

1. Whether you learn music by ear or from the written page, I suggest learning chords (any combination of three notes or more played together), and music theory (how chords are used in the different music traditions). Any piece of written music could be analyzed in terms of its chord structures, and that can be an aid in memorization. The individual notes are like the letters in the alphabet, and chords are like words. The Major and minor chords are the building blocks for all other chords. Here is a suggested way to learn chords:

1. First learn the **Major chords**, which have the 1<sup>st</sup>, 3<sup>rd</sup>, and 5<sup>th</sup> notes of the Major scale of a key.
2. Then learn the **minor chords**, which have the 3<sup>rd</sup> lowered a half step (down one note).
3. The next step would be to learn the dominant 7<sup>th</sup> chords, the minor 7<sup>th</sup> chords, and the Major 7<sup>th</sup> chords.
4. Then learn the 9<sup>th</sup> chords (adding the 9<sup>th</sup> note with those three types of 7<sup>th</sup> chords mentioned just above in #3).
5. Then learn the diminished chords (and the diminished 7<sup>th</sup> chords), and the augmented chords.
6. Then learn the Major 6<sup>th</sup> and the minor 6<sup>th</sup> chords.
7. And then, if it is an area one is interested in, learn the jazz chords – 13<sup>th</sup> chords (the 6<sup>th</sup> an octave above the 7<sup>th</sup> note), flat 9<sup>th</sup> chords, augmented 9<sup>th</sup> chords, flat 5 chords, 11<sup>th</sup> chords (the 4<sup>th</sup> above the 7<sup>th</sup> and 9<sup>th</sup>), and more; and also scales and modes.

Again, any combination of three notes or more can be called a chord (and actually any chord could be interpreted in *twelve* different ways in any of the twelve keys, depending on its use as functional harmony [what comes before and after it]).

Here are the Major and minor chords:

<u>Key</u>	<u>Major</u>	<u>minor</u>
C	C-E-G	C-Eb-G
D flat	Db-F-Gb	Db-E-Gb
D	D-F#-A	D-F-A
E flat	Eb-G-Bb	Eb-Gb-Bb
E	E-G#-B	E-G-B
F	F-A-C	F-Ab-C
G flat	Gb-Bb-Db	Gb-A-Db
G	G-B-D	G-Bb-D
A flat	Ab-C-Eb	Ab-B-Eb
A	A-C#-E	A-C-E
B flat	Bb-D-F	Bb-Db-F
B	B-D#-F#	B-D-F#

A great book for exploring more chords is:

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**Picture Chord Encyclopedia for Keyboard** – this book has photos, diagrams, and music notation for over 1,600 keyboard chords – see [www.halleonard.com](http://www.halleonard.com).

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**2. Ear training – learning to recognize intervals:**

**a. FIND SONGS YOU LIKE AND ANALYZE THE INTERVALS OF THE FIRST 2 NOTES (or the first change in the intervals very near the beginning)**

**b. and for reference, you can subtract the interval from “9” to get the inverted (the same notes, but reversed) interval from it (within a diatonic “white note on the piano” scale –for example, the inverted interval of a 6th is:  $9 - 6 = 3$  (a 3rd); and the inverted interval of a 5th is  $9 - 5 = 4$  (a 4th), etc.**

- [also for intervals more than an octave apart (sometimes also used to describe extended chords) , add “7” to the interval –the most used examples (especially in naming extended chords) are: a 2nd interval becomes a 9th; a 3rd becomes a 10th; a 4th becomes an 11th; and a 6th becomes a 13th

**c. try to develop “memory pitch” or perfect pitch by analyzing what the first note of a song you like it – and you can use this note as a reference note to find other notes, by going up or down the Major scale.**

**d. ASCENDING MELODY INTERVALS AT BEGINNINGS OF SONGS:**

**-minor 2nd – White Christmas, I Left My Heart in San Francisco, Michelle, I’m In the Mood for Love, The Twilight Zone (TV theme), When I’m Sixty Four, Billy Boy, How Insensitive, The Entertainer, Caravan, Never My Love, The Lonely Bull, Till There Was You, Alley Cat, Third Man Theme**

**-Major 2nd – Yankee Doodle, Oh Suzannah, Happy Birthday, Silent Night, My Country ‘Tis of Thee; Ain’t Misbehavin’, I Got Rhythm, Sweet Georgia Brown, This Land is Your Land, Row Row Row Your Boat, Frera Jacka, Alouette (aka “Pufferbillies”), Memories of You, Come Softly to Me, I’m Confessin’ That I Love You, September in the Rain, Ruby, Send In the Clowns, I’m Gonna Sit Right Down and Write Myself a Letter, Old Man River, Tennessee Waltz, Begin the Beguine, Our Love is Here to Stay, Goodnight Irene, And I Love Her, The Pink Panther, Embracable You**

**-minor 3rd – Greensleeves, Mission Impossible (TV theme), Georgia on My Mind, Five Foot Two, Mack the Knife, St. Louis Blues, Love Theme from Romeo & Juliet, In the Mood, Sixteen Tons – the 1st & 2nd sung notes, Mission Impossible (TV theme), Moonglow, Stand By Me, The Sounds of Silence, Windy, The Work Song, Wade in the Water, Light My Fire –the 1st & 2nd sung notes, Riders on the Storm –the 1st & 2nd sung notes, Louisiana 1927 (by Randy Newman), Jambalaya, You Don’t Know Me, The Very Thought of You**

**-Major 3rd – Kumbaya, Peggy Sue, Stardust, Sometimes I Feel Like a Motherless Child, Arkansas Traveler, I Could Have Danced All Night, Oh Pretty Woman -the 1st & 2nd played notes of the guitar intro; Birthday (by the Beatles) –the 1st & 2nd played**

notes of the guitar intro; Maverick (TV theme), Can't Buy Me Love, September Song, Tammy, High Heeled Sneakers, Dry Bones, Up a Lazy River, Blue Velvet, When the Saints Go Marching In

**-4th** – Home on the Range, When Johnny Comes Marching Home, Jimmy Crack Corn, Taps (Day is Done), Reveille, We Wish You a Merry Christmas, O Tannenbaum, Red River Valley, A Taste of Honey, Auld Lang Syne, Someday My Prince Will Come, The Shadow of Your Smile, The Look of Love, Exodus, Riders in the Sky, The Green Leaves of Summer, How High the Moon, So Rare, A Certain Smile, Tonight (from West Side Story), Danny Boy (aka “Londonderry Air”), What Kind of Fool Am I, All the Things You Are, We're Off to See the Wizard, Bonanza (TV theme), The William Tell Overture (TV theme from “The Lone Ranger”), A Certain Smile, ‘Round Midnight, C Jam Blues. Nardis, When She Loved Me (by Randy Newman, from the movie Toy Story), Mardi Gras in New Orleans (by Professor Longhair)

**-augmented 4th (aka flatted 5th)** – Maria (from West Side Story), Washington Square – the 3rd & 4th notes of the guitar intro, It Ain't Necessarily So -the 1st & 3rd notes; The Cosby Show (TV theme) –the higher notes played after the intro chord; Unsolved Mysteries (TV theme) –the 2nd high note played over a droning tonic note; Sea Hunt (TV theme); Black & White Rag –the 1st and 3rd notes of the main riff

**-5th** – The Alphabet Song, Love & Marriage, My Favorite Things, Moon River, Scarborough Fair, It Ain't Necessarily So, Goldfinger, Chim Chim Cheree, Also Sprach Zarathustra (from the movie “2001”) Abraham Martin & John, Georgy Girl, Gunfight at the O. K. Corral, Linus & Lucy (the low piano intro), Cast Your Fate to the Wind (the 1st & 2nd notes of the low piano intro), Harlem Nocturne, What'd I Say – the 1st & 2nd notes of the piano intro

**-minor 6th** – Manha De Carnival (aka “Morning of the Carnival”, or “A Day in the Life of a Fool”), Shortnin' Bread, Bei Mir Bist Du Schein, Go Down Moses, Lassie (TV theme), In Germany Before the War (by Randy Newman)

**-Major 6th** – It Came Upon A Midnight Clear, Jingle Bells, My Bonnie Lies Over the Ocean, On Broadway, Days of Wine and Roses, Everybody Loves Somebody, When Sunny Gets Blue, Raindrops, Surfer Girl, Take the A Train, Cocoon Waltz

**-minor 7th** – Star Trek (the first series' TV theme); Somewhere (from West Side Story), When I Fall In Love –the 1st & 3rd notes, The Fugitive (TV theme); Friendly Persuasion (Thee I Love) –the 2nd & 3rd played notes; Jungle Drums -the 2nd & 3rd played notes; Watermelon Man -the 1st & 2nd played notes of the piano intro; Soul Kitchen (by The Doors) –the 1st & 2nd played notes of the organ intro; Little House on the Prairie (TV theme) -the 1st & 4th played notes

**-Major 7th** – Moon River – the 9th & 10th notes; Somewhere over the Rainbow -the 1st & 3rd notes; Bali Hai – the 1st & 3rd notes, Colour My World (by Chicago) –the 1st & 4th played piano notes in the intro; Dr. Kildare (TV theme – aka “Three Stars Will Shine Tonight”) –the 1st & 4th played notes; I Could Have Danced All Night -the 1st & 5th played notes; Samba de Orpheus -the 1st & 4th played notes; ---[*this the second least used interval between two notes in songs - best to just to play the notes C and then the B above it on the piano and memorize the sound of it*]

**-octave** – Somewhere Over the Rainbow, When You Wish Upon a Star, The Christmas Song (Chestnuts Roasting on an Open Fire), What the World Needs Now, Bali Hai,

Nature Boy, Oh Where Oh Where Has My Little Dog Gone, I Dig Rock 'n Roll Music, Gunsmoke (TV theme), Cast Your Fate to the Wind -the first high piano melody)

**e. DESCENDING MELODY INTERVALS AT BEGINNINGS OF SONGS:**

-**minor 2nd** – Joy to the World, O Little Town of Bethlehem, Beautiful Dreamer, Bye Bye Love, The Birth of the Blues, Easter Parade, The Good Life, Mona Lisa, Twilight Time, Laura, All My Loving, Smoke Gets in Your Eyes, The Poor People of Paris, Puff the Magic Dragon, Tico Tico. Fly Me To the Moon, 12th Street Rag, Stars and Stripes Forever, On Green Dolphin Street, Lover

-**Major 2nd** – Swanee River, Three Blind Mice, The First Noel, We Three Kings, Mary Had a Little Lamb, Deck the Halls, Away in a Manger, Yellow Rose of Texas, Volare, On the Sunny Side of the Street, Satin Doll, I Want to Hold Your Hand, Cheek to Cheek, Do You Want to Know a Secret, I Can't Stop Loving You

-**minor 3rd** – Star Spangled Banner, America the Beautiful; This Old Man (aka “I Love You”, the end theme from Barney & Friends); Bicycle Built for Two, Dixie, Playmate, Tea for Two, Misty, Love is Many Splendored Thing, Misty, Girl From Ipanema, March from the River Kwai (aka “Colonel Bogey March”), Hey Jude

-**Major 3rd** – Skip to My Lou, Summertime, Swing Low Sweet Chariot, Here Comes the Sun, Light My Fire (the 1st 2 notes on the organ intro), Don't Let the Sun Catch You Crying (the Gerry & the Pacemakers version), Wheels, Christmas Time is Here

-**4th** - Working on the Railroad, Old McDonald, Born Free, O Come All Ye Faithful, Our Day Will Come, Sleepwalk, Walk Right In, Wives & Lovers, Let's Fall In Love, Barnacle Bill the Sailor, Sixteen Tons –the 1st & 2nd played instrumental notes; Do Nothin' 'Till You Hear From Me

-**augmented 4th (aka flatted 5th)** – It Ain't Necessarily So (the 2nd & 4th notes); Unsolved Mysteries (TV theme) – the 2nd high note played over a droning tonic note; The Man from U.N.C.L.E (TV theme) –[the 2nd & 3rd played notes of the main melody after the intro]; Caravan –the 2nd & 4th notes

-**5th** – Drunken Sailor, The Flintstones (TV theme), The Way You Look Tonight, My Foolish Heart, Have You Met Miss Jones, Waltz for Debby (by Bill Evans)

-**minor 6th** – Love Story (aka “Where Do We Begin”), In Germany Before the War (by Randy Newman) –the 4th and 5th sung notes

-**Major 6th** – Bye Bye Blues, The Good Life (the 2nd & 3rd played notes), Love Walked In, Shina No Yoru (aka “China Night” – 1930s Japanese song)

-**minor 7th** – Watermelon Man (the 1st & 2nd played notes of the trumpet melody); The Price is Right (TV theme); Watermelon Man -the 2nd & 3rd played notes of the piano intro; Soul Kitchen (by The Doors) –the 2nd & 3rd played notes of the organ intro; The Good Life –the 1st & 3rd played notes

-**Major 7th** – (the least used interval between two notes in songs) - Colour My World (by Chicago) –the 4th & 7th played piano notes in the intro; ---[*this is the least used interval*

*between two notes in songs - best to just to play the notes B and then the C below it on the piano and memorize the sound of it]*

**-octave** – Sailor’s Hornpipe (Popeye) –the 3rd & 4th played notes, Willow Weep for Me, Love Me or Leave Me, Gimme Some Lovin’ –the 1st and 2nd intro bass notes

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**3. Modes** – taking a Major scale and making seven scales, starting the scales on each of the seven notes in the Major scale – making each of the seven notes the tonic note (the “1”)

A. These are listed here in the key of C – relating to a scale of an octave of white notes from low to high in an octave (called *diatonic*– meaning that all the notes of the melody and all the notes of the chords are with these particular 7 notes) – and relating to each mode with what notes are altered from the Major scale (the “white note” scale with no flatted or sharped notes):

1. **Ionian Mode** – from C up to C - the standard Major scale with no flatted or sharped notes - (corresponds with the C Major chord, the I chord). **[fix]**
2. **Dorian Mode** – from D up to D – with flatted 3rd and 7th notes – used in many traditional Irish tunes, such as “Drunken Sailor”; also used in many Appalachian fiddle tunes; also often used as a scale in jazz improvisation- (corresponds with the D minor chord, the ii chord).
3. **Phrygian Mode** – from E up to E - with flatted 2nd, 3rd, 6th, and 7th notes – used in Spanish music (and also in Spanish music sometimes the 3rd is not flatted) - (corresponds with the E minor chord, the iii chord).
4. **Lydian Mode** – from F up to F - with sharped 4th – often used in a scale in jazz improvisation - (corresponds with the F Major chord, the IV chord).
5. **Mixolydian Mode** – from G up to G - with flatted 7th – used in many traditional Scottish tunes; also used in many Appalachian fiddle tunes; often used in a scale in jazz; also used in Latin music, and in many R&B and rock songs from the 1950s and 1960s such as “On Broadway”, “I Only Have Eyes for You”, “Ferry Cross the Mersey”, Watermelon Man”, “Soul Kitchen” (by The Doors), etc. - (this mode corresponds with the G Major chord, the V chord [especially the V7th chord]).
6. **Aeolian Mode** – from A up to A - with flatted 3rd, 6th, and 7th; used for some traditional Irish tunes; the English song “Greensleeves” is usually in this mode (it is also often played in the Dorian Mode in America) -

corresponds with the A minor chord, the vi chord - (corresponds with the A minor chord, the vi chord).

- (and the Harmonic minor Scale is the same as the Aeolian Mode, with the 7th not flatted).

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7. **Locrian Mode** – from B up to B -with flatted 2nd, 3rd, 5th, 6th, and 7th – [it is basically the Mixolydian Mode up a Major third interval – it is not often used] - (corresponds with the vii diminished chord).

**B. the Modes also could be organized in a “Circle of 5ths” – that is, for each 5th interval you go up, another note is flatted (these are also the seven positions for playing the diatonic harmonica):**

1. **C (no flats)**
2. **G (one flat)**
3. **D (two flats)**
4. **A (three flats)**
5. **E (four flats)**
6. **B (five flats)**
7. **F (in the diatonic scale this is a flatted fifth interval above the B, and it is much more convenient to just say that the 4th is sharped**

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- C. **The Blues scale** – based on a minor Pentatonic (5 note) scale, with the 1st, flatted 3rd, 4th, (adding in the sharp 4), the 5th, and the flatted 7th. The 3rd is often played as a “neutral” note, in between the flatted 3rd and the natural 3rd.

- The Blues Scale is an extension of the minor Pentatonic Scale – it uses 5 notes of the Dorian Mode - with the 1st, the flatted 3rd, the 4th, the 5th, and the flatted 7th - it is used in most of the world.

- D. **The Major Pentatonic Scale** – with the 1st, 2nd, 3rd, 5th, and 6th - it uses five notes of the Major Scale – the basis for Chinese traditional music, and used in most of the world.

- The Major Pentatonic and minor Pentatonic Scales are related – if you play the C Major Pentatonic scale (C-D-E-G-A-C), but have the first note as the “A”, then it becomes the A minor Pentatonic Scale - so a Major Pentatonic scale is the minor Pentatonic scale of the key 3 half steps down (it’s relative minor); and conversely, a minor Pentatonic Scale is the Major Pentatonic Scale of the key three half steps up (it’s relative Major).

**- Modes (starting and ending the scale on each of the different tones in the scale) could be used for the two Pentatonic Scales also.**