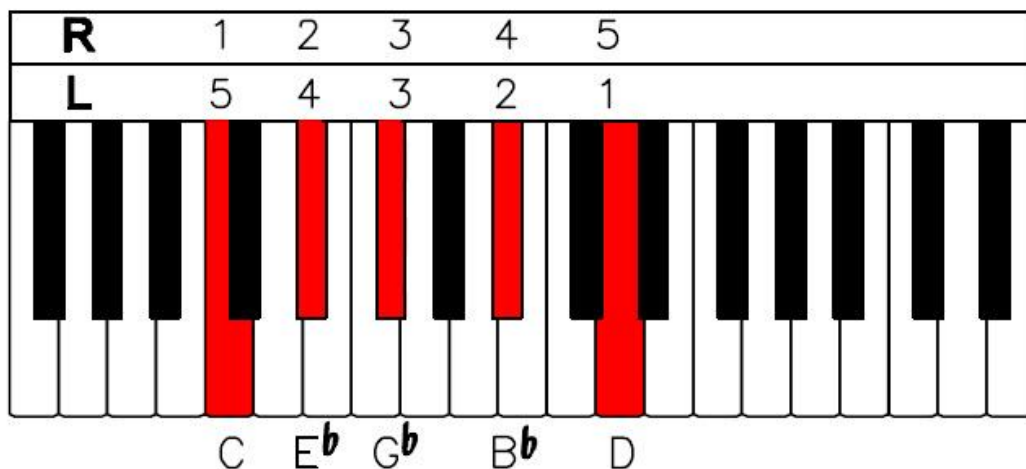
*This chord tells us that C is the root, it is major, and we are to add the 6<sup>th</sup> and the 9<sup>th</sup> major notes into it. C, E, and G make up the C major. A is the 6<sup>th</sup> note in the scale. We then add D which is the 9<sup>th</sup> note in the scale. But remembering the extended chord rule, when we go above the octave then we add the 7<sup>th</sup>. Since this is specified as major, the major 7<sup>th</sup> is added to this as well, which is B.*

# C7add13



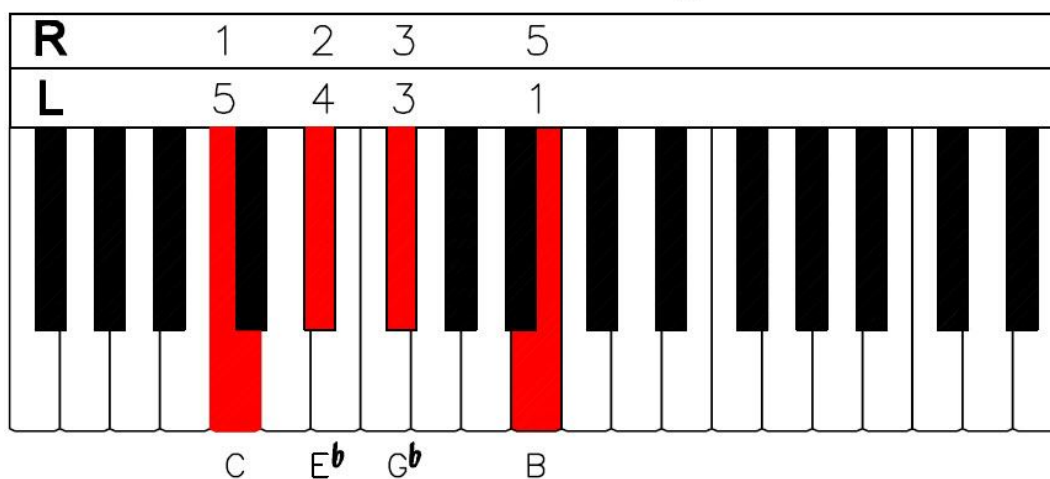
*This chord tells us that C is the root, and we will be playing the 7<sup>th</sup> chord and adding a 13<sup>th</sup> note to the chord. So C, E, and G are automatically played to make a C chord. The minor 7<sup>th</sup> (B<sup>b</sup>) is combined with the chord, because the chord was not specified as major, and the 13<sup>th</sup> note of the chord is the added note which is A.*

# Cm9<sup>b</sup>5



*This chord tells us that the root note is C, it is a minor chord with a 9<sup>th</sup>, and it alters the five. So the C minor is C, Eb, and G. The 9 is combined with the chord, which is D, not forgetting the extended chord rule, in which we add Bb to the chord (the minor 7<sup>th</sup>). Our regular G in our minor chord is then flatted, because the chord specifies b5, so we change G to Gb.*

# Cdim maj7



*This chord tells us that C is the root and it is a diminished chord, but we have to add a major 7<sup>th</sup> to the chord. First we play the diminished chord, which is C, Eb and Gb. We then add the major 7<sup>th</sup> note to C major chord, which is always B*

***Exercise***

*Apply what you have learned so far by playing the following chords on your instrument:*

**Gm7**

**F#7**

**Cmaj9 add13**

**Also practice other combination chords to get use to the fingering of chords. Make sure to use your knowledge of intervals to construct your chords.**

Quiz #11

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

Which chord type listed below is not a triad?

- Diminished
- minor
- Major
- Combination

Which note in a triad does a suspended chord suspend?

- 3rd
- 4th
- 2nd
- 5<sup>th</sup>

What is the abbreviation for a G augmented chord?

- G+
- Ga
- G°
- Gα

What is the abbreviation for a G diminished chord?

- G+
- Ga
- G°
- Gα

What type of chord is an F#7?

- Altered
- Added Tone
- Combination
- Extended

What type of chord is a GMaj7 add 9?

- Altered
- Added Tone
- Combination
- Extended

What type of chord is a Dm9?

- Altered
- Added Tone
- Combination
- Extended

**The intervals in a seventh chord in order from left to right are:**

- Major 3<sup>rd</sup>, Minor 3<sup>rd</sup>, and Major 3<sup>rd</sup>
- Perfect 4<sup>th</sup>, Minor 3<sup>rd</sup>, and Minor 3<sup>rd</sup>
- Minor 3<sup>rd</sup>, Major 3<sup>rd</sup>, Minor 3<sup>rd</sup>
- Major 3<sup>rd</sup>, Minor 3<sup>rd</sup>, Minor 3<sup>rd</sup>

**The difference between the C7 and the Cm7 is one note. Which note is it?**

- 2<sup>nd</sup>
- 3<sup>rd</sup>
- 4<sup>th</sup>
- 5<sup>th</sup>

**List the notes in a Gb Major 7 chord from left to right.**

**What is the difference between an A7 and an AMaj7?**

*Extra Credit*

**Is a C7 #5, #9 a major chord or a minor chord? Explain your answer.**

## Lesson 7

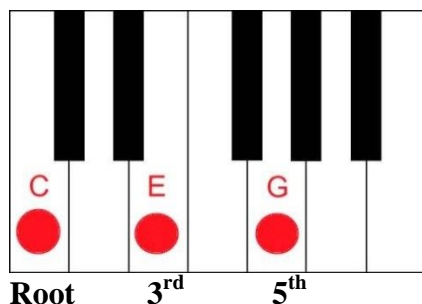
### Music Relations and Intervals:

### Diatonic Chords

As you learned in the previous lesson, a chord with 3 distinct notes is called a triad. No matter what three notes are played, it will always be determined and classified as a triad. The relative chords that also use triads are the minor, **diminished**, and **augmented chords**. These are all closely related to the major chord, and we will learn more about them later in the lesson. But as an introductory, here are ways to construct all four of these related triads:

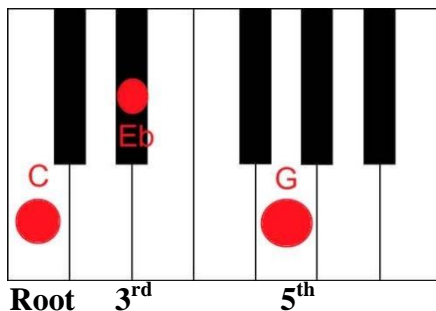
A **major triad** can be constructed using the following methods:

1. Given any major scale, the major triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing major scale.
2. The first note of the triad is the root note of a major scale, to find the next note you go up 4 half steps from the root note, and then to find the last note you go up 3 half steps from the 2<sup>nd</sup> note in the triad.



A **minor triad** can be constructed using the following methods:

1. Given any major scale, the minor triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing minor scale.
2. The first note of the triad is the root note of a minor scale. To find the next note you go up 3 half steps from the root note and then to find the last note you go up 4 half steps from the 2<sup>nd</sup> note in the triad.

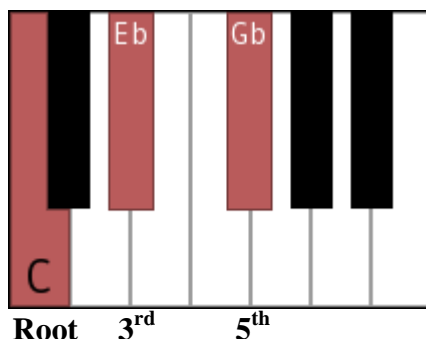


A **diminished triad** can be constructed using the following methods:

1. Given any diminished scale, the diminished triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing diminished scale.

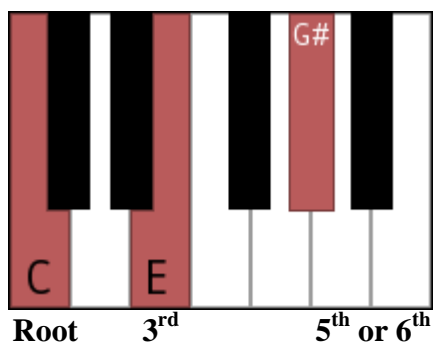


- The first note of the triad is the root note of a diminished scale. To find the next note you go up 3 half steps from the root note and then to find the last note you go up 3 half steps from the 2<sup>nd</sup> note in the triad.



An **augmented triad** can be constructed using the following methods:

- Given any **major harmonic scale**, the augmented triad consists of the root, the 3<sup>rd</sup>, and the 6<sup>th</sup> notes of the prevailing **major harmonic scale**. In this case, however, you can also assume the G note is just sharpened; therefore it remains the 5<sup>th</sup> note in a major triad.
- The first note of the triad is the root note of a major harmonic scale. To find the next note you go up 4 half steps from the root note and then to find the last note you go up 4 half steps from the 2<sup>nd</sup> note in the triad.



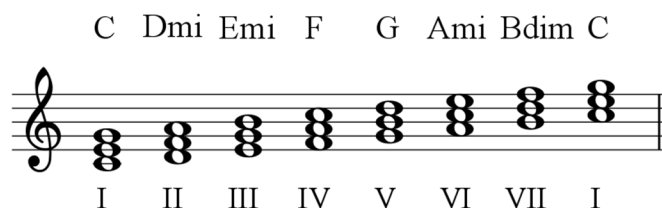
As you can see from the examples above, simply changing one note by either flattening or sharpening the note makes the chord completely different. A chord can be **altered** or **added** in so many different ways, as we will learn further in this lesson. When a chord is altered, existing note(s) in the chord are flatted, double flatted, sharpened, or double sharpened. When a chord is added to, notes of higher pitch and lower pitch can be included in the chord set.

**Diatonic scales** mostly are referred to as scales using none or the least amount of **chromatic** alteration. This means that the scale is required to contain predominately whole tones. **Chromatic scales** are opposite; they require that all intervals played are to be semitones, therefore including all 12 notes or more in a given scale. The chromatic scale plays all 7 natural notes and all 5 sharps and flats in any direction of pitch. The chromatic scale can work in any application, but the diatonic scale must play only the notes that are relative to the prevailing scale.

An example of a diatonic scale is a C major scale. The layout of the 7 natural notes defines diatonic. Any **modulations** of the major scale are considered to be diatonic as well, meaning a C# major is diatonic, an Eb major is diatonic, and so on. Minor scales are not considered to be diatonic, because it is

not a proper transposition of the major scale. Even though an A minor scale also has all white keys, it still is not considered diatonic because the pattern is a minor pattern. However, this is greatly argued in the music theological world.

There are names for every diatonic note in a diatonic scale. Since there are 7 notes in a major scale, in a given major chord, you can construct 6 additional chords that can go with the prevailing scale. This is accomplished simply by moving the root note of the chord up or down 1 pitch in the scale. In the C major, the root can be changed to D, then E, then F, and so on. Each of the root notes of each diatonic chord is called a **degree**. For example, C major has 7 different notes. C is considered the first degree, since it is the first note in the scale. D is considered the second degree, since it is the second note in the scale, and so on. This pattern continues until it restarts at the next available C, or the octave of the root note (see Figure 2.1)



**Figure 2.1**

In figure 2.1, each chord is called out at the top of the staff. As noted, the 1<sup>st</sup> degree is C major. The second degree is D minor. The reason these change is because the notes of the diatonic scale are moved over 1 whole step (or half step in some cases) to create another chord. The chord is then defined by what notes make it up. As you can see, in a **diatonic chord progression**, there are four minor chords and three major chords. Understanding the **diatonic chord progression** can further enhance your ability to write songs with an understanding of chord relationships.

Now that you understand degrees of the diatonic scale, you must also understand that each degree of the scale has a name associated with it. Diatonic scales are mostly major scales, and the triad diatonic progression includes major and minor chords. These chords are further specified by the following terms:

**Tonic**- the first scale degree of the diatonic scale and the tonal center or final resolution tone;

**Supertonic**- The second scale degree (the scale degree immediately "above" the tonic);

**Mediant**- The third scale degree (the "middle" note of the tonic triad);

**Subdominant**- The fourth scale degree (a fifth "below" the tonic);

**Dominant**- The fifth scale degree (the most "pronounced" harmonic note after the tonic);

**Submediant**- The sixth scale degree (the "middle" note of the subdominant triad);

**Leading tone**- (or leading note)- The seventh scale degree (the scale degree that "leads" to the tonic, this is also referred to as subtonic);

**\*\*Subtonic**- also seventh scale degree, but applying to the lowered 7th found in the natural minor scale.

Each of these names for the degrees in the diatonic scale has significant meaning and can further explain the role of each degree. Though not as often used except for more advanced theory, these names are

good to know because they bring further definition of the roles of each note in a diatonic chord progression.

### Exercise

- ❖ Practice playing the diatonic chord progression of C major
- ❖ Play the triad at the 5<sup>th</sup> degree of C major
- ❖ Play the triad at the 3<sup>rd</sup> degree of C minor
- ❖ At the 6<sup>th</sup> degree of a major triad, is the chord major or minor?

### Intervals

Given the previous lessons, so far you understand the whole step, half step, and octaves of a note. These terms are used to describe the space, or the interval, of a given note change that either elevates in pitch or lowers in pitch. We are going to give further meaning to the intervals, so that we can understand how chords are built and what relationship each note has with one another.

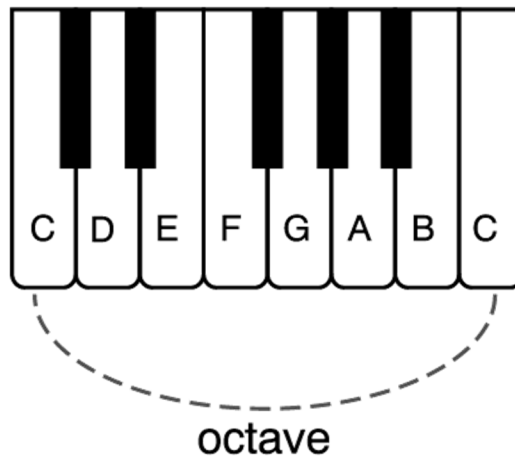


Figure 2.2

**Diatonic intervals** are intervals that belong in a specific group of a prevailing key or chord, sounding “right to the ear,” or in other words: sounding natural. The naming of these intervals consists of 2 parts, a prefix that describes the note and the degree of the highest note relative to the root note of the major scale. We can start with an example of the C major scale.

The interval from C to D is called a major 2<sup>nd</sup>, where the prefix “Major” indicates that the interval is diatonic to the major scale, and the degree “2<sup>nd</sup>,” lets us know that it plays the second degree of that major scale, which is D. It is that simple. The interval from C to G is called a perfect 5<sup>th</sup>. The “5<sup>th</sup>” refers to the degree of the major scale to play. The prefix “perfect” indicates that the intervals produce a

**consonant** sound, meaning the sound of the two or more intervals played together sound pleasant and natural. On the contrary you have a **dissonant** sound, in which when the two or more intervals are played together, they sound irregular or strange to the ear. Diatonic scales produce a high level of **consonance**, and chromatic scales produce a high level of **dissonance**.

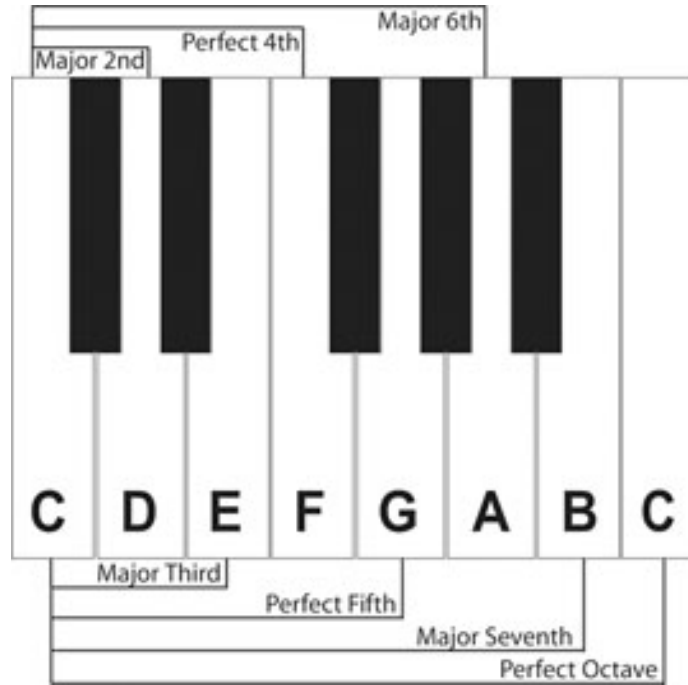


Figure 2.3

Just as there are eight respective notes in a completed diatonic scale, there are 8 interval callouts for each note in the diatonic scale. Let's look at what these will be in a C major diatonic scale (see figure 2.3)

The root (C) is referred as the **perfect 1<sup>st</sup>** or **unison**. **Unison** means that the note played is accompanied by another note of the same exact pitch and value.

The second degree (D) is called a **major 2<sup>nd</sup>**. A major 2<sup>nd</sup> tells us that the note is the second note in the prevailing major scale.

The third degree (E) is called a **major 3<sup>rd</sup>**. A major 3<sup>rd</sup> tells us that the note is the third note in the prevailing major scale.

The fourth degree (F) is called a **perfect 4<sup>th</sup>**. A perfect fourth lets us know that the note is the fourth note in the diatonic scale.

The fifth degree (G) is called a **perfect 5<sup>th</sup>**. A perfect fifth lets us know that the note is the fifth note in the diatonic scale.

The sixth degree (A) is called a **major 6<sup>th</sup>**. A major 6<sup>th</sup> tells us that the note is the sixth note in the prevailing major scale.

The seventh degree (B) is called the **major 7<sup>th</sup>**. The major 7<sup>th</sup> tells us that the note is the seventh note in the prevailing major scale.

The eighth note in the scale (C) is called the **perfect 8<sup>th</sup>** or **octave**. An octave is a series of eight notes occupying the interval between two notes, one having twice or half the frequency of vibration of the other. This note in a diatonic scale is the note that fully completes the scale.

There are also the **major 9<sup>th</sup>**, **perfect 11<sup>th</sup>** and the **major 13<sup>th</sup>** when you consider chord building. These three intervals stretch beyond an octave but still remain true to the diatonic scale. In simpler terms, here is how each of the diatonic intervals work:

**Perfect 1<sup>st</sup>** – Play the root note of the scale

**Major 2<sup>nd</sup>**- Count up one whole step from the root note

**Major 3<sup>rd</sup>**- Count up two whole steps from the root note

**Perfect 4<sup>th</sup>**- Count down one whole step from the fifth note in the scale

**Perfect 5<sup>th</sup>**- Play the fifth note of the scale

**Major 6<sup>th</sup>**- Count up one whole step from the fifth note

**Major 7<sup>th</sup>**- A half step shy of an octave

**Octave**- A complete octave from the root note

**Major 9<sup>th</sup>**- Same note as the major 2<sup>nd</sup> but one octave higher; the 9<sup>th</sup> note in the scale

**Perfect 11<sup>th</sup>**- Same note as the perfect 4<sup>th</sup> but one octave higher; the 11<sup>th</sup> note in the scale

**Major 13<sup>th</sup>**- Same note as the major 6<sup>th</sup> but one octave higher; the 13<sup>th</sup> note in the scale

These intervals are key to be used in chord building. It is important to be absolutely familiar with these intervals in order to attempt to alter and add to your triad chords.

In addition to the **major** and **perfect** intervals, there is also the **minor** and **diminished** interval. There are two main **minor intervals**, the minor 3<sup>rd</sup> and the minor 7<sup>th</sup>. All instances of minor intervals require that the major interval of the degree be flatted. When a major third is flatted, it then becomes a minor third. But when a major 7<sup>th</sup> is flatted, it becomes a lowered 7<sup>th</sup> matching that of the natural minor scale. However unlike the 3<sup>rd</sup>, the minor 7<sup>th</sup> can be added to a major chord. There is one note that is considered to be the **diminished interval**, and that is the flatted 5<sup>th</sup>. This interval is referred to as the **diminished 5<sup>th</sup>**. We will explore that further in the lesson.

In conclusion, the major, perfect, unison, and octave intervals all are considered diatonic intervals. The minor and diminished intervals are considered **chromatic intervals**. In contrast, the major, perfect, unison, and octave intervals can also be considered chromatic intervals. However, these intervals are limited to the diatonic set and thereby are dominantly considered as diatonic intervals.

## Transposing Notes

**Transpose** means to raise or lower the pitch of a prevailing note by a specified interval. An example of transposing would be changing a C major chord to a C# major chord. The term transpose is more commonly used to specify the change in the prevailing key of a song. For example, if a song is

originally written in C major, one can transpose that song to be played instead in C# major. The amount that a note or chord is transposed is defined by two things: how many half or whole steps are added or subtracted to the original note, and what direction to go. Changes in pitch are quite common in songs, but not every changed pitch in a song is necessarily transposing. Transposing can be easily confused with simple diatonic or chromatic intervals that are changed or altered as the song progressed. This is accomplished in the song by adding irregular chord progressions, commonly noted as **chromatic chord progressions**, to add dissonance in the song. Irregularity is used to make the song unique and challenging to the listening ear. But transposing more refers to the change in the actual key of the song. Many songs transpose twice; once rising in pitch, then another time returning back to the original pitch that the song is played in.

Another word for transpose is to **modulate**. Modulation is used more for vocal studies than piano.

## Understanding Chromatics

Chromatic is a musical term that is used to define the progression of notes that advance only by semitones. Just as chromatic notes are useful in scales, they are just as useful with chords. In modifying chords and chord progressions, chromatics play a key role in it. When you flatten or sharpen a note, that note is chromatic to the note that it previously was. In other words, any time a note is changed by a semitone means that you are using a chromatic change. Chromatic changes can have dramatic effects to a song.

Now that you understand chromatics, it is time to apply them to your playing so far. The theory we went over so far introduced you to the C major scale and chord. Using chromatics, try applying your knowledge further by transposing what you have learned to other keys greater than C major and minor. Remember how both the chords and the scales are composed, and remember in every key the same rules apply. We will further look at chords in the next session.

Quiz #12

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**Which note changes in a C Major chord to a C minor chord?**

- The 1<sup>st</sup> (C)
- The 2<sup>nd</sup> (D)
- The 3<sup>rd</sup> (E)
- The 5<sup>th</sup> (G)

**Describe how each of the following triads is constructed in one sentence.**

- A) Major-
- B) minor-
- C) Diminished-
- D) Augmented-

**Diatonic Scales are: (Choose the closest answer)**

- the opposite of chromatic scales
- similar to a major scale
- collection of note intervals that consist of whole tones
- collection of notes that sound “right to the ear”

**True or False: The A minor scale is a diatonic scale because it consists of all natural notes.**

- True
- False

**The 5<sup>th</sup> degree of a D# Major is what type of chord?**

- Major
- minor
- Diminished
- Augmented

**The 7<sup>th</sup> degree of an F Major is what type of chord?**

- Major
- minor
- Diminished
- Augmented

**The 2<sup>nd</sup> degree of a G Major is what type of chord?**

- Major
- minor
- Diminished
- Augmented



**What note is considered the 6<sup>th</sup> degree of a D major scale?**

- G
- B
- E
- D

**The 5<sup>th</sup> degree of a D# Major is what type of chord?**

- Major
- minor
- Diminished
- Augmented

**How many different notes are involved in a full diatonic triad chord progression starting from C and ending on octave C?**

- 7
- 21
- 8
- Unspecified

**How many degrees are in a single chromatic chord progression?**

- 7
- 12
- 23
- Unspecified

**True or False: The subdominant note is the 4<sup>th</sup> degree of a scale.**

- True
- False

**True or False: The tonic is any note one octave above the root note.**

- True
- False

**Which term is used to describe a lowered 7<sup>th</sup> degree?**

- Dominant
- Tonic
- Subtonic
- Leading Tone

**Which term is used to describe a lowered 3<sup>rd</sup> degree?**

- Mediant
- Supertonic
- Subdominant
- Minor Mediant

**How many semitones are in between a perfect 5<sup>th</sup>?**

- 15
- 13
- 12
- 7

Which note is a major 6<sup>th</sup> interval above the root of a G note?

- E
- F
- G
- A

Which interval is a unison note?

- Octave
- Perfect 5<sup>th</sup>
- Major 2<sup>nd</sup>
- Unspecified

List two ways to find a major 7<sup>th</sup> interval.

How many whole tones are in a major 3<sup>rd</sup> interval?

- 1
- 2
- 3
- 4

### *Extra Credit*

Thinking of intervals such as the major 2<sup>nd</sup> and minor 3<sup>rd</sup>, how many diminished intervals are there?

- 1
- 3
- 5
- 4
- None of the above

Describe the functional difference between the subtonic and leading note. Make sure to use examples.

## Lesson 8

### Scales and Modes:

Scales are an essential part of music. In this lesson, you should be familiar with most of the types of scales, in every key.

#### Major Scales

Major scales are played with a whole tone half tone pattern of 2 2 1 2 2 2 1, where 2 is a whole tone and 1 is a half tone. Visit the end of this lesson to view the notes and fingering for all 12 major scales.

#### *Exercise*

Practice each major scale with the above fingering on the piano. Don't hesitate to take notes in ways that you can understand them.

#### Minor Scales

The **natural minor scales** are played with a whole tone half tone pattern of 2 1 2 2 1 2 2, where 2 is a whole tone and 1 is a half tone. Each minor scale shares the same notes in a major scale, except they start 3 half steps below each major scale. In this case the natural minor scale is referred to as a **relative minor scale**, because of how directly related it is to the major scale. An example is C major and A minor share the same scale notes. A minor is actually 3 half steps under C. When we play the A minor scale, we are playing A, B, C, D, E, F, and G. The C major chord requires us to play C, D, E, F, G, A, and B. As you can see, the A minor scale plays all of the same notes, it just starts 3 half steps below.

The same is for all minor chords. The minor Bb plays the same notes as the major Db. The minor D plays the same notes as the F major. This helps a lot especially if you know the major scales. Once you learn the major scales, the minor scales are a much easier to play.

There are three types of minor scales, **natural** or **relative minor**, **harmonic minor**, and **melodic minor**. The **natural minor scale** can also be called the **relative minor scale**, because as we discussed above, natural minor scales are directly related to major scales (a 3 half step difference). Natural minor scales are the regular, or normal minor scales, with a whole tone half tone pattern of 2 1 2 2 1 2 2. **Harmonic minor scales** are the same as natural minors except we raise the minor 7<sup>th</sup> degree to make it a major 7<sup>th</sup> degree. The whole tone half tone pattern of a harmonic minor scale is 2 1 2 2 1 3 1. In C minor, this would mean that instead of playing a Bb, you would replace it with a B in the scale. The **melodic minor scale** goes one step further and raises the 6<sup>th</sup> and 7<sup>th</sup> degrees of a natural minor scale. The whole tone half tone pattern of a melodic minor scale is 2 1 2 2 2 2 1.

The natural minor scale is a standard minor scale. It is just as much equally named the relative minor scale, especially when we refer to the circle of fifths. In the circle of fifths, every major key has a relative minor key that can directly be associated with it. This creates another circle of fifths inside the major circle for the minor keys. You can find all fingering and notes for the natural minor scale at the end of this lesson.

The harmonic minor scale is the same as the natural minor scale with exception of the raised 7<sup>th</sup> note. In the natural minor scale, every note sounds right to the ear except the lowered 7<sup>th</sup>. The 7<sup>th</sup> note, in

order to gain a high level of consonance, must be separated from the octave by a half step. Since the natural minor does not achieve this, the harmonic minor does. The 7<sup>th</sup> note can be referred to as the leading note, and in the case of a natural minor, the leading note is 1 whole step below the root note. To our ears, for whatever reason, a more natural sound is when the leading note is 1 half step below the root, making it a major 7. In an attempt to address this, the harmonic minor is formed.

The melodic minor scale is the same as the natural minor scale with exception of 2 degrees: the 6<sup>th</sup> and the 7<sup>th</sup>. The melodic minor scale was created in an attempt to smoothen the intervals out between the 6<sup>th</sup> and the 7<sup>th</sup> degrees in a harmonic minor scale. This scale is very close to being major, with exception to the minor 3<sup>rd</sup>.

### Other Scales

In addition to the major and minor scales, you can find many other scales as well. Either through cultural music or by accidental calculations, there are many unique scales out there, some with as few as 5 notes.

The diatonic scale, as we have already explored, is a scale that uses only notes that are related and sound “right to the ear”, using whole and half steps that naturally go together.

The **Whole Tone scale** is a scale that uses only whole tones and no half tones. This scale consists of 6 different notes, and if we started in C they would be as follows: C, D, E, F#, G#, A#.

The **Half Tone scale**, or the chromatic scale, is a scale that only uses half tones, or semitones. This scale consists of all 12 notes, and in every application, leaves no notes out.

An **Octatonic scale** is any eight note scale. This scale is called such in classical theory, but in jazz theory this type of scale is solely called a **Diminished scale**. There are three different variations of the diminished scale; due to its continual pattern of half and whole tone intervals. The whole tone half tone pattern in a diminished scale is 2 1 2 1 2 1 2 1.



### Three Diminished scales, Db, D and Eb

The **Double Harmonic scale** is a scale that lowers the 2<sup>nd</sup> and the 6<sup>th</sup> degrees of a major scale by a semitone. This scale is often referred to as the **Arabic scale** because this scale is used widely in Arabic music. There is also the **Double Harmonic Minor scale**, which is exactly like the harmonic minor scale except it raises the 4<sup>th</sup> degree by a semitone. This scale is also referred to as the **Gypsy scale**, or the **Hungarian Minor scale**.

The **Pentatonic scale** is a scale made up of 5 notes. There can be major pentatonic and minor pentatonic. The 1<sup>st</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 7<sup>th</sup> are played in a major pentatonic scale. The 1<sup>st</sup>, lowered 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 7<sup>th</sup> are played in a minor pentatonic scale.

## Modes

A mode is a scale that contains a characteristic pitch that distinguishes it from the major or minor scale from which it is derived. Modes are important to know if you want to be a jazz musician. Each mode is derived from a diatonic major scale degree, starting from 1 and ending at 7. That means there are exactly 7 modes. Do you recall how each triad at a given degree makes a different chord? This can also apply to scales, and that is where modes kick in.

There are 7 modes: the **Ionian mode**, the **Lydian mode**, the **Mixolydian mode**, the **Aeolian mode**, the **Dorian mode**, the **Phrygian mode**, and the **Locrian mode**.

The Ionian mode is another name for the major scale. This mode is played from any major scale at the first degree.

The Dorian mode is a natural minor scale with a raised 6<sup>th</sup> degree. This mode is played from any major scale at the 2<sup>nd</sup> degree.

The Phrygian mode is a natural minor scale with a lowered 2<sup>nd</sup> degree. This mode is played from any major scale at the 3<sup>rd</sup> degree.

The Lydian mode is a major scale with a raised 4<sup>th</sup> degree. This mode is played from any major scale at the 4<sup>th</sup> degree.

The Mixolydian mode is a major scale with a lowered 7<sup>th</sup> degree. This mode is played from any major scale at the 5<sup>th</sup> degree.

The Aeolian mode is another name for the natural minor scale. This mode is played from any major scale at the 6<sup>th</sup> degree.

The Locrian mode is a natural minor scale with a lowered 2<sup>nd</sup> and 5<sup>th</sup> degree. This mode is played from any major scale at the 7<sup>th</sup> degree.

A mode is easy to find, once you recognize the order they are in. If you want to find a mode quick, use the white keys. C major is the fastest and easiest way to find a mode. The mode at the 1<sup>st</sup> degree is Ionian, the second degree Dorian, the third degree Phrygian, the fourth degree Lydian, the fifth degree Mixolydian, the sixth degree Aeolian, and the seventh degree Locrian.

## How to use modes in melody

When you try to use these different modes in melody, things can get rather complex. Instead of jumping right into it and making use of all the modes at once, try one at a time. Modes can always change keys, as long as they keep the same intervals. In other words, a Lydian mode can be played in all

12 keys, and the only similarity all twelve Lydian modes have is the intervals played. Let's begin discussing an Ionian mode.

The Ionian mode starts at the root of the major chord. That means it is the same as the major chord. A C Ionian means that you play a melody in C major using all of the 7 notes in the C major. This is the same thing with all of the other notes.

The Dorian mode starts at the second degree of a major chord. Therefore, Ab Dorian means that you are playing a melody with all the notes you can find in a Gb major, because Ab is the second degree of a Gb major. Even though you are playing the notes in a Gb major, that doesn't necessarily mean the prevailing key is in Gb. If in fact the prevailing key is Gb major, then Ab will be your base note, making it a mere Ab11 chord.

The Phrygian mode starts at the third degree of a major chord. Therefore, an A Phrygian means that you are playing a melody with all the notes you can find in an Ab major, because A is the third degree of an Ab major. Remember however that A is considered the root note in the melody. Modes share notes with major scales just like relative minors do; and though they share the same notes, they are definitely not the same.

The Lydian mode starts at the fourth degree of a major chord. Therefore, a B Lydian means that you are playing a melody with all the notes you can find in an F# major, because B is the fourth degree of an F# major. Remember however that B is considered the root note in the melody. Modes share notes with major scales just like relative minors do; and though they share the same notes, they are definitely not the same.

The Mixolydian mode starts at the fifth degree of a major chord. Therefore, a C Mixolydian means that you are playing a melody with all the notes you can find in an F major, because C is the fifth degree of an F major. Remember however that C is considered the root note in the melody. Modes share notes with major scales just like relative minors do; and though they share the same notes, they are definitely not the same.

The Aeolian mode starts at the sixth degree of a major chord. So then, a C Aeolian means that you are playing a melody with all the notes you can find in an Eb major, because C is the sixth degree of an Eb major. Remember however that C is considered the root note in the melody. Modes share notes with major scales just like relative minors do; and though they share the same notes, they are definitely not the same.

The Locrian mode starts at the seventh degree of a major chord. So then, an F Locrian means that you are playing a melody with all the notes you can find in a Gb major, because F is the seventh degree of a Gb major. Remember however that F is considered the root note in the melody. Modes share notes with major scales just like relative minors do; and though they share the same notes, they are definitely not the same.

## *Exercise*

- ❖ Before you move on to the next lesson, make sure you are familiar with each of the major and minor scales, by application. Practice each scale using the proper fingering.
- ❖ Create a short melody for each mode. Make sure that your melody includes all of the notes in the mode that you are using.
- ❖ Know the difference between natural, harmonic, and melodic minors.



## MAJOR SCALES

A Major Scale: A, B, C#, D, E, F#, G#, A

RH: 123 12345

LH: 54321 321



Ab Major Scale: Ab, Bb, C, Db, Eb, F, G, Ab

RH: 23 123 123

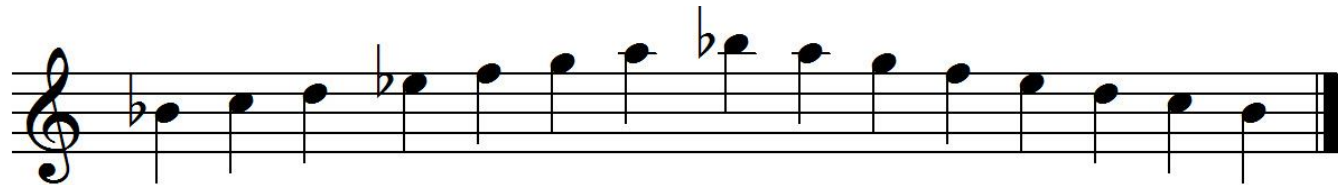
LH: 321 4321 2



Bb Major Scale: Bb, C, D, Eb, F, G, A, Bb

RH: 2123 1234

LH: 321 4321 2



B Major Scale: B, C#, D#, E, F#, G#, A#, B

RH: 123 12345

LH: 54321 321



C Major Scale: C, D, E, F, G, A, B, C

RH: 123 12345

LH: 54321 321



C# Major Scale: C#, D#, E#, F#, G#, A#, B#, C#

RH: 23 12341 2

LH: 321 4321 2



D Major Scale: D, E, F#, G, A, B, C#, D

RH: 123 12345

LH: 54321 321



Eb Major Scale: Eb, F, G, Ab, Bb, C, D, Eb

RH: 21234 123

LH: 321 4321 2



E Major Scale: E, F#, G#, A, B, C#, D#, E

RH: 123 12345

LH: 54321 321



F Major Scale: F, G, A, Bb, C, D, E, F

RH: 1234 1234

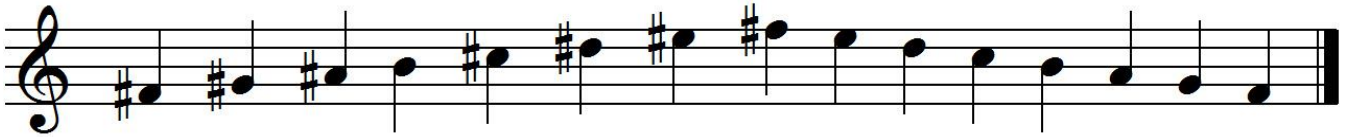
LH: 54321 321



F# Major Scale: F#, G#, A#, B, C#, D#, E#, F#

RH: 234 123 12

LH: 4321 321 2



G Major Scale: G, A, B, C, D, E, F#, G

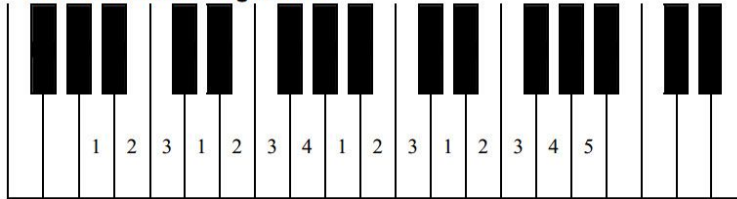
RH: 123 12345

LH: 54321 321

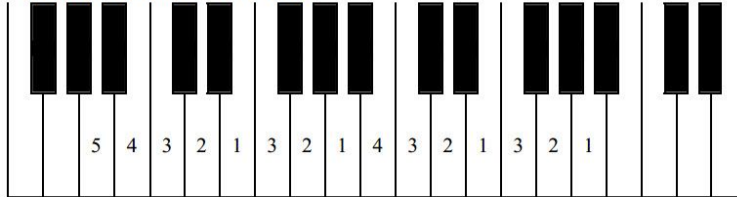


## Natural Minor Scales w/Fingering

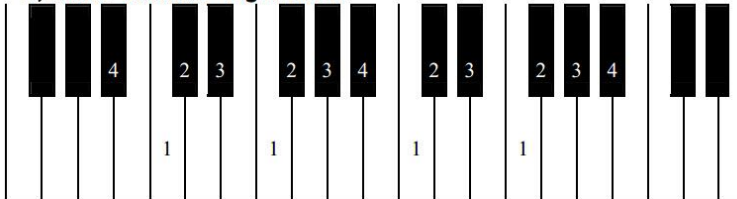
**a minor natural – right hand**



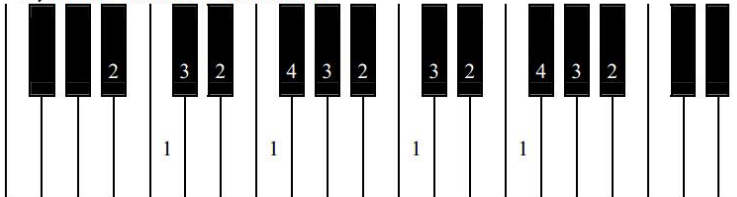
**a minor natural – left hand**



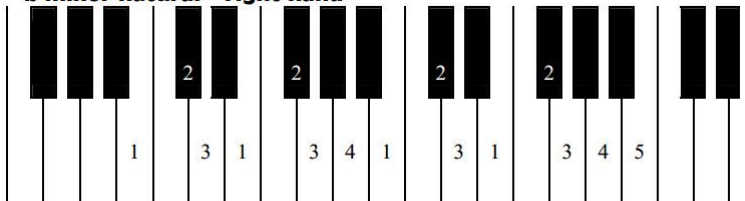
**b, minor natural – right hand**



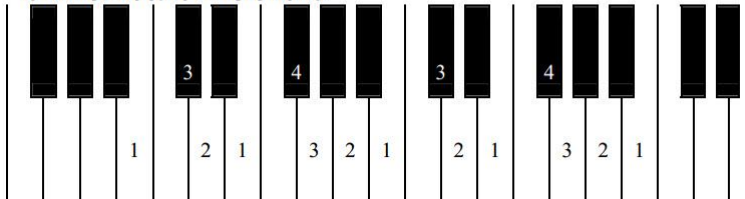
**b, minor natural – left hand**



**b minor natural – right hand**



**b minor natural – left hand**



**c minor natural - right hand**

A diagram showing the right hand fingering for the c minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F, C, G). The second group has two black keys (C, G) with a '3' above the G key and a '1' below the C key. The third group has three black keys (G, D, A) with a '2' below the G key, a '3' above the D key, and a '4' above the A key. The fourth group has two black keys (D, A) with a '3' above the A key and a '1' below the D key. The fifth group has three black keys (A, E, B) with a '2' below the A key, a '3' above the E key, and a '4' above the B key. The sixth group has two black keys (E, B) with a '3' above the B key and a '1' below the E key. The seventh group has two black keys (B, F) with a '5' below the B key.

**c minor natural - left hand**

A diagram showing the left hand fingering for the c minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F, C, G). The second group has two black keys (C, G) with a '3' above the G key and a '5' below the C key. The third group has three black keys (G, D, A) with a '2' below the G key, a '3' above the D key, and a '2' above the A key. The fourth group has two black keys (D, A) with a '3' above the A key and a '1' below the D key. The fifth group has three black keys (A, E, B) with a '2' below the A key, a '3' above the E key, and a '2' above the B key. The sixth group has two black keys (E, B) with a '3' above the B key and a '1' below the E key. The seventh group has two black keys (B, F) with a '1' below the B key.

**c# minor natural - right hand**

A diagram showing the right hand fingering for the c# minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F#, C#, G#). The second group has two black keys (C#, G#) with a '3' above the G# key and a '1' below the C# key. The third group has three black keys (G#, D#, A#) with a '2' below the G# key, a '3' above the D# key, and a '1' above the A# key. The fourth group has two black keys (D#, A#) with a '3' above the A# key and a '1' below the D# key. The fifth group has three black keys (A#, E#, B#) with a '2' below the A# key, a '3' above the E# key, and a '1' above the B# key. The sixth group has two black keys (E#, B#) with a '3' above the B# key and a '1' below the E# key. The seventh group has two black keys (B#, F#) with a '1' below the B# key.

**c# minor natural - left hand**

A diagram showing the left hand fingering for the c# minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F#, C#, G#). The second group has two black keys (C#, G#) with a '3' above the G# key and a '1' below the C# key. The third group has three black keys (G#, D#, A#) with a '4' below the G# key, a '3' above the D# key, and a '2' above the A# key. The fourth group has two black keys (D#, A#) with a '3' above the A# key and a '1' below the D# key. The fifth group has three black keys (A#, E#, B#) with a '4' below the A# key, a '3' above the E# key, and a '2' above the B# key. The sixth group has two black keys (E#, B#) with a '3' above the B# key and a '1' below the E# key. The seventh group has two black keys (B#, F#) with a '1' below the B# key.

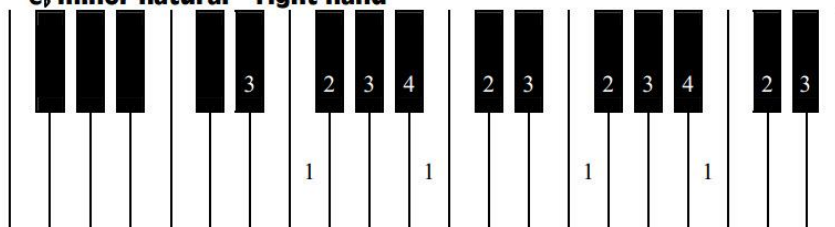
**d minor natural - right hand**

A diagram showing the right hand fingering for the d minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F, C, G). The second group has two black keys (C, G) with a '1' below the C key and a '2' below the G key. The third group has three black keys (G, D, A) with a '3' below the G key, a '1' above the D key, and a '2' above the A key. The fourth group has two black keys (D, A) with a '4' below the D key, a '1' above the A key, and a '2' above the A key. The fifth group has three black keys (A, E, B) with a '3' below the A key, a '1' above the E key, and a '2' above the B key. The sixth group has two black keys (E, B) with a '4' below the E key and a '5' below the B key. The seventh group has two black keys (B, F) with a '4' below the B key and a '5' below the F key.

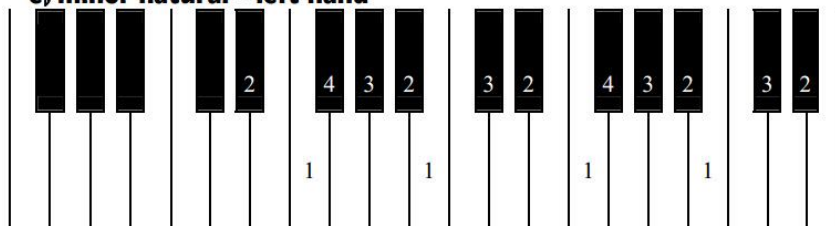
**d minor natural - left hand**

A diagram showing the left hand fingering for the d minor natural scale. The scale is represented by a sequence of seven groups of piano keys. The first group has three black keys (F, C, G). The second group has two black keys (C, G) with a '5' below the C key and a '4' below the G key. The third group has three black keys (G, D, A) with a '3' below the G key, a '2' above the D key, and a '1' above the A key. The fourth group has two black keys (D, A) with a '2' below the D key, a '1' above the A key, and a '4' above the A key. The fifth group has three black keys (A, E, B) with a '3' below the A key, a '2' above the E key, and a '1' above the B key. The sixth group has two black keys (E, B) with a '3' below the E key and a '1' below the B key. The seventh group has two black keys (B, F) with a '2' below the B key and a '1' below the F key.

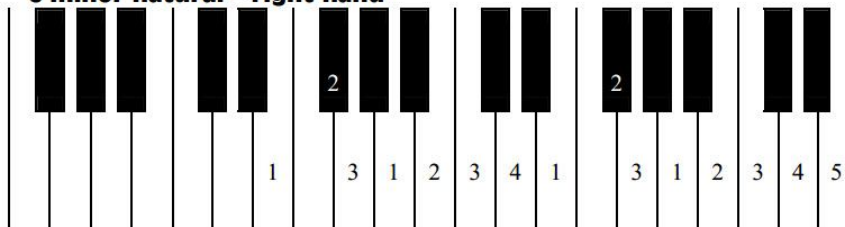
**e, minor natural – right hand**



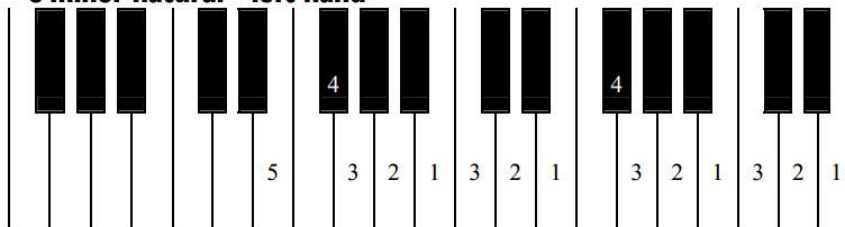
**e, minor natural – left hand**



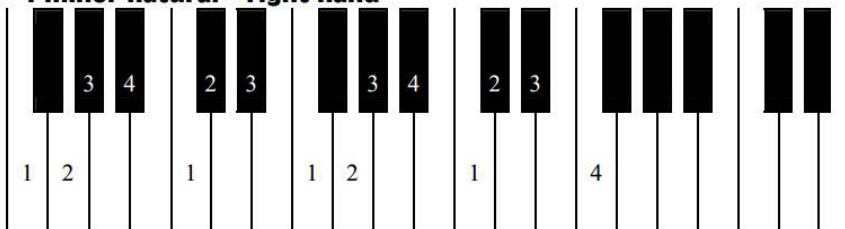
**e minor natural – right hand**



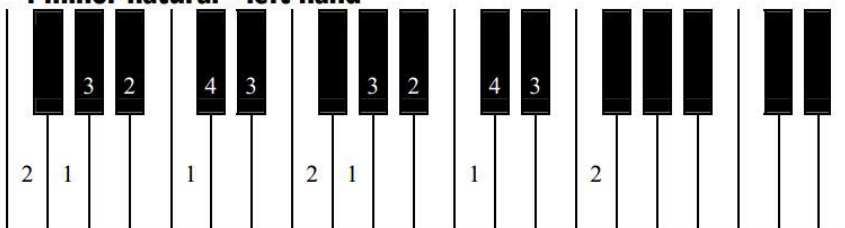
**e minor natural – left hand**



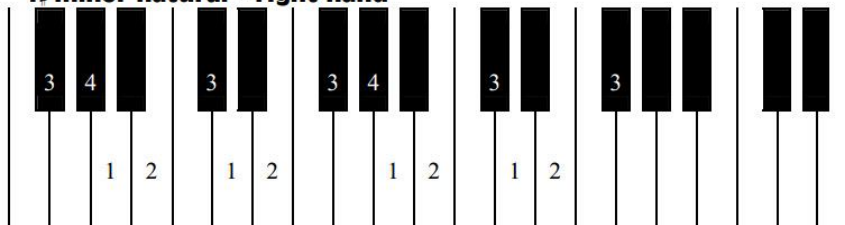
**f minor natural – right hand**



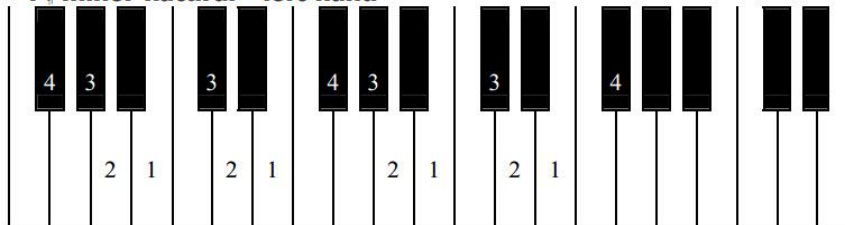
**f minor natural – left hand**



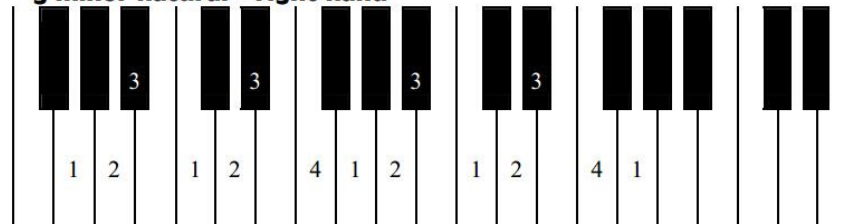
**f# minor natural – right hand**



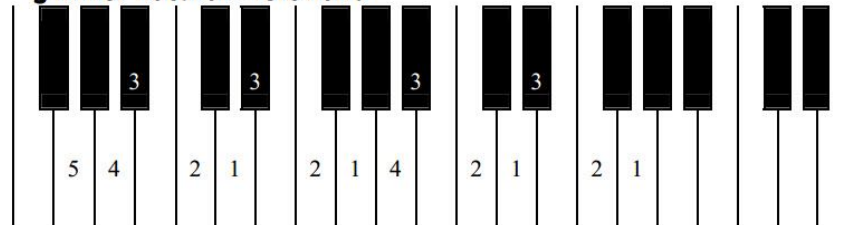
**f# minor natural – left hand**



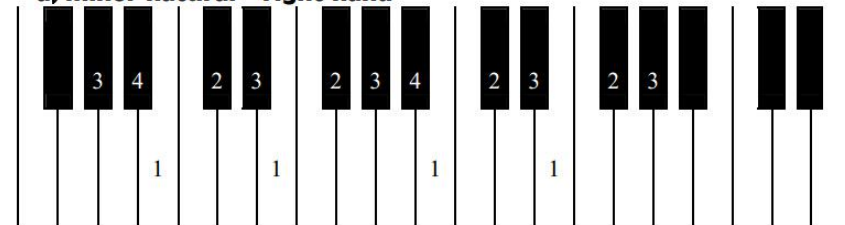
**g minor natural – right hand**



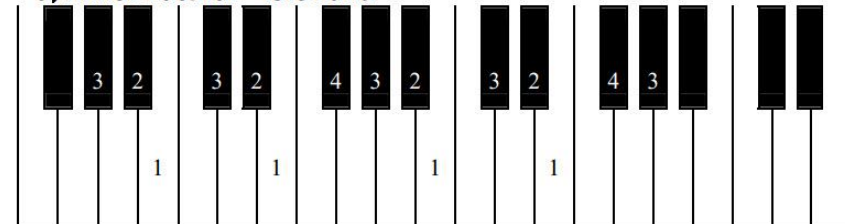
**g minor natural – left hand**



**a, minor natural – right hand**



**a, minor natural – left hand**





Quiz #13

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**There are three types of minor scales. One of them is a natural minor. Now that we know one of them, which one of the following three doesn't belong?**

- Melodic minor
- Harmonic minor
- Relative minor
- None of the above

**The only difference between a natural minor and a harmonic minor is a \_\_\_\_ 7<sup>th</sup>**

- Raised
- Altered
- Lowered
- Highered

**Another name for a Half-Tone scale is what type of scale?**

- Pentatonic
- Octatonic
- Diatonic
- Chromatic

**Another named used for the diminished scale is what type of scale?**

- Pentatonic
- Octatonic
- Diatonic
- Chromatic

**True or False: A double harmonic scale has a major 3rd interval.**

- True
- False

**If you raise the 4<sup>th</sup> degree of a harmonic minor scale by 1 semitone, what type of scale would you create?**

- Harmonic Major
- Minor Pentatonic
- Double Harmonic
- Chromatic

**If you play a scale in the Aeolian mode, what type of scale are you playing?**

- Natural Major
- Natural Minor
- Octatonic
- Chromatic

**True or False: the Locrian Mode allows you to play a major scale with a lowered 2<sup>nd</sup> and 5<sup>th</sup> degree.**

True

False

*Extra Credit*

**Write the following notes according to the modes listed below.**

C Dorian-

D Locrian-

F# Mixolydian-

G Aeolian-

Db Phrygian-

Bb Ionian-

Ab Lydian-

## Arpeggios and Note Arrangements:

A song is always written in a particular prevailing key. With that in mind, naturally you assume that all notes and chord progressions that are made within the song will be played to reflect that prevailing key. In most instances, that is the case. The prevailing key is the foundation of the harmony and pitch choices for a composer. In plenty of cases however, the composer can take alternate approaches to the way music is written, by pushing the limits of a song and adding “irregular” notes. These types of changes challenge the brain and spark interest, because they are not natural to the ear. In songs, it is essential that all chord progressions and scales be played in the right key. We will study this in more depth.

So far, we went over introductions to chords and scales. One final category of composition to know is an **arpeggio**. **Arpeggios** are the notes of a chord played in succession, either ascending or descending in pattern. Chords, scales, and arpeggios are all cousins in this since they work together to produce songs. However, these three elements are not by themselves able to produce a complete song without rhythm. But for the most part, these three elements cover the basis of melody and harmony. Arpeggios are very similar to both chords and scales. Scales are related due to the execution of single notes in a patterned equation, which is dispersed over the keyboard. Chords are related due to defining the pattern of the arpeggio.

An arpeggio can sometimes be confused with a scale. A rule of thumb states that a series of 5 or more notes repeated over octaves is a scale, and a series of 5 or less notes repeated over octaves is considered an arpeggio. Note that this is a rule of thumb and does not always apply to scales and arpeggios. A standard arpeggio is a major arpeggio. The major arpeggio consists of 3 notes: the root, 3<sup>rd</sup>, and 5<sup>th</sup>; just like the major chord. Further, a major arpeggio *is* made up of a major chord. A chord, no matter what chord, defines arpeggios. A chord with 6 or more notes can in fact be an arpeggio, however if the series of notes happen to define a scale, then that series of notes is more likely to be called a scale.



Sample C major Arpeggio played over 1 octave

If one were to play a C major chord, it would work well with a C major arpeggio. In a song, playing chords, scales, and arpeggios are essential to making it sound good. Each of these is distinguishable in any song. You can test out your ear by listening to your favorite song. Listen to how the harmonies come together, and then listen to the melodies. The harmonies (when two or more notes are played or sung together) are your chord (progressions). The melodies can be either your scales or your arpeggios (single distinct notes). In a song, the main melody is what you hum to yourself when you think of it. In that melody rests simple or complex modes and arpeggios that are played around the prevailing key.

In improvising, the artists use scales and arpeggios to make their solo sound good. But, how does the soloist know when to use a scale and when to use an arpeggio in their solo? The difference is application. Scales tend to help a lot in shorter intervals, whereas arpeggios allow the soloist to explore larger intervals and travel the distance of the keyboard in a short period of time.

In basic songwriting, writers will use notes and chords that are diatonic to the prevailing key. For example, a prevailing key of C major can house a D minor, E minor, F major, G major, A minor, and a B diminished chord with all their inversions. It is with great significance that there are three major chords, three minor chords, and one diminished chord. Songs that harbor these variations of chords are successfully written. When songs are written in a major chord, commonly, a lot of interest is put on the 1<sup>st</sup>, 4<sup>th</sup>, and 5<sup>th</sup> degree chords due to the fact that they all are closest related. And since the prevailing key is a major, that usage feels natural to any songwriter. Things get a little more advanced when the songwriter decides to utilize the minor chords. The great thing about music is you can explore to great depths, and the exploration never has to end.

### *Exercise*

- ❖ Using your knowledge of chords, practice arpeggios using the same fingering as shown in the diagrams below. Practice a mixture of major and minor triad arpeggios over multiple octaves.
- ❖ Practice arpeggios using your knowledge of the 7 major modes.
- ❖ Practice the minor and major pentatonic arpeggio.

### **WARM-UP ROUTINE**

Using what you know so far, it is important to start working on a warm up routine so that every time you get ready to practice, you can warm up your fingers, hands, and posture in playing. At this point, you should spend approximately 30 minutes warming up before you practice a song. To access a suggested warm up routine, go to the free resources page at [www.johnspianolesson.com](http://www.johnspianolesson.com) and pick the appropriate lesson.

# MAJOR ARPEGGIOS

**C Major**

**G Major**

**D Major**

**A Major**

**E Major**

**B Major**



**F# Major**

**Db Major**

**Ab Major**

**Eb Major**

**Bb Major**

**F Major**

## MINOR ARPEGGIOS

**A minor**

**E minor**

**B minor**

**F# minor**

**C# minor**

**G# minor**



D# minor

Handwritten musical notation for D# minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 1 2 3 1 2 3 5, 1 2 4 1 2 4 5, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 5 4 2 1 4 2 1, 5 4 2 1 4 2 1, and 5 3 2 1 3 2 1.

Bb minor

Handwritten musical notation for Bb minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 2 3 1 2 3 1 2, 2 1 2 3 1 2 3, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 3 2 1 3 2 1 2, 2 1 3 2 1 3 2, and 5 3 2 1 3 2 1.

F minor

Handwritten musical notation for F minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 1 2 3 1 2 3 5, 2 1 2 3 1 2 3, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 5 4 2 1 4 2 1, 4 2 1 4 2 1 2, and 5 3 2 1 3 2 1.

C minor

Handwritten musical notation for C minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 1 2 3 1 2 3 5, 2 1 2 3 1 2 3, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 5 4 2 1 4 2 1, 4 2 1 4 2 1 2, and 5 3 2 1 3 2 1.

G minor

Handwritten musical notation for G minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 1 2 3 1 2 3 5, 2 1 2 3 1 2 3, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 5 4 2 1 4 2 1, 4 2 1 4 2 1 2, and 5 3 2 1 3 2 1.

D minor

Handwritten musical notation for D minor. The exercise consists of three measures, each with a treble and bass clef staff. The treble clef part features a sequence of eighth notes with fingerings: 1 2 3 1 2 3 5, 1 2 4 1 2 4 5, and 1 2 3 1 2 3 5. The bass clef part features a sequence of eighth notes with fingerings: 5 4 2 1 4 2 1, 5 4 2 1 4 2 1, and 5 3 2 1 3 2 1.

**Quiz #14**

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**True or False: A C minor arpeggio has 4 different notes played in sequence.**

True

False

**The difference between a scale and an arpeggio is determined by:**

Intervals

Notes

Pitch

Style of music

**Is an arpeggio closer related to a scale or a chord?**

Scale

Chord

*Extra Credit*

**List the notes used in a Dm9 add 11 arpeggio.**

# INVENTION

NO 10 IN G MAJOR

Johann Sebastian Bach

**Presto.** (♩ = 152.)

The musical score is presented in five systems, each with a grand staff (treble and bass clefs). The key signature is one sharp (F#) and the time signature is 3/8. The first system begins with a forte (*f*) dynamic and includes fingerings 1, 2, 4 in the right hand and 2, 4, 3, 5 in the left hand. The second system is marked *poco dim.* and features fingerings 5, 3, 1, 2, 1 in the right hand and 1, 3 in the left hand. The third system starts with a forte (*f*) dynamic and includes fingerings 1, 3, 2, 4 in the right hand and 2, 1, 1, 3, 5, 2, 3 in the left hand. The fourth system is marked *p* and *cresc.* and includes fingerings 2, 3 in the right hand and 5, 1 in the left hand. The fifth system begins with a forte (*f*) dynamic and includes fingerings 4, 2 in the right hand and 3, 3 in the left hand, followed by a mezzo-forte (*mf*) section with fingerings 1, 2, 4 in the right hand and 3, 3 in the left hand.

First system of musical notation. The treble clef staff contains a half note G4, a quarter note A4, a quarter note B4, and a quarter rest. The bass clef staff contains a half note G3, a quarter note A3, a quarter note B3, and a quarter note C4. The second measure has a half note G4, a quarter note A4, and a quarter note B4. The third measure has a half note G4, a quarter note A4, and a quarter note B4. A *cresc.* marking is present above the third measure. Fingerings 1, 2, and 4 are indicated below the bass staff.

Second system of musical notation. The treble clef staff has a half note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bass clef staff has a half note G3, a quarter note A3, a quarter note B3, and a quarter note C4. The second measure has a half note G4, a quarter note A4, and a quarter note B4. The third measure has a half note G4, a quarter note A4, and a quarter note B4. A *tr* (trill) marking is above the G4 in the third measure. A *f* (forte) dynamic marking is above the second measure. Fingerings 2, 4, 3, 2, 1, 3, 2 are indicated below the bass staff.

Third system of musical notation. The treble clef staff has a half note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bass clef staff has a half note G3, a quarter note A3, a quarter note B3, and a quarter note C4. The second measure has a half note G4, a quarter note A4, and a quarter note B4. The third measure has a half note G4, a quarter note A4, and a quarter note B4. A *tr* (trill) marking is above the G4 in the second measure. Fingerings 1, 3, 2, 3, 2, 2, 1, 2 are indicated below the bass staff.

Fourth system of musical notation. The treble clef staff has a half note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bass clef staff has a half note G3, a quarter note A3, a quarter note B3, and a quarter note C4. The second measure has a half note G4, a quarter note A4, and a quarter note B4. The third measure has a half note G4, a quarter note A4, and a quarter note B4. A *cresc.* marking is above the second measure. Fingerings 1, 3, 2, 3, 1, 1, 2, 3, 4, 5, 3 are indicated below the bass staff.

Fifth system of musical notation. The treble clef staff has a half note G4, a quarter note A4, a quarter note B4, and a quarter note C5. The bass clef staff has a half note G3, a quarter note A3, a quarter note B3, and a quarter note C4. The second measure has a half note G4, a quarter note A4, and a quarter note B4. The third measure has a half note G4, a quarter note A4, and a quarter note B4. A *ff* (fortissimo) dynamic marking is above the first measure. A *dim.* (diminuendo) marking is above the second measure. A *f* (forte) dynamic marking is above the third measure. Fingerings 3, 3, 3, 2, 3, 5, 1, 1, 3, 5 are indicated below the bass staff.



# INVENTION NO 15 IN B MINOR

Johann Sebastian Bach

**Allegro non troppo.** (♩ = 104.)

The musical score for Invention No. 15 in B Minor by Johann Sebastian Bach is presented in five systems. Each system consists of a treble and bass clef staff. The key signature is B minor (two sharps: F# and C#), and the time signature is 3/4. The tempo is marked "Allegro non troppo" with a quarter note equal to 104 beats per minute. The score begins with a piano (*p*) dynamic. The first system includes a mezzo-forte (*mf*) dynamic marking. The second system features a crescendo (*cresc.*) marking. The third system starts with a forte (*f*) dynamic. The fourth system includes a decrescendo (*dim.*) marking. The piece concludes with a final cadence. Fingering numbers (1-5) are indicated throughout the score to guide the performer.

The first system of music consists of two staves. The right staff (treble clef) begins with a quarter rest, followed by eighth-note patterns with fingerings 2, 3, 2, 1, 2, 5, 3, 4. The left staff (bass clef) starts with a piano (*p*) dynamic and features eighth-note patterns with fingerings 8, 2, 2, 2. A crescendo (*cresc.*) marking is placed above the right staff in the second measure.

The second system continues with two staves. The right staff (treble clef) has eighth-note patterns with fingerings 2, 2, 3, 2, 2, 3, 2. The left staff (bass clef) has eighth-note patterns with fingerings 2, 1, 3, 2, 2, 2, 8, 1, 3, 2. A mezzo-forte (*mf*) dynamic is marked in the first measure, and a crescendo (*cresc.*) marking is in the second measure.

The third system features two staves. The right staff (treble clef) has eighth-note patterns with fingerings 5, 2, 2, 2, 5, 2, 2, 1, 3, 2, 2, 2. The left staff (bass clef) has eighth-note patterns with fingerings 1, 2, 4, 2, 5, 3. A forte (*f*) dynamic is marked in the second measure.

The fourth system consists of two staves. The right staff (treble clef) has eighth-note patterns with fingerings 5, 3, 4, 2, 1, 3, 2, 3, 2, 3, 2, 5. The left staff (bass clef) has eighth-note patterns with fingerings 3, 2, 2, 2, 2, 4. Dynamics include *dim.* in the first measure and *mf* in the second measure.

The fifth system consists of two staves. The right staff (treble clef) has eighth-note patterns with fingerings 2, 2, 1, 2, 2, 2. The left staff (bass clef) has eighth-note patterns with fingerings 3, 2, 2, 4, 2, 1. Dynamics include *cresc.* in the first measure and *dim.* in the second measure.

# SONATINA

Op 36 No 1

Muzio Clementi

**Allegro.**

The musical score is presented in four systems, each with a treble and bass clef staff. The first system begins with a forte (*f*) dynamic and includes fingering numbers 2, 4, 2, 1, 5, 1, 3, 4. The second system features a piano (*p*) dynamic and includes fingering numbers 5, 4, 2, 4, 3, 5, 1, 4, 2, 3, 1, 4, 2, 3, 1, 4, 2. The third system returns to a forte (*f*) dynamic and includes fingering numbers 1, 1, 2, 5, 4, 5, 1, 1, 2, 5, 4, 5. The fourth system concludes the piece with a repeat sign and includes fingering numbers 1, 2, 4, 5, 4, 1, 3, 2, 2, 2, 4, 5, 1, 5, 4.



2/5

The first system of music consists of two staves. The right-hand staff begins with a piano (*p*) dynamic marking. It contains four measures of music with various fingerings: 2, 4, 2, 4, 5, 4, 2, 3, 1, 2, 3. The left-hand staff has a bass clef and contains two measures of music with fingerings 1 and 2.

The second system of music consists of two staves. The right-hand staff begins with a forte (*f*) dynamic marking. It contains four measures of music with various fingerings: 2, 5, 1, 5, 2, 3, 2, 5, 1. The left-hand staff has a bass clef and contains four measures of music with fingerings 2, 1, 5, 2, 1.

The third system of music consists of two staves. The right-hand staff begins with a piano (*p*) dynamic marking. It contains four measures of music with various fingerings: 2, 4, 3, 4, 5, 4. The left-hand staff has a bass clef and contains four measures of music with fingerings 2, 5, 1.

The fourth system of music consists of two staves. The right-hand staff contains four measures of music with various fingerings: 2, 1, 2, 4, 3, 2, 1, 2, 3, 5, 3, 4, 3, 1, 2, 1, 1, 2. The left-hand staff has a bass clef and contains four measures of music with fingerings 2, 2. A *cresc.* marking is present in the second measure, and a *f* marking is present in the fourth measure.

The fifth system of music consists of two staves. The right-hand staff contains four measures of music with various fingerings: 5, 4, 5, 1, 2, 5, 4, 5. The left-hand staff has a bass clef and contains four measures of music with fingerings 4, 4.

The sixth system of music consists of two staves. The right-hand staff contains four measures of music with various fingerings: 1, 2, 4, 5, 4, 5, 1, 4, 1, 4, 2, 3, 1, 4, 2, 3, 1. The left-hand staff has a bass clef and contains four measures of music with fingerings 3, 2, 1, 2, 5.

*Andante.*

*dolce*  
*legato*

*cresc.* *f > p*

*cresc.* *f* *ten.* *f > p*

*f > p*

*dolce*

*dimin.* *f*

a)

a)



**Vivace.**

The sheet music is arranged in six systems, each with a treble and bass staff. The tempo is marked 'Vivace.' and the time signature is 3/8. The dynamics are *p*, *f*, *p*, *f*, *p*, and *p*. The piece includes various musical notations such as slurs, accents, and fingerings (1-5). The final system concludes with a *dimin.* instruction.

5/5

The image displays a six-system piano score in 5/5 time. The notation is written for both the right and left hands on grand staves. The piece begins with a *pp* (pianissimo) dynamic in the first system. The second system features a *f* (forte) dynamic. The third system includes a *p* (piano) dynamic, and the fourth system features a *ff* (fortissimo) dynamic. The score is heavily annotated with fingering numbers (1-5) to guide the performer. The music consists of flowing eighth and sixteenth notes, often grouped with slurs and ties. The piece concludes with a final cadence in the sixth system.

# Ear Training Lessons 1-6





## Lesson 1

### Sound, Noise and Tone

#### Introductions

As depicted by the title, this course will go over the essentials in learning how to train your ear to reach its maximum potential when using it in music. Obviously the ear plays a key role in music, because without it, you would be disconnected from the audible melodies. However music is considered even deeper than that, because hearing a melody is just the beginning of **music comprehension**.

I once worked with a deaf man who on occasion nodded his head with a smile on his face to a constant rhythm. One day I had the courage to ask him, what exactly it was he was nodding to. The answer was simple to him, but baffling to me. Music! My first thought was, how in the world can you nod your head to music when you can't hear a thing? That is pretty amazing. This explains one thing; music goes deeper than what we can hear. It is something we live and breathe, and comes from the inside far beyond the physical ear.

Music comprehension is key to understand as a component completely separate from hearing melodies. This term defines something deeper, that every person on this earth has experienced. Music has only one location and that is in the soul of a man. God created us that way; we have the ability to create music because we were designed so intricately by the Creator to do so. This can simply be explained to a person with no musical training through humming. Do you ever wonder where this humming comes from? Because when you hum, you create a melody out of something that is already inside of you. This will describe the major role that the brain plays in ear training. Within the brain is the memory and the control headquarters where it determines what type of notes are being played from the outside; and it also has the ability to command the body to create melody from the inside. The brain is already pre-programed to do this from birth; however this ability evolves depending on what culture you live in.

A key word to remember when beginning to train your ear is **memory**. An example of memory can be given by our reactions to the type of music that we listen to. If you listen to predominately jazz music, in your alone time or quiet times, you will tend to hum jazz like melodies. The same is with any other kinds of music. Depending on what area of the world you live in, your brain will be shaped to operate in the predominant music of the area. As music shapes cultures, it shapes memories first. Humans are by nature submissive to their surroundings and tend to create a world that is based on whatever is around them. The things that surround us are what we make as “real”, and we begin to memorize those things, then we live by those things. In music, we can only create based on memory. Some may disagree, but surroundings and culture have everything to do with the way people write their music. It also plays a key role in what people listen to as well. That is why with every style of music, we can associate a type of person to that music. Such as when we think of hip hop and rap, we automatically think of African Americans and their culture. When we listen to classical, we automatically think of the Europeans. This is true for just about every style and just as it is common to think that way, most of the time it is true.

If music can shape the core value of who you are, then that means we are all naturally talented musicians, because subconsciously we can act out the music in our life through recognition. Just as our



heart beat has varying rhythms, so does music. Using the same principles in cultural “grouping” so to speak, it is possible that you can train that natural ability to work for your advantage in Ear Training!

## Sound

The first thing we are going to talk about in this lesson is sound. It is important to know what defines sound so that we can build a foundation. Anatomically, sound is a sequence of waves that vary depending on the source. In this case, we will be referring to the sound that is produced through musical instruments, more specifically the piano. There are two components of sound that I want to teach in this course:

### Tone

Tone is used to describe the regular, or constant pattern of sound vibrations produced. This constant pattern is described as producing a note. Pitch is the range of high and low notes heard on the piano, so in the case of regular patterns that are produced, you hear one or multiple notes of the same or different pitch.

### Noise

Noise is used to describe the irregular or inconstant pattern of sound vibrations produced. In this case, noise is referred to as a car passing by, or a scream, or scratch on a table. The origin of “noise” is when multiple pitches are at work at once, creating an unpredictable sound wave.

Both of these are important to understand foundationally because you can begin to start recognizing and classifying each of the sounds that you hear every day. This practice of **recognition** is the first of two components that I want to teach you in this course.

Below, please indicate whether each of the following are considered tone or noise.

- A dog barking
- A person talking
- A horn blowing
- A car starting
- A phone ringtone

## Dynamics

**Dynamics** are the range of loud and soft sounds that you hear. It is a term used to describe the level of tone or noise in volume a sound produces. Along with recognizing what produces tone and what produces noise, it is now important to recognize the dynamics of the two sound types. Take note of what makes a sound get louder and what makes a sound get softer. Recognizing this allows your ear not to grow deaf to any loud or soft tones that are played at the same time. The ear can be trained to hear whatever you want it to hear, it depends on what you listen for. In this case, listening for quieter and louder sounds in a non-bias way will teach your ear not to ignore anything.

It is very true that when you hear music, louder and softer sounds are played at the same time, all the time. In every song there will be two things going on, a more dominant sound and a more inferior sound. Both of these sounds create great songs, because in audio mixing, too much of anything can ruin

the sound. Consider going to a concert of your favorite artist. If you hear the guitar very loud, but every other instrument and singers faintly, you will not enjoy it because the mix is not balanced properly. But if you hear each instrument in its proper volume, you will be satisfied because it makes more sense. That is the importance of mixing. However, the brain is designed so amazingly that it subconsciously hears more than what it consciously hears. When it comes to hearing music, your subconscious picks up more sounds than your conscious. In ear training, we have to learn how to flip that around and train our brain to actively recognize every component of music, leaving none out, that way we can pinpoint notes and sounds.

## Tempo

**Tempo** is the musical term used for speed. In varying speeds, pitch recognition can become difficult. However it is essential to get used to hearing sounds and recognizing them as they are played in varying tempos.

**Rhythm** is the structure of sound. Each impulse shown in a sound wave is directly driven by some sort of rhythm. To know how to recognize rhythm both in structure and in application is important in ear training. It is not only relevant to know how to recognize pitch, but also the fast and slow changes from pitch to pitch. Now in practice, you can listen to sounds from songs or regular noise, to recognize the varying rhythms that are prevalent in every sound.

### The Subconscious Mind

The great thing about the subconscious is that memory and utilization are not hidden from the conscious. For example, you blink subconsciously. However, you can also control how many times you blink and blink on purpose using your conscious. This is the same concept in ear training. All you are doing is bringing to life what is already there in the first place. With a little knowledge of how to do that musically, you can master this technique!

Lesson 1 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**What is the fundamental difference between the structure of tone and noise?**

- Multiple pitches and single pitches
- Regular and irregular sound patterns
- Being in tune and out of tune
- Making sense and not making sense

**True or False: Varying dynamics means that you lose or gain the intensity of the song.**

- True
- False

**The most important tool you have in ear training is what?**

- Your ear
- Your playing
- Your memory
- Your talent

**The impulses in a sound wave portray what?**

- Time
- Tempo
- Rhythm
- Ear

**True or False: The subconscious picks up more sounds in a song than the conscious.**

- True
- False

## Lesson 2

### The Responsible Ear

#### Pitch

When it comes to music, the main idea is to recognize pitch. Secondly, we recognize rhythm. When sound enters the ear, the vibrated signals from the ear drum are processed in the brain. We recognize the sound by tone and by pitch. When we hear the sound by tone, we recognize the type of sound it is, such as if it is from a piano or a guitar. When we hear the sound by pitch, we recognize the range of high and low notes.

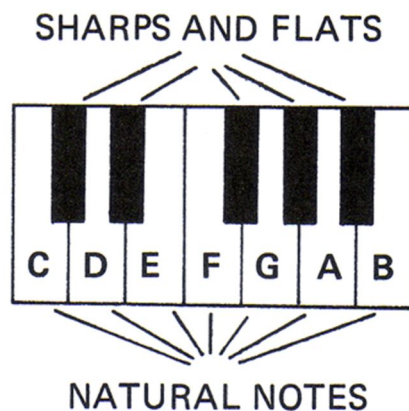
#### Exercise 1:

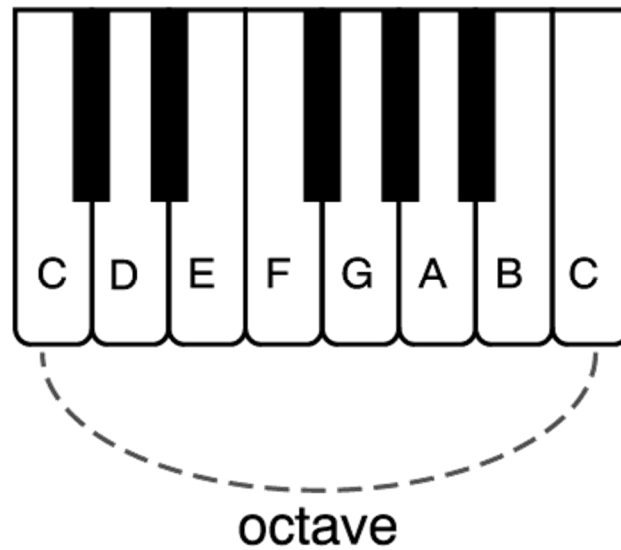
Take the time by recognizing both. We will start with pitches on a piano keyboard. You can start by having someone test you on which notes are higher and which notes are lower, by having that person play individual piano notes on the keyboard and you telling them the value of the notes. Further, in our lesson lecture, we have different tones and sounds that you can test yourself to see if you can recognize what type of instrument is played and if the pitch is higher or lower than the previous pitch played.

Doing the above exercise will begin to help you in your pitch recognition skills. Knowing the basic “high and low” notes is a good starting point to training your ears to recognize pitch. Take some time (stop the lesson) and practice this until you can get 100%

#### Exercise 2:

The next exercise is to recognize octaves. As you may know already, there are 7 natural notes and 5 in-between pitched notes. These in-between pitched notes are called sharps and flats, most easily recognized visually on the piano by the black keys. That means there is a total of 12 different “notes” that you can play on an instrument or sing with your voice. If you look at the pattern of the keyboard, this section of 12 notes is repeated over and over again in a range from low to high. Panning over to the left direction of the keyboard means the pitch is lowering and panning over to the right means the pitch is going up.





An octave is an interval that is defined by going one note above a full 12 note section on the keyboard. As each note is named from A-G, an octave means that these notes are repeated, and have the same value except a higher or lower pitch; such as an A note is 1 octave higher or lower than another A note.

Learning how to find octaves will start to train your ear to learn how to find a note in a general area of the keyboard when you hear it. It helps when you hear something and want to play it; your ear can “be in the ballpark” of where that note might be in pitch.

Let’s try this out. I want you to be in front of a piano keyboard and play the octaves of a C note. First begin quizzing yourself on which C notes are higher than the other, sort of like our previous exercises. In our lesson lecture, we have a section that will help quiz you in this area.

Next get used to hearing the sound of a 1 octave interval, 2 octave interval, and so on. Each time you pass over a 12 pitch section, it is referred to as 1 octave. When you pass over multiple sections, it then becomes multiple octaves. This is a good exercise to begin training your ear.

## Scientific Pitch Notation

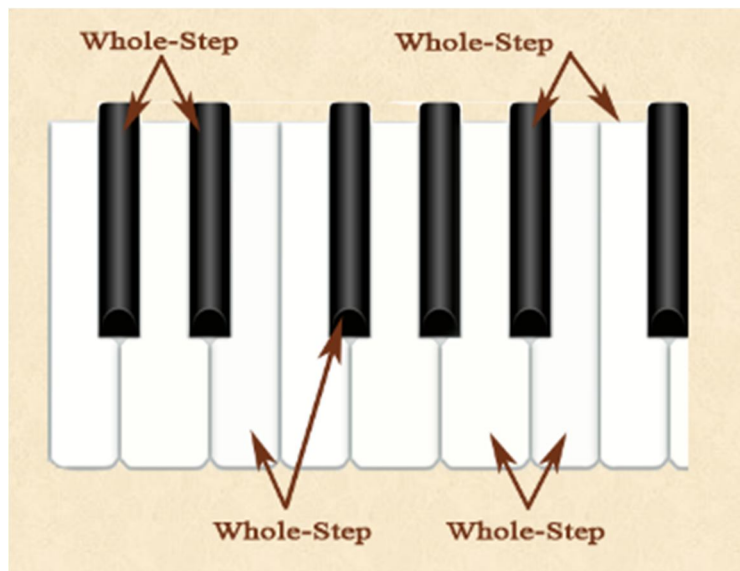
In scientific pitch notation, a western pitch classification method, the octaves of a note are numerically classified by pitch. The range is from C0 to B10. On an 88 weighted keyboard, the pitch numbers start from the low A1 and end on the high C8. The numbers are ordered from low to high, symbolizing low to high pitches. Middle C can be found in the middle of the keyboard and this is numbered as C4. Using and being familiar with middle C on the keyboard can be beneficial in helping your ear recognize which pitch is played when you hear it.

## Exercise

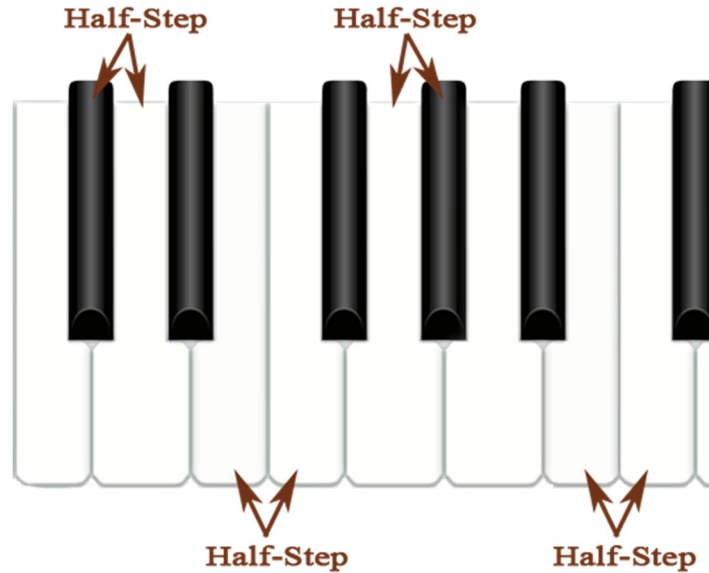
This is an optional exercise, however it is a more advanced way in your ear training. Label each of the octaves on your keyboard from low to high, #1-8. It is now time to blindfold yourself, or have someone else play a note on the keyboard of your choice. Just by hearing that note, tell what number on the scientific pitch notation chart it is. Make sure to choose just one note, such as A, and spend time on that one note testing your ear to recognize the different octaves of A. When you get them all right, you are ready to start the process of learning to recognize individual pitches.

## Intervals

It is important in ear training to understand intervals. An interval is simply the space between two pitches. On a basic level, we need to understand two different types of intervals. A **half step** is the smallest interval that you can move and on the keyboard this is recognized by moving up or down 1 note. A **whole step** is when you move 2 notes, or skip one note in pitch. Look at the two images below to compare.



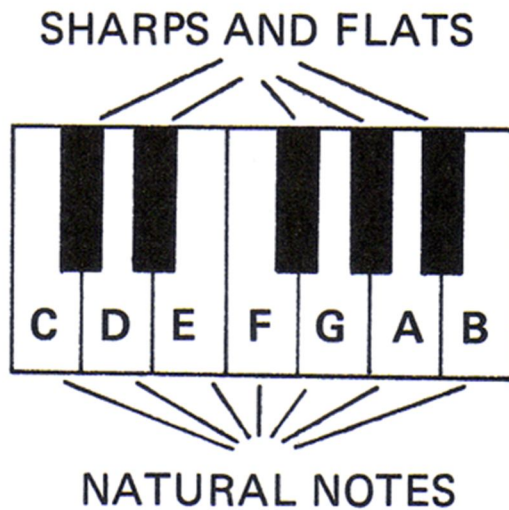




Another name for whole steps played on a keyboard is whole tone. Another name for half steps played on the keyboard is semitone. As mentioned above, another important interval to know is the **octave**. An **octave** is equal to 6 whole steps and begins the next set of keys. An additional important interval to know is **unison**. When notes are in unison, it means they have the same exact pitch value as each other, so you do not move up or down in at all.

### Understanding and Knowing Pitch Values

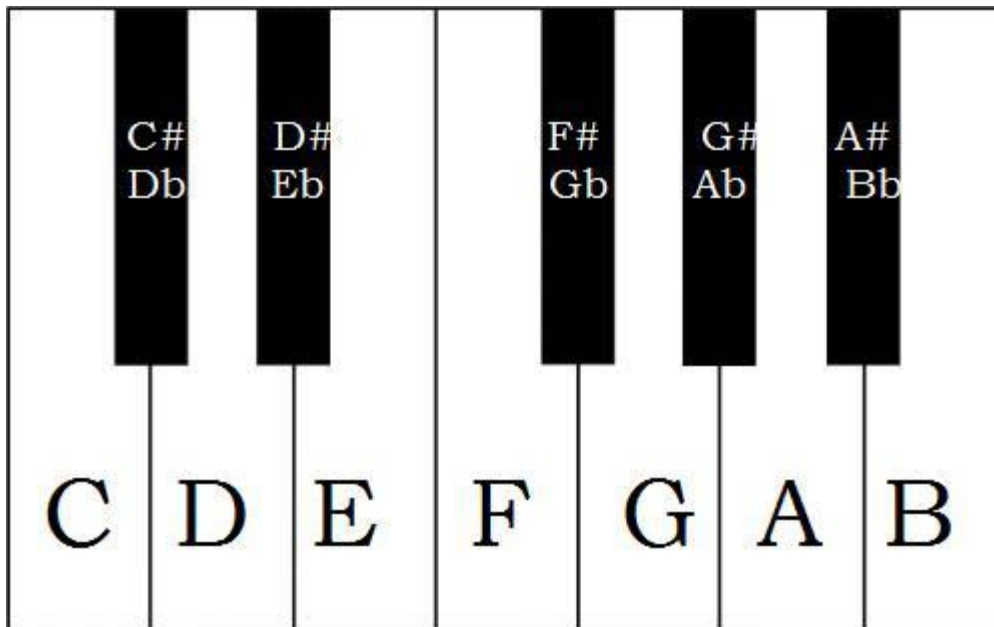
As a student of ear training, it is fundamental to learn the construction of the notes on a keyboard. It is equally important for any musical interest to have an adequate understanding of natural notes, sharps, and flats.



**Sharp** means that the note is moved up a half step. The symbol for sharp is a # pound sign. **Flat** means that the note is moved down a half step. The symbol for flat is a lowercase b. **Double sharp**

means the note is moved up a whole step. **Double flat** means it is moved down a whole step. When music is referred to as up or down. Up means the pitch increases in value, meaning that it has a higher frequency than the previous note. Down means it decreases in value, in which it has a lower frequency than the previous note.

Whenever you hear the word “**pitchy**”, that means the note is too sharp or too flat in between keys. This is common in singers and players of some musical instruments like the violin, because you have to find the pitch based on another instrument or memory. Ear training cannot guarantee that you will be able to sing or play the right pitch every time, but it can guarantee that your accuracy rate in hitting your pitches on target will increase.



In the above image, you can see how the relationships of the sharps and flats work with the natural notes. Simply, the sharps and flats are added to the name of the natural note, such as D flat or F sharp. Each black key can either be a sharp or flat, meaning that they are neutral until specified. Look at the black key in between the C and the D. That black key can either be a C sharp or a D flat. This is defined by the term **enharmonic tones**, in which one note can be defined by more than one pitch. Usually the note name is determined by the dominate scale. The dominate scale, or prevailing key of a song makes all notes subject to the rules applied to that scale.

Lesson 2 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**What are the two main things for your ear to pick up in ear training?**

- Pitch and Tone
- Pitch and Rhythm
- Pitch and Note
- Pitch and Speed

**How many sharp notes are there on the keyboard?**

- 5
- 7
- 8
- Too many

**How many natural notes are there on the keyboard?**

- 5
- 7
- 8
- Too many

**Adding both the total number of sharps and natural notes on the keyboard, how many notes do we have?**

- 22
- 15
- 12
- Too many

**What does it mean if the note is too sharp?**

- Too loud
- Too high
- Too low
- Too soft

**What does it mean if the note is too flat?**

- Too loud
- Too high
- Too low
- Too soft

**True or False: A whole step is when you move 1 note up or down in pitch, and a half step is when you move 2 notes up or down in pitch.**

- True
- False

**If an interval is specified by the space between pitches, what is the name of the interval that has a space of 6 whole steps?**

- Unison
- Interval
- Octave
- Semitone

**A C# and a Db together are considered:**

- Enharmonic Notes
- Pitchy Notes
- Sharped Notes
- Different Pitches

## Lesson 3

### Tonal/Pitch Memory

#### In Practice

With ear training, it is key to practice sounding out pitches to memory. The only way to memorize something is to practice it over and over again. This same concept is used in ear training. Without practice, you cannot get on the level of ear talent as you hope.

In previous lessons I have talked about recognition of the pitch and rhythm. Recognition is the first step in ear training. The next step is response. Response means that you take what you have recognized and put it into action by applying what you know to do. For example if a F note is played on the piano, you first can recognize that the note was played, then your final step would be to figure out that it is an F note. It's kind of like an "analyze then action" step.

#### Exercise 1

Let's start by getting hands on and putting response into practice. You are going to hear a series of 5 notes, from notes C-G, played in a rising pitch sequence, then a lowering pitch sequence. First let the 5 notes play, and then after they are done, sing the melody that you just heard. Make sure that your pitch AND rhythm match what you hear from the recording.

Now you are going to hear a series of 4 notes, from Gb to C, rising and declining in pitch. Do the same thing that you did above by repeating them with your voice.

#### Exercise 2

Now we are going to respond to greater intervals. Hear the two notes that have an interval of 2 whole steps in between them played, a G and a B, then hum or sing the notes. This is called a major 3<sup>rd</sup>.

Now hear two notes that are played with an interval of 3-1/2 whole steps between them, a G and a D. This is called a perfect 5<sup>th</sup> interval.

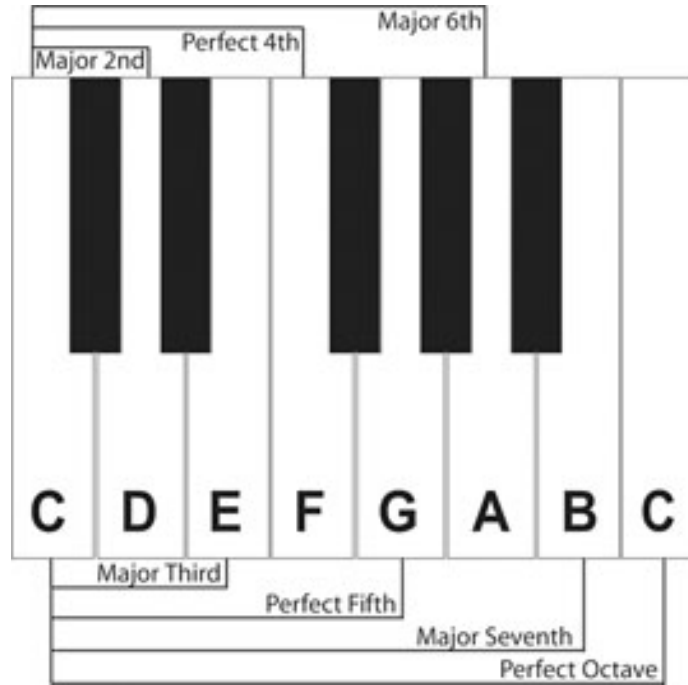
### Hearing Intervals

It is key to know how to recognize intervals. When you can master this technique with your ear, you are pretty much set in your musical career. Ear training is all about recognizing the intervals. Let's now put a name to each interval type that you can hear.

**Diatonic intervals** are intervals that belong in a specific group of a prevailing key or chord, sounding "right to the ear", or in other words, sounding natural. The naming of these intervals consists of 2 parts, a prefix that describes the note and the degree of the highest note relative to the root note of the major scale. We can start with an example of the C major scale.

The interval from C to D is called a major 2<sup>nd</sup>, where the prefix "Major" indicates that the interval is diatonic to the major scale, and the degree "2<sup>nd</sup>," lets us know that it plays the second degree of that major scale, which is D. It is that simple. The interval from C to G is called a perfect 5<sup>th</sup>. The "5<sup>th</sup>," refers to the degree of the major scale to play. The prefix "perfect" indicates that the intervals produce a

**consonant** sound, meaning the sound of the two or more intervals played together sound pleasant and natural. On the contrary you have a **dissonant** sound, in which when the two or more intervals are played together, they sound irregular or strange to the ear. Diatonic scales produce a high level of **consonance**, and chromatic scales produce a high level of **dissonance**.



There are 8 interval callouts for each note in the diatonic scale. Let's look at what these will be in a C major diatonic scale.

The root (C) is referred as the **perfect 1<sup>st</sup>** or **unison**. **Unison** means that the note played is accompanied by another note of the same exact pitch and value.

The second degree (D) is called a **major 2<sup>nd</sup>**. A major 2<sup>nd</sup> tells us that the note is the second note in the prevailing major scale.

The third degree (E) is called a **major 3<sup>rd</sup>**. A major 3<sup>rd</sup> tells us that the note is the third note in the prevailing major scale.

The fourth degree (F) is called a **perfect 4<sup>th</sup>**. A perfect fourth lets us know that the note is the fourth note in the diatonic scale.

The fifth degree (G) is called a **perfect 5<sup>th</sup>**. A perfect fifth lets us know that the note is the fifth note in the diatonic scale.

The sixth degree (A) is called a **major 6<sup>th</sup>**. A major 6<sup>th</sup> tells us that the note is the sixth note in the prevailing major scale.



The seventh degree (B) is called the **major 7<sup>th</sup>**. The major 7<sup>th</sup> tells us that the note is the seventh note in the prevailing major scale.

The eighth note in the scale (C) is called the **perfect 8<sup>th</sup>** or **octave**. An octave is a series of eight notes occupying the interval between two notes, one having twice or half the frequency of vibration of the other. This note in a diatonic scale is the note that fully completes the scale.

Lesson 3 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**What is the best way to memorize something?**

- Study it
- Practice it
- Read it
- Play it

**Which one of the below is not considered a diatonic interval?**

- Major 3<sup>rd</sup>
- Perfect 4<sup>th</sup>
- Octave
- Minor 2<sup>nd</sup>

**The interval between a G and D note is a:**

- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>
- Major 3<sup>rd</sup>
- Minor 3<sup>rd</sup>

**The interval between an F and Ab note is a:**

- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>
- Major 3<sup>rd</sup>
- Minor 3<sup>rd</sup>

**The interval between an F# and B note is a:**

- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>
- Major 3<sup>rd</sup>
- Minor 3<sup>rd</sup>

**True or False: A Major 2<sup>nd</sup> of C would be considered the E note.**

- True
- False

**True or False: A Perfect 4<sup>th</sup> of D would be considered the A note.**

- True
- False

**True or False: A Major 6<sup>th</sup> of Eb would be considered the Bb note.**

- True
- False

## Lesson 4

### Absolute Pitch

#### Perfect Pitch

The “proper” name for a commonly called perfect pitch is absolute pitch. Absolute pitch is the ability to recognize a pitch of any note. An example of this would be if you hear a middle C, you have the ability to recognize what it is and can immediately play it on the piano. Perfect pitch becomes more impossible to attain as you get older. A process in brain development allows the musical side of the brain to engrave the memory of pitch, and it is otherwise impossible after that portion of the brain is fully developed. Quite frankly, people who say they have developed perfect pitch at an older age than 7 or sometimes younger, have it mistaken with pitch memory. With formal ear training, it is possible that anyone can identify pitch. However people with perfect pitch never make mistakes, and people with good “pitch memory” make mistakes occasionally in pitch. Through many studies, it is pretty evident that the younger you are, the easier it is to gain great pitch memory. It is still argued at what age a child can still develop perfect pitch; however some studies show children that have any kind of formal music training before the age of 7 develop perfect pitch. There are also a great number of children that don’t develop this at the same age of music training. This is a tough one to pinpoint as far as exact origin. Some argue that it could be environmental, type of musical training, genetics, and even more factors.

In this course, with everything that is taught, it just takes practice. The biggest thing to remember as a student of ear training is memory. Your goal is to develop pitch memory, not exactly perfect pitch. With further music education you can use your ear for much more than exactly identifying pitches. Learning chords and scales and musical theory accelerates your ability in ear training, because your pitch memory can have something to relate to.

With repetitive exercises you can train your ear to recognize pitches and chords simply by remembrance. The same concept is given to practicing your craft: if you are a singer or musician, you get better at it by constant practicing. There are some special things in music that need to be practiced separately, and ear training is one of them.

#### Exercise 1

Watch the course lecture and follow the exercise shown. In your own time, have someone assist you or do it yourself to practice. Practice is very important!

Here is a good website to visit if you want to further test your “pitch memory” skills for single notes. Copy or Type this url in your web address box: <http://detrave.net/nblume/perfect-pitch/>

**Lesson 4 Quiz**

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**Another name for absolute pitch is what?**

- Perfect Pitch
- Harmonic Pitch
- Right Pitch
- None of the above

**True or False: Absolute pitch is easier to attain as your brain develops.**

- True
- False

**What is the fundamental difference between pitch memory and absolute pitch?**

- Instantaneous Pitch recognition
- Knowing intervals and harmony
- Recognizing Pitches
- Using reference points

## Lesson 5

### Playing what you hear

#### Response

This class session is dedicated to playing the exact rhythm and pitches that you hear. Through practice, doing this will sharpen your ear to pitch. Overtime you will find it a lot easier to mimic pitches and also find the pitches that you need to find.

There can be nothing more frustrating than when you hear a song in your head but can't play it. You have the recognition part down, but responding to that recognition is not possible. But with more practice, you can chart your melodies more accurately overtime.

Follow the exercises shown in the course lesson video. To find these videos (free on the [johns\\_piano\\_lessons](#) Instagram), you can go to [www.johnspianolesson.com](http://www.johnspianolesson.com), go to the lessons portal, and scroll down to find the lessons that pertain to ear training lesson #5. If you start from the first lesson, you will be able to follow the video to play along to the sounds in the videos.

## Lesson 6

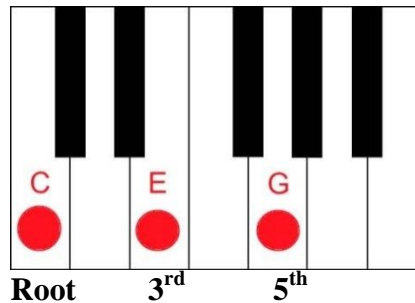
### Harmony

#### Triads

A chord with 3 distinct notes is called a triad. No matter what three notes are played or sung, it will always be determined and classified as a triad. It is important to learn how chords work because you want to make sure that with whatever you hear you can harmonize correctly. Study the diagrams below to learn how the 4 main triads are built.

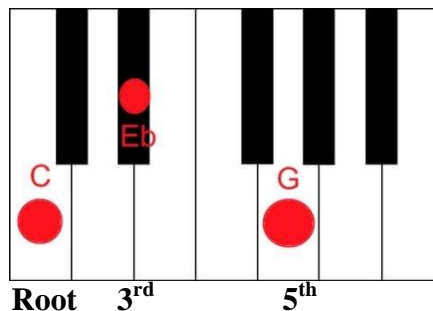
A **major triad** can be constructed using the following methods:

3. Given any major scale, the major triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing major scale.
4. The first note of the triad is the root note of a major scale. To find the next note you go up 4 half steps from the root note and then to find the last note you go up 3 half steps from the 2<sup>nd</sup> note in the triad.



A **minor triad** can be constructed using the following methods:

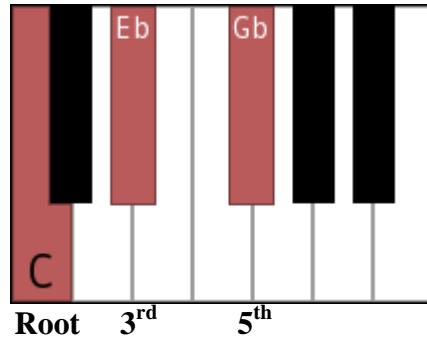
3. Given any major scale, the minor triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing minor scale.
4. The first note of the triad is the root note of a minor scale. To find the next note you go up 3 half steps from the root note and then to find the last note you go up 4 half steps from the 2<sup>nd</sup> note in the triad.





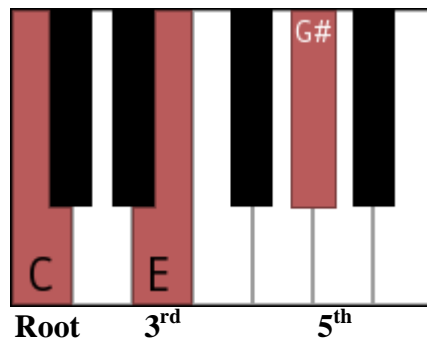
A **diminished triad** can be constructed using the following methods:

3. Given any diminished scale, the diminished triad consists of the root, the 3<sup>rd</sup>, and the 5<sup>th</sup> notes of the prevailing diminished scale.
4. The first note of the triad is the root note of a diminished scale. To find the next note you go up 3 half steps from the root note and then to find the last note you go up 3 half steps from the 2<sup>nd</sup> note in the triad.



An **augmented triad** can be constructed using the following methods:

3. Given any major scale, the augmented triad consists of the root, the 3<sup>rd</sup>, and a sharped 5<sup>th</sup> in the prevailing major scale.
4. The first note of the triad is the root note of a major harmonic scale. To find the next note you go up 4 half steps from the root note and then to find the last note you go up 4 half steps from the 2<sup>nd</sup> note in the triad.



## Identify Harmony by Hearing it

Now practice along with the lesson “hearing” the chords then identifying what kind of triad they are. This comes with practice. I am not going to require that you know every kind of chord, but it helps that you learn at least these four and know what they sound like. These four triads can be considered the root of most chords played. The only difference is other chords are “built” upon at least one of these four triads. That is considered the process of chord building.

## Harmonic Challenges

Now it is key to learn how to find actual harmonies of keys. If you were asked to sing a major 3<sup>rd</sup> over a root note, how will you go about that? The first key is to knowing what root note it is, what type of scale it is, then you can find the note you need to sing based on that. Go through the exercises in the lesson to sing the required intervals above the pitch stated, so you can get used to training your ear to create melody. If you are a musician or a pianist, now is the time to “by ear” find the note on your instrument.

Find the major 3<sup>rd</sup> ABOVE the following notes:  
C, G, F, E, D, Eb, Bb, F#

Find the minor 3<sup>rd</sup> BELOW the following notes:  
G, F#, Ab, B, A, C#

Find the perfect 5<sup>th</sup> ABOVE the following notes:  
F, A, Bb, C, Db, G, D

Find the perfect 4<sup>th</sup> BELOW the following notes:  
B, C#, Eb, Gb, Ab, D, F

Find the minor 3<sup>rd</sup> ABOVE the following notes:  
Db, F, C, Gb, A, F#, Bb

Find the major 6<sup>th</sup> ABOVE the following notes:  
D#, G, A, C#, Bb, Ab, F

Some notes to take in the above exercises: any time there is a minor interval, that means that it is the same major interval just flatted a half step. Also note to sound out the notes in-between the intervals. So if it is a major, use a major scale pattern to find the note. If it is a minor, use a minor scale to find the note. If you don't know major from minor, go back in the previous sessions and make sure that you sound your voice with both so you can become familiar with the minor and major scales.

In the next challenge, you are required to sing or play a specified interval above, in between, or below a **dyad**, which is a chord with two notes that are played at the same time. You will be adding one note above, in the middle or at the root, completing a triad chord, or a three-part-harmony. Make sure you find the note first by ear, then play or sing the note. You are “creating the missing note”.

Playing a chord with: Db, F. Complete the major triad with your voice or instrument

Playing a chord with: F, C. Complete the minor triad with your voice or instrument

Playing a chord with: B, D. Complete the diminished triad with your voice or instrument

Playing a chord with: E, Ab. Complete the augmented triad with your voice or instrument

Playing a chord with: F#, A. Complete the major triad by finding the missing root note

Playing a chord with: C, E. Complete the minor triad by finding the missing root note

Playing a chord with: Bb, D. Complete the augmented triad by finding the missing root note  
Playing a chord with: Eb, Gb. Complete the diminished triad by finding the missing root note  
Remember to find the note with your ear and voice. If you already know what note to complete the triad with, that is fine, but the key is to find it with your ear. Also remember to sing the note as closely to the same time as the dyad is played as possible, that way you can harmonize with the sound. This is great training for your ear.

On the course video, I don't specify which notes are being played, but just so you can see the exercise I listed it here in the textbook.

In the next challenge, we will be harmonizing in passing chords, or chord progressions. We will start with three different chords, and then move on to more. The base notes of these chord intervals will be played, but you are required to sing the following in order:

Playing intervals above the root note: G major 3<sup>rd</sup>, D minor 3<sup>rd</sup>, and E minor 3<sup>rd</sup>  
Playing intervals above the note shown: F minor 3<sup>rd</sup>, G major 3<sup>rd</sup>, and Bb major 3<sup>rd</sup>  
Playing intervals above the root note: D major 3<sup>rd</sup>, E minor 3<sup>rd</sup>, and F# minor 3<sup>rd</sup>

Now we will try the same three notes but find the interval below the note, so this time you are required to find the root note with your ear/voice.

Playing intervals below the root note: G major 3<sup>rd</sup>, D minor 3<sup>rd</sup>, and E minor 3<sup>rd</sup>  
Playing intervals below the note shown: F minor 3<sup>rd</sup>, G major 3<sup>rd</sup>, and Bb major 3<sup>rd</sup>  
Playing intervals below the root note: D major 3<sup>rd</sup>, E minor 3<sup>rd</sup>, and F# minor 3<sup>rd</sup>

It may be a little trickier to find the intervals below the root note. However this gets your ear to be trained by default to go in the right direction when you hear a major or minor chord.

### Perfect Pitch/Pitch Memory Exercises

At this point you are able to harmonize using intervals by ear. I want to further your training in finding exact notes by name when you hear them. This is a great tool to not only test your ability in pitch finding, but shape it up. The more you practice at it, the greater you will become.

In these exercises, you will hear a series of notes. Each time the notes are finished, write them down on a piece of paper what you think they are. At the end of the course, the screen will list the answers and you are required to compare yours with the right answers. Good luck!

Thank you for taking the Ear Training course. I hope you found this course helpful in your music education!

Level 6 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**The difference between a major triad and an augmented triad is what?**

- A flatted 3<sup>rd</sup>
- A sharpened 7<sup>th</sup>
- A major 6<sup>th</sup>
- A sharpened 5<sup>th</sup>

**How many semitones are found between the 3<sup>rd</sup> and the 5<sup>th</sup> in a major triad?**

- 2
- 3
- 4
- 5

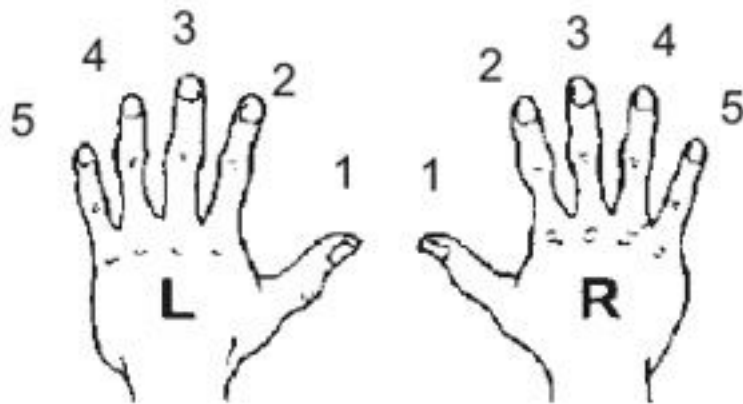
**How many semitones are found between the 3<sup>rd</sup> and the 5<sup>th</sup> in an augmented triad?**

- 2
- 3
- 4
- 5

**How many semitones are found between the 3<sup>rd</sup> and the 5<sup>th</sup> in a diminished triad?**

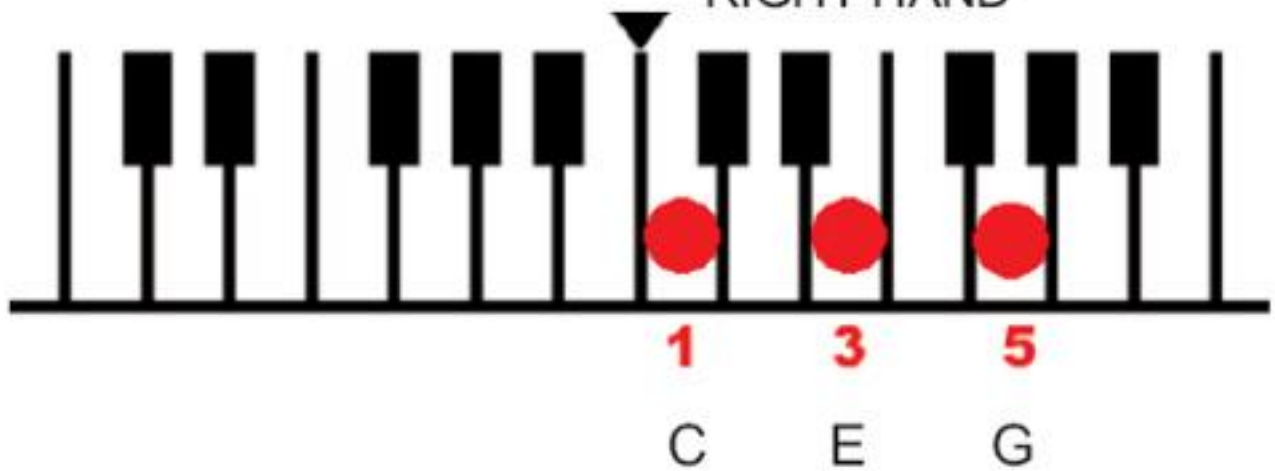
- 2
- 3
- 4
- 5

# Chord Improvement Lessons 1-6



The Chord of C

RIGHT HAND



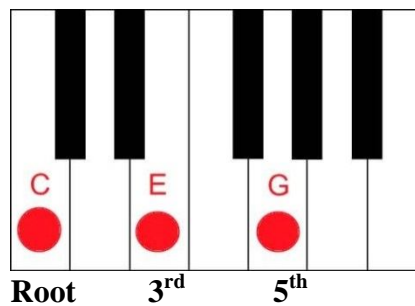
## Lesson 1

### Chord Building:

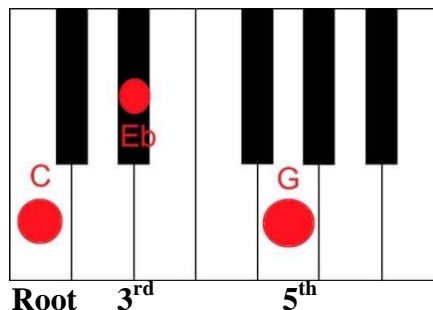
The act of adding additional tones and notes to a basic triad can be referred to as chord building. A triad is a chord with three notes played at the same time in harmony. Some musicologists say a chord is not a chord until it has three notes played at the same time, some say two. The point however is that you understand how to use chords in your daily playing by definition of the multi-pitched group of notes. Let's start exploring:

First I will introduce you to the four (4) different types of triads. Foundationally this is a good place to start because we will construct many more chords upon these four types of triads: Major, Minor, Diminished, and Augmented.

A **major triad** is composed of a root note, the 3<sup>rd</sup>, and the 5<sup>th</sup> note in a major scale. Major triads are the most common triad in chords. Major based chords are pleasant to the ear and sound bright and happy. Take a look at the diagram below and play it with each hand one at a time.

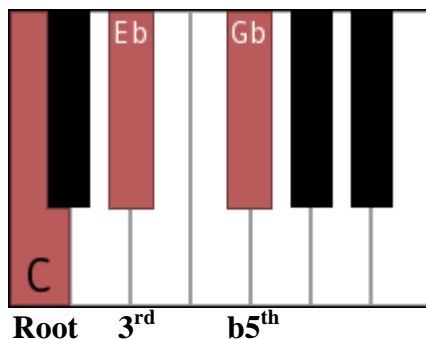


A **minor triad** is composed of a root note, the 3<sup>rd</sup>, and the 5<sup>th</sup> note in a minor scale. Minor based chords have a more emotional, darker sound to them than the major. They are used in more serious music applications. A minor chord is shown in the diagram below.

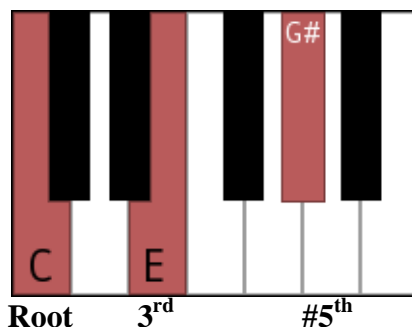




A **diminished triad** is composed of a root note, the 3<sup>rd</sup>, and a flatted 5<sup>th</sup> note in a minor scale. Diminished based chords are mysterious and confused, but also add the right kind of flavor that songs need. Single diminished chords work well in either major or minor chord progressions, which we will go over further in the lesson. The diagram below shows how a diminished chord looks.



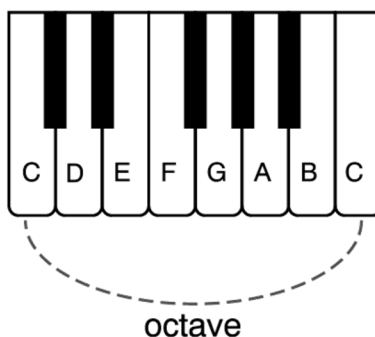
An **augmented triad** is composed of a root note, the 3<sup>rd</sup>, and a sharped 5<sup>th</sup> note in a major scale. Augmented based chords are mainly used for special transitions and jazz chords as well. The diagram below shows how an augmented triad is constructed.



## Scales

With every chord, there is a musical scale. A scale is a collection of notes that are related by pitch. As chords are labeled either major or minor etc., so are scales. Both chords and scales go hand in hand. Before understanding how to build chords, we need to understand the make-up of scales. In scales, each note is classified with a number. This number increases as the pitch gets higher, and decreases as the pitch gets lower. An example of this is a major scale, as shown below

**R 2 3 4 5 6 7**

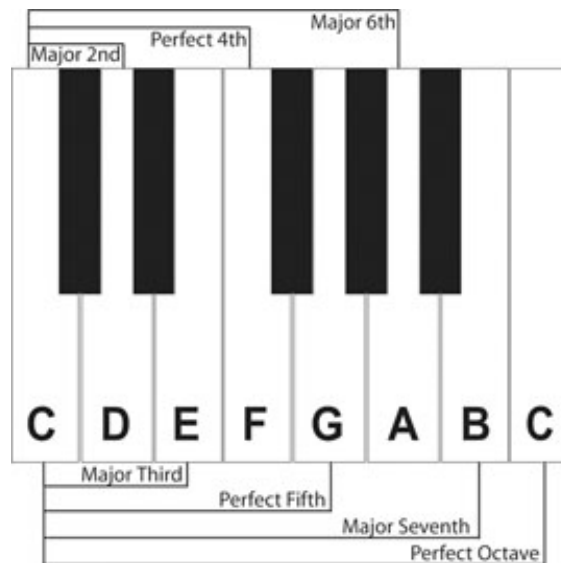


## Intervals

Whenever the scale reaches an octave, this numbering system starts over again. The 1<sup>st</sup> note in the scale is always referred to as the root note. The rest of the notes are characterized with numbers.

The spacing between each note played in a scale or chord is called an interval. As you may know, there are 7 natural pitches, labeled as A B C D E F and G. There are 5 in-between pitches, noted on the piano as the black keys called sharps and flats, which are labeled as C# Eb F# Gb and Ab. When you play these notes in immediate succession, meaning with no spaces between them, this is called a half step. When you play notes by skipping one note that is called a whole step. We can then figure out how many half and whole steps are between each key in a chord.

As you know in a major and minor scale, there are 7 available notes. These notes have names that either represents a major or a minor chord. The below figure shows the relationships of the intervals that have major relationships.



It is very important to understand this system of intervals, because this will help you in your chord building. Every chord has a specific name, and this name is always changed based on the intervals that are played. A basic understanding of the C major chord intervals can help you get this:

The root (C) is referred to as the **perfect 1<sup>st</sup>** or **unison**. **Unison** means that the note played is accompanied by another note of the same exact pitch and value.

The second note (D) is called a **major 2<sup>nd</sup>**. A major 2<sup>nd</sup> tells us that the note is the second note in the prevailing major scale.

The third note (E) is called a **major 3<sup>rd</sup>**. A major 3<sup>rd</sup> tells us that the note is the third note in the prevailing major scale.

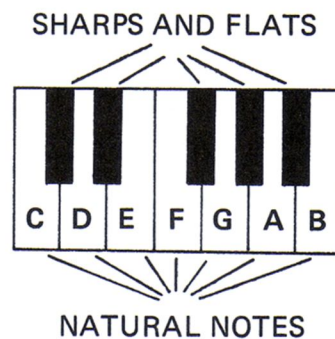
The fourth note (F) is called a **perfect 4<sup>th</sup>**. A perfect fourth lets us know that the note is the fourth note in the diatonic scale.

The fifth note (G) is called a **perfect 5<sup>th</sup>**. A perfect fifth lets us know that the note is the fifth note in the diatonic scale.

The sixth note (A) is called a **major 6<sup>th</sup>**. A major 6<sup>th</sup> tells us that the note is the sixth note in the prevailing major scale.

The seventh note (B) is called the **major 7<sup>th</sup>**. The major 7<sup>th</sup> tells us that the note is the seventh note in the prevailing major scale.

The eighth note in the scale (C) is called the **perfect 8<sup>th</sup> or octave**. An octave is an interval of eight notes occupying the space between two notes, one having twice or half the frequency of vibration as the other. This is the note that fully completes the scale.



As there are intervals to understand, you must understand the make-up of the keyboard. The white keys are the natural notes and the black keys are the sharps and flats. Sharp means that the natural note moves up in pitch by a half step. Flat means that the natural note moves down in pitch by a half step. You must remember this in chord building so that you can identify each chord properly.

## Exercise 1

Pause the video if you are watching it, and play each of the four main triads starting with C. Then you are going to do something called **transpose**. **Transpose** means you change the root chord that you are playing by a specified interval. In this case you will transpose up in pitch. So starting on the C triad, you move to C#, then D, then Eb, then E and so on. You must maintain the same intervals as you move up. Stop once you get to the octave note, so basically you will be playing 48 chords, meaning 12 chords at a time with 4 triads. This exercise is to get you used to playing the triads in every key. Practice transposing the key as many times as you can.

Every chord played on the piano has a name. This name consists of the following: key of chord and type of chord. Chords with further suffixes will include chord additions such as #9, b5 etc. The basic chords, such as the major chords, will give you those two basic identifications though. Here are a list of triads that are identified only by key and type:

### Major/minor Triad Chord Abbreviations

C Major is abbreviated as CMaj or in some cases CM

C minor is abbreviated as Cmin or in some cases Cm

C diminished is abbreviated as Cdim or C°

C augmented is abbreviated as Caug or C+

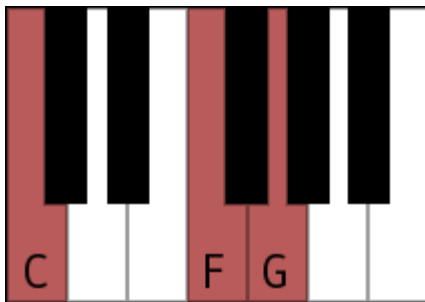
C **suspended** is abbreviated as Csus or Csus4

## Chord Compositions

There are now three chord types that I want to introduce you to, the suspended, 6<sup>th</sup>, and 7<sup>th</sup> chords. These chords are the next “need to know” chords in this session.

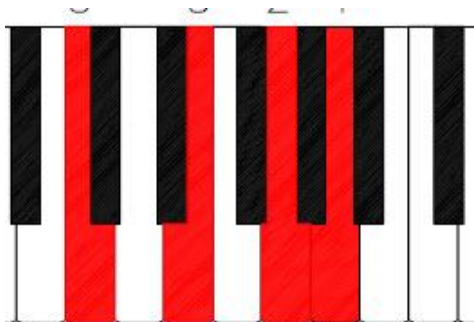
### Suspended Chords

A suspended chord is the only neutral chord that can either belong to the minor or major family, depending on the prevailing key of the song. You can accomplish a suspended chord by “suspending” the third and adding a perfect fourth. The perfect fourth replaces the third, whether it is a minor or major third. Suspended chords are triads, however special.

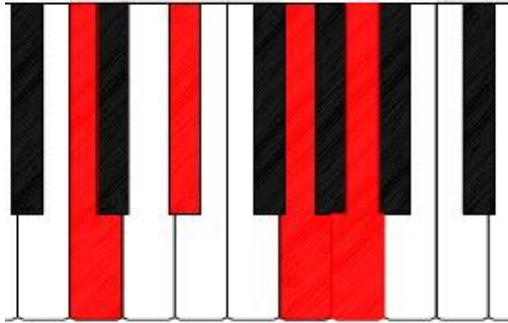


### 6<sup>th</sup> Chord

6<sup>th</sup> chords are major or minor triads that include the major 6<sup>th</sup> interval. So in a C6, you would play the normal C major triad and add the six to the note, making the notes that you play C, E, G, and A. Minor 6<sup>th</sup> chords are the same, you add the major sixth note to the minor triad.



C6 chord

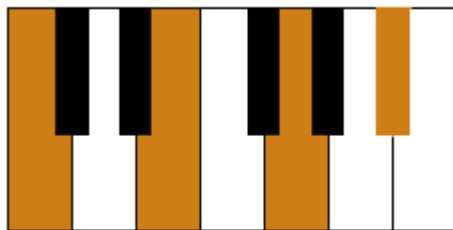


**C minor 6<sup>th</sup> chord**

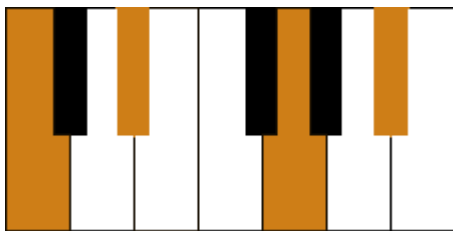
### 7<sup>th</sup> Chord

7<sup>th</sup> chords are **combination chords** that include a minor 7<sup>th</sup> interval. These chords are added to a major or a minor triad. If we were to add it to C, the chord name would be C7. If we were to add it to C minor, the chord name would be Cm7. 7<sup>th</sup> chords are commonly added to a major or minor triad.

#### **Piano C7 Chord**



**Major 3rd**   **Minor 3rd**   **Minor 3rd**  
 (2 tones)   (1 1/2)   (1 1/2)  
                   **tones**        **tones**



**C Minor 7<sup>th</sup> chord**

7<sup>th</sup> chords are commonly used to make the chord sound more bluesy and bring more interest and color to the sound. 7<sup>th</sup> chords can spark a number of scales, such as the **pentatonic scale**.

## Chord Families

Each chord can be categorized into 5 groups. Keep in mind that there are hundreds of thousands of different types of chords. However all of these chords share something in common, but you have to learn it in order to apply it. Otherwise chords can become very confusing. Here is a list of the types of chords and their definitions.

**Triads-** include the major, minor, diminished, augmented, and suspended chords.

**Combination Chords-** include 6<sup>th</sup>, 7<sup>th</sup>, Maj6, Maj7, and any chords within the octave.

**Extended Chords-** include chords that extend beyond the octave that have 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> notes, which we will learn in the next session.

**Altered Chords-** include chords that are modified by flattening or sharpening note(s) in the chord other than the root, which we will learn in the next session.

**Added Tone Chords-** are regular triads with an added note above the octave, such as a 9<sup>th</sup>, 11<sup>th</sup>, or 13<sup>th</sup> note, which we will learn in the next session.

## Arpeggiated Chords

Arpeggiated chords are chords that instead of playing the notes together, they are singled out. Such as in a C major, instead of the C E and G played at the same time, it will be the C then the E then the G, kind of like a scale. Arpeggiating your chords can also help you find the notes that you want to play in them, and further define your chord building.

## Exercise 2

Now let's put into practice what we have learned so far. We are going to accomplish something called a chord progression. A chord progression is a collection of chords that are played in order, similar to a scale but with chords. All songs have chord progressions, so it is important to know how they work. Below I list 4 different chord progressions using the same chords that you have learned in this lesson. Play through them over and over again so you can get the hang of this. You can even transpose them to practice them in other keys. Remember to watch the video again to make sure you are doing it correctly.

### Progression 1

Cm – Dm – EbMaj - FMaj - Gm

### Progression 2

G7 – Cm – F7 – BbMaj – Eb7 – AbMaj

### Progression 3

Fm – Edim – Ddim – EbMaj

### Progression 4

BMaj – Bbaug – Ebm – Abm

Lesson 1 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

Which triad has two major 3<sup>rd</sup> intervals?

- Major
- Minor
- Augmented
- Diminished

Which triad has two minor 3<sup>rd</sup> intervals?

- Major
- Minor
- Augmented
- Diminished

The 5<sup>th</sup> note in a C minor is:

- G
- B
- C
- Ab

The 6<sup>th</sup> note in a B Major is:

- G
- B
- C
- Ab

The 7<sup>th</sup> note in a Db minor 7 is:

- G
- B
- C
- Ab

Another name for the perfect 1<sup>st</sup> interval is:

- Octave
- Unison
- Major
- 1<sup>st</sup> Degree

Another name for the perfect 8<sup>th</sup> interval is:

- Octave
- Unison
- Major
- 1<sup>st</sup> Degree



**The interval between a C and an immediate Eb is:**

- Minor 3<sup>rd</sup>
- Major 3<sup>rd</sup>
- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>

**The interval between a D and a higher A is:**

- Minor 3<sup>rd</sup>
- Major 3<sup>rd</sup>
- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>

**The interval between an F# and a lower Bb is:**

- Minor 3<sup>rd</sup>
- Major 3<sup>rd</sup>
- Perfect 5<sup>th</sup>
- Perfect 4<sup>th</sup>

**If you transpose from the key of A 3 half steps up, what note are you in now?**

- A
- B
- C
- D

**If you modulate down from the key of Eb four semitones, what key are you in now?**

- A
- B
- C
- D

**What are suspended 4 chords made up of? (sus4)**

- Root, 3<sup>rd</sup> and 5<sup>th</sup>
- Root, b3<sup>rd</sup> and #5<sup>th</sup>
- Root, 4<sup>th</sup> and 5<sup>th</sup>
- Root, b4<sup>th</sup> and #5<sup>th</sup>

**If you modulate down from the key of Eb four semitones, what key are you in now?**

- A
- B
- C
- D

## EXTRA CREDIT

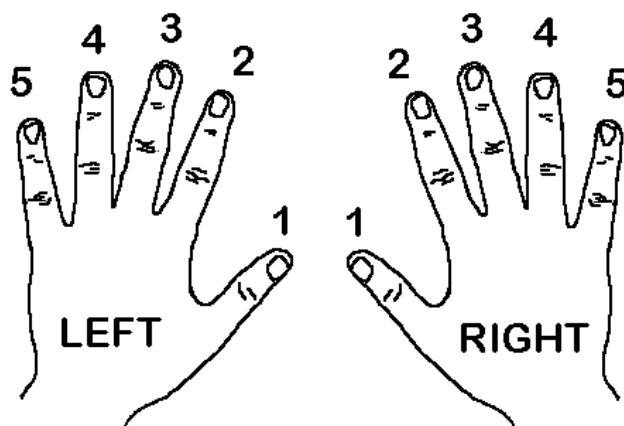
**Spell out the notes in an arpeggiated A#m9 chord.**

## Lesson 2

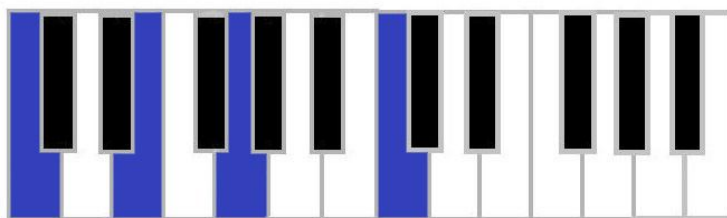
### Fingering:

When playing a chord, fingering is almost just important as playing the chord itself. If there is one thing that we pianists overlook the most, it is our fingering. Sometimes skating by seems to be the easiest route when playing chord progressions, but it costs you in the long run. This session will help direct you to making the best possible decisions when fingering your chords, and we will start with the basics.

All four main triads have one thing in common: fingering. With the commonality in structure, a root, third, and a fifth are accompanied by fingers 1, 3, and 5. Both hands are symmetrical, so playing the fingering for each chord will be the same for both hands. By understanding this basic make-up of chord fingering, we can build upon this knowledge by playing other chords as well.



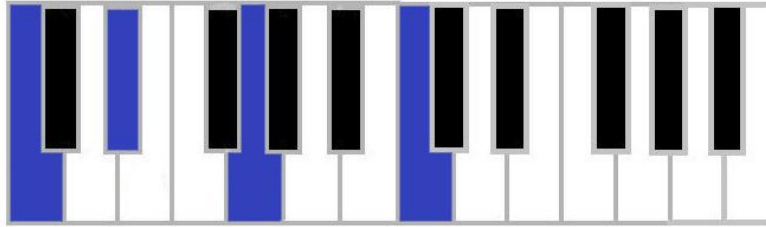
Just as a scale becomes more complete and well-rounded when you include the octave note, the same occurs in a chord. A triad consists of a root, third, and a fifth, but you can also add an octave note. When you add an octave note, the fingerings change. Let's take the example of a C major chord.



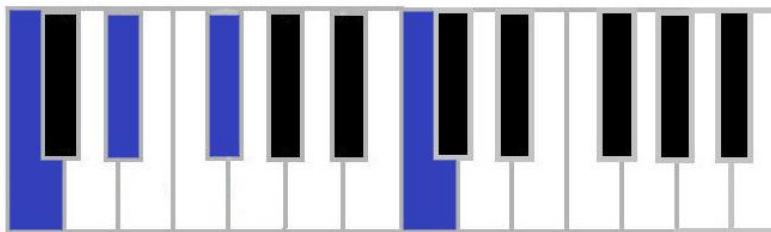
As you can see, we are playing an additional note in the C major triad, but does that mean that it is no longer a triad? No, it is still a triad because it still consists of three different notes. The only thing that changes is the fingering.

I must admit, hands are different, and in some cases there are alternatives to the way chords should be fingered per person. However, the foundational chords, especially the triads, never change no matter how big or small your fingers are. The best way to finger a major triad with an octave note is: right hand 1, 2, 3, and 5; Left hand 5, 4, 3, and 1. Try this fingering with the C major shown above.

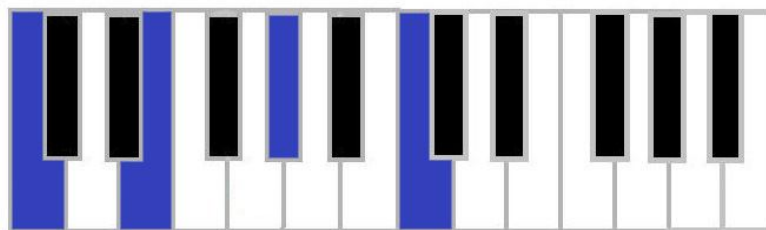
Now let's try the octave C minor chord with the same fingering as the major with both hands.



Now let's try the octave C diminished chord with the same fingering as the major and minor with both hands.



Now let's try the octave C augmented chord. This chord is a little different from the others when it comes to the left hand, as the position of the sharpened note changes the comfortable position of the left hand. On the right hand, you play fingers 1, 2, 3, and 5. On the left hand you play fingers 5, 4, 2, and 1. The reason why is because the distance between your right hand ring finger and pinky is twice as short as the distance between your left hand thumb and index finger. This difference will sometimes affect your fingering in chords, especially when you have to stretch more to play the chords. Try transposing the augmented chords.



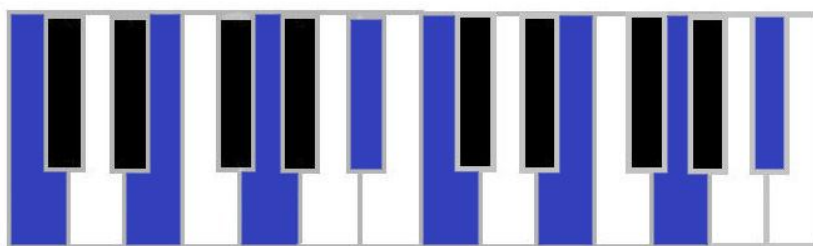
Whenever you transition from one chord to the next, make sure your fingering adjusts accordingly. You should know the chord that you are going to play before you play it, so your thought process should include providing the proper fingering for that chord. Triads all have the same fingering, no matter what key they are played in. Practice playing them in as many keys as you can with the same fingering. The idea is that if you practice in every key, you will equally get used to playing them in all keys.

Other chords are not nearly as easy when it comes to fingering. 7<sup>th</sup> chords sometimes change according to what key they are in. There are also 2 different ways you can play them. The standard fingering for a 7<sup>th</sup> chord is as follows: right hand - 1, 2, 3, and 5; left hand - 5, 4, 3, and 1. This comes from the idea that a 7<sup>th</sup> chord is just one additional note to the triad chord. Another way you can play the 7<sup>th</sup> chords is with the following fingering: 1, 3, 4, and 5 on the right hand and 5, 3, 2, and 1 on the left

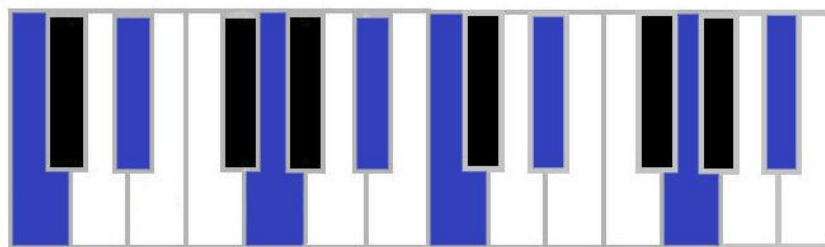
hand. This stems from the idea of choice, in which whatever your next chord will be will be based on the fingering you decide for the 7<sup>th</sup> chord. This is important, because when you play chords, you want to make sure that your fingers are in as comfortable of a position as possible. If not, you can overly strain your hand and you will not enjoy playing the piano as much. Not only do you have to think of comfort for the current chord you play, but you also have to keep in mind the transition to the next chord as well. Sometimes we have to alter our fingering just to make it easier to get to the next chord in the progression. I will show you examples as we move ahead.

## Exercise 1

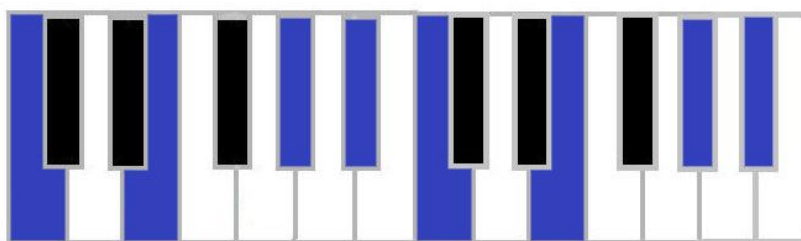
Play the 7<sup>th</sup> chords starting from C. Transpose them as many times as you want, just make sure that you play all 12 pitches (7 natural notes and 5 sharps/flats). Use both of the fingering options and determine which one works best for you. Play the chords with both hands at the same time as shown in the diagram.



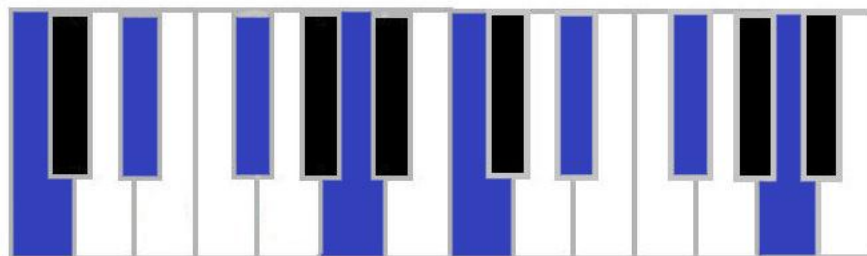
Now let's try the minor 7<sup>th</sup> chords. Remember the only thing that changes in the minor from the major is the 3<sup>rd</sup> is flatted. The fingering for the minor 7<sup>th</sup> chords is as follows: right hand – 1, 2, 4, and 5; left hand – 5, 4, 2, and 1. Play them with both hands and transpose them as many times as you can for practice. Retain the same rules that were applied to the 7<sup>th</sup> chord above.



Now let's try the augmented 7<sup>th</sup> chords. Augmented 7<sup>th</sup> chords are more commonly called 7<sup>th</sup> chords with a sharped 5. In C, this would be labeled as C7#5. This is because in a regular 7<sup>th</sup> chord, the only difference is that the 5<sup>th</sup> note in the scale is sharped. The fingering for this 7<sup>th</sup> chord is different from the others because of the sharped 5<sup>th</sup>, and it is as follows: right hand- 1, 2, 3, and 5; left hand- 5, 4, 2, and 1. Try transposing this chord to practice playing in other keys as well. Remember to use both hands.



Now let's look at the diminished 7<sup>th</sup> chords. The make-up of this chord is slightly different because the diminished scale is different from other scales. Each note is the same equal distance from the other, making it easy to find and finger. A common diminished 7<sup>th</sup> chord consists of the following fingerings: right hand - 1, 2, 3, and 5; left hand - 5, 4, 3, and 1. Even though the fingering can be considered similar to the others, the difference is the note in which we call the "7<sup>th</sup>". The 7<sup>th</sup> note in the C major, minor, and augmented triad is Bb. The 7<sup>th</sup> note of the C diminished triad is an A, exactly a half step below the others. Take a look at the example, and transpose this just like the others for practice.



## Exercise 2

Now that we know the fingering for most chords, let's begin with an exercise to strengthen your hands to play the chords effectively. If you are a beginner, you may find it difficult to play these chords effectively because your fingers have not built up the coordination to execute strength that comes from your arm. When you play, you don't play with your fingers, you play with your arm and your wrist. Your arm is considered the conduit in which you get the force from your body to play the note. That force is transferred from your body, through the arm and to the wrist, in which, with tiny wrist movements, you execute the note. For more on this, take class number 2 in the beginner theory course called Posture.

Coordination can be learned and that is the whole point in piano playing. The more you practice one thing, the better you become at it. So in this exercise, we will do a series of octaves so that you can get your fingers used to the stretching of full chords.

1. Play octave major triads going up in pitch using all half steps, then going down in pitch using all half steps. Do this 5 times.
2. Play octave minor triads going up in pitch using all half steps, then going down in pitch using all half steps. Do this 5 times.
3. Now play octave 7<sup>th</sup> chords going up in pitch using all half steps, then going down in pitch using all half steps. Do this 5 times.

You should find that after completing the exercises above that your fingers feel nice and stretched. These exercises also help with coordination and placement when playing chords. Try playing these chords with both hands at the same time for the best possible results.

Fingering can vary depending on application. Knowing the basics of fingering can help you make the best possible choices when playing chords. Since there are hundreds of thousands of chord types, it would be wise for me not to sit down with you and tell you the fingering for each and every chord. That will take a long time. Instead it's better to give you direction in how to finger your chords. Sometimes being bogged down with a legalistic way of playing can dwarf your creativity as a musician. It's great to be free to express yourself, and at the same time keep the general rules that apply to each situation.

To introduce these "general rules," here is what we call finger zones. These zones demonstrate the normal limits of fingering your chords. You can also say that stretching your fingers beyond these zones means that you are stretching beyond the natural comfort zones. Some chords require that you do that, however in most applications these rules will apply.

Chord zoning in the key of C:



**RH: 1            2            3            4            5**  
**LT: 5            4            3            2            1**

The zones can refer to as fingers that you use. In this case, the zoning numbers on the top refer to the fingering on the right hand in order. The zoning numbers on the bottom refer to the fingerings on the left hand in order. Some zones will share keys as well, but this is a general overlook on how to finger chords. Now that you know this, you are ready to move on to more advanced chords.

Lesson 2 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

When fingering a triad, the middle note is to be played with which finger?

- 1<sup>st</sup>
- 2<sup>nd</sup>
- 3<sup>rd</sup>
- 4<sup>th</sup>

How does your right hand fingering change if you switch from a regular triad to adding the octave note to the root of the triad?

- From 1,3,5 to 1,2,4,5
- From 1,2,3 to 1,2,3,5
- From 1,3,5 to 1,3,4,5
- From 1,3,5 to 1,2,3,5

On the left hand, the thumb mostly plays the \_\_\_\_ note, and the right hand pinky mostly plays the \_\_\_\_ notes of a chord.

- Bottom, Top
- Middle, Bottom
- Middle, Top
- Bottom, Middle

True or False: when playing the same noted chord on the right and left hands, the fingering is ALWAYS the same, just opposite.

- True
- False

If you use the fingering 1,2, 3, and \_\_ in a 7<sup>th</sup> chord, what finger would you finish the chord off with?

- 5<sup>th</sup>
- 4<sup>th</sup>
- Depends on what you do next
- None of the above because not specific

True or False: a diminished 7<sup>th</sup> chord has the same 7<sup>th</sup> note as the major minor and augmented 7<sup>th</sup> chords.

- True
- False

True or False: an augmented 7<sup>th</sup> chord is played comfortably with fingers 1, 2, 3, and 4 on the right hand.

- 1<sup>st</sup>
- 2<sup>nd</sup>

True or False: there is only one way to finger all chords, and if you don't play with that fingering, your technique is off.

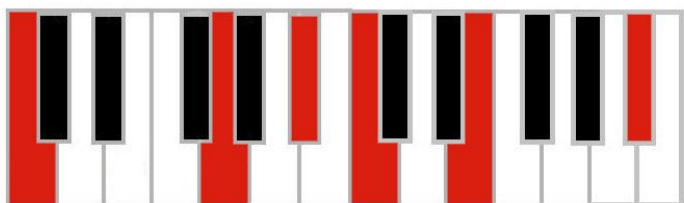
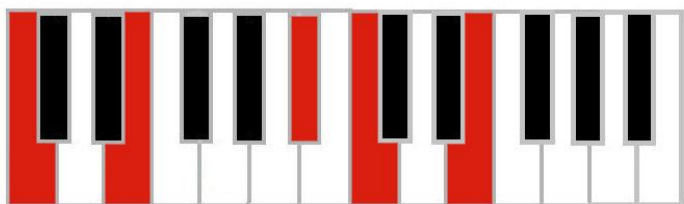
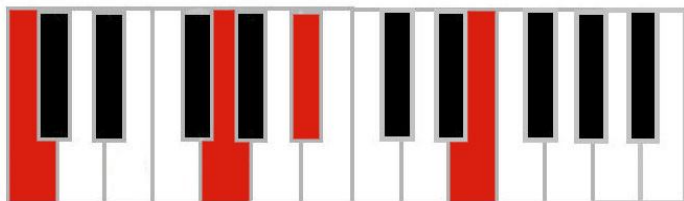
- True
- False



## Lesson 3

### Chord Tones and Voicing

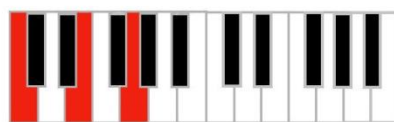
Tones and voicing in chords refer to the types of notes that you use in your chord. Sometimes chords can be modified in a way that they are not regularly played, such as the absence of some notes or the different inversions. Below are three different chord voicings of a C7 chord.



Each chord shown above emits a different sound. The sound is slightly different that is barely noticeable except when used in context. Sometimes in songs, it makes all the difference when you change the value of a chord like what is shown above. This gives us many options as far as making one chord sound like 10 different chords or more. The higher and lower pitches help this to come to pass as well.

### Inversions

Inversions are very important know when you are playing chords. They work much more notably in chord progressions. When you invert a chord, the root note changes to the next note going up or down in the chord pitch pattern, such as a C major with notes C as the root, E as the 3<sup>rd</sup>, and G as the 5<sup>th</sup>, this would change to make E the root, G the next note, and C the last note in that triad chord. Look at the example below.



Root Chord

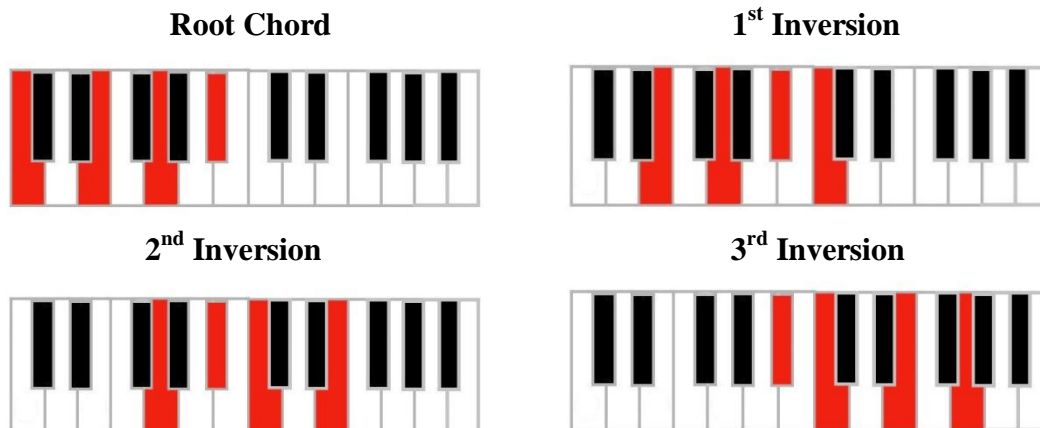


1<sup>st</sup> Inversion



2<sup>nd</sup> Inversion

These inversions, or changes in the chord pattern, can happen in any chord, no matter how many voicings it has. Take a look at the C7 chords below:



**Exercise 1:**

Find the following notes in each inverted chord below and write the note names that make up the chord.

E7      E7 1<sup>st</sup> Inv.      E7 2<sup>nd</sup> Inv.      E7 3<sup>rd</sup> Inv.

F7      F7 1<sup>st</sup> Inv.      F7 2<sup>nd</sup> Inv.      F7 3<sup>rd</sup> Inv.

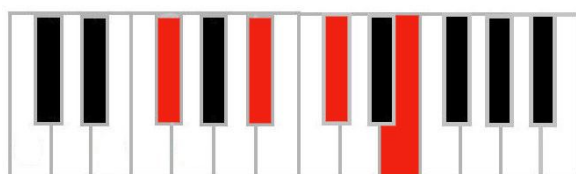
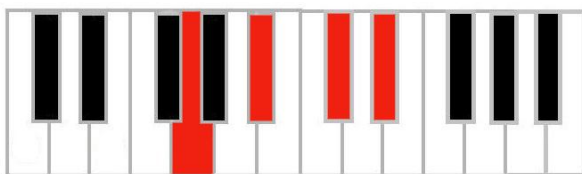
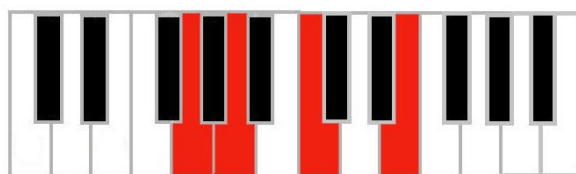
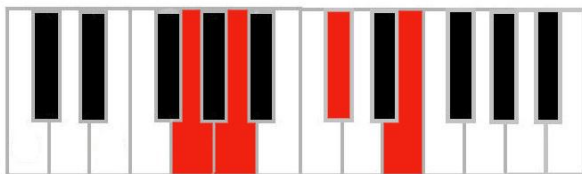
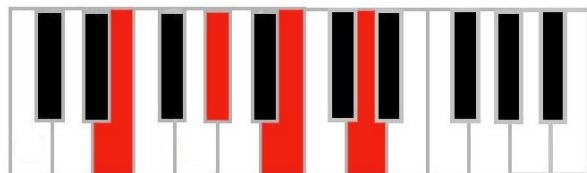
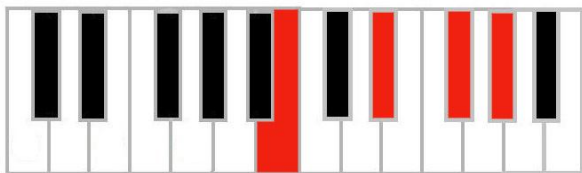
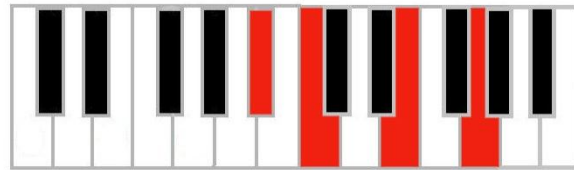
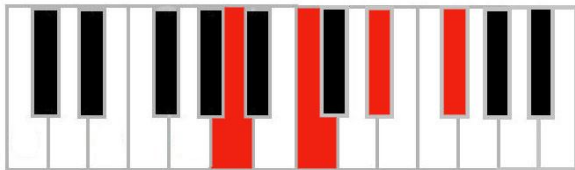
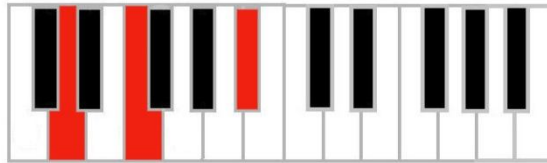
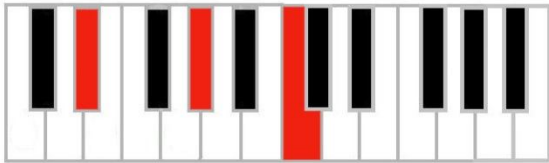
Gm7      Gm7 1<sup>st</sup> Inv.      Gm7 2<sup>nd</sup> Inv.      Gm7 3<sup>rd</sup> Inv.

Bbm7      Bbm7 1<sup>st</sup> Inv.      Bbm7 2<sup>nd</sup> Inv.      Bbm7 3<sup>rd</sup> Inv.

G#dim7      G#dim7 1<sup>st</sup> Inv.      G#dim7 2<sup>nd</sup> Inv.      G#dim7 3<sup>rd</sup> Inv.

## Exercise 2:

Write the names of each chord shown below along with the inversions.



## How to read a chord

At first glance, it is rather difficult to read complex chords and immediately play them. However with much practice, chords will become easier for you to understand. It is very important to know how to read a chord when it is written or when you need to play it. Here are some examples with descriptions.

## CMajb5 add9

Chords are like equations, and if you know how they are constructed, you can easily pick them apart. Look at the above C chord and see if you can play it. The “C” at the beginning indicates that the root note is C. The “Maj” tells us that the chord (C) is a major chord. The b5 (flat 5) tells us that we are to take the natural 5 and move it down a half step. And finally the add9 tells us to add a 9<sup>th</sup> note of the scale to the chord.

## Cm9

This chord tells us that the key is in C minor, and the 9 tells us to add a 9<sup>th</sup> and a minor 7<sup>th</sup> to the chord. This chord is considered to be an extended chord due to the 9<sup>th</sup> note being added to the 7<sup>th</sup> chord. As a rule, all extended chords that have a 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup> will also include the minor 7<sup>th</sup> note unless it is specified as a major root. For example, adding the 9<sup>th</sup> note to make a C9 will allow these notes to be played: C, E, G, Bb, and octave D (1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, m7<sup>th</sup>, 9<sup>th</sup>). This rule applies also to notes that are played beyond the 9<sup>th</sup> and 11<sup>th</sup>. For example, a full C13 has these following notes: C, E, G, Bb, D, F, and A (1<sup>st</sup>, 3<sup>rd</sup>, 5<sup>th</sup>, m7<sup>th</sup>, 9<sup>th</sup>, 11<sup>th</sup>, and 13<sup>th</sup>). Sometimes this rule isn't followed, and sometimes certain notes are excluded from the bunch. But what is important is that the correct notes per the chord definition are played.

## In Application

Especially in music today, songs tend to have a free form of playing instead of specific notes. For example, in church you can play a song however you want, as long as it fits in with the chord structure of the song. When you are an accompanist in any form, just knowing the chords and a basic understanding of the rhythmic pattern that the vocals will sing is enough to successfully play a full song. Below you can find the chord structure to America the Beautiful. Most people know how to sing this song, and with your knowledge of the melody, play the chords along with it that are shown above each lyric. This is Ray Charles's version. (Hint: C/B = Triad/Root Note):

**D7 G Em Edim Am7 D7 C C/B Am7 D7 G Edim D7**  
 O beautiful for spacious skies, for amber waves of grain,  
**D7 G Em Edim Am7 D7 Fdim D7 E7 A7 D7**  
 For purple mountain majesties above the fruited plain!  
**G D7 D9 C D7 Am7 D9 Am7 D D7 G GM7 G7**  
 America! A - merica! God shed His grace on thee,  
**Fdim C Am7 G G/F# Em**  
 And crown thy good with brotherhood  
**D7 C Am7 D D7 G Em7 D7**  
 From sea to shining sea!  
**D7 G Em Edim Am7 D7 C C/B Am7 D7 G Edim D7**  
 O beautiful for pilgrim feet whose stern impassion'd stress  
**D7 G Em Edim Am7 D7 Fdim D7 E7 A7 D7**  
 A thoroughfare for freedom beat across the wilderness.  
**G D7 D9 C D7 Am7 D9 Am7 D D7 G GM7 G7**  
 America! A - merica! God mend thine every flaw,  
**Fdim C Am7 G G/F# Em D7 C Am7 D D7 G Em7 D7**  
 Confirm thy soul in self-control, thy liberty in law.  
**D7 G Em Edim Am7 D7 C C/B Am7 D7 G Edim D7**  
 O beautiful for patriot dream that sees beyond the years  
**D7 G Em Edim Am7 D7 Fdim D7 E7 A7 D7**  
 Thine al-a-bas-ter cities gleam undim'd by human tears.  
**G D7 D9 C D7 Am7 D9 Am7 D D7 G GM7 G7**  
 America! A - merica! God shed His grace on thee,  
**C Am7 G G/F# Em**  
 And crown thy good with brotherhood  
**D7 C Am7 D D7 G**  
 From sea to shining sea!

In practice, try to make sure that your timing matches with the song. You can try this with more of your favorite songs by finding the chords online and playing along with it like the example above.

## Chord Voices

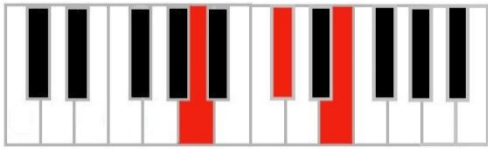
When you play a chord, there are three parts that are essential: the root, the middle, and the top. The root of the chord is the bottom note, the top note is the highest pitch note in the chord, and whatever happens in between those two notes is considered the middle. How you play them and where you add them in application is important. In this section, we will explore the three important components of the chord.

### The Bottom (root)

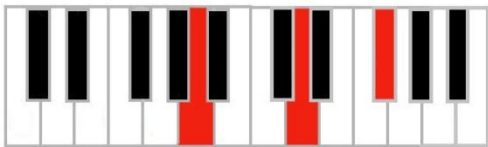
With your knowledge of inversions, you already know that the root can be modified to satisfy your musical needs. The root note is the most important note of the chord because all other notes are based off of it. Bass notes in chords can do three things: stay normal, be inverted, or be altered. In a normal application, the bass note applies to the natural root of a chord, such as an A major would have a root

note of A. When it is inverted, the bass note is changed to another note in the chord, such as a D major with a root of A. When the bass note is altered, that means it is flatted, sharpened, or moved to an irregular position like commonly used in jazz. An example would be an F major with a root of Bb.

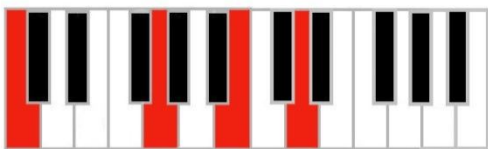
Normal Root (A Major)



Inverted Root (D Major 2<sup>nd</sup> Inversion)



Altered Root (G/C)

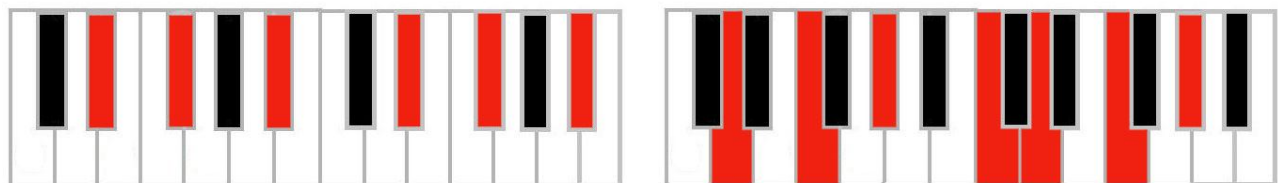


**The Middle**

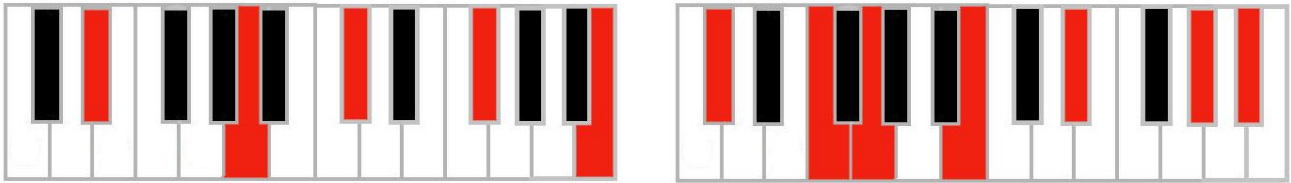
The function of the 3<sup>rd</sup> in the triad sums up the function of the middle notes in any chord. The middle notes provide definition, balance, and completeness to the chord. In ear training, the middle notes are the hardest notes to hear and recognize. They can sound buried and drowned out at times.

When it comes to using both hands, you have two options: play octaves or play contrast. The most common way to play a chord with both hands is by playing octaves. This is also the easiest way to play chords, because you can play the same middle notes over again in different octaves. This is used the same way that octaves can round up the sound of a triad or two simple notes. When you play contrast, you play different notes with your right hand than what you are playing with your left. This is an important way to play because you can give chords further color by doing this. Let's look at a few examples.

Octaves (Example)



Contrast (Example)

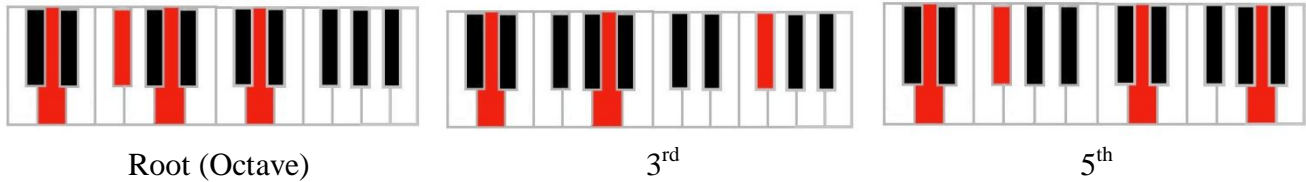


**The Top**

The top note of the chord is considered to main voice of the chord, because when you hear a chord, this note sticks out to your ear the most. It is not by choice that this note becomes the dominating note in your ear recognition, because in all cases higher pitched notes are more easily recognized than lower pitched notes because of their structure: a higher rate of vibration and a thinner sound. The ear catches the treble sounds first.

In application, there are an infinite number of ways that the top note can be used in a chord, due to the infinite number of melodies that can be produced in a single key. However, we can explore some common ways that you can use the top note, especially in accompanying a singer.

We can start with the basic inversions. You can use the inverted notes in a chord to represent the top note. See the example in D below.



The top note is very important. A common way to voice the top note in chords is to use the 3<sup>rd</sup>. The third and the root are the best and most soothing harmonization that can possibly be heard, and that isn't just my opinion. The most popular songs ever recorded feature this harmonization. Canon in D is one example of this usage.

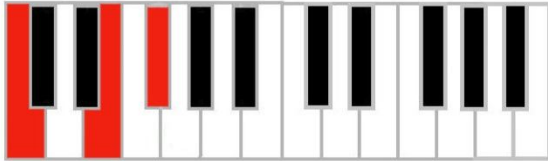


## Lesson 4

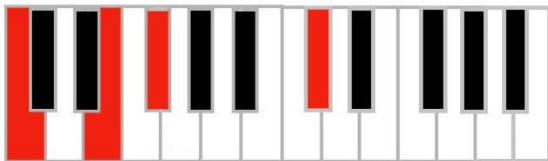
### Chord Alterations

#### Altered Chords

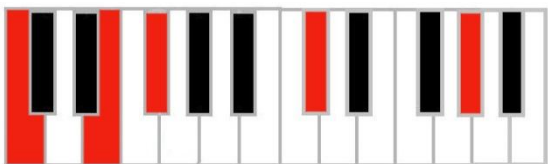
In this session, we will focus on the function of chords in which specific pitches are modified. A chord is altered when it contains an additional flatted or sharped note within its context. For example, a C major can contain a flatted 5<sup>th</sup> and this would make it a C b5 chord.



C b5

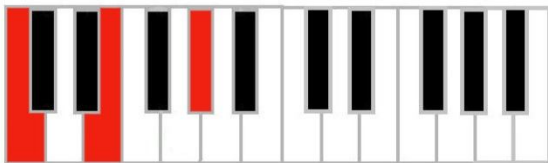


C b5(b9)

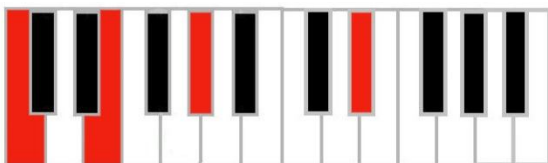


C b5(b9,b13)

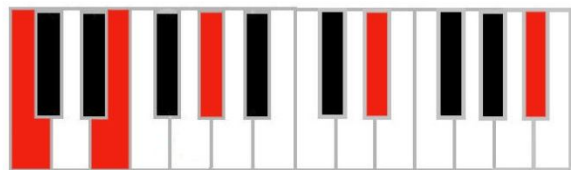
As you can see from the displays above, you can add more flatted notes to the equation. Each flatted note is specified and moved by a number in the scale.



C #5



C #5(#9)



**C #5(#9,#13)**

The same thing applies to the sharps: the numbers in the scale are specified.

## Using Altered Chords in Transition:

There are infinite ways that altered chords can be used. Here are just a few that you can practice on your own. These 3 variation chord progressions feature altered chords.



**Ab7#5(#9)**



**Bb7#5**



**F7**



**F#mb5(b6,b9)**



**Abmb5(b6,b9)**



**AMaj6,7 sus2**



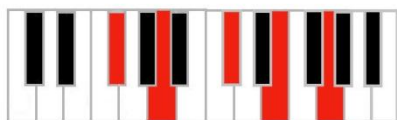
**EMaj7**



**F#7(#5, #9)**



**BMaj7**



**F#m7(b9)**



**AbMaj6**



**F#6 sus2 2 inversion**

## Exercise 1

Play a C major chord and then alter it in two ways: 1. Flat the 5<sup>th</sup> then 2. Flat the 5<sup>th</sup> and the 9<sup>th</sup>. Repeat this multiple times by transposing and playing this exercise in all 11 other keys. Then try sharpening the 5<sup>th</sup> and the 9<sup>th</sup> in each key. Get familiar with the process and the sound that these chords make.

## Lesson 5

### Chords with Scales

#### Related Scales

In this session, we will be exploring the many relationships that scales have specifically with chords. This relationship is important to know because when you play a chord, most likely you will want to also play single notes in succession by pitch to represent either the melody or an additional movement within the song. First, we will start by exploring the basic triads and what kind of scales work well with them. Below there are three classifications of related scales that I want to point out for each of the 4 triads: Perfect, Slightly Altered, and Extremely Altered. Perfect means that the notes in the scale perfectly match the notes in progression of the chord. Slightly altered means the scale changes one or two notes in the prevailing scale. Extremely altered refers to scales, which even though they are different from the prevailing chord type, they still can work with the chord.

### Major

#### Perfect

Major Scale  
Major Pentatonic  
Ionian Mode

#### Slightly Altered

Lydian Mode  
Mixolydian Mode  
Harmonic Major

#### Extremely Altered

Double Harmonic Major  
Dorian Mode  
Melodic Minor

### Minor

#### Perfect

Natural Minor Scale  
Minor Pentatonic  
Aeolian Mode

#### Slightly Altered

Harmonic Minor  
Melodic Minor  
Dorian Mode

#### Extremely Altered

Locrian Mode  
Diminished  
Double Harmonic Minor

### Diminished

#### Perfect

Diminished Scale

#### Slightly Altered

Altered Dominant Scale

#### Extremely Altered

Natural Minor

### Augmented

#### Perfect

Harmonic Major  
Mixolydian b6

#### Slightly Altered

Natural Minor  
Double Harmonic Major

#### Extremely Altered

Diminished  
Double Harmonic Minor

Now that we know which scales work with the basic triads, we can now take it further by exploring other chord types.

### 7<sup>th</sup> Chords – C7, C#7, D7, Eb7, E7, F7, F#7, G7, Ab7, A7, Bb7, B7

These chords are major triads with an added flatted 7<sup>th</sup>. This gives way to the directly related scale, the mixolydian mode. In the mixolydian mode, you play a major scale except the 7<sup>th</sup> is flatted. As you play the chord, begin to improvise by adding in various notes included in the mixolydian scale.

### Minor 7<sup>th</sup> Chords - Cm7, C#m7, Dm7, Ebm7, Em7, Fm7, F#m7, Gm7, Abm7, Am7, Bbm7, Bm7

These chords are minor triads with an added minor 7<sup>th</sup> (flatted). The scale that is most related to the minor 7<sup>th</sup> is the natural minor scale. Another scale that directly goes along with the chord is a minor pentatonic scale.

### 6<sup>th</sup> Chords – C6, C#6, D6, Eb6, E6, F6, F#6, G6, Ab6, A6, Bb6, B6

These chords are major triads with an added major 6<sup>th</sup> note. Since all notes are major, the initial related scale would be the major scale. The major pentatonic scale also works perfectly with these chords.

### Minor 6<sup>th</sup> Chords - Cm6, C#m6, Dm6, Ebm6, Em6, Fm6, F#m6, Gm6, Abm6, Am6, Bbm6, Bm6

These chords are minor triads with an added major 6<sup>th</sup>. The scale that is directly related to the minor 6<sup>th</sup> chord is the Dorian Mode. The Dorian Mode is a natural minor scale with a raised 6<sup>th</sup>. The 6<sup>th</sup> is raised to reflect the major 6<sup>th</sup> note in the scale/chord.

### Augmented 7<sup>th</sup> Chords - C7+, C#7+, D7+, Eb7+, E7+, F7+, F#7+, G7+, Ab7+, A7+, Bb7+, B7+

These chords are regular 7<sup>th</sup> chords with a raised 5<sup>th</sup>, similar to what is found in an augmented triad. The scale that is immediately and directly related to augmented 7<sup>th</sup> chord is the Mixolydian b6. In a regular Mixolydian Mode, you play a major scale with exception to the 7<sup>th</sup> which is flatted. With the Mixolydian b6, you simply include the b6 in that scale. Another good scale to play with these chords is the whole tone scale.

### 7<sup>th</sup> chords with a flat 5 - C7b5, C#7b5, D7b5, Eb7b5, E7b5, F7b5, F#7b5, G7b5, Ab7b5, A7b5, Bb7b5, B7b5

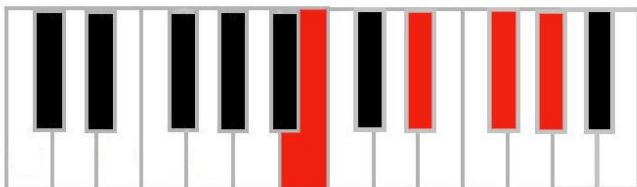
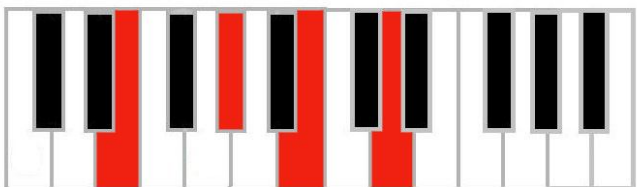
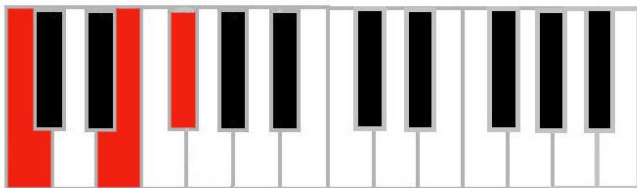
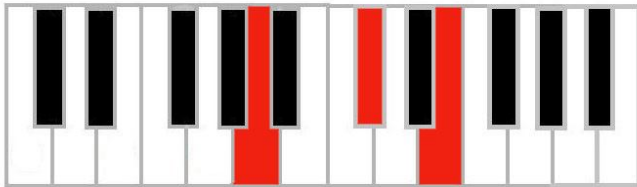
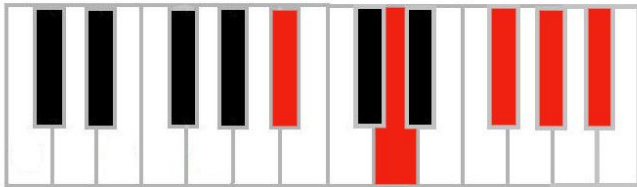
These chords are regular 7<sup>th</sup> chords with a lowered 5<sup>th</sup>. The scale that works directly with this type of chord is the Locrian Mode. The Locrian Mode is a regular minor scale with a flatted 2<sup>nd</sup> and 5<sup>th</sup>.

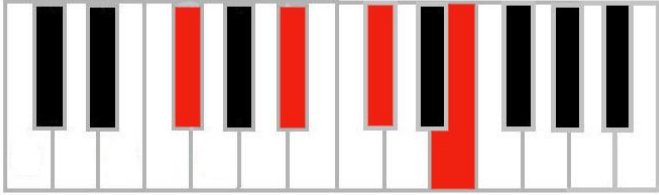
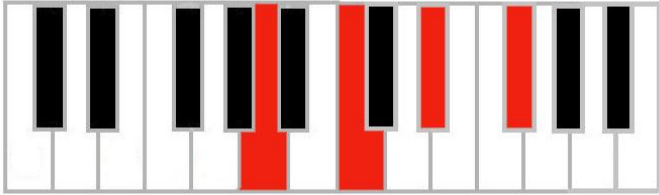
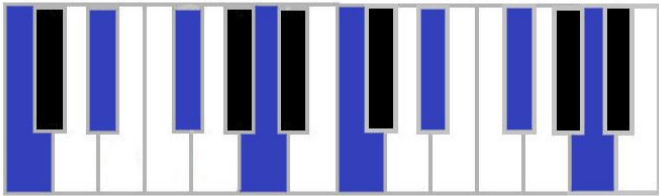
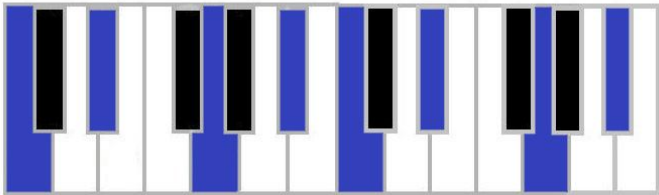
We will explore more chords later on in these courses. With your knowledge of chords, match the above scales with each chord. The benefit of knowing these relationships is that you can apply a melodic

run to any chord application. If you want to learn more about scales and fingering, take the **Piano Speed Classes** or the **Piano Improvisations Classes**.

### Exercise 1

With each chord shown below, write under it what kind of scale you play along with the notes that are associated with the scale. Make sure to include the note name. Use references if necessary.





## Lesson 6

### Chord Theory

#### Diatonic Chords

**Diatonic scales** mostly are referred to as scales using none or the least amount of **chromatic** alteration. This means that the scale is required to contain predominately whole tones. **Chromatic scales** are opposite: they require that all intervals played are to be semitones, therefore including all 12 notes or more in a given scale. The chromatic scale plays all 7 natural notes and all 5 sharps and flats in any direction of pitch. The chromatic scale can work in any application, but the diatonic scale must play only the notes that are relative to the prevailing scale.

An example of a diatonic scale is a C major scale. The layout of the 7 natural notes defines diatonic. Any **modulations** of the major scale are considered to be diatonic as well, meaning a C# major is diatonic, an Eb major is diatonic, and so on. Minor scales are not considered to be diatonic because they are not a proper transposition of the major scale. Even though an A minor scale also has all white keys, it still is not considered diatonic because the pattern is a minor pattern. However this is greatly argued in the music theological world.

There are names for every diatonic note in a diatonic scale. Since there are 7 notes in a major scale, in any given major chord, you can construct 6 additional chords that can go with the prevailing scale. This is accomplished simply by moving the root note of the chord up or down 1 pitch in the scale. In the C major, the root can be changed to D, then E, then F, and so on. Each of the root notes of each diatonic chord is called a **degree**. For example, C major has 7 different notes. C is considered the first degree, since it is the first note in the scale. D is considered the second degree, since it is the second note in the scale, and so on. This pattern continues until it restarts at the next available C or the octave of the root note.

C Dmi Emi F G Ami Bdim C

I II III IV V VI VII I

In the diagram above, each chord is called out at the top of the staff. As noted, the 1<sup>st</sup> degree is C major. The second degree is D minor. The reason these change is because the notes of the diatonic scale are moved over 1 whole step (or half step in some cases) to create another chord. The chord is then defined by what notes make it up. As you can see, in a **diatonic chord progression**, there are four minor chords and three major chords. Understanding the **diatonic chord progression** can further enhance your ability to write songs with an understanding of chord relationships.

Now that you understand degrees of the diatonic scale, you must also understand that each degree of the scale has a name associated with it. Diatonic scales are mostly major scales, and the triad diatonic progression includes major and minor chords. These chords are further specified by the following terms:



- Tonic**- the first scale degree of the diatonic scale and the tonal center or final resolution tone;  
**Supertonic**- The second scale degree (the scale degree immediately "above" the tonic);  
**Mediant**- The third scale degree (the "middle" note of the tonic triad);  
**Subdominant**- The fourth scale degree (a fifth "below" the tonic);  
**Dominant**- The fifth scale degree (the most "pronounced" harmonic note after the tonic);  
**Submediant**- The sixth scale degree (the "middle" note of the subdominant triad);  
**Leading tone**- (or leading note)- The seventh scale degree (the scale degree that "leads" to the tonic, this is also referred to as subtonic);  
**\*\*Subtonic**- also seventh scale degree, but applying to the lowered 7th found in the natural minor scale.

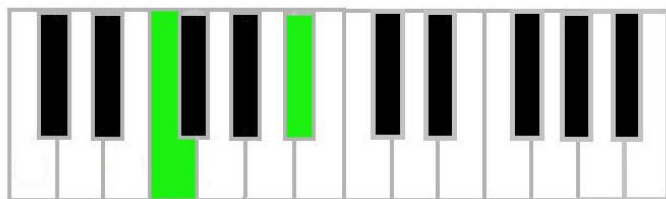
Each of these names for the degrees in the diatonic scale has significant meaning and can further explain the role of each degree. Though not as often used except for more advanced theory, these names are good to know because they bring further definition of the roles of each note in a diatonic chord progression.

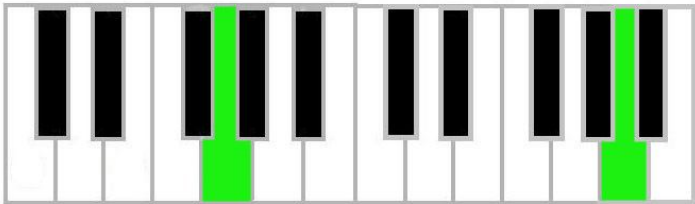
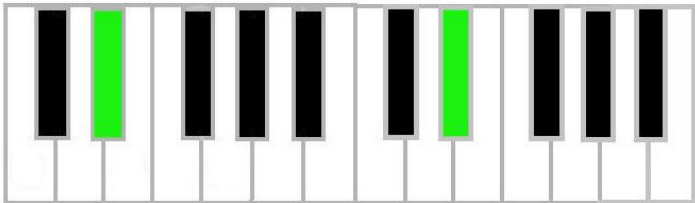
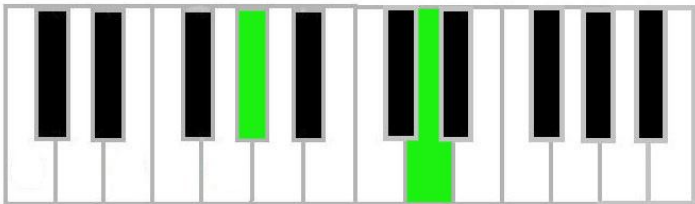
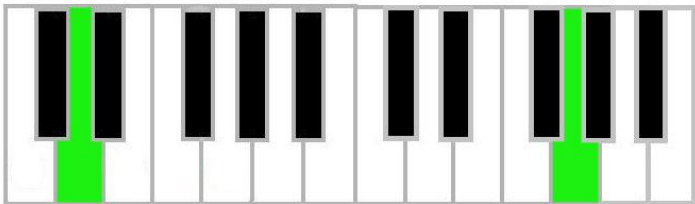
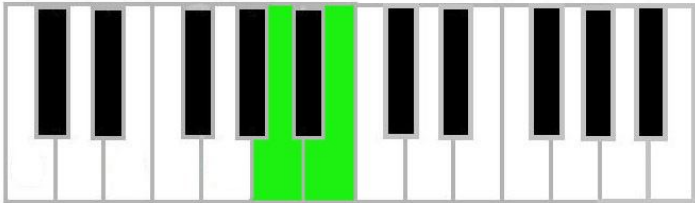
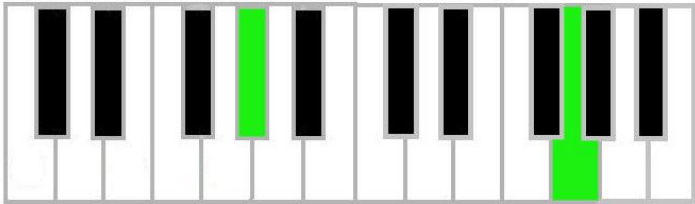
When you consider chord building, it is essential to be familiar with all of the types of intervals that you can use. Knowledge of the intervals is the key to knowing how chords work. Below is a list of these intervals and how they work (just review).

- Perfect 1<sup>st</sup>** - Play the root note of the scale  
**Minor 2<sup>nd</sup>** - Count up one half step from the root note  
**Major 2<sup>nd</sup>** - Count up one whole step from the root note  
**Minor 3<sup>rd</sup>** - Count up three half steps from the root note  
**Major 3<sup>rd</sup>** - Count up two whole steps from the root note  
**Perfect 4<sup>th</sup>** - Count down one whole step from the fifth note in the scale  
**Diminished 5<sup>th</sup>** - Play the b5 note of the scale  
**Perfect 5<sup>th</sup>** - Play the fifth note of the scale  
**Major 6<sup>th</sup>** - Count up one whole step from the fifth note  
**Minor 7<sup>th</sup>** - A whole step shy of an octave  
**Major 7<sup>th</sup>** - A half step shy of an octave  
**Octave/Perfect 8<sup>th</sup>** - A complete octave from the root note  
**Major 9<sup>th</sup>** - Same note as the major 2<sup>nd</sup> but one octave higher; the 9<sup>th</sup> note in the scale  
**Perfect 11<sup>th</sup>** - Same note as the perfect 4<sup>th</sup> but one octave higher; the 11<sup>th</sup> note in the scale  
**Major 13<sup>th</sup>** - Same note as the major 6<sup>th</sup> but one octave higher; the 13<sup>th</sup> note in the scale

## Exercise 1

With each chord shown below, specify the type of interval.





In conclusion, the major, perfect, unison and octave intervals all are considered diatonic intervals. The minor and diminished intervals are considered **chromatic intervals**. In contrast, the major, perfect, unison, and octave intervals can also be considered chromatic intervals, but these intervals are limited to the diatonic set, and thereby are dominantly considered as diatonic intervals.

## Transposing Notes

**Transpose** means to raise or lower the pitch of a prevailing note by a specified interval. An example of transposing would be changing a C major chord to a C# major chord. The term transpose is more commonly used to specify the change in the prevailing key of a song, such as if a song is originally written in C major, one can transpose that song to be played instead in C# major. The amount that a note or chord is transposed is defined by two things: how many half or whole steps are added or subtracted to the original note and what direction to go. Changes in pitch are quite common in songs, but not every changed pitch in a song is necessarily transposing. Transposing can be easily confused with simple diatonic or chromatic intervals that are changed or altered as the song progressed. This is accomplished in the song by adding irregular chord progressions, commonly noted as **chromatic chord progressions**, to add dissonance in the song. Irregularity is used to make the song unique and challenging to the listening ear. But transposing more refers to the change in the actual key of the song. Many songs transpose twice; once rising in pitch and then another time returning back to the original pitch that the song is played in.

## Understanding Chromatics

Chromatic is a musical term that is used to define the progression of notes that advance only by semitones. Just as chromatic notes are useful in scales, they are just as useful with chords. In modifying chords and chord progressions, chromatics play a key role in it. When you flatten or sharpen a note, that note is chromatic to the note that it previously was. In other words, any time a note is changed by a semitone means that you are using a chromatic change. Chromatic changes can have dramatic effects to a song.

Now that you understand chromatics, it is time to apply them to your playing so far. The theory we went over so far introduced you to the C major scale and chord. Using chromatics, try applying your knowledge further by transposing what you have learned to other keys greater than C major and minor. Remember how both the chords and the scales are composed, and remember in every key the same rules apply. We will further look at chords in the next session.

## Exercise 2

Using the scales noted for the chords shown below, play the chord progression starting from the root chord.

D minor chord with a Natural Minor progression

An augmented chord with a Mixolydian b6 progression

Db diminished chord with a diminished progression

F# major chord with a major progression

F7 chord with a Mixolydian progression

# Sight Reading Lessons 1-6



## Lesson 1

### Symbols and Uses

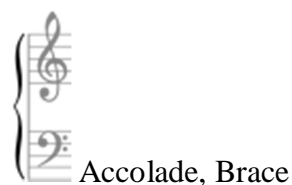
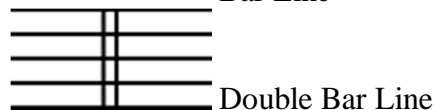
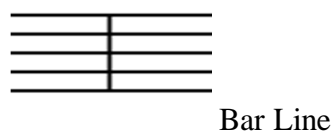
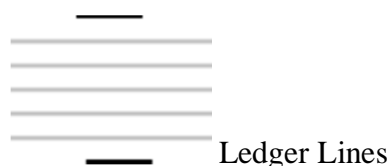
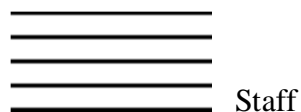
#### Introductions

Before we begin with the practice of sight reading, it is important to gain an understanding of the meaning of most symbols that you will run across if not frequently, from time to time. It is good to be able to learn the meanings of symbols, that way you become more versatile in using what you want to use when writing, as well immediately recognizing when you read. There is a wealth of symbols to go over.

Sight reading is essential to have under your belt as a student of music theory. Sight reading helps improve your virtuosity as a pianist and as a musician. As a musician, you are not absolutely required to learn how to read before you learn how to actually play, but it has its benefits.

#### Lines in Sheet Music

Lines in sheet music are very similar to lines on collegiate paper. They have two functions, to set the perimeters on where the notes are to be placed and also to divide notes according to the rhythm. I will define each symbol shown above starting from top to bottom.



A **staff** is a series of 5 vertical lines that represent certain pitches on the piano or any other instrument. Each line and space represents 1 distinct pitch.

**Ledger Lines** are imaginary lines that are drawn in above or below any staff in which they represent an extended pitch. Staves only represent a total of 9 pitches (5 lines and 4 spaces) so we realize that there are more pitches beyond what a standard staff can show.

A **Bar Line** is a horizontal line that divides notes by rhythm. Most of the time, each bar line separates the entire song evenly.

A **Double Bar Line** is used to separate a change, or a new phase within a song.

The **Final Double Bar Line** is a line that is used to denote the end of a song.

An **Accolade**, or **Brace**, is the connecting squiggly or straight line that connects two or more staves. In the case of the piano, the brace will connect two staves.

## Notes and Rests

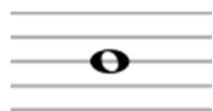
**Notes** represent two things: pitch and rhythm. The pitch is determined by which line or space the note is on in the staff, and the rhythm is defined by the note type. Rests are points in the music that are purposely designated to silence for a specified period of time. Rests contain the same amount of time rhythmically as their distant cousin: notes. For example, rhythmically a whole note is equal to a whole rest.



Breve/Double Whole Note



Double Whole Rest



Semi Breve/Whole Note



Whole Rest



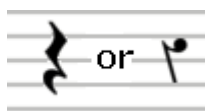
Minim/Half Note



Half Rest



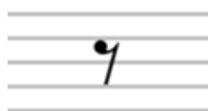
Crotchet/Quarter Note



Quarter Rest



Quaver/Eighth Note



Eighth Rest



Semiquaver/Sixteenth Note



Sixteenth Rest



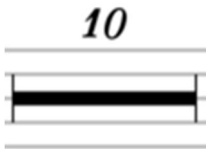
Demisemiquaver/Thirty-second Note



Thirty-Second Rest



Dotted Notes



Multi-Measure Rest

**Dotted notes** are notes that are given an additional half of their time. An example of this could be a dotted quarter note is equal to a quarter note and an eighth note combined.

The **multi-measure rest** is used to save space on the paper for long rest periods in a song. The number of measures that are to be rested are shown by a number above the staff where the rest begins to take place.

## Clefs

**Clefs** are symbols usually shown in the beginning of the staff lines that indicate which pitch the lines and spaces will represent.

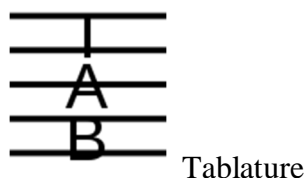


G Clef/Treble Clef



C clef/Alto Clef/Tenor Clef





The **G clef**, or **treble clef**, tells us that the lines and spaces are above the ledger line “Middle C.” This clef contains the notes that are higher in pitch on the piano.

The **C clef**, or **Alto clef**, is a clef that points to middle C as being in the middle of the staff line set. So in the case of the above image of the C clef, middle C is considered to be represented by the middle line. This clef is mainly used for viola, trombone, tuba, and other instruments with lower register but also mid-range to higher pitched ability.

The **F clef**, or **Base clef**, tells us that the lines and spaces in the staff are below the ledge line “Middle C.” This clef tells us that the staff is to play notes of a lower pitch on the piano.

**Tablature** is used to notate music for guitar players.

## Accidentals and Key Signatures

Accidentals modify or change the pitch of any given note. Each accidental will tell whether to modify a pitch by going up or down in a scale.





Double Flat



Double Sharp



Flat Key Signatures



Sharp Key Signatures

A **Flat** symbol is similar to a lower case b. This symbol indicates that the note is to be moved down in pitch by one semitone (half-step).

A **sharp** is similar to the pound sign in western numerals. This symbol means that the note is to be moved up in pitch by one semitone.

A **natural** symbol means that the note is to be played in its defined context, such as an A, B, C, D, E, F, or G. Natural notes are easily recognized on the keyboard as the white keys.

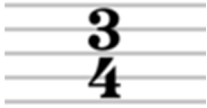
A **double flat** symbol means that the note is to be moved down in pitch by 2 semitones or one whole step.

A **double sharp** is a symbol similar to an x. This symbol indicates that the note is to be moved 2 semitones or one whole step up in pitch.

**Key signatures** are shown in the front of a staff to indicate a line or space being flatted or sharped in ALL cases. They are used to modify a pitch universally throughout the song.

## Time Signatures

**Time signatures** are fractions that define the rhythmic volume of a song. More specifically they define the **meter** of music. These tell us how many beats are in bars and measures and what type of notes to use within them. Even though time signatures give us a specific rhythm that a song is to be played, it is not required, but merely a suggested way.



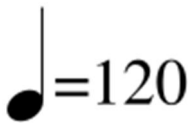
Specific time



Common time



Alla breve or cut time



Metronome mark (in bpm)

**Specific time signatures** define a varying range of time that a song is to have. This can include 3/4, 5/8, 6/8, 5/16, and more. The numerator of a time signature tells how many “beats” are to be in each measure, and the denominator tells us what kind of note the “beat” will represent.

**Common time signatures** indicate a time signature of 4/4, because in modern day music, 4/4 is much more commonly used than any other time signature.

The **alla breve**, or **cut time signature**, indicates the use of 2 half notes to make a measure; so it is considered to be a 2/2 time signature.

The **metronome mark** is a number and a symbol shown only in the beginning of a song that indicates the exact speed of a song based on beats per minute. The time signature determines the type of beat to be used, and the metronome mark determines how many beats are to be regularly played in a minute’s time.

## Note Connections



Tie



Slur



Glissando or Portamento



Artificial Groups, or triplets



Chord



Arpeggiated Chord



Beamed Notes

In many instances, notes are grouped together in certain ways. Each of these methods of groupings brings greater meaning to notes in general. They are as follows:

A **tie** is an arced-line drawn to connect two notes together of the same pitch. This means that the note is to be held continuously until the rhythm value of both notes is resolved.

A **slur** is an arced-line drawn to connect two or more notes together of different pitches. This symbol means that the notes are to be played legato, or held onto as much as possible before going to the next note. All this is done within the rhythm of the note however and does not mean you hold the note longer than you are supposed to.

**Glissando**, or **Portamento**, is a symbol that means to slide up or down from one note to another, gliding across the pitches that are in-between the two notes. The note to the left indicates the note you start on and then the note to the right indicates the note that you end on.

**Artificial groups**, or **tuplets**, indicate a note to be played slightly shorter and quicker than normal. Examples are a group of three notes, called a triplet, which are to be played in the time equal to two of their kind.

A **chord** in sheet music is indicated by multiple notes that are stacked on top of one another.

An **arpeggiated** chord symbol is found to be a squiggly line that sits to the left of any chord. This means that the notes are to be played in succession from low to high, rather than at the same time.

## Articulation Marks

**Articulation marks** are used to specify the way individual notes are to be played. They can be shown either above the note head or below the note head in notation.



Staccato



Staccatissimo



Accent



Tenuto



Marcato



Pizzicato or Stopped Note



Fermata

A **staccato** symbol is shown as a dot above or below a note head, and indicates that the note is to be physically played at half the duration of the note, however the full duration of the note is still to be kept. Staccato notes are notes that are played quickly or briefly at each application.

**Staccatissimo** is a tiny filled triangle drawn above or below a note head, and it indicates even more of a chopped note when it is played than its parent, staccato.

An **accent** indicates that the note is to be played more expressively than other notes. Accented notes are supposed to stick out above other notes that are played around the same time or even at the same time.

A **tenuto** has several meanings, but the main meaning is that the note is to be played for its full value.

The tenuto symbol is a horizontal line that is drawn either above or below the note head.

A **pizzicato** or **stopped note** is a symbol used to indicate a string to be plucked rather than bowed. This symbol is not used in piano, but still good to know regardless.

A **fermata** indicates that the note is to be held for longer than the note value. This symbol is similar to a retardando.

## Ornaments



Trill



Mordent



Mordent (Lower)

**Ornaments** modify the pitch value of individual notes.

A **trill** is symbolized by the letters “tr” above the note. A trill is a single rapid alteration between the specified pitch and the next pitch higher. This is similar to a grace note but plays the root note first and last instead of just last. The higher pitched note is determined by the predominant scale of the song, or the specific chord and scale pattern being played at the time.

A **mordent** is symbolized by a squiggly line above or below the note head. A mordent is the multiple rapid alterations between the specified pitch and the pitch one note higher in the scale. The definition “to be played rapidly” is not specific as far as how fast, but it is understood that it should be played rapidly.

A **lower mordent** is symbolized by a squiggly line with a vertical line in the middle of it. It can be shown above or below the note head. A lower mordent is the multiple rapid alterations between the specified pitch and the pitch one note lower in the scale.

## Dynamics

Dynamics are used in the song to indicate the contrast of loud and soft tones.

**ppp** Pianississimo

**pp** Pianissimo

**p** Piano

**mp** Mezzo Piano

**mf** Mezzo Forte

**f** Forte

**ff** Fortissimo

**fff** Fortississimo

**sfz** Sforzando

**<** Crescendo

**>** Decrescendo or Diminuendo

**Pianississimo** means to play extremely soft.

**Pianissimo** means to play very soft.

**Piano** means to play softly.

**Mezzo Piano** means to play half as soft as piano.

**Mezzo Forte** means to play half as loud as forte.

**Forte** means to play loud.

**Fortissimo** means to play very loud.



**Fortississimo** means to play extremely loud.

**Sforzando** means to put fierce emphasis on a note or forced sound.

**Crescendo** means to gradually increase the volume of a certain section of the song.

**Diminuendo** or **Decrescendo** means to gradually decrease the volume of a certain section of the song.

## Octave Signs



Ottava



Quindicesima

**Octave signs** are used to indicate the note to be played an octave higher than shown. This is due to the fact that sometimes ledger lines can become rather tedious, therefore it is with greater convenience that you can use these symbols to indicate that a note or group of notes are an octave or two higher.

The **Ottava** is defined with the symbol 8va in sheet music. The ottava indicates that any specified note is to be played with a pitch value of exactly an octave higher than shown.

The **Quindicesima** is identified with a 15na in sheet music. The quindicesima indicates that any specified note is to be played with a pitch value of exactly 2 octaves above the indicated note.

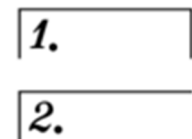
## Repeat Signs and Codas



Tremelo



Repeat Bar Lines



Volta Brackets

*D.C.*

Da Capo

*D.S.*

Dal Segno



Segno



Coda

In music, repetition is common. With the use of repeating bar line sections and codas, it helps save time and space when reading or writing music. These symbols are very useful in that purpose. A **tremolo** is indicated by hashes that are shown on the stem or body of any note. A tremolo indicates that the note is to be played in a repeated pattern rapidly. The hash marks on the stem indicate the rate at which the notes are to be repeated; such as one hash represents a speed equal to an eighth note, two hashes are equal to a sixteenth note, and so on. The more hashes, the more rapid the note is to be repeated. Also, notes are repeated only within their required duration.

**Repeat Bar Lines** indicate that any music written within them are to be repeated one or more times as specified.

**Volta Brackets** are variations that are played at the end of each repeated passage. Sometimes at the end of a repeated passage, you want the ending to be different from the previous.

**Da Capo** tells the performer to play the song from the beginning.

**Dal Segno** tells the performer to play the song starting from the segno symbol that should be shown somewhere in the music.

The **Segno** is used with the Dal Segno, and it indicates a starting point where the performer is told to begin a section of a song. The song will then end either by *al fine* which means play it until the end or *al coda* which means it stops at the coda symbol and skips to the end part of the song.

The **Coda** indicates a forward jump to the ending passage. Codas are usually used at some point during or after a Dal Capo or Dal Segno. If that were the case, this would mean that the performer is to go to the end of the last specified Dal Capo or Dal Segno.

## Pedal Marks



Engage Sustain Pedal



Release Sustain Pedal



Variable Pedal Mark



Con Sordino



Senza Sordino

The “Ped.” abbreviation is most commonly used when it comes to pedal initiation. The sustain pedal is the most common pedal used, so that makes for good association. Every time the release sustain pedal symbol is shown, it means exactly that. Each pedal symbol is indicated below the staff.

A **Variable Pedal Mark** is more specific in that it tells you exactly when to hold and let go of the pedal with your foot.

A **Con Sordino** symbol tells the performer to initiate the una corda pedal.

The **Senza Sordino** symbol tells the performer to let go of the una corda pedal.

## Conclusion

Make sure to study these symbols and use these pages as reference whenever you are reading sheet music. Knowing your symbols and how they work is foundational.

Lesson 1 Quiz

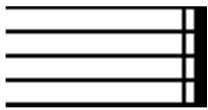
Instructions:

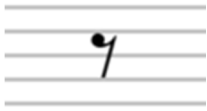
Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

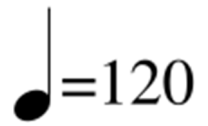
Name:

Date:

Write the name and the basic function of each of the symbols listed below.

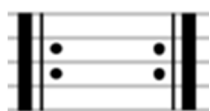












*D.S.*



*Red.*



## Lesson 2

### Writing Practice

In this lesson, I will introduce the benefit of writing musical symbols down on paper to help your recognition and memorization. First I will start with the basic symbols and we will move on further as the exercises will progress.

The essential practice with anything is putting it into action. In writing the symbols, you aren't just putting them on paper; you are using them in their proper function and application. By doing this, it is easy to memorize the functions of each symbol and help your memory. No matter how advanced of a reader, or how much you can recognize the symbols, this practice comes in handy.

### Exercise 1

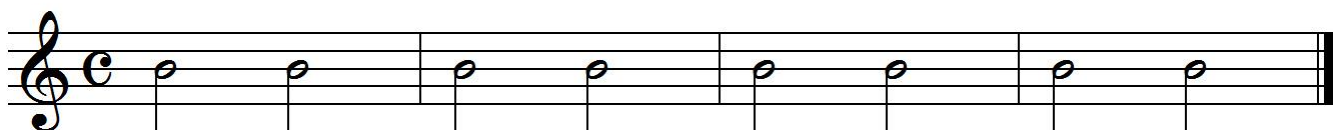
In this first exercise, we will write the common note symbols a few times. First, we will start by recognizing the treble clef, bass clef, and the letters of the staves. Next, we will draw in the common notes: eighth note, quarter note, half note, and whole note. These four notes are most commonly seen in sheet music. Before we start the exercises, make sure to print out a few blank sheet music sheets from the following pages so that you can write on the pre-drawn staves.

Draw the following 50 times, repeating the note name in your head. Each staff will be given a time signature of common time, so 4 beats per measure. Separate each measure with a bar line as shown below.

#### Whole Note (50 Measures)



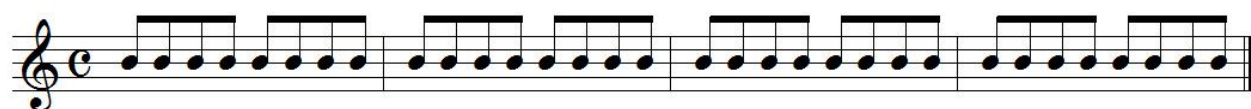
#### Half Note (50 Measures)

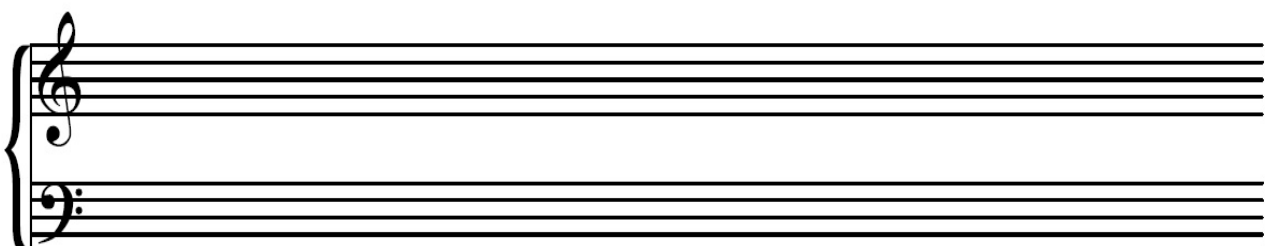
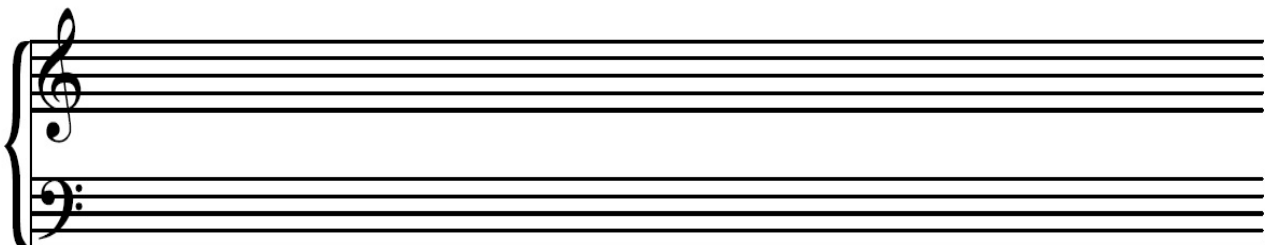
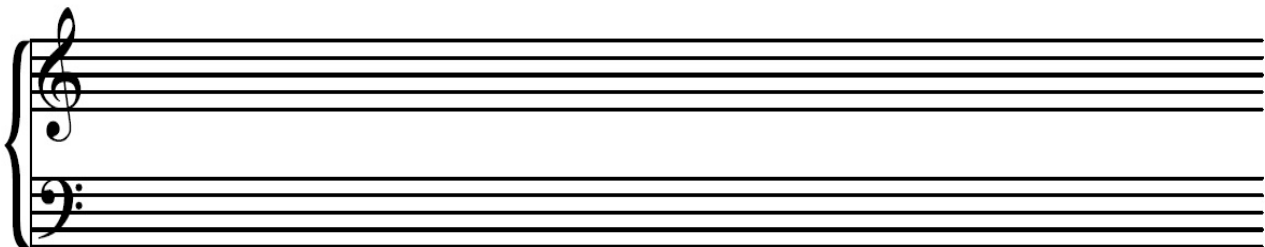
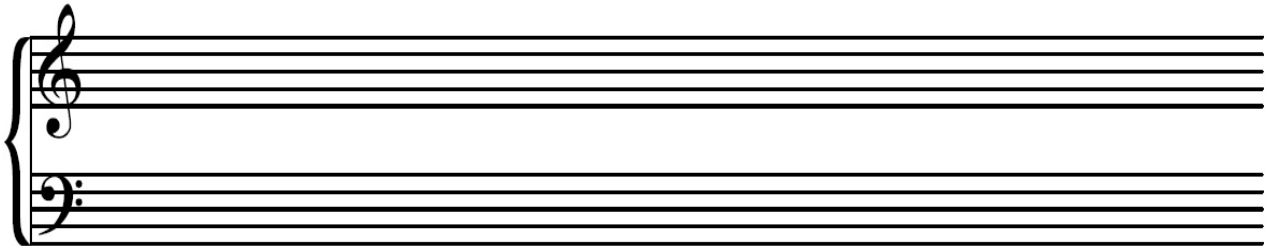


#### Quarter Note (25 Measures)



#### Eighth Note (15 Measures) – Beam 4 notes at a time as shown:



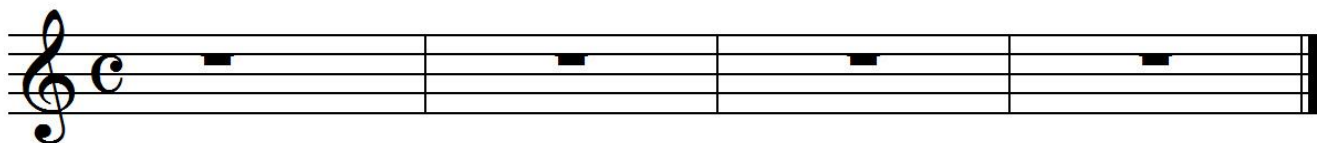


One thing that also helps is when you label each measure numerically starting from one. This helps you identify each measure individually. It is important to do this in sheet music because this is how you can find different parts of a written song.

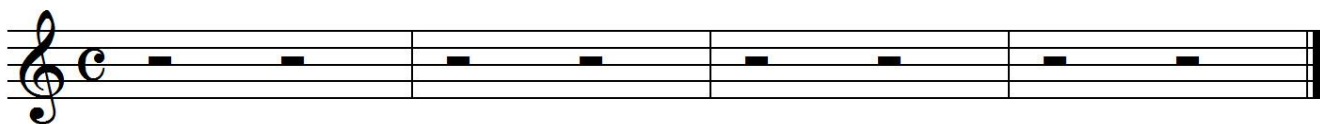
## Exercise 2

In this next exercise, you will write the rests. A rest is a symbol used to tell the performer to pause. The rests are given the same duration as the notes. Write the common rests in sheet music as demonstrated below.

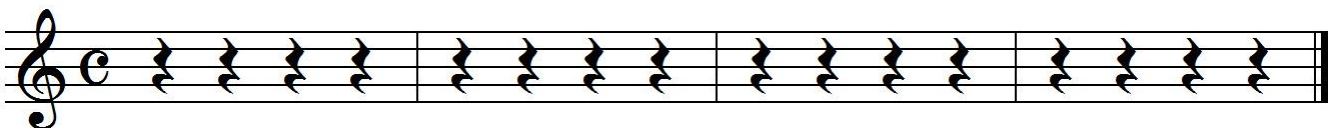
### Whole Rest (50 Measures)



### Half Rest (50 Measures)



### Quarter Rest (25 Measures)

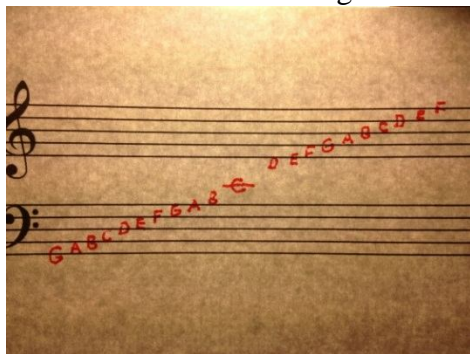


### Eighth Rest (15 Measures)



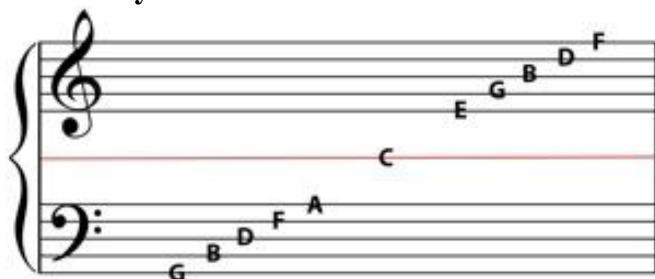
## Exercise 3

In this next exercise, you will write the note names by letter on each staff. If there is anything to practice when writing down notation, this would be the one to do. The exercise is to label each line and space starting from the G bottom note on the F clef to the F top note on the G clef. Repeat this 50 or more times while sounding them out and also taking visual memory:

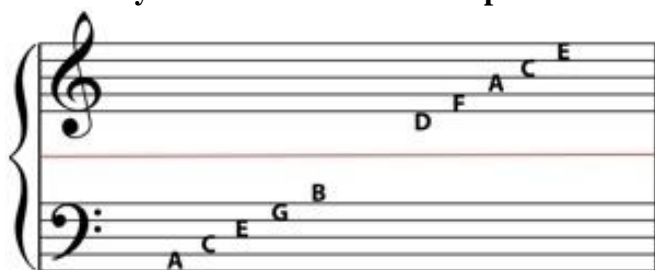


Now try to mix them up. It is important to know the lines and spaces individually by heart, so we can further accomplish this by separating them in the exercise.

**Write only the note names for the lines as shown. Do this 50 or more times for memorization.**



**Write only the note names for the spaces as shown. Do this 50 or more times for memorization.**



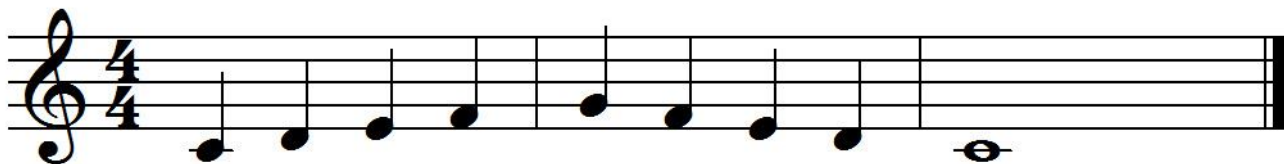
## Exercise 4

Now that we know both the note values and the note letters, we are going to combine both to make melody and then play it. Using a description, you will be required to write the notes on a staff, then take it to the piano or another instrument and play what you wrote. I will walk you through the first example and attempt to do the rest without help.

### Quarter Notes

Description: Write the following quarter notes in rising pitch succession: Middle C, D, E, F, and G. Time is 4/4 time on the treble clef staff. Then write the following quarter notes in declining pitch: F, E, D. Finish the song off with a whole note of middle C. Play what you have written on the piano.

Here is an example of what I just required:



### Groups of two

Description: With a time of 4/4 and on the bass clef staff, write the following notes in rising pitch succession: D quarter, F half, G quarter, B half. Then write the following in declining pitch succession: A quarter, F quarter, E quarter, and C whole. Take it to the piano and play what you have written.

### Four Counts

Description: With a time of 2/2 on the bass clef staff, write the following notes in declining pitch succession: F half, C half, B half; rise up to E half, then end on Middle C whole. Take this to the piano and play what you have written.

### Importance of Counting

In the next few exercises, we will go over how to count when you are reading music. Counting is essential in reading music because you can stay on track with what you are playing. It is equally essential when you are reading the notes, because each note has a certain count associated with it as follows:



Whole note/rest = 4 counts



Half note/rest = 2 counts



Quarter note/rest = 1 count



Eighth note/rest = 1/2 count



Sixteenth note/rest = 1/4 count

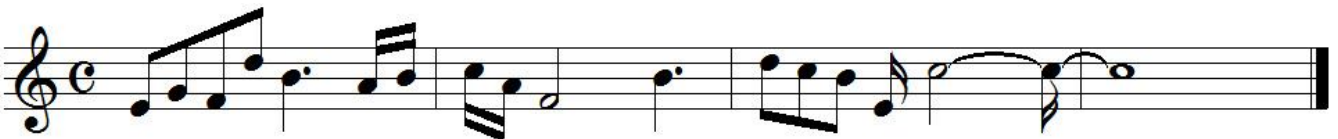
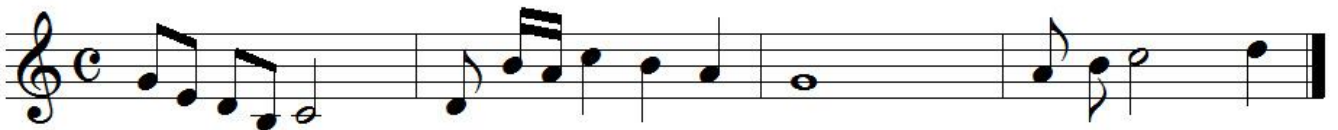
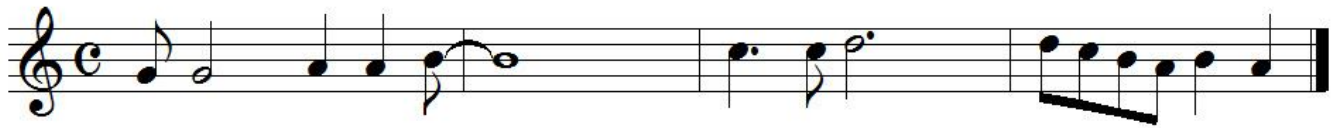
When counting, it is important to first know the time signature of the song. On a specific time signature, the top number of the fraction tells you up to what number you are counting to. So if it is a time signature of 3/4, then that means your count is “1 2 3 1 2 3,” etc. because each measure gets three counts. Whenever you enter a new measure, your counting starts over again. In knowing how many counts each measure gets, you can figure out how many notes can fit into each measure.

Here is an example of counting per note, where the number indicates number of counts:



### Exercise 5

Add up each of the following measures by writing the number of counts each note has above the note. After you are done putting the number of counts over the notes, put the total number of the counts added up and circle it over the measure. You may also do this on another sheet of paper if you wish. All of the measures should add up to 4 counts, and if what you have written doesn't add up to four, check it again.

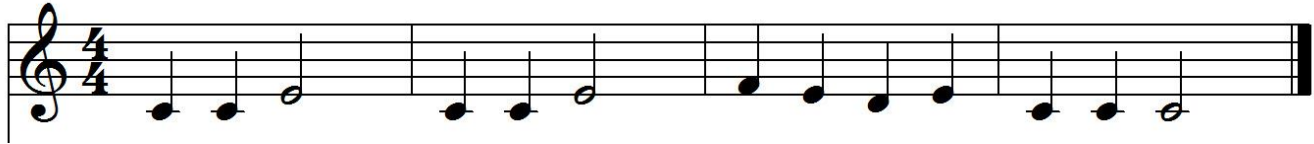




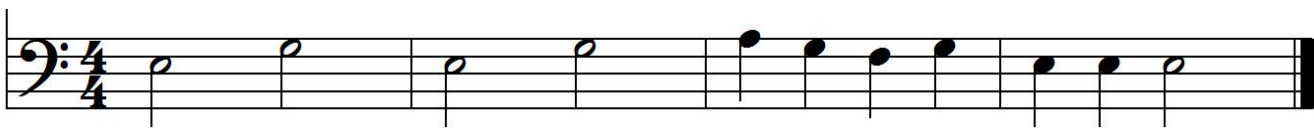
### Exercise 6

In this exercise, we are now going to combine what we have learned so far about rhythm and pitch by sight reading the simple diagrams below, one hand at a time on the piano. Go to a piano and play the following as directed:

RH

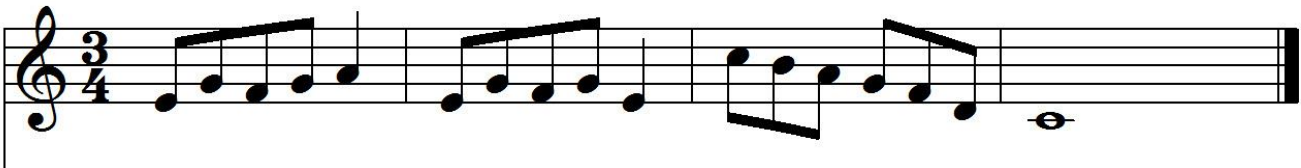


LH



In the first pass, play each hand individually. Then try playing each together. Make sure your timing is right.

RH



LH



Lesson 2 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**How many whole notes can fit into a single measure in a 4/4 time signature?**

- 1
- 2
- 3
- 4

**True or False: a half note is equal to two whole notes:**

- True
- False

**True or False: Three quarter notes are equal to 6 eighth notes:**

- True
- False

**What kind of notes are called out in a 2/2 time signature?**

- Quarter
- Half
- Whole
- 4<sup>th</sup>

**How many counts are in one measure with a time signature of 6/8?**

- 2
- 3
- 6
- 9

**In a grand staff, the single ledger line that sits in the middle between the treble and bass staff is classified by what note?**

- C
- D
- E
- F

**If I want to make a song with 3 counts per measure, what time signature would I use?**

- Common Time
- 4/4
- Cut Time
- 3/4

**True or False: a whole rest and a whole note have equal duration.**

- True
- False

**True or False: a quarter rest and 4 eighth rests have equal duration.**

- True
- False

**True or False: the top line on a treble staff is an F.**

- True
- False

**How many whole notes can fit into a single measure in a 4/4 time signature?**

- 1
- 2
- 3
- 4

## Extra Credit

**6 \_\_\_\_\_ notes are found in each measure in a time signature of 6/8.**

- Sixteenth
- Quarter
- Half
- Whole
- None of the Above

## Lesson 3

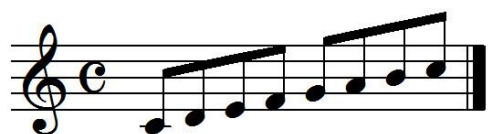
### Key Signatures

A Key Signature is a collection of accidentals that are shown at the beginning of the staff of the song. A key signature will represent the prevailing key of the song. Whenever you see a key signature, whichever lines and spaces are flatted or sharped in the beginning will be universal for the whole song; meaning that at any point of the song a note lands on that line or space, then it is to be whatever accidental is shown in the key signature.

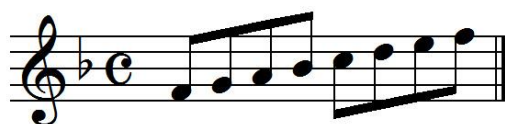
In order to get a good understanding of how key signatures work, it is helpful to memorize the major scales. Key signatures are written in either a major key or a minor key, however the relative minor keys share the same key signature as a major key that is rooted 3 semitones above the minor root.

So let's explore the flat key signatures. Below is a list of scales; play them and visually remember them on the staff.

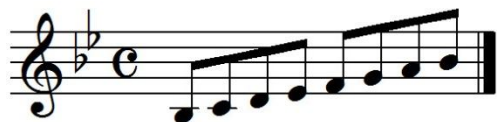
C Major Scale



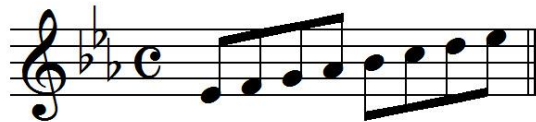
F Major Scale



Bb Major Scale



Eb Major Scale



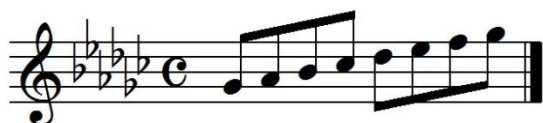
Ab Major Scale



Db Major Scale



Gb Major Scale



Cb Major Scale



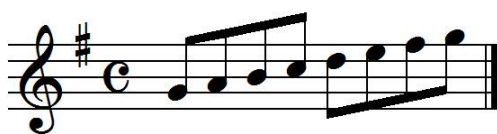
As you may have been able to tell already, with every change in scale, 1 flat note was added. This order of scales can be determined by the circle of 4ths. In memorizing key signatures, it is important that you know the major scale associated with it to make your sight reading so much easier. You should be able to recognize each key signature after studying them and practicing them in application.

Now let's move on to the sharps.

C Major Scale



G Major Scale



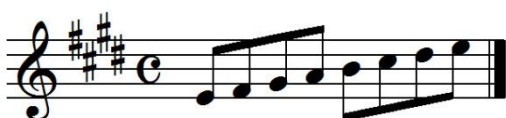
D Major scale



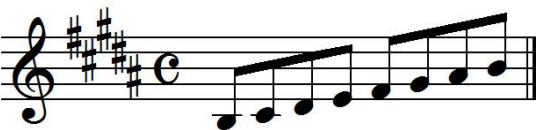
A Major Scale



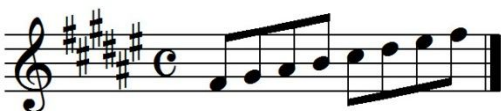
E Major Scale



B Major



F# Major Scale



C# Major Scale



Here is a closer look at the key signatures that have sharps and flats:

### Flats

Below is a list of the flats in order so you can closer see how they are notated on the staff.



**C major**  
All Naturals



**F major**  
Bb



**Bb Major**  
Bb, Eb



**Eb Major**  
Bb, Eb, Ab



**Ab Major**  
Bb, Eb, Ab, Db



**Db Major**  
Bb, Eb, Ab, Db, Gb



**Gb Major**  
Bb, Eb, Ab, Db, Gb, Cb



**Cb Major**  
Bb, Eb, Ab, Db, Gb, Cb, Fb

## Sharps

Below is a list of the sharps in order so you can closer see how they are notated on the staff.



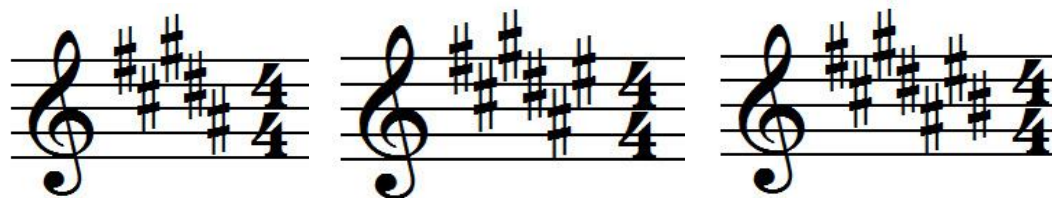
**C major**  
All Naturals

**G major**  
F#

**D Major**  
F#,C#

**A Major**  
F#,C#,G#

**E Major**  
F#,C#,G#,D#

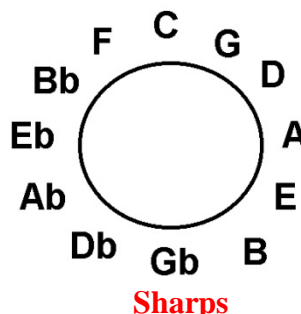
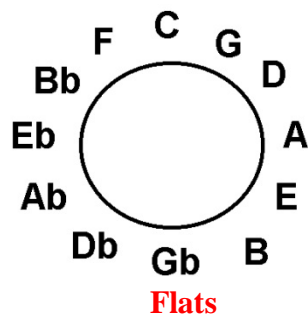


**B major**  
F#,C#,G#,D#,A#

**F# major**  
F#,C#,G#,D#,A#,E#

**C# Major**  
F#,C#,G#,D#,A#,E#,B#

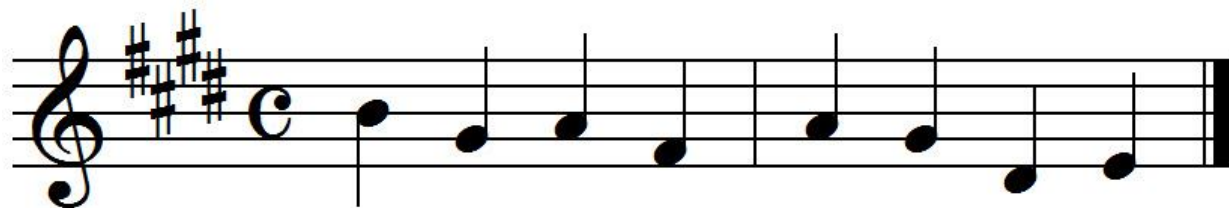
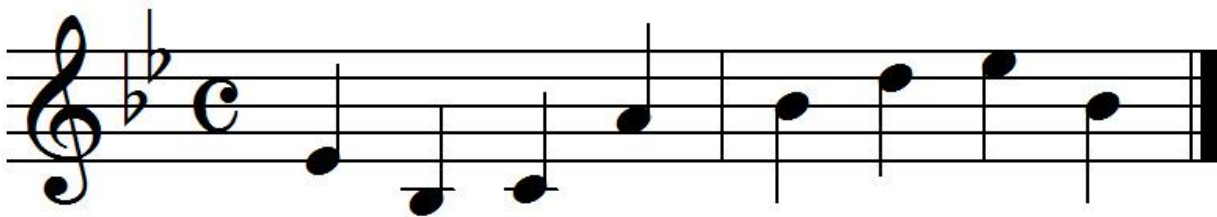
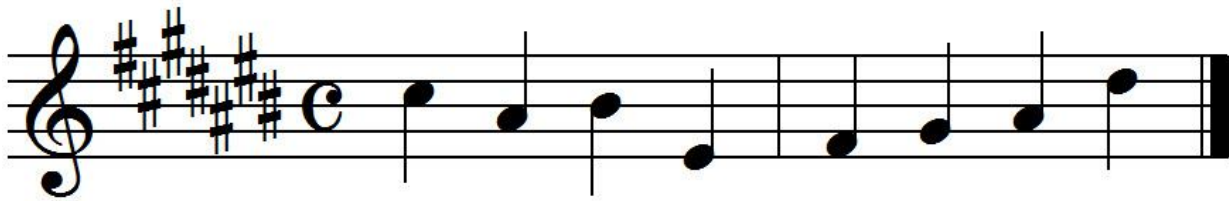
Now notice how both the group of sharps and the group of flats are directly related to the circle of 4th & 5ths. This means that you can help you memorization of the number of sharps and flats in each key simply by remembering the circle of 5ths.



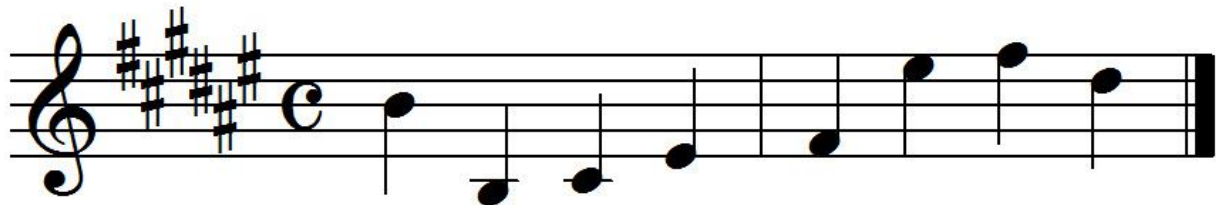
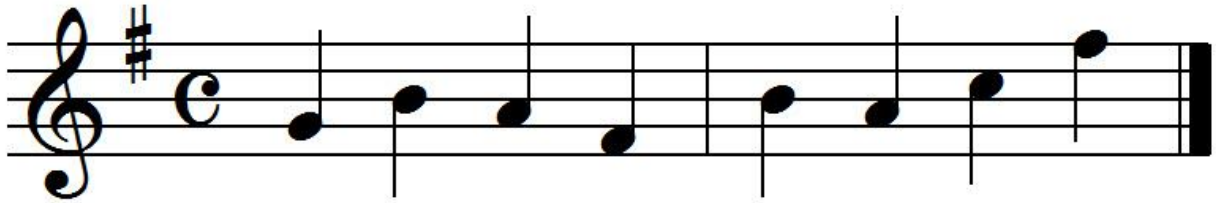
Using the diagrams above, write the number of sharps and flats that each key has right next to the key. You will find that the sharps and flats numerically go in pattern starting from C (0) then ending on a Db or a B (7). Memorize this pattern similar to writing the pattern over and over again.

### Exercise 1

Now I will test your ability to recognize notes written in the staves which are in a specific key signature. Above each staff, write the value of the notes that you see, along with which key signature it is:

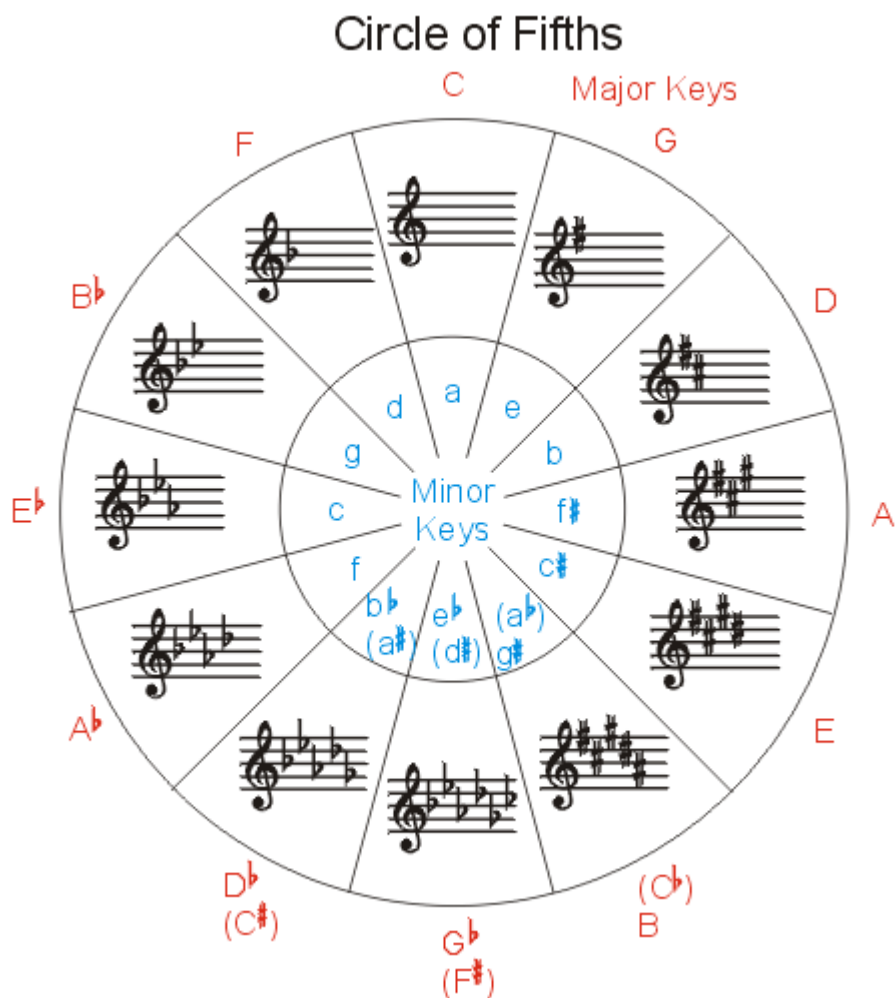






## Minor Keys

Key signatures can represent both major and minor keys. Take a look at the circle of fifths diagram below to see how they work with major key signatures.



Looking at the above diagram of the circle of fifths, you can see the pattern of minor keys that match the same key signature as the major keys. For example, the G Major key signature is the same as the E minor key signature. This is the theory of the relative minor/major keys. The interval between each major and minor is 3 semitones, or a minor 3<sup>rd</sup> interval. This makes key signatures much easier to work with, given that there are only 12 to choose from.

### Exercise 3

Write next to each worded key signature the relative major or relative minor key signature associated.

C# Major=  
D Minor=  
F# Major=  
G Major=

Db Major=  
F Minor=  
Ab Minor=  
B Major=

C Major=  
G Minor=  
A Minor=  
Eb Major=

### Exercise 4

Write the indicated key signature inside the following blank staves. Take note that the key signatures are the same on the treble and bass staff, except the placement is different. Take the time to memorize which keys are flatted and sharped in each key signature. Then with your knowledge of the notes on each staff, place the flats and sharps on the right line or space. You may look at examples of this while you do the exercise so you can be sure you are on the right track.

**C# Major**



**F# Minor**



**A Major**



**D Minor**



**F# Major**



**A<sup>b</sup> Minor**



**E<sup>b</sup> Major**



**G Minor**



**C Major**



**Bb Minor**



**E Major**



**E Minor**



**Db Major**



**B Minor**



**Cb Major**



**F Minor**



**Exercise 4**

Now we will conclude this lesson by sight reading a song with the knowledge that we have so far. There are three levels of songs shown below, beginner, intermediate, and advanced. Whichever kind of piano player you can associate yourself with, pan down to that written song and play it by sight reading. Good luck, and see you in the next lesson!

Beginner

# Minuet in C

Haydn

The first system of the Minuet in C by Haydn, measures 1-5. The music is in 3/4 time and C major. The right hand features a melody with eighth notes and a triplet of eighth notes in measures 4 and 5. The left hand provides a simple accompaniment of quarter notes.

The second system of the Minuet in C by Haydn, measures 6-10. The right hand has a slur over measures 6-7 and a triplet of eighth notes in measure 8. The left hand continues with quarter notes.

The third system of the Minuet in C by Haydn, measures 11-15. The right hand features a triplet of eighth notes in measure 12 and a slur over measures 13-14. The left hand continues with quarter notes. The piece concludes with a double bar line in measure 15.



Intermediate

(Second Tune.)

**129 HAIL, THOU EVER-BLESSÉD MORN.**

Anon.

1. See, a-mid the win-ter's snow, Born for us on earth be-low; See, the ten-der

The first system of music consists of a vocal line in the treble clef and a piano accompaniment in the bass clef. The key signature is one sharp (F#) and the time signature is common time (C). The vocal line begins with a quarter note G4, followed by quarter notes A4, B4, and C5. The piano accompaniment features a steady bass line with chords in the right hand.

Lamb appears, Promised from e-ter-nal years! Hail, thou ev-er-bless-ed morn, Hail, Re-

The second system continues the vocal and piano parts. The vocal line has a melodic contour that rises and then falls. The piano accompaniment provides harmonic support with chords and moving lines in both hands.

demption's happy dawn, Sing thro' all Je-ru-sa-lem, Christ is born in Beth-le-hem.

The third system concludes the piece. The vocal line ends with a final cadence, and the piano accompaniment provides a concluding harmonic structure. The piece ends with a double bar line.

## Advanced

### Hymn #215/319/1138

The image displays a piano accompaniment for a hymn, consisting of four systems of music. Each system includes a treble clef staff and a bass clef staff. The key signature is two flats (B-flat and E-flat), and the time signature is 3/4. The music is written in a style typical of hymn accompaniment, with a steady bass line and a more melodic treble line. The first system begins with a whole rest in the treble staff. The piece concludes with a double bar line and repeat dots at the end of the fourth system.

### Lesson 3 Quiz



Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**True or False: a key signature indicates the prevailing scale of a song.**

- True  
 False

**How many sharps and flats does a C major key signature have?**

- 1  
 3  
 5  
 7

**True or False: the key signature of F major can have either sharps or flats.**

- True  
 False

**An Ab major has how many flats?**

- 2  
 4  
 6  
 8

**Which keys are sharped in a D major scale?**

- F and G  
 G and E  
 F and A  
 E and D

**If you were counting how many flats there are in each key signature, which would you use: the circle of 5ths or circle of 4ths?**

- Circle of 5ths  
 Circle of 4ths

**If you were counting how many sharps there are in each key signature, which would you use: the circle of 5ths or circle of 4ths?**

- Circle of 5ths  
 Circle of 4ths

**True or False: there is one (1) flat in the G major key signature.**

- True  
 False

**What is the relative minor key to an F major key signature?**

- F
- G#
- F#
- D

**What is the relative major key to a G minor key signature?**

- A
- Bb
- C
- Db

## Lesson 4

### Sounding Rhythm

So we obviously know the importance of two key factors in sheet music: pitch and rhythm. We use these two subjects whenever we read sheet music. The challenge comes in whenever we have to read them at the same time. The following exercises are designed to progressively help you recognize the pitch and the rhythm simultaneously as you flow along the notes. From now on we will be using both hands at the piano.

#### Exercise 1

Clap to a 4/4 tempo. This clap should be a “1,2,3,4 – 1,2,3,4” and so on. Now clap to a 3/4 tempo. This clap should be a “1,2,3 – 1,2,3” and so on. Now transfer this to the way you read music. As you read, practice modifying your count to the rules of the music; the time signature and the pitches. Supplement your count with a foot tap or a head nod as you play.

#### Exercise 2

Sight read the following songs in order using the method in exercise 1. If you miss a note or mess up, be sure to start from the top again.

1.

**Allegro di molto e con brio.**

The musical score consists of two systems of piano music. Each system has a treble and bass clef staff. The first system begins with a piano (*p*) dynamic and a fortissimo (*sf*) dynamic. The second system also includes a piano (*p*) dynamic and a fortissimo (*sf*) dynamic, followed by a crescendo (*cresc.*) marking. The music features various rhythmic patterns, including eighth and sixteenth notes, and rests. Fingering numbers (1, 2, 3, 4) are placed above or below notes to indicate fingerings. The tempo is marked as **Allegro di molto e con brio.**



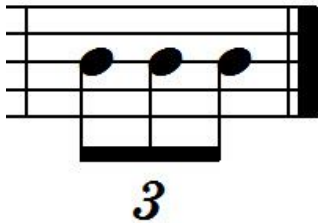



As a reminder, it is important to get used to reading both staves at the same time, however it can be fairly difficult when there are numerous notes to be played at the same time. But with practice, reading music becomes easier and easier. The main thing I can offer you in this course and the next courses is practice material to help strengthen your ability to read. Once you know the symbols, it takes practice in application to get better at reading. If you don't practice, you won't be able to sight read as well even if you know the symbols by heart.

## Irregular Rhythms

Artificial groups as you know are groups of notes that are played in a modified fractional value. The most common artificial groups are the **triplet** and the **sextuplet**. A triplet is a group of three notes played in a value equal to two of its kind. A sextuplet is a group of six notes that are played in a value of four of its kind. A group of five notes are played in a value of four of its kind. A group of seven notes are played in a value of six of its kind. Occasionally there is a group of 2 notes. As opposed to the other artificial groups, the groups of 2 notes are played slightly slower than the note value normally would allow them.

Each artificial group is defined by a number over the connecting bar of a group of notes. If that number is a 3, then it is a triplet. If that number is a 6, then it is a sextuplet.



Irregularities in music other than artificial groups are marked in different ways. A **ritardando**, marked with a fermata symbol , means to lessen the speed of a given point in the song. The length of time that the lessening of speed is indicated by a series of period marks like this.....after the symbol. **Accelerando** means to quicken the speed of a given point in the song. These symbols are used to add flavor to the song and to be executed as long as the music taste dictates it to.

## Speed

It is important to recognize the speed of a song that you play. Time signatures do not tell you the speed, but rather the rhythmic format of the song. The metronome mark and specified terms will tell you how fast or slow to play a song. These terms vary from extremely fast to extremely slow, and are most commonly written in Italian. These terms are a general idea approach and a suggested way from the writer to the reader of how to play the song.

**Grave** means slow and solemn.

**Largo** means slow, but a little faster than grave.

**Larghetto** means a little faster than largo.

**Adagio** means slow, but faster than Larghetto.

**Lento** means slow.

**Andante** means moderately slow.



**Moderato** means the mediate between fast and slow.

**Allegretto** means cheerful.

**Allegro** means quick.

**Vivo** means fast and lively.

**Presto** means very quick.

For many of the Italian terms above, when the suffix –issimo is added to them, this gives the term a much higher degree than its original meaning. For example, **adantissimo** is slower than andante, and **prestissimo** means the song is to be played faster than presto.

Lesson 4 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking/ Feel free to check your answers when done. Good luck!

**Name:**

**Date:**

**The only way to become a better sight reader is to:**

- Practice
- Learn the symbols
- Write the notes
- Study clefs

**Which of the four options below is considered an irregular rhythm?**

- 3/4 Time Signature
- Beamed Notes
- Triplet
- Quarter Notes

**A ritardando is when:**

- You play the notes louder
- You play the notes lower
- You play the notes softer
- You play the notes harder

**True or False: a staccato note shortens the note duration in the sheet music.**

- True
- False

**The opposite of ritardando is:**

- Accelerando
- Legato
- Moderato
- Allegro

**What symbol is used in sheet music to note a ritardando?**

- Fermata
- Tenuto
- Staccato
- Triplet

**If presto means fast, then prestissimo means:**

- Slow
- Medium
- Faster
- Moderate

**If you see the term Lento in the beginning of sheet music, how is the song to be played?**

- Fast
- Slowly
- Medium Speed
- Maximum Speed

**If you see the term Lento in the beginning of sheet music, how is the song to be played?**

- Fast
- Slowly
- Medium Speed
- Maximum Speed

**A sextuplet is equal to how many notes of its kind?**

- 4
- 5
- 2
- 3

## Lesson 5

### Application of Memorization

In this class I emphasize the importance of practice and repetition. I suggest using the examples that I give you in this course and then find more on your own for further practice. Also it doesn't hurt to find your favorite songs in sheet music and read/play them for fun. That is also a great way to practice.

Read and play through the written music shown below. Once you have finished playing, apply this practice to other songs that are written.

Measures 1-3 of the piece. The music is in C major, 4/4 time. The melody in the treble clef consists of quarter notes: B4, C5, D5, E5, D5, C5, B4. The bass line in the bass clef consists of quarter notes: B3, C4, D4, E4, D4, C4, B3. The key signature has one flat (Bb) and the time signature is common time (C).

4

Measures 4-6. The melody continues with quarter notes: B4, C5, D5, E5, D5, C5, B4. The bass line continues with quarter notes: B3, C4, D4, E4, D4, C4, B3. The key signature has one flat (Bb) and the time signature is common time (C).

7

Measures 7-9. The melody in the treble clef consists of eighth notes: B4, C5, D5, E5, D5, C5, B4. The bass line in the bass clef consists of eighth notes: B3, C4, D4, E4, D4, C4, B3. The key signature has one flat (Bb) and the time signature is common time (C).

10

Measures 10-12. The melody in the treble clef consists of eighth notes: B4, C5, D5, E5, D5, C5, B4. The bass line in the bass clef consists of eighth notes: B3, C4, D4, E4, D4, C4, B3. The key signature has one flat (Bb) and the time signature is common time (C).

30. Allegro  $\text{♩} = 118/124$

30. *Allegro*  $\text{♩} = 118/124$

*mf*

*p*

31. *Con moto cantabile*

31. *Con moto cantabile*

*mp*

*rit.* *a tempo*

**Performance Tip:** When site reading a song, sometimes the first pass is played without feeling just to get used to the rhythms and the pitches involved. One process is to play carefully through the song just so you can get used to its pattern, then on the second or third pass begin to implement the feeling that the composer meant for the song, or even your own interpretation.

Arranger : D. Yzhaki

# Piano Man

Billy Joel

Moderately

mf

9

15 Last time FINE  
slower

19 mp

27

33 Jump  
mf

Copyright © piano-play-it 2008



Golden Hours of Pianoforte Duets - 1931 Keith Prowse & Co. Ltd., London

[www.quatre-mains.net](http://www.quatre-mains.net)

2007

Preview

Free PDF, Primo 213 kB - Secondo 156 kB, 2 x 2 pages

## DANCE OF THE SUGAR PLUM FAIRY.

Casse-Noisette Suite.

Arranged by ERNEST HAYWOOD.

**Andante non troppo.**

PRIMO.

TSCHAIKOWSKY.

The Primo part of the score is written for two staves in 2/4 time. The key signature has one sharp (F#). The tempo is 'Andante non troppo'. The first measure is marked with a '4' in a box. The second measure is marked with 'mf stacc.'. The music consists of a series of chords and short melodic fragments.

SECONDO.

**Andante non troppo.**

The Secondo part of the score is written for two staves in 2/4 time. The key signature has one sharp (F#). The tempo is 'Andante non troppo'. The music is marked with 'pp stacc.' and consists of a series of chords and short melodic fragments.

# Tik Tok

Kesha

(♩ = 104)

transcribed by White Admiral

Piano

Chord progression for the first system: B♭ maj7, C, D min, B♭ maj7, C, D min.

Chord progression for the second system: B♭, C, D min, B♭, C, D min.

Chord progression for the third system: B♭, C, D min, G min, B♭ maj7, G min, B♭ maj7.

Chord progression for the fourth system: B♭, C, D min, B♭.

Chord progression for the fifth system: C, D min, B♭, C, D min.

truepianotranscriptions.com

Page 1



# Love is Blue

蓝色的爱

Piano

8<sup>va</sup>

6

11

16

21

The image shows a piano score for the piece 'Love is Blue' (蓝色的爱). The score is written for piano and consists of five systems of music. Each system has a treble and bass clef staff. The first system starts with a treble clef key signature of one sharp (F#) and a 4/4 time signature. The second system continues in 4/4. The third system changes to a 2/4 time signature. The fourth system changes to a 3/4 time signature. The fifth system returns to 4/4. The score includes various musical notations such as chords, arpeggios, and melodic lines. A dynamic marking of 'Piano' is present at the beginning, and an 8va marking is shown in the first system. Measure numbers 6, 11, 16, and 21 are indicated at the start of their respective systems.

Supplement your sheet music archive by visiting these websites and finding more free music to sight read:

[Musicnotes.com](http://Musicnotes.com)

[Free-scores.com](http://Free-scores.com)

[8notes.com](http://8notes.com)

[Sheetzbox.com](http://Sheetzbox.com)

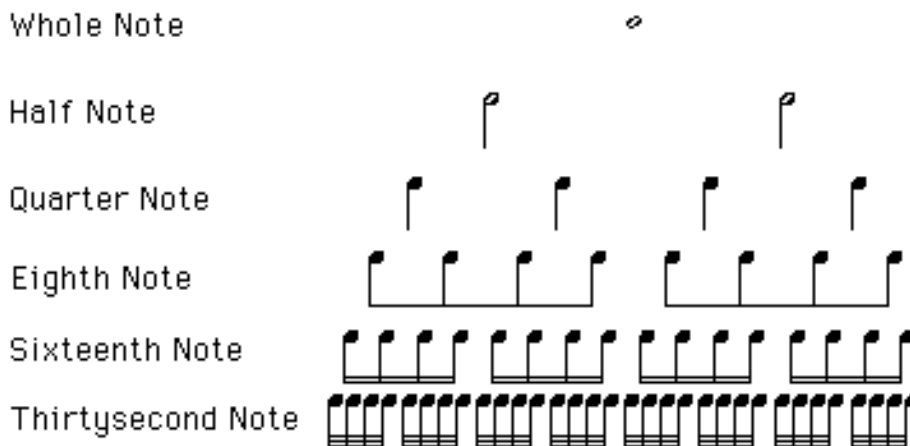
[Pianostreet.com](http://Pianostreet.com)

[Virtualsheetmusic.com](http://Virtualsheetmusic.com)

## Lesson 6

### Advanced Rhythms

#### Rhythm Tree



#### Example of notated rhythm



With the seemingly unlimited rhythm changes in music, sheet music can become rather complicated to read. In this lesson, we will go over coping with the changing counts in the time signatures and from measure to measure. As an advanced reader, you should be always ready to challenge yourself, as there is no such thing as a perfect sight reader (besides a computer). We all make mistakes from time to time and constantly need to practice. Although practice won't allow you to be "mistake-free," it will help you make fewer mistakes.



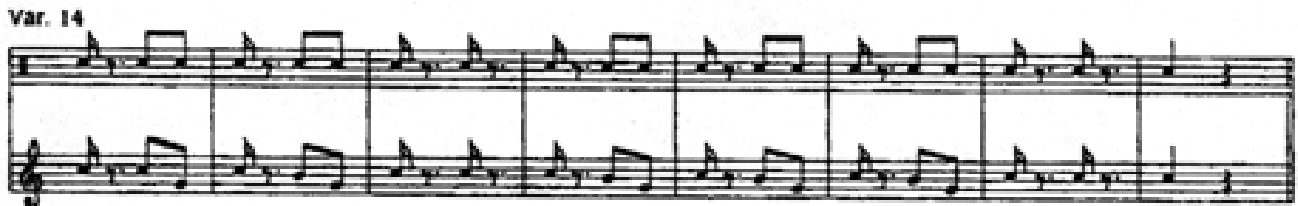
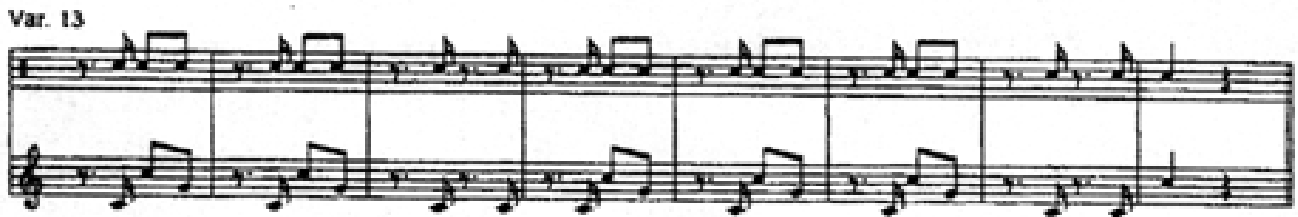
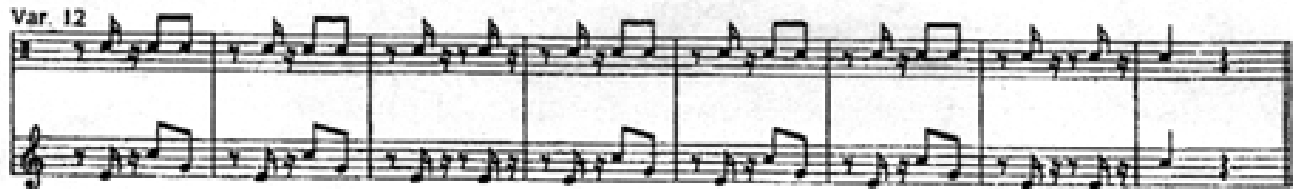
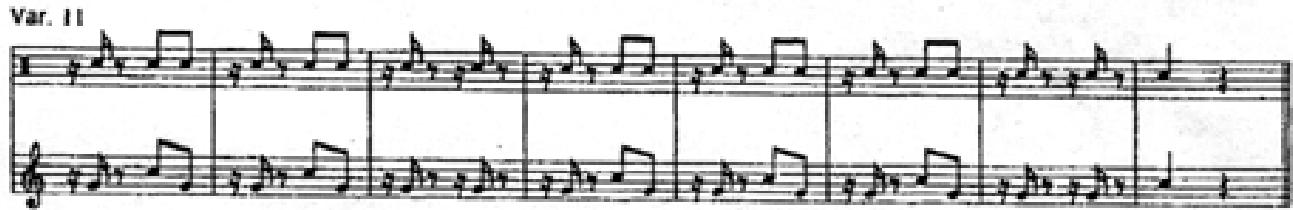
Take a look at the above section of music. When playing songs from sheet music, it is essential to give both your right and left hand their own voice. Both hands play a completely separate roll in the success of the song. It is then essential to get used to using syncopation to a higher degree, by being able to play alternating complex rhythms with both hands, then simultaneously. This kind of sight reading takes practice and can be accomplished. After a while your hands begin to think for themselves so to speak because they get used to playing certain phrases. That is where the object of familiarity comes into play.

8. **Grave.**

In advanced rhythms, most of the challenge comes from dotted durations. Single and double dotted duration gives the writer satisfaction as far as the sound that they want accomplished by the song, however it can cause headache to the sight reader. Becoming familiar with dotted durations by constant exposure is key in the advanced sight reader. Play the above song by identifying each dotted duration.



The above short piece is an example of exercises that you can use to build yourself up to getting used to.



Above you can find variations in rhythm exercise. No matter how many times you run through these, it benefits your reading skills. Sight read the sheet music provided over and over again in order to practice as much as you can in reading music. It's not about what you know; it's about putting what you know into practice.



Lesson 6 Quiz

Instructions:

Use this multiple choice open book quiz to test your knowledge on the content in the lessons so far. Try your best to remember the answers without looking. Feel free to check your answers when done. Good luck!

Name:

Date:

**A dotted quarter note is a duration equal to:**

- Three 8<sup>th</sup> Notes
- One whole note
- Two Half Notes
- Four 8<sup>th</sup> notes

**A double-dotted eighth note is a duration equal to:**

- One quarter note and One eighth note
- Two 16<sup>th</sup> Notes and one 32<sup>nd</sup> Note
- Two 8<sup>th</sup> notes and one 16<sup>th</sup> note
- Three 16<sup>th</sup> Notes and one 32<sup>nd</sup> Note

**In the options below, select the simple meter.**

- 3/4
- 5/8
- 9/8
- None of the Above

**In the options below, select the compound meter.**

- 3/4
- 5/8
- 9/8
- None of the Above

**In the options below, select the asymmetrical meter.**

- 3/4
- 5/8
- 9/8
- None of the Above

**True or False: a time signature of 12/16 is considered a compound meter.**

- True
- False

**True or False: a simple meter is a beats that are equally divisible by 2 in each measure.**

- True
- False

**How many measures are shown in a Cadenza?**

- 1
- 3
- 5
- 7
- None of the Above

## Glossary

- **Accelerando-** A notation indicating to speed up a section of a song
- **Accent-** A notation requiring a note to be played louder than surrounding notes to “stand out”
- **Accidental-** Symbols used in notation to sharpen, flatten, or naturalize pitch(flat, sharp, natural)
- **Adagio-** A tempo; to be played slowly
- **Added Tone Chord-** A triad or regular chord with a note added above the octave
- **Aeolian Mode-** A scale similar to the natural minor scale
- **Allegretto-** To be played cheerful and lively
- **Allegro-** To be played at a speedy, lively rate
- **Altered Chord-** Chords that denote sharps or flats in their definition
- **Andante-** To be played very slowly and mellow
- **Arabic Scale-** A scale similar to the double harmonic scale
- **Arpeggio-** The notes of a chord played in succession, either ascending or descending in pattern
- **Bar Line-** A vertical line on a staff used to divide music into even time
- **Base Clef-** A clef placing F below middle C on the second-highest line of the staff
- **Beam-** a thick line frequently used to connect multiple consecutive eighth notes or notes of shorter value
- **Beat-** A main accent or rhythmic unit in music or poetry
- **Beats per Minute-** Amount of beats per minute as to define the tempo or speed of a song
- **Blues-** Melancholic music of black American folk origin, typically in a twelve-bar sequence
- **Chord-** A set of 2 or more related notes of different pitch played together at the same time
- **Chord Building-** The adding or alteration of notes to a major or minor sub-chord
- **Chromatic Chord Progression-** A progression, usually very short, with only semitone intervals
- **Chromatic Interval-** An interval made up of only semitones
- **Circle of Fifths-** A musical pattern in which the 5<sup>th</sup> note of every major or minor scale becomes the first note of the next major or minor scale in sequence
- **Circle of Fourths-** A musical pattern in which the 4<sup>th</sup> note of every major or minor scale becomes the first note of the next major or minor scale in sequence
- **Classical-** A period of music between the years of 1550 and 1900
- **Combination Chord-** Notes that are added to a basic triad make up a combination
- **Consonance-** The recurrence of sounds that sound right, or pleasant
- **Degree-** The inverting of the 7 notes in a scale
- **Diatonic-** Involving only notes proper to the prevailing key without chromatic alteration
- **Diatonic Chord Progression-** Chord progression made up of only diatonic roots
- **Diatonic Intervals-** Intervals that are played belonging to a major scale
- **Diminished Interval-** An interval that lowers the 5<sup>th</sup> degree of any scale
- **Diminished Scale-** Also called the Octatonic Scale, consists of 8 notes in a repetitive whole tone semitone patten
- **Dissonance-** The recurrence of sounds that sound irregular to the ear
- **Dominant-** Defines the 5<sup>th</sup> degree note
- **Dorian Mode-** A scale similar to the natural minor scale except with a raised 6<sup>th</sup> degree

- **Dotted Duration-** In sheet music, a single dot adjacent to a note indicates an additional hold of the note equal to half of the note
- **Double Bar Line-** A symbol in musical notation used to separate two sections or phrases of music, and to start and end a musical piece
- **Double Dotted Duration-** In sheet music, a double dot adjacent to a note indicating to add  $\frac{3}{4}$  times the value of the note to the notes hold time
- **Double Flat-** A musical notation of two flats in front of a note indicating that it is to be lowered by two semitones
- **Double Harmonic Scale-** A scale that lowers the 2<sup>nd</sup> and the 6<sup>th</sup> degrees of a major scale by a semitone
- **Double Harmonic Minor Scale-** A scale similar to the harmonic minor scale except with a raise 4<sup>th</sup> degree
- **Double Sharp-** A musical notation of an “x” symbol in front of a note indicating that it is to be raised by two semitones
- **Eighth Note-** A note having the time value of an eighth of a whole note or half a quarter note, represented by a large dot with a hooked stem
- **Extended Chord-** A Chord that extends beyond an octave without “added” notes
- **Fall-** the cover that goes over the keys or keyboard of a piano
- **Final Double Bar-** The double bar line shown at the end of a song meaning the song is complete
- **Flat-** To lower the pitch of a note by one semitone, or half step
- **Grace Note-** In sheet music, a grace note is a small note that has no value, except by noting a “hammer on” to the next official note drawn
- **Grand Staff-** The combination of two staves, the treble and bass, in western music notation
- **Grave-** Tempo to be played slow and mellow
- **Gypsy Scale-** A scale similar to the double harmonic minor scale
- **Half Note-** A note having the time value of one half of a whole note, represented by a hollow dot with a single straight stem
- **Half Step-** A semitone
- **Half Tone Scale-** A scale made up of only semitones (see Chromatic scale)
- **Harmonic Minor Scale-** A natural minor scale except with a raised 7<sup>th</sup> degree
- **Hammer-** A device inside of a piano that strikes the internal strings when a key is pressed making the string vibrate to produce a sound
- **Hammer Striking-** The action of a pianist pushing down a key on a keyboard with his or her finger
- **Harmony-** The combination of simultaneously sounded musical notes to produce chords and chord progressions with a pleasing effect
- **Hungarian Minor Scale-** A scale similar to the double harmonic minor scale
- **Invert or Inversion-** The re-arranging of the root note of a chord
- **Ionian Mode-** A scale similar to the major scale
- **Jazz-** A type of music of black American origin characterized by improvisation, syncopation, and usually a regular or forceful rhythm
- **Keyboard-** Keys sit on the piano in order from low notes to high notes
- **Key Signature-** Any of several combinations of sharps or flats after the clef at the beginning of each staff indicating the key of a composition

- **Larghetto-** To be played slow, but a little faster than Largo
- **Largo-** To be played slow and calm
- **Leading Tone-** The note right before the octave; the 7<sup>th</sup> degree
- **Legato-** Signifies that a group of notes are to be played with no rest between them. “Together” – Opposite of staccato.
- **Lento-** A tempo to be played slowly
- **Lid Prop-** An adjustable stick that holds up the lid on a piano
- **Locrian Mode-** A scale similar to the natural minor scale except with a lowered 2<sup>nd</sup> and 5<sup>th</sup> degree
- **Lydian Mode-** A scale similar to the major scale except with a raised 4<sup>th</sup> degree
- **Natural Minor Scale-** A basic minor scale consisting of a flatted 3<sup>rd</sup>, 6<sup>th</sup>, and 7<sup>th</sup>
- **Major-** A musical classification consisting of a natural third which is two whole tones above the root note
- **Major Interval-** Any interval consisting of major scale intervals
- **Measure or bar-** An amount of time depicted by tempo and time signature of a song illustrated by bar lines
- **Mediant-** Defines the 3<sup>rd</sup> degree note
- **Melody-** A sequence of single notes that is musically satisfying
- **Melodic Minor Scale-** A scale similar to the natural minor scale except with a raised 6<sup>th</sup> and 7<sup>th</sup> degrees
- **Mensural Notation-** The musical notation system which was used in European music from the later part of the 13th century until about the 1600’s
- **Metronome-** A device used by musicians that marks time at a selected rate
- **Middle C-** The middle C on a 88 keyed keyboard, used in western music notation as the center note to the grand staff, one line below a treble staff and one line above a bass staff
- **Minor-** A musical classification consisting of a flattened third which is three semitones above the root note
- **Minor Interval-** An interval that describes the flattened 3<sup>rd</sup> and/or 7<sup>th</sup> of a major scale
- **Mixolydian Mode-** A scale similar to the major scale except with a lowered 7<sup>th</sup> degree
- **Moderato-** To be played in a moderate tempo
- **Modulate-** To change a prevailing key by a specified pitch count
- **Music Rack-** The prop up for sheet music or any paper on the face of the piano
- **Natural Notes-** Seven notes labeled in alphabetical sequence from A to G
- **Note-** The duration of a tone that is created by vibrations making a noise
- **Octatonic Scale-** Term used in classical theory used to describe the diminished scale
- **Octave-** A series of eight notes occupying the interval between two notes, one having twice or half the frequency of vibration of the other
- **Pentatonic Scale-** A five note scale playing the root, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, and 7<sup>th</sup> in a sequential pattern
- **Perfect Interval-** Intervals that contain even tone such as the root to the 5<sup>th</sup>, 4<sup>th</sup>, and 11<sup>th</sup>
- **Phrygian Mode-** A scale similar to the natural minor scale except with a lowered 2<sup>nd</sup> degree
- **Piano Lid-** The adjustable cover that opens on top of the piano, revealing its strings, hammers, and soundboard
- **Piano Stool-** The seat for a pianist at the piano
- **Pitch-** The quality of a sound governed by the rate of vibrations producing it

- **Plectra-** A device used to pluck the strings inside a harpsichord when a key is pressed
- **Plectrum-** The corresponding mechanical part that plucks the strings of an instrument such as a harpsichord
- **Posture-** The position of the body while playing an instrument
- **Presto-** Tempo to be played very fast
- **Pulse-** A rhythmical pattern also referred to as a beat
- **Quarter Note-** A note having the time value of a quarter of a whole note or half of a half note, represented by a large dot with a straight stem
- **Relative Minor Scale-** Refers to natural minor scales in which their relationship with major scales being 3 semitones apart
- **Renaissance Period-** Was a cultural movement that spanned the period roughly from the 14th to the 17th century, beginning in Italy in the late middle ages and later spreading to the rest of Europe
- **Rest-** A music notation meaning a break in the song or in the playing of notes
- **Rhythm-** Sound or noise produced by irregular impulses in the air, or vibrations, which are propagated over a certain period of time; the structure of sound
- **Ritardando-** To slow down a certain part of a song
- **Root-** The note defined by the prevailing key
- **Root Position-** The foundational inversion of a chord, with the base note as the root note
- **Scale-** A collection of notes that are related by pitch
- **Scientific Pitch Notation-** One of several methods that name the notes of the standard Western chromatic scale
- **Sextuplet-** A collection of six notes played in the timeframe equal to four of their kind
- **Sharp-** To raise the pitch of a note by one semitone, or half step
- **Sixteenth Note-** A note having the time value of a sixteenth of a whole note or half an eighth note, represented by a large dot with two hooked stems
- **Sostenuto Pedal-** The middle pedal on a piano base, and when it is initiated can sustain (or hold) selected notes while others remain unaffected
- **Staccato-** A notation requiring the note strike to be cut in half of its original note hold value
- **Staff-** A series of 5 lines used in western music notation to note music
- **Subdominant-** Defines the 4<sup>th</sup> degree note
- **Submediant-** Defines the 6<sup>th</sup> degree note
- **Subtonic-** Defines the lowered 7<sup>th</sup> degree note (as found in the minor scale)
- **Supertonic-** Defines the 2<sup>nd</sup> degree note
- **Suspended Chord-** A major or minor triad that replaces the 3<sup>rd</sup> degree with a 4<sup>th</sup> degree
- **Sustain Pedal-** The pedal on the far right of the piano base, and when it is initiated allows the notes to have a continuous sound as long as the pedal is held
- **Tempo-** The speed or cadence of a song or collection of notes
- **Tie-** A curved line in notation connecting two or more notes of the same pitch, indicating the pitch of the notes to be held for the duration of the notes combined
- **Time Signature-** An indication of rhythm following a clef, generally expressed as a fraction
- **Tone-** The overall quality of a musical or vocal sound
- **Tonic-** Defines the 1<sup>st</sup> degree, or the root note
- **Transpose-** To lower or raise the prevailing key by a specified number of whole or half tones

- **Treble Clef-** A clef placing G above middle C on the second-lowest line of the staff
- **Triad-** A collection of three notes played at the same time
- **Triplet-** A collection of three notes played in the timeframe equal to two of their kind
- **Una Corda Pedal-** The pedal on the far left of the piano base, and when it is initiated mellows the piano sound, giving it a warmer and quieter tone
- **Unison-** The occurrence of one pitch being sounded from more than one source at the same time
- **Velocity-** The speed/power used to execute a hammer strike or note
- **Vivo-** Tempo to be played lively and loud
- **Whole Note-** A note having the time value of one whole note represented by a large hollow dot
- **Whole Step-** A whole tone
- **Whole Tone Scale-** A scale consisting of only whole tones