

Music Theory for Songwriters

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Introduction

So there you are, walking along, when suddenly you come to a big wall, and written all over it are ideas - ideas for songwriters.

Along the way, most songwriters have some questions. Many of the questions have easy answers, but sometimes you meet one that looks like a mountain in your path.

One of the biggest mountains can be described this way. Let's say we're writing a song. First we choose a key. Now here comes the mountain. Which chords are available in this key, and how do they flow from one to another in ways that sound good?

These questions are easy to ask, but it took me years to understand what I wanted to know. Now, some of what seemed mysterious to me then has grown clearer. If you are asking questions like these, this book may help you to understand more quickly. Have fun!

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Part One

Scales, Note Numbers, Roman Numerals

Concept #1 - Music as a Language

To begin with, music is like a language. Take this paragraph, for instance. It's made up of sentences, which are made up of words, which are groups of letters. The letters are taken from the alphabet.

Music has an alphabet too, but we call it a scale. Each note is like a letter. We put notes from the scale together to make chords (words). Then we put the chords (words) together to make phrases (musical sentences). When you know how to make good-sounding phrases, you are well on your way to writing songs.

So chords are your vocabulary. You need to know chords. But knowing chords alone is not enough. That would be like speaking words and not being able to create sentences. You need to know how chords flow from one to another.

Concept #2 - The Major Scale

There are many scales, but there is one in particular you'll want to know. It's called the Major Scale.

The major scale has a recognizable sound. You're probably quite familiar with it already. Have you ever heard someone sing "Do, Re, Mi, Fa, So, La, Ti, Do?" That's it. That's the major scale. That's the alphabet.

Next we simplify. Instead of "Do, Re, Mi, Fa, So, La, Ti, Do," we use "1, 2, 3, 4, 5, 6, 7, 1." Same sound, just numbers now instead of names.

Intersection

At this point, you might think we should learn a lot about scales, and someday I hope you can. But for now, we need to stay true to our purpose: to know the chords we need and how they flow from one to another. So let's move on.

It might surprise you, but it's possible to write a very good song without knowing a lot about scales. When you play a chord, you can immediately hum several notes that seem to fit. This process of playing and singing while searching for a strong melody is automatic. You "hear" the vocal lines in your head, or you experiment until you discover something you like. Part of the fun of writing songs is this searching process.

But while you can get along fine "discovering" the tune, it's a lot harder to discover chords. The writing process is much easier if you already have a group of chords to work with.

Concept #3 - Roman Numerals

Even though we walked quickly past scales, there is one important scale concept to remember. The notes in the major scale can be numbered 1 through 7. That matters.

Next let's introduce a new idea. Each note in the scale can be considered the starting point, or "root," for a chord. In other words, there is a note we will call 1, and there is a chord, made up of several notes, which uses note 1 as a starting point. Don't worry right now where those other notes come from. Just remember, there is a note called 1, and there is a chord based on note 1.

This chord based on note 1 is called the "one chord," and we use a roman numeral one (I) when we are referring to this chord. So if we want to talk about just the note, we will use "1," but if we're talking about the chord, we write "I." This is important to understand. "1" means note number one. "I" means the one chord, which is built on note number 1.

The same is true for the other notes in the scale.

There is a note "2" and there is a chord "ii."

There is a note "3" and there is a chord "iii."

There is a note "4" and there is a chord "IV."

There is a note "5" and there is a chord "V."

There is a note "6" and there is a chord "vi."

(There is a note "7" also, but the chord built on note 7 is a little different, so we're leaving it out for now. You may still use note 7 when you sing, and note seven may appear in other chords, but the chord that uses 7 as a starting point is not being considered at the moment.)

Did you notice? Some of the roman numerals are capitalized (I, IV, and V), while others are lower case (ii, iii, and vi). This is intentional. The capitalized chords have a sound which some people describe as being happy or bright. In music theory we call them "major chords." The lower case chords have a sound some consider to be more contemplative, or perhaps darker, or sad. These lower case chords are "minor chords."

Review of Part One

We started with our purpose: to learn about chords and how they flow. We then discussed how music is like a language, with stories, sentences, words, and letters, but we call them songs, phrases, chords, and notes. The notes come from the scale. The scale is similar to the alphabet.

Although it's very helpful to learn scales, we decided to postpone this area and jump straight to chords and how they follow one another. Most beginning songwriters can hum or sing a melody without knowing a lot about scales. But it's very hard to write songs when you still don't have an understanding of chords.

We did, however, observe one important fact regarding the major scale: it has seven notes. We numbered the notes one through seven and then made the further observation that each of these seven notes can function as a starting point, or root, for a chord. For instance, the chord built on note 1 is called "I." Leaving off the chord built on note seven, we were left with six chords, which we labeled I, ii, iii, IV, V, and vi. The I, IV, and V chords are "major chords," and the ii, iii, and vi chords are "minor chords."

Review this page as needed until the material starts to feel natural. When you understand the information here, you are ready for [Part Two](#).

Part Two

I, IV, and V Chords, Keys, Chords in D

Concept #4 - Getting Started

For your first exploration into the world of songwriting, it's helpful to establish some "rules." These are not rules in the sense that they cannot be broken; these are suggestions or good ideas. You'll do better if you follow these "rules" most of the time.

Rule Number 1 - Start and end your song with the I chord. This establishes clearly where you are, and helps both you and the listener experience a strong beginning and ending.

Rule Number 2 - I, IV, and V are the three chords you will use most often. Many songs have been written with just these three chords.

Rule Number 3 - Choose a key. We haven't discussed keys yet, so let's address that next. You already know that a major scale can be numbered 1, 2, 3, 4, 5, 6, 7. Each of these numbers represents a note. You can sing the scale or play it on an instrument.

When you sing, you don't always think of the note as having a name, because your voice can sing high and low and everywhere in between. It may not matter to you what note it is as long as it sounds good. But when you play an instrument like the piano, each note has a name and a location on the instrument.

So when you walk up to the piano to play 1, 2, 3, 4, 5, 6, 7, you have to ask a question first. Where is note 1? The answer is you may choose whichever note you like to be note 1. But after you choose note 1, the major scale determines where 2, 3, 4, 5, 6, and 7 are located. You can't just jump around and call them whatever you want. You only get to choose note 1.

Whichever note you choose to be note 1 is the name of the "key." So if you choose a D to be note 1, you will be playing in the key of D. If you choose an A, you will be playing in the key of A.

Choosing note 1, playing the scale, and then finding the chords based on each note in that scale can be a bit of a challenge at first, so let's simplify things by using the following table.

KEY	I	ii	iii	IV	V	vi
C	C			F	G	
Db	Db			Gb	Ab	
D	D			G	A	
Eb	Eb			Ab	Bb	
E	E			A	B	
F	F			Bb	C	
Gb	Gb			Cb	Db	
G	G			C	D	
Ab	Ab			Db	Eb	
A	A			D	E	
Bb	Bb			Eb	F	
B	B			E	F#	

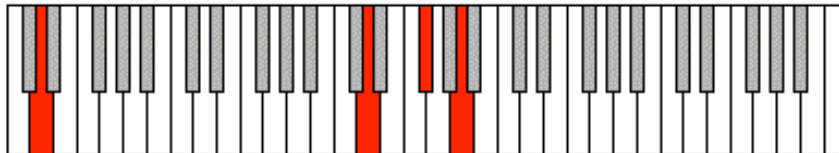
Take a look at the table and answer this question. In the key of D, can you name the I, IV, and V chords? It's easy to find them. The I chord is D, the IV chord is G, and the V chord is A.

So What Does That Mean?

It means you can write a simple song in the key of D if you know how to play just three chords: D, G, and A. You will start the song with a D chord because that's the I chord. You will also end the song with a D chord. Along the way you will use D's, G's, and A's whenever you like.

And what do these chords look like? These diagrams show one way they might be played on a keyboard, and also on a guitar.

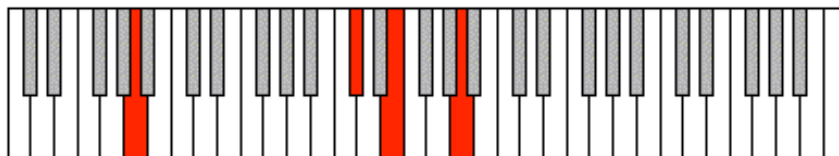
The D Chord

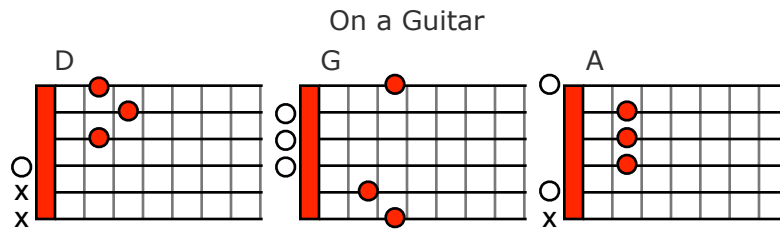


The G Chord



The A Chord





Another Intersection

At some point, you will want to learn to play I, IV, and V in other keys, but for now this is enough to illustrate the principle. Our next step is to add in the minor chords: ii, iii, and vi. Just before going in that direction, let's review what we've learned.

Review of Part Two

In Part Two we stated some simple "rules." Start and end your song with the I chord. Along the way use I, IV, and V. Choose a key. If you aren't sure which chords are I, IV, and V, you can look it up in the table.

We learned that a key has the same name as note 1. So if the key is D major, note 1 must be D.

We looked at the chords D, G, and A, both on a keyboard and on a guitar. We recognized the goal of eventually being able to play I, IV, and V in all of the major keys, but rather than taking the time now to explore them, we decided to move on to ii, iii, and vi.

Ready for [Part Three](#)?

Part Three

ii, iii, and vi Chords, The Simple Map

Concept #5 - ii, iii, and vi

The ii, iii, and vi chords are minor chords built on notes 2, 3, and 6 of the scale. They have a different sound than the three major chords we have already discussed. This adds many new possibilities to your music.

First, let's fill in the rest of the table.

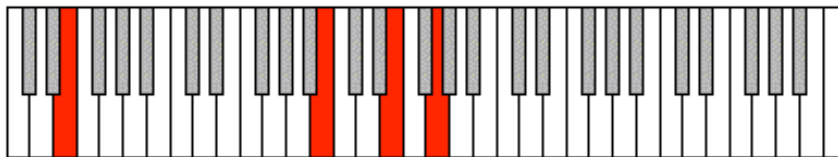
KEY	I	ii	iii	IV	V	vi
C	C	Dm	Em	F	G	Am
Db	Db	Ebm	Fm	Gb	Ab	Bbm
D	D	Em	F#m	G	A	Bm
Eb	Eb	Fm	Gm	Ab	Bb	Cm
E	E	F#m	G#m	A	B	C#m
F	F	Gm	Am	Bb	C	Dm
Gb	Gb	Abm	Bbm	Cb	Db	Ebm
G	G	Am	Bm	C	D	Em
Ab	Ab	Bbm	Cm	Db	Eb	Fm
A	A	Bm	C#m	D	E	F#m
Bb	Bb	Cm	Dm	Eb	F	Gm
B	B	C#m	D#m	E	F#	G#m

Now answer this question. In the key of D, can you name the three major chords and the three minor chords?

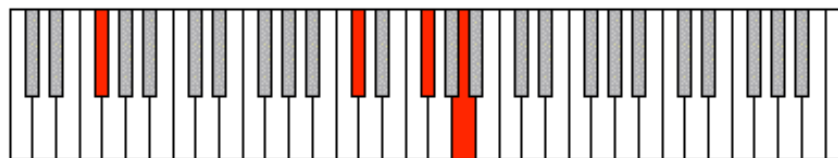
Answer: the three major chords (I, IV, and V) are D, G, and A, and the three minor chords (ii, iii, and vi) are E minor, F# minor, and B minor.

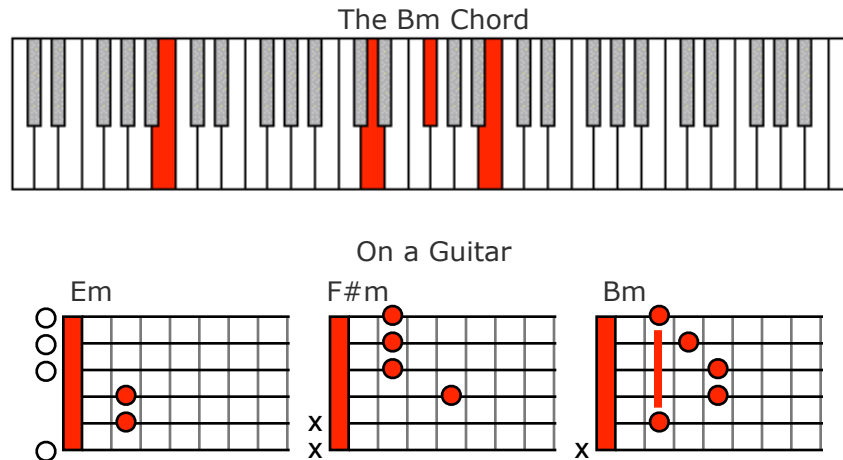
What do the new chords look like? In the diagrams below, you will see one way each of these chords can be played, first on a keyboard and then on a guitar.

The Em Chord



The F#m Chord





Concept #6 - The Simple Map

This is where the big question begins to emerge. We now have six chords available. How do they flow from one to another?

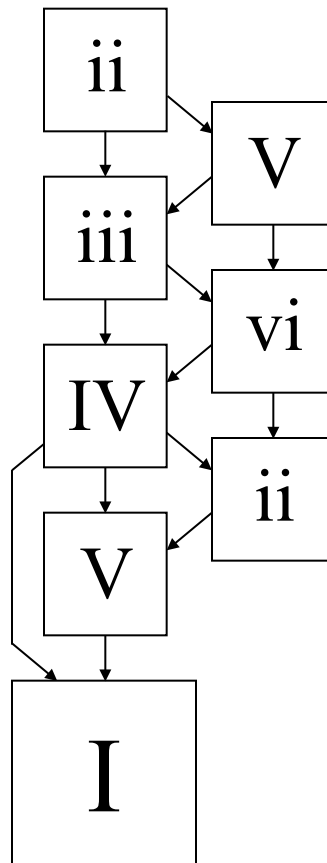
There are two answers. The simple answer goes like this. It doesn't matter which chord comes next as long as it sounds good. In some ways, this answer is correct. All six chords come from the same scale, and they work together well enough to just bounce from one to another. But there is a better answer, though it takes a little longer to understand.

The better answer is this one. Chords are flowing through the song, but they are also flowing into the minds of your listeners. To the listener, chords have an effect. Some chords feel stable and strong while others feel like they're leaning or going somewhere. Some chords create tension, waiting for another chord to come along and relax the tension. Sometimes a chord is meant to surprise the listener. Sometimes a chord is intended to soothe. And there is also a kind of guessing game going on. The audience is wondering what chord comes next. Sometimes they guess right. Sometimes you throw them a curve.

I came across this analogy once: you want to throw enough curves to keep your audience guessing, but not so many that they start striking out. The listeners feel better when they "hear" chords coming, and guess right, but not all the time. They want to be surprised some of the time.

What I'm going to show you next is a map. The map has one very simple purpose. It shows you chord sequences that your audience will tend to "guess in advance." These chord sequences sound natural, like walking down the stairs, with no sudden jumps or unexpected turns. A lot of music is created with simple sequences like these.

The Simple Map



Concept #7 - Using the Simple Map

To use the map, remember two things. First, you may jump anywhere from I. Second, if a chord appears at more than one location, there is an "imaginary tunnel" connecting both places, so you can move freely from one location to the other.

With the map you can do exercises like:

Write a long "loop," starting with the I chord. Jump from I to wherever you like. Then work your way back to I by following the arrows.

Write several three or four chord sequences. Start anywhere on the map. Follow the arrows.

Here are some possible answers.

I - iii - vi - IV - ii - V - I is a "loop."

It starts and ends on I.

IV - V - I is a three-chord sequence.

vi - ii - V - I is a four-chord sequence.

ii - V - iii - vi is another four-chord sequence.

You can find a lot more.

An Observation

It doesn't necessarily take a lot of chords to create the background for a song. There are quite a number of songs that repeat the sequence I - V - vi - IV over and over. I've heard some songs that used only I and V, or I and ii. And we've already mentioned that a lot of songs have been written with just I, IV, and V.

Remember the Map's Purpose

The Map doesn't write a song for you, but it helps you find natural, smooth-sounding chord patterns. If you experiment with these natural-sounding patterns, you will automatically start using them in your music. When you do, your listeners will relate well to these sections. This is good for them. They want to "hear" chord changes coming in advance and guess right, not all the time, but a good percentage of the time.

So here's your homework. See how many short progressions you can create. Start anywhere. Then follow the arrows.

Review of Part Three

We began this section discussing the three minor chords. We call them ii, iii, and vi. These chords come from the same scale as I, IV, and V. All six chords work well together. We created a table with the six chords in twelve major keys.

Though you may use any chord in any order if it sounds good, we recognize that our listeners are part of the process, and they need to hear some natural-sounding patterns and some surprises. In order to generate chord sequences that sound smooth and natural, we introduced The Simple Map. Following the arrows gives us many short phrases that work well.

This way to [Part Four](#).

Part Four

Chord Variations, Complex Chords

Concept #8 - Keeping Things Interesting

Imagine living in a world where there was only one shade of red, one shade of green, etc. You would get used to it, but it's far more interesting to have variations in color.

The same is true for chords in a song. It's much better to have several ways to play the same chord. We have a number of options to introduce variety.

This is an exciting area to study, but it can get complex quickly.

(Note: if this is the first time you've seen the following concepts, they may seem confusing at first. Just skim read it then and go on to Part Five. Remember, strong songs can be written with simple chords too.)

I will illustrate some of these concepts with keyboard chord diagrams, but there are too many possibilities to draw them all. At some point you may wish to find a book or an app showing various chord diagrams for keyboard, guitar, or another chordal instrument you may be playing.

Adding Interest with...

- 1 - Chord Inversions
- 2 - Slash Chords
- 3 - Chord Variations
- 4 - Seventh Chords
- 5 - Altered Chords
- 6 - Chord Substitutions
- 7 - Secondary Chords

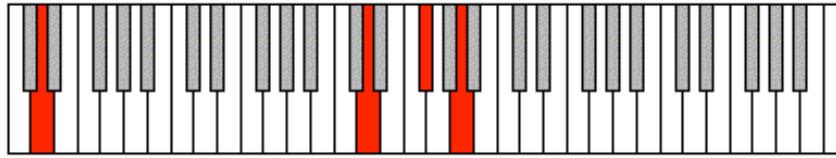
1 - Chord Inversions

Suppose you are playing a simple D major chord. You look down at your hand and notice you are playing three notes: a D, an F#, and an A. You ask, "What would happen if I let go the D note and replaced it with another D further up the keyboard?" You would still have a D major chord, but it would be a different arrangement of the three notes.

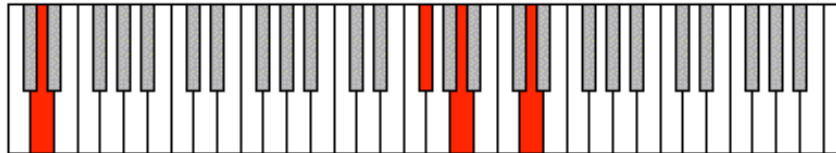
The idea here is this: as long as you are playing a D, an F#, and an A, regardless of where they are located on the instrument, you are playing a D chord.

These three pictures show the D chord with two inversions. Notice that the same three notes are involved. They just show up in different places.

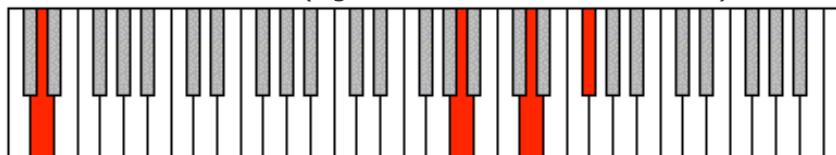
The D Chord (right hand in root position)



The D Chord (right hand in first inversion)



The D Chord (right hand in second inversion)



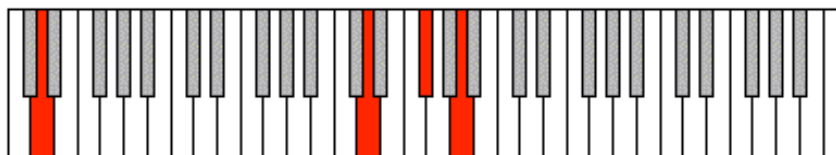
2 - Slash Chords

Until now, every time we showed a D chord, the bass note was always a D. What would happen if we played the F# or the A instead? We would still be playing a D chord, but changing the bass note makes a big difference. It makes such a big difference that we have a way of indicating when we want the bass note to be one of these other possibilities. We call them slash chords.

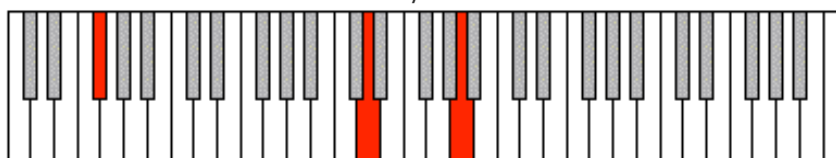
When we want a D chord with D in the bass, we write D. When we want the F# in the bass, we write D/F#. When we want the A in the bass, we write D/A.

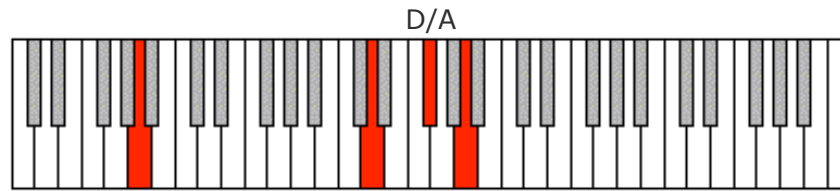
This is illustrated in the next three pictures.

D



D/F#



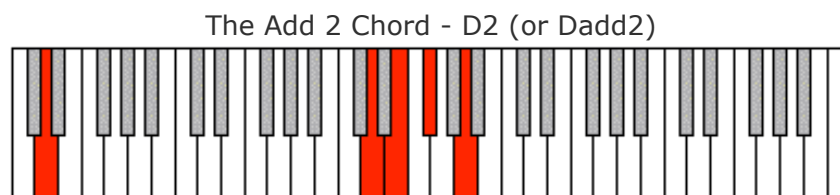


By the way, did you notice that the middle chord, D/F#, has only two notes in the right hand? This is intentional. When the "third" of a major chord is in the bass, it often sounds best to leave the "third" out in the right hand. (F# is the "third" of the D chord because the D scale goes D, E, F#...)

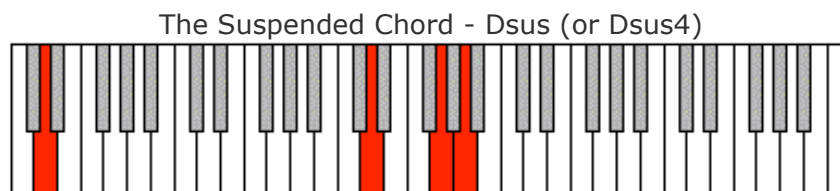
3 - Chord Variations

There are some very common variations musicians use all the time to add variety and interest. Here are a few of them, applied to the D chord.

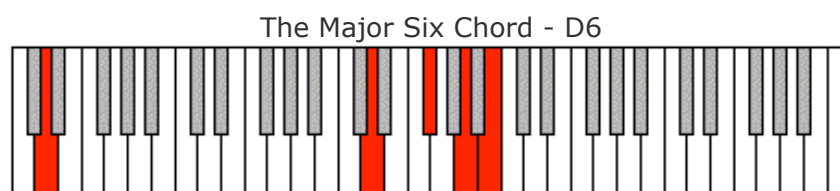
The 2 chord adds note 2 to the chord. (By note 2, we mean the 2nd note of the major scale whose name is the same as the chord currently being played. In other words, if you are playing a D chord, think for a moment about the D major scale. Which note is note 2? That's the note we will add.)



The suspended chord moves note 3 in the chord up one half-step, replacing note 3 with the 4th note of the scale. This 4th note has a tendency to feel like it is ready at any time to come back down to note 3, so while it is on note 4 it is "suspended" or lifted up, waiting to step back down. It is quite often written sus4.

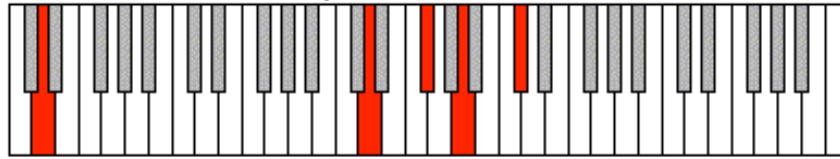


The major six chord adds note 6 to the basic chord. In the case of a D chord, the sixth will be the note B.



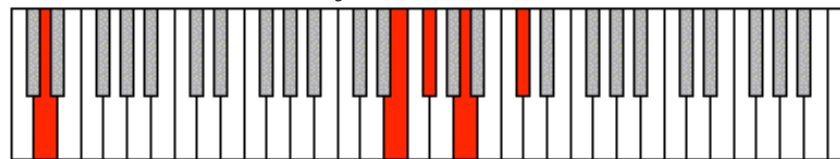
The major seven chord adds note seven to the basic chord. Added to a D chord, the major seventh would be the note C#.

The Major Seven Chord - DM7



The major nine chord has a major 7 in it, and then we add note 9. Note 9, depending on where you position it, sometimes looks like note 2, but we call it 9 when note 7 has already been added to the chord.

The Major Nine Chord - DM9

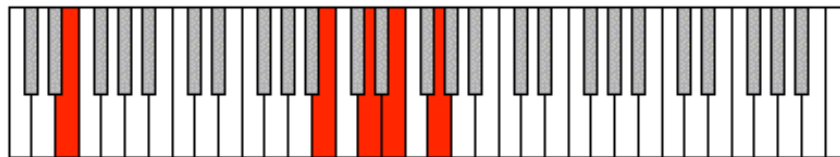


4 - Seventh Chords

Minor chords will often add a 7th to them.

The E minor chord adds note D as its seventh.

The E Minor 7 Chord - Em7



(Note that this is not the same as adding a major seventh (M7) to a chord. The seventh and the major seventh are two different notes.)

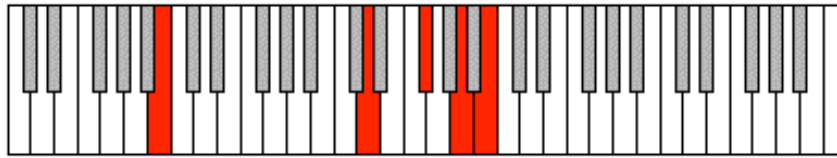
The F# minor chord adds note E as its seventh.

The F# Minor 7 Chord - F#m7



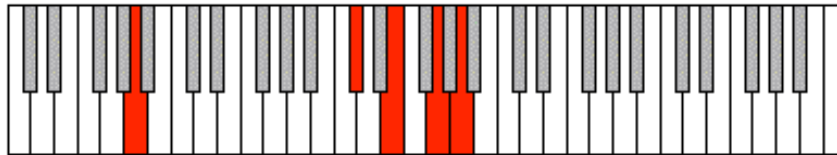
The B minor chord adds note A as its seventh.

The B Minor 7 Chord - Bm7



V chords often have a 7. In the key of D, the V chord is A, so you might see the chord A7 appearing in the music.

The V7 Chord in D is A7.

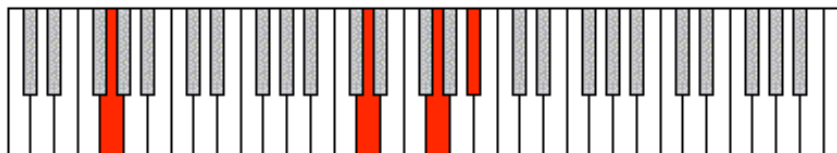


5 - Altered Chords

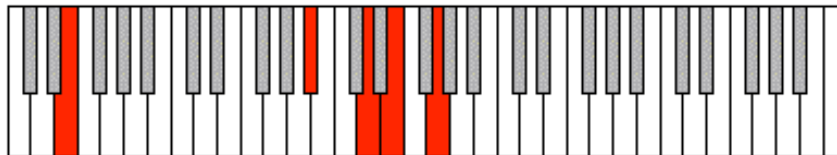
So far, all the changes we've made have added notes that are in the scale. There are other notes though that are not in the scale. Switching a note in the chord to a non-scale note gives us an altered chord.

Two very useful altered chords are the iv chord (notice we switched from IV to iv, from major to minor), and the iim7b5 (pronounced "two minor seven flat five"). In the key of D the IV chord is G, so the iv chord is G minor. The iim7b5 is Em7b5.

The G Minor Chord - Gm



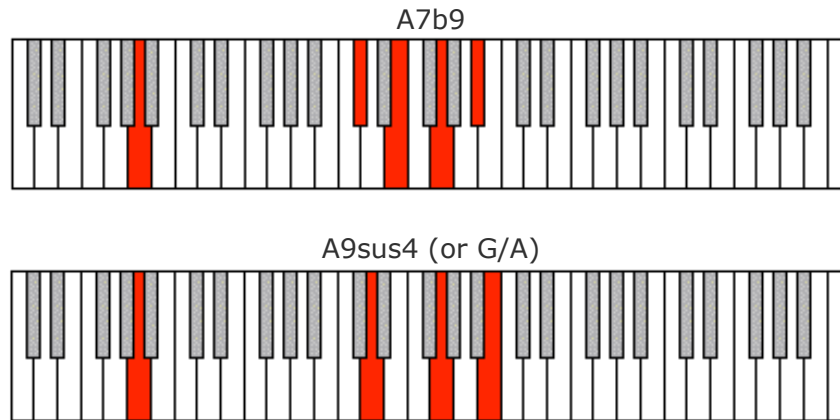
The iim7b5 in D is Em7b5.



6 - Chord Substitutions

There are a whole group of chords with interesting names like nines, elevens, thirteens, nine sharp fives, nine flat fives, and the list goes on. These chords generally have a more complex sound. A good player will use these chords when that particular sound is desired. Often the player "substitutes" one of these complex chords for a simpler one in the music.

For example, if the music calls for an A7, an A7b9 might in some instances be more interesting. Here are two possible chord substitutions for the A7 chord.



7 - Secondary Chords

This topic is addressed in Part Five. Before going there, let's take a minute to step back and see where we've been.

Review of Part Four

In this part, we saw the number of chords available to us suddenly explode. We learned that even simple chords can be played in several ways called inversions. Slash chords were introduced to keep track of bass notes when the bass is playing something other than the root. We used scale notes to get chords like 2, sus, 6, M7, and M9. We used non-scale notes to get iv and iim7b5. Chord substitutions like nines, elevens, and thirteens came along to replace sevens when needed.

We still haven't discussed how these new chords fit into our Map, and we haven't covered secondary chords yet. These topics are just ahead in [Part Five](#).

Part Five

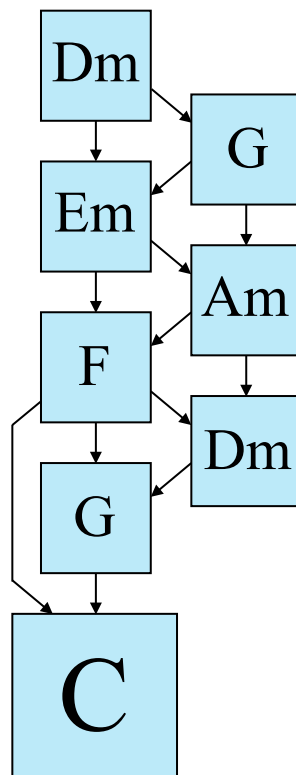
Secondary Chords and the Big Map

Concept #9 - Chords from Other Keys

When we left Part Four, we were just about to discuss Secondary Chords. These are chords borrowed from other keys. Let's explain it this way.

Have you ever visited a Water Park with pools and slides? Let's take our Simple Map and use our imagination. First, we're going to change the simple map from I, ii, iii, IV, V, vi to C, Dm, Em, F, G, and Am. These are the chords for the key of C. Second, we're going to illustrate each square in the diagram as a "pool" in an imaginary Water Park.

A Map for C

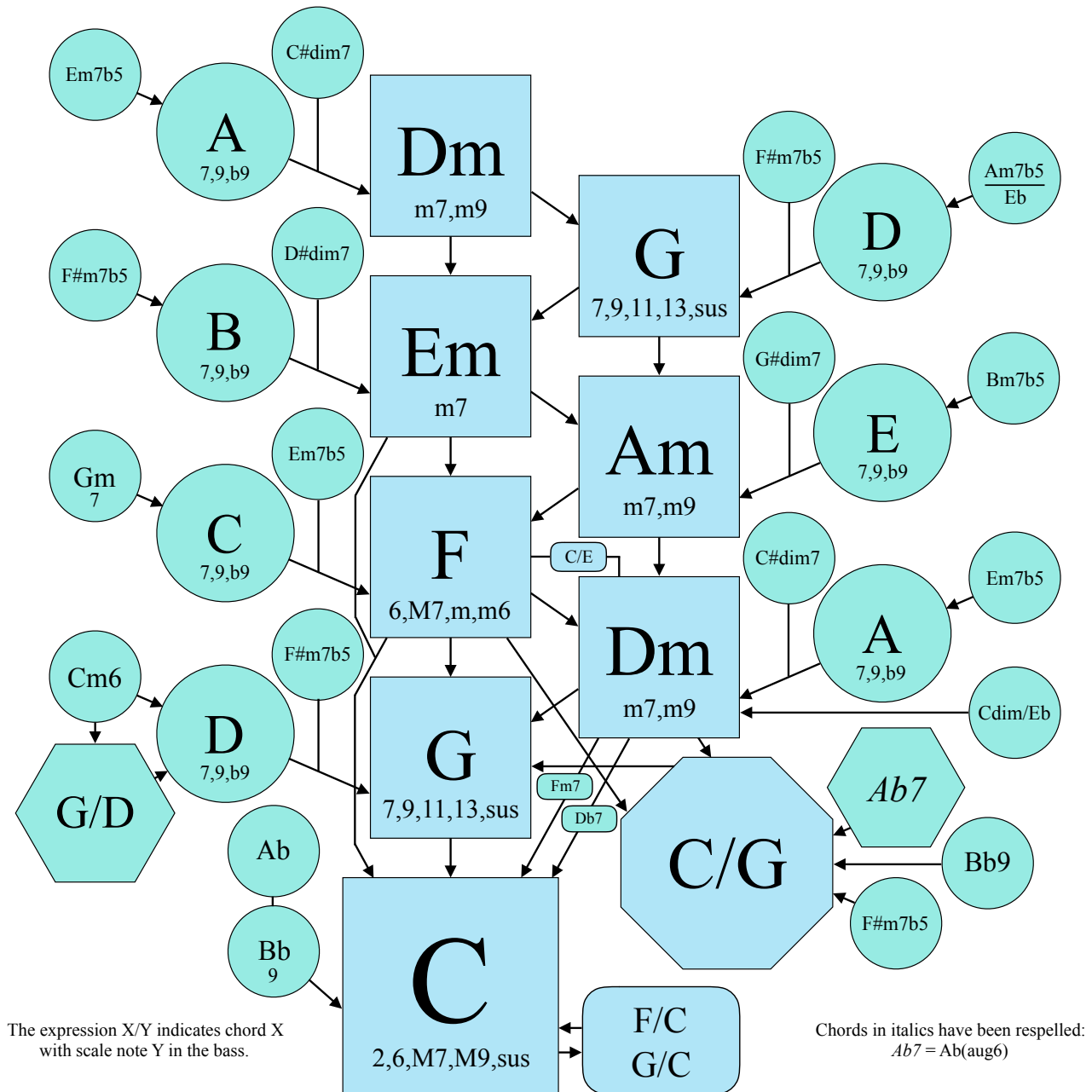


Do you remember the rules? You may jump anywhere from I, which in this case is C. If a chord appears at more than one place (like Dm or G), there is a "secret tunnel" connecting them, so being at one spot is the same as being at the other.

But this time we add a new rule. At any time you may leave the "water" to come down a "slide." Where are the slides?

The slides are the green locations pictured in the next diagram, the one labeled "A Progression Map For C Major."

A Progression Map for C Major



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Some Things to Think About

The first idea is not to be afraid of the complexity of the picture. Yes, it may look complicated, but we are only in one box or circle at a time, and the general flow of the arrows is back toward the home location, which is the C at the bottom. From there we can jump anywhere we like, and then come flowing back.

Also, the sounds represented by these locations are sounds you've probably heard before, perhaps many times, and have grown accustomed to, though you may not have seen them spread out in a picture.

We call this diagram "The Big Map." The example here is for the key of C major. There are other charts like this, for the other major keys, in the "Charts and Maps" section of this material. There is also a "Generic Map," with roman numerals instead of specific names for the chords, for those who would like to have this information on just one page.

Some Things to Notice

While we're looking at The Big Map for C, there are a few things to notice.

First, let's talk about the blue boxes. Some of the chord variations now appear at the bottom of each box. For instance, C lists the 2 chord, the 6 chord, major 7, major 9, and suspended as possible options, any of which can be played at that location.

Three blue locations have been added.

The octagon with C/G inside indicates that this chord quite often follows Dm or F, and then heads for G before going home to C.

The box labeled F/C and G/C shows that the right hand chord can change while the bass note (C) stays right where it is. This technique, holding a bass note while varying the chord above it, yields many surprising and useful sounds.

Finally, the little box labeled C/E is often found between F and Dm. It works going either way.

The chords with a green background don't belong to the key of C; they come from other keys. They are useful when we want to explore sounds a little "farther from home."

You can put a green chord almost anywhere, but when you do, you'll probably want to follow the arrows back toward the blue ones. Your audience will feel good when the chords that seem far from home step back to more familiar ground.

Review of Part Five

In this section we imagined our Simple Map as being a group of pools, each one with slides flowing into it. These slides allow you to choose a chord outside the key and come back smoothly to more familiar sounds. We also added a few new locations to the simple part of the map.

With all of these chord possibilities, there is quite a lot of room to explore and practice. If you spend some time learning, your music will show the difference.

This way to [Charts and Maps](#) and then on to [Part Six](#).

Chord Charts and Maps

Scales

[Major Scale Diagrams in Twelve Keys](#)

Chord Pictures

[Chords With The Name C](#)
[More Chords With The Name C](#)
[Chords With The Name Db](#)
[More Chords With The Name Db](#)
[Chords With The Name D](#)
[More Chords With The Name D](#)
[Chords With The Name Eb](#)
[More Chords With The Name Eb](#)
[Chords With The Name E](#)
[More Chords With The Name E](#)
[Chords With The Name F](#)
[More Chords With The Name F](#)
[Chords With The Name Gb](#)
[More Chords With The Name Gb](#)
[Chords With The Name G](#)
[More Chords With The Name G](#)
[Chords With The Name Ab](#)
[More Chords With The Name Ab](#)
[Chords With The Name A](#)
[More Chords With The Name A](#)
[Chords With The Name Bb](#)
[More Chords With The Name Bb](#)
[Chords With The Name B](#)
[More Chords With The Name B](#)

In the "Chord Picture" diagrams, the notes shown are played by the right hand. The bass note, played by the left hand, is not shown. Usually the bass note is the same letter name as the chord. For example, any chord with the name C (Cm6, CM7...) would have a C as its bass note.

Chord Progression Maps

[The Big Map In C](#)
[The Big Map In Db](#)
[The Big Map In D](#)
[The Big Map In Eb](#)
[The Big Map In E](#)
[The Big Map In F](#)
[The Big Map In Gb](#)
[The Big Map In G](#)
[The Big Map In Ab](#)
[The Big Map In A](#)
[The Big Map In Bb](#)
[The Big Map In B](#)

The Generic Map

[A Progression Map for Major Keys](#)

How Were the Maps Developed?

While studying music theory in college, I was introduced to ideas pertaining to chords and chord flow. After leaving college, I was teaching piano to young students for a while. Searching for ways to make chord flow accessible to young minds, I began drawing diagrams that would allow a child to create strong progressions. It seemed best to put each chord at a visual location with arrows to direct the flow. I experimented with different variations before choosing what I now call the Simple Map. Years later, I added the secondary chords that make the Big Map look the way it does.

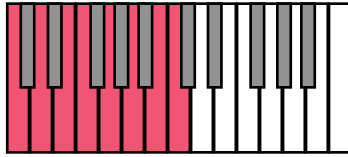
I hope these pages, charts, and maps will help you understand chords and how they flow together. Enjoy writing music. Love and peace to all.

Ready for the Next Lesson?

This way to [Part Six](#).

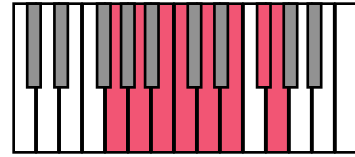
Major Scale Diagrams in 12 Keys

C



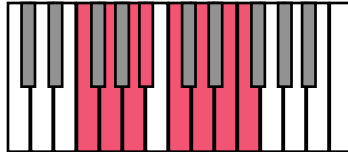
No sharps or flats.

G



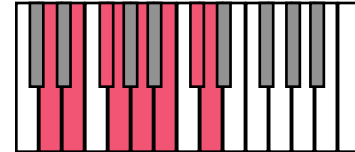
One sharp.

F



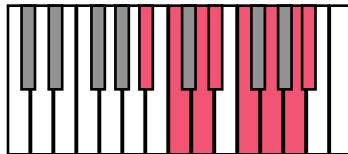
One flat.

D



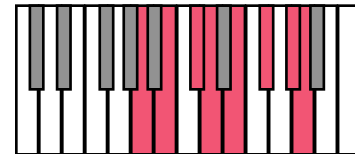
Two sharps.

Bb



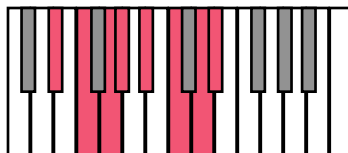
Two flats.

A



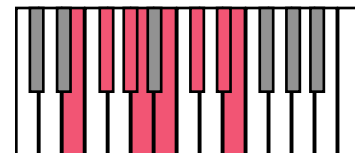
Three sharps.

Eb



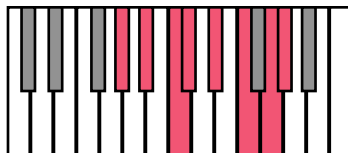
Three flats.

E



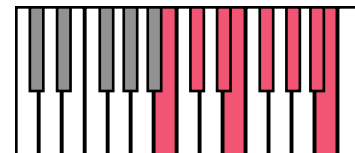
Four sharps.

Ab



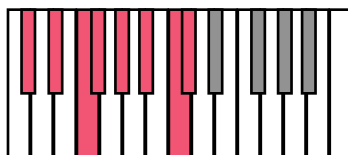
Four flats.

B



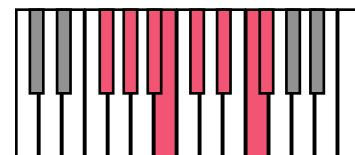
Five sharps - these same notes can be written as Cb, seven flats.

Db



Five flats - these same notes can be written as C#, seven sharps.

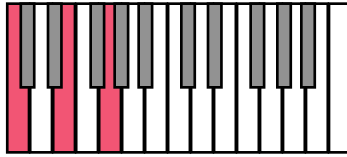
Gb



Six flats - these same notes can be written as F#, six sharps.

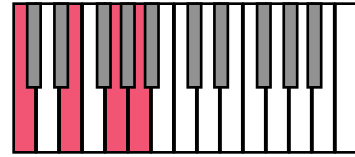
Chords with the Name C

C



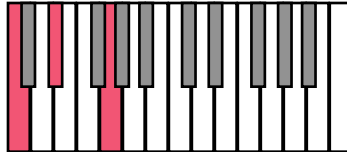
Major chord from which the others are derived.

C6



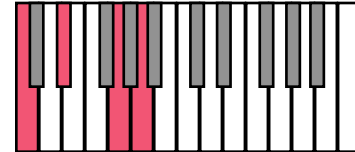
Major 6 - add note 6.

Cm



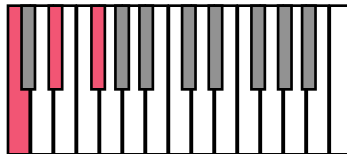
Minor - note 3 is flat.

Cm6



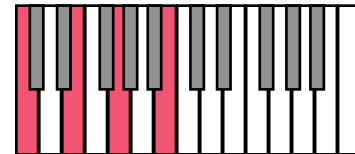
Minor 6 - note 3 flat, add 6.

Cdim



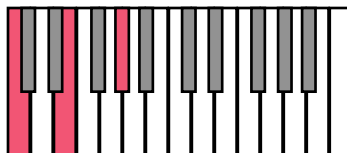
Diminished - notes 3 and 5 are flat.

CM7



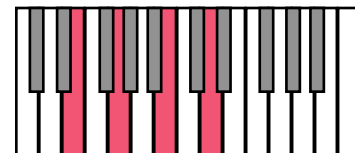
Major 7 - add note 7.

Caug



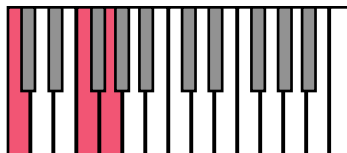
Augmented - note 5 is sharp.

CM9



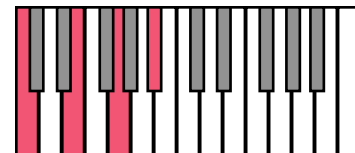
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Csus



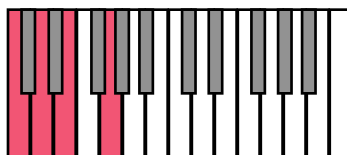
Suspended - note 3 is replaced by note 4.

C7



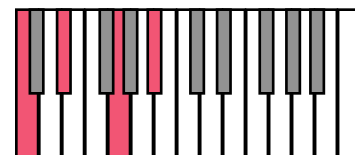
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Cadd2



Add 2 - add note 2.

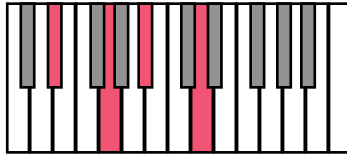
Cm7



Minor 7 - minor chord with flat 7 added.

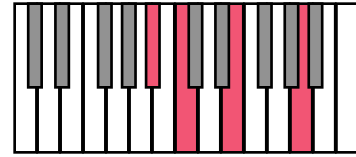
More Chords with the Name C

Cm9



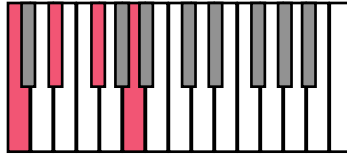
Minor 9 - play note 1 in bass.

C13



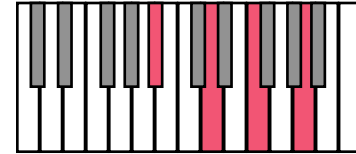
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Cdim7



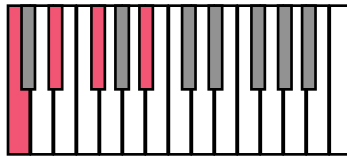
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

C13



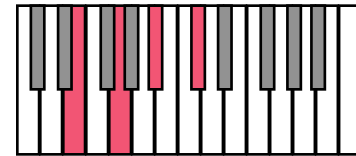
Thirteen - this variation has a flat 7, a 9, and an 11.

Cm7b5



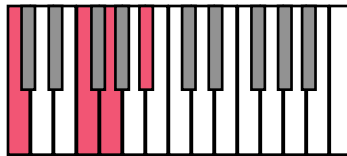
Minor 7 Flat 5 - this has also been called half-diminished 7.

C7b9



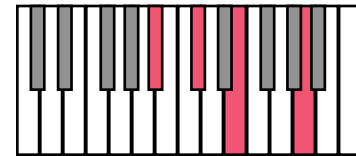
Flat 9 - interesting chord - adds tension and color.

C7sus



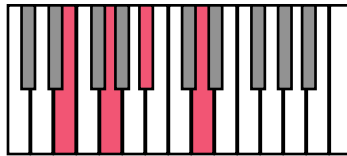
7 Suspended - flat 7, with note 3 replaced by note 4.

C13b9



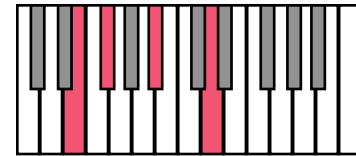
Thirteen Flat 9 - note 9 is flat.

C9



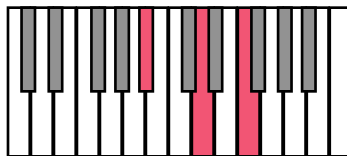
Nine - has a flat 7 in it. Note 1 is in the bass.

C9b5



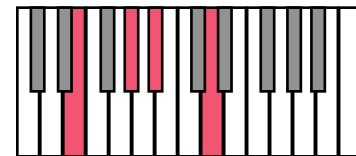
Nine Flat 5 - seventh chord with a 9 and a flat 5.

C11



Eleven - note 1 in bass.

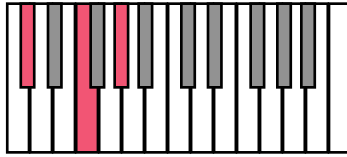
C9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

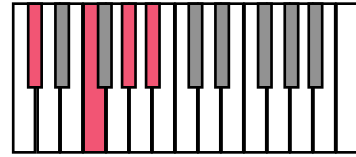
Chords with the Name Db

Db



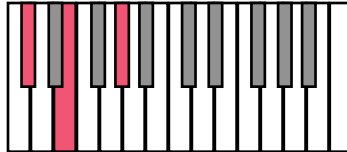
Major chord from which the others are derived.

Db6



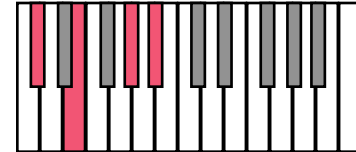
Major 6 - add note 6.

Dbm



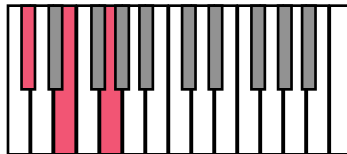
Minor - note 3 is flat.

Dbm6



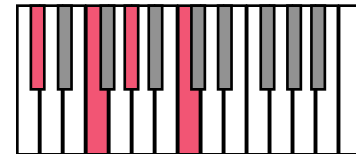
Minor 6 - note 3 flat, add 6.

Dbdim



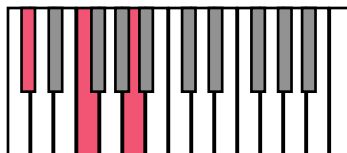
Diminished - notes 3 and 5 are flat.

DbM7



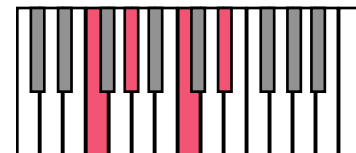
Major 7 - add note 7.

Dbaug



Augmented - note 5 is sharp.

DbM9



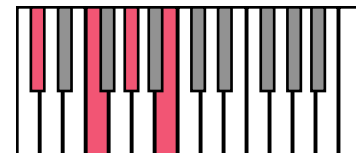
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Db sus



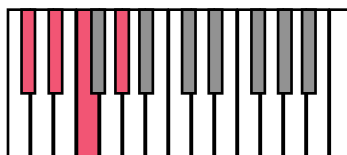
Suspended - note 3 is replaced by note 4.

Db7



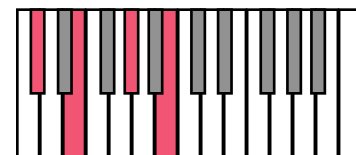
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Dbadd2



Add 2 - add note 2.

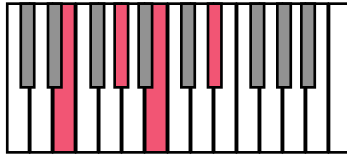
Dbm7



Minor 7 - minor chord with flat 7 added.

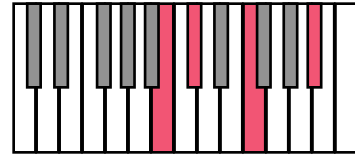
More Chords with the Name Db

Dbm9



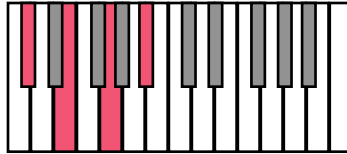
Minor 9 - play note 1 in bass.

Db13



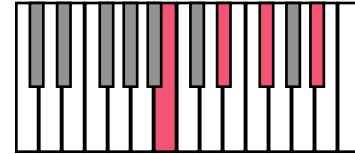
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Dbdim7



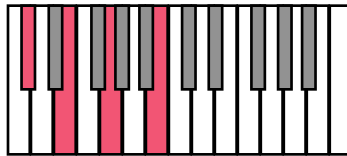
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

Db13



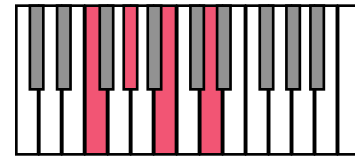
Thirteen - this variation has a flat 7, a 9, and an 11.

Dbm7b5



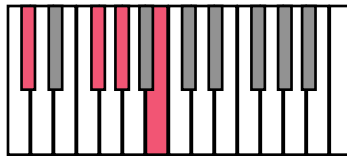
Minor 7 Flat 5 - this has also been called half-diminished 7.

Db7b9



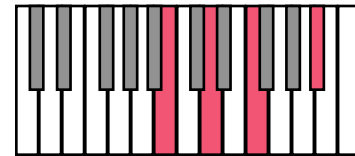
Flat 9 - interesting chord - adds tension and color.

Db7sus



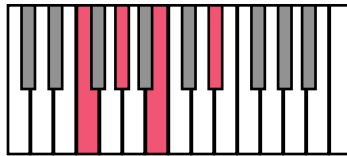
7 Suspended - flat 7, with note 3 replaced by note 4.

Db13b9



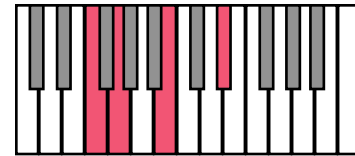
Thirteen Flat 9 - note 9 is flat.

Db9



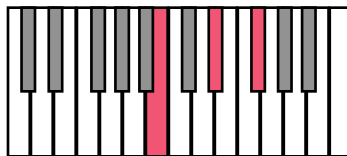
Nine - has a flat 7 in it. Note 1 is in the bass.

Db9b5



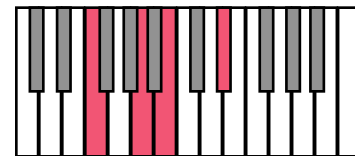
Nine Flat 5 - seventh chord with a 9 and a flat 5.

Db11



Eleven - note 1 in bass.

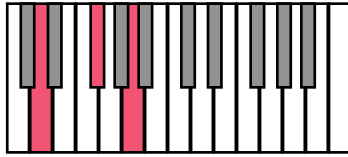
Db9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

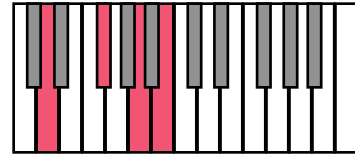
Chords with the Name D

D



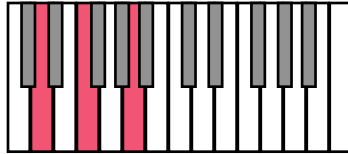
Major chord from which the others are derived.

D6



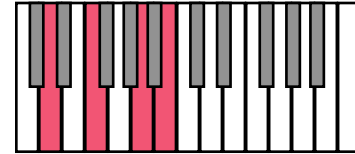
Major 6 - add note 6.

Dm



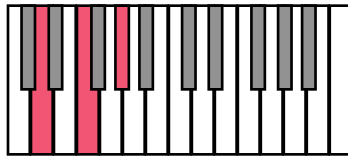
Minor - note 3 is flat.

Dm6



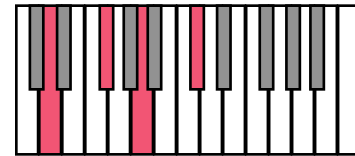
Minor 6 - note 3 flat, add 6.

Ddim



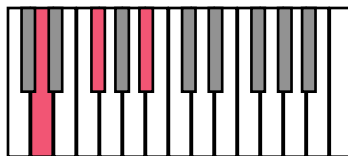
Diminished - notes 3 and 5 are flat.

DM7



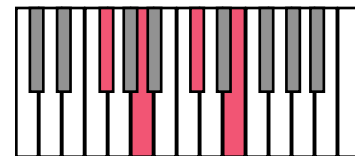
Major 7 - add note 7.

Daug



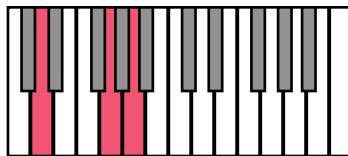
Augmented - note 5 is sharp.

DM9



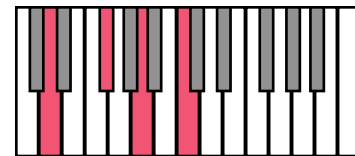
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Dsus



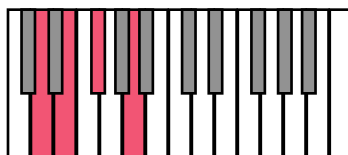
Suspended - note 3 is replaced by note 4.

D7



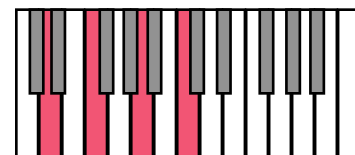
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Dadd2



Add 2 - add note 2.

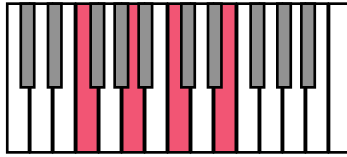
Dm7



Minor 7 - minor chord with flat 7 added.

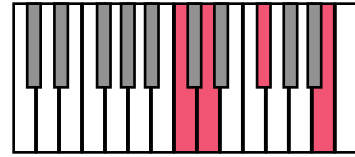
More Chords with the Name D

Dm9



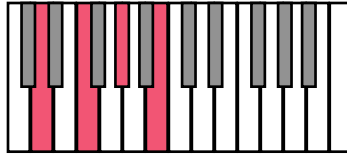
Minor 9 - play note 1 in bass.

D13



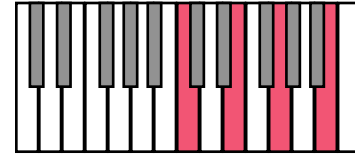
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Ddim7



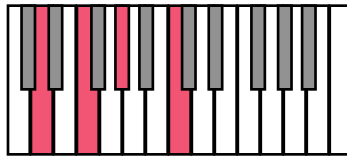
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

D13



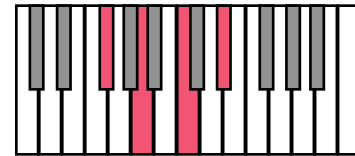
Thirteen - this variation has a flat 7, a 9, and an 11.

Dm7b5



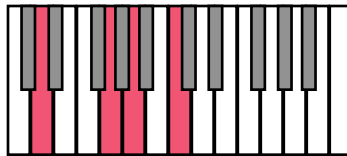
Minor 7 Flat 5 - this has also been called half-diminished 7.

D7b9



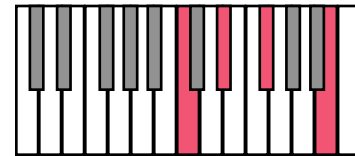
Flat 9 - interesting chord - adds tension and color.

D7sus



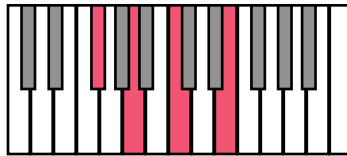
7 Suspended - flat 7, with note 3 replaced by note 4.

D13b9



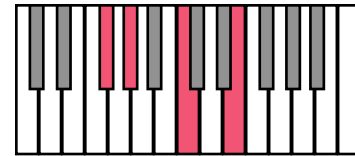
Thirteen Flat 9 - note 9 is flat.

D9



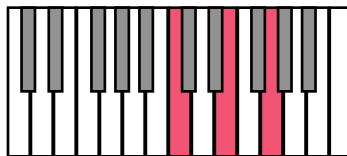
Nine - has a flat 7 in it. Note 1 is in the bass.

D9b5



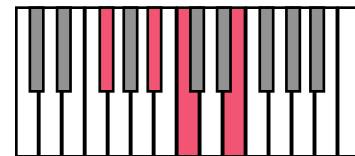
Nine Flat 5 - seventh chord with a 9 and a flat 5.

D11



Eleven - note 1 in bass.

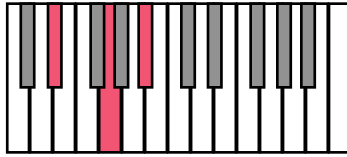
D9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

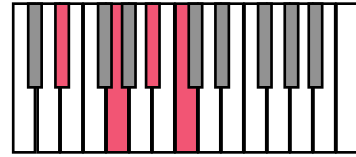
Chords with the Name Eb

Eb



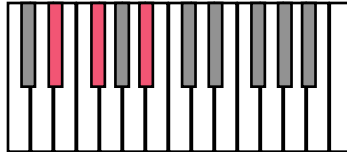
Major chord from which the others are derived.

Eb6



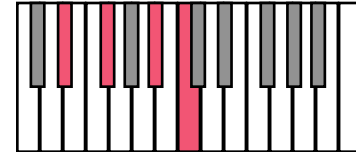
Major 6 - add note 6.

Ebm



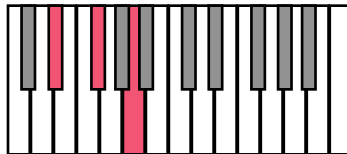
Minor - note 3 is flat.

Ebm6



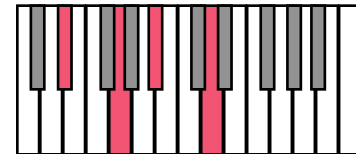
Minor 6 - note 3 flat, add 6.

Ebdim



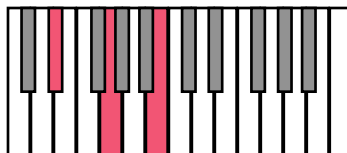
Diminished - notes 3 and 5 are flat.

EbM7



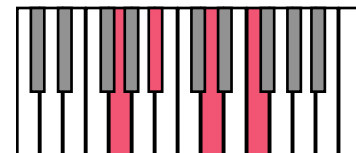
Major 7 - add note 7.

Ebaug



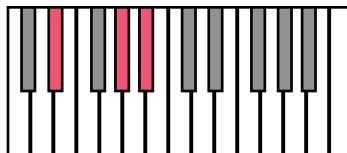
Augmented - note 5 is sharp.

EbM9



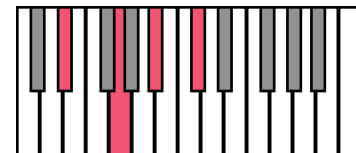
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Ebsus



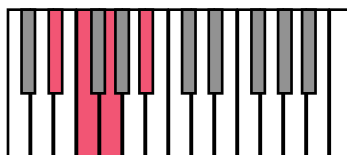
Suspended - note 3 is replaced by note 4.

Eb7



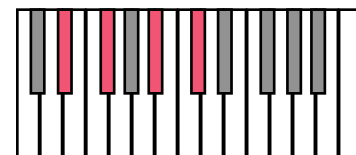
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Ebadd2



Add 2 - add note 2.

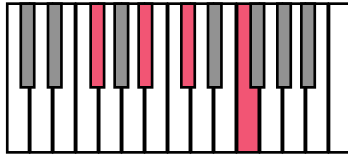
Ebm7



Minor 7 - minor chord with flat 7 added.

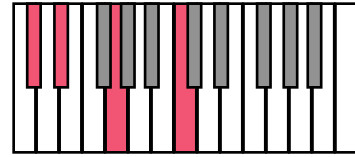
More Chords with the Name Eb

Ebm9



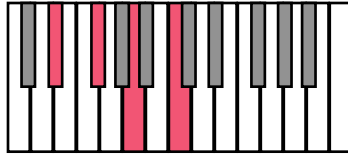
Minor 9 - play note 1 in bass.

Eb13



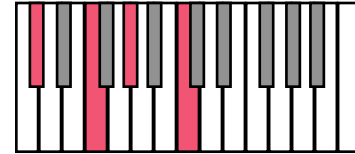
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Ebdim7



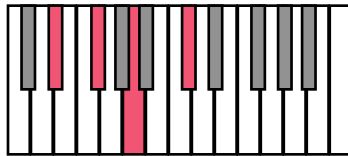
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

Eb13



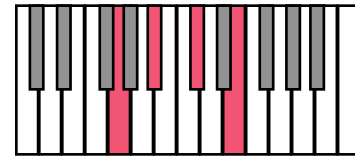
Thirteen - this variation has a flat 7, a 9, and an 11.

Ebm7b5



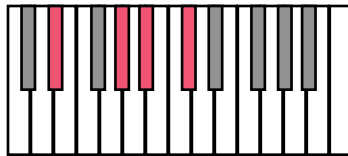
Minor 7 Flat 5 - this has also been called half-diminished 7.

Eb7b9



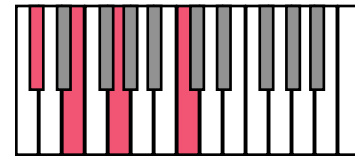
Flat 9 - interesting chord - adds tension and color.

Eb7sus



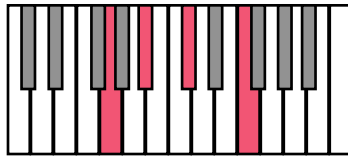
7 Suspended - flat 7, with note 3 replaced by note 4.

Eb13b9



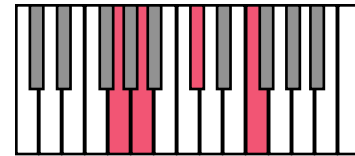
Thirteen Flat 9 - note 9 is flat.

Eb9



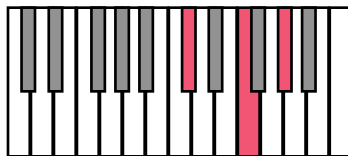
Nine - has a flat 7 in it. Note 1 is in the bass.

Eb9b5



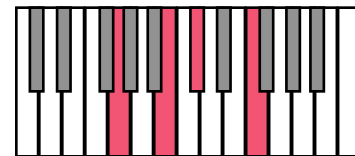
Nine Flat 5 - seventh chord with a 9 and a flat 5.

Eb11



Eleven - note 1 in bass.

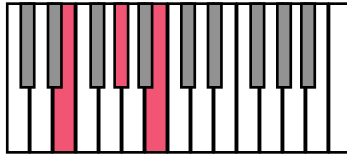
Eb9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

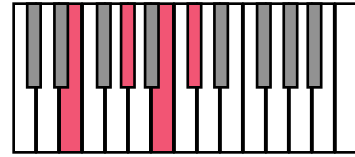
Chords with the Name E

E



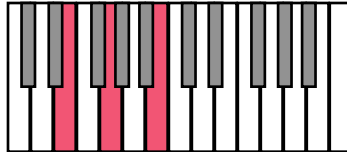
Major chord from which the others are derived.

E6



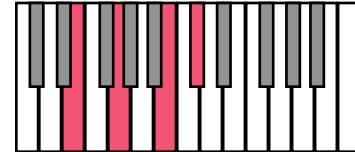
Major 6 - add note 6.

Em



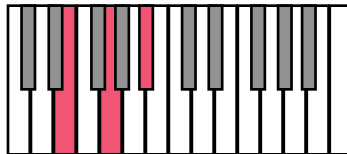
Minor - note 3 is flat.

Em6



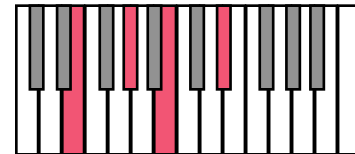
Minor 6 - note 3 flat, add 6.

Edim



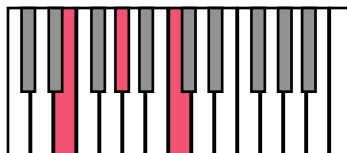
Diminished - notes 3 and 5 are flat.

EM7



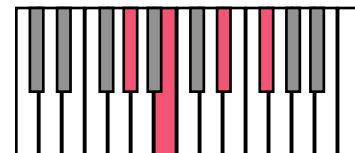
Major 7 - add note 7.

Eaug



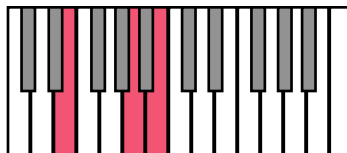
Augmented - note 5 is sharp.

EM9



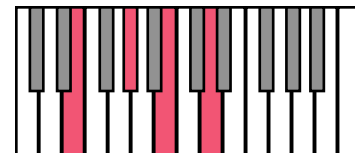
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Esus



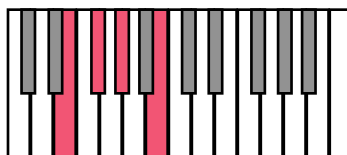
Suspended - note 3 is replaced by note 4.

E7



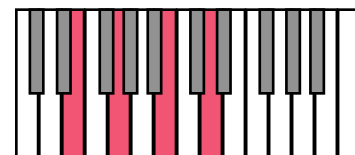
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Eadd2



Add 2 - add note 2.

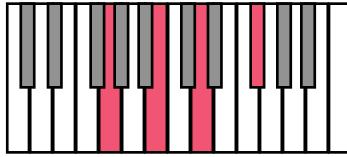
Em7



Minor 7 - minor chord with flat 7 added.

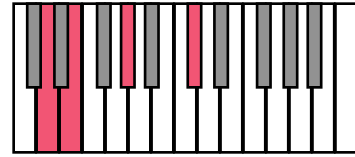
More Chords with the Name E

Em9



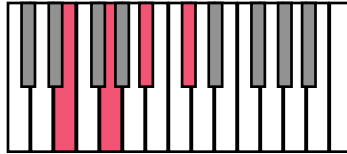
Minor 9 - play note 1 in bass.

E13



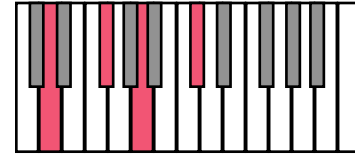
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Edim7



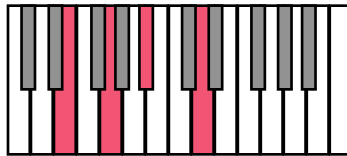
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

E13



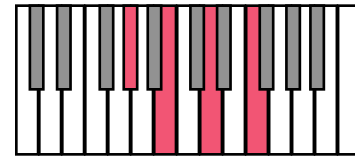
Thirteen - this variation has a flat 7, a 9, and an 11.

Em7b5



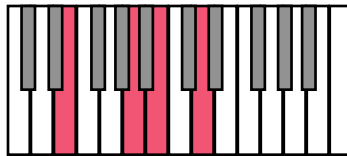
Minor 7 Flat 5 - this has also been called half-diminished 7.

E7b9



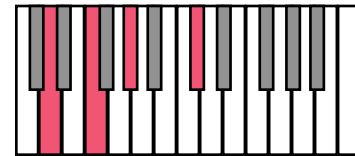
Flat 9 - interesting chord - adds tension and color.

E7sus



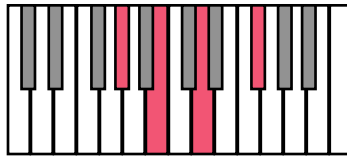
7 Suspended - flat 7, with note 3 replaced by note 4.

E13b9



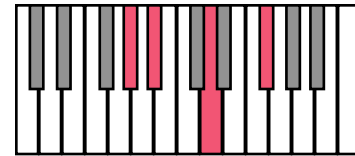
Thirteen Flat 9 - note 9 is flat.

E9



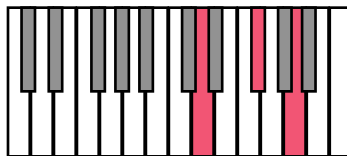
Nine - has a flat 7 in it. Note 1 is in the bass.

E9b5



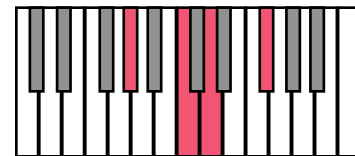
Nine Flat 5 - seventh chord with a 9 and a flat 5.

E11



Eleven - note 1 in bass.

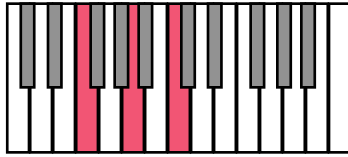
E9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

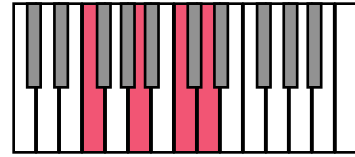
Chords with the Name F

F



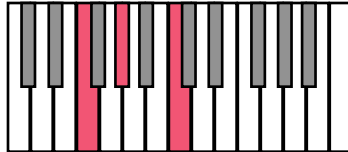
Major chord from which the others are derived.

F6



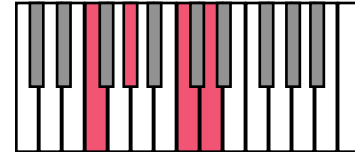
Major 6 - add note 6.

Fm



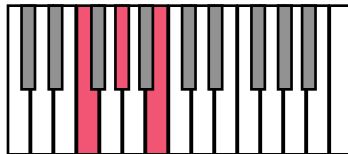
Minor - note 3 is flat.

Fm6



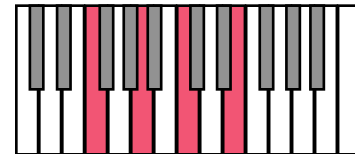
Minor 6 - note 3 flat, add 6.

Fdim



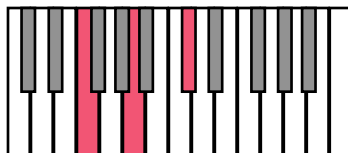
Diminished - notes 3 and 5 are flat.

FM7



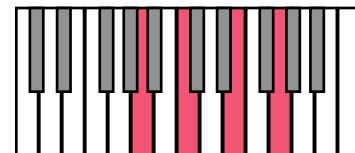
Major 7 - add note 7.

Faug



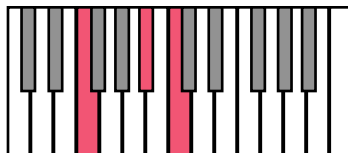
Augmented - note 5 is sharp.

FM9



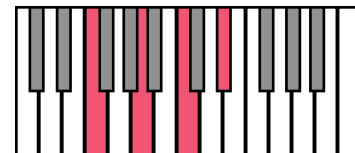
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Fsus



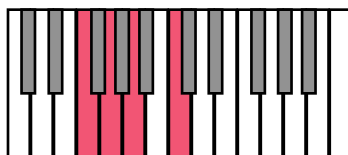
Suspended - note 3 is replaced by note 4.

F7



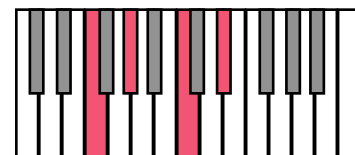
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Fadd2



Add 2 - add note 2.

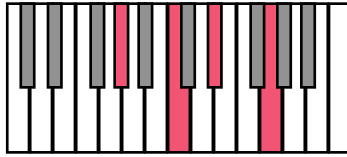
Fm7



Minor 7 - minor chord with flat 7 added.

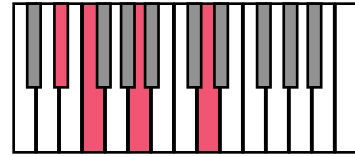
More Chords with the Name F

Fm9



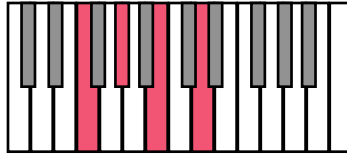
Minor 9 - play note 1 in bass.

F13



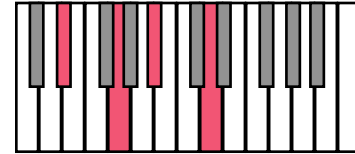
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Fdim7



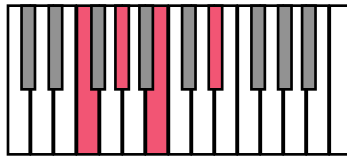
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

F13



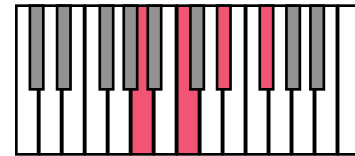
Thirteen - this variation has a flat 7, a 9, and an 11.

Fm7b5



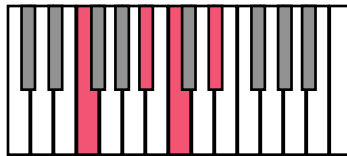
Minor 7 Flat 5 - this has also been called half-diminished 7.

F7b9



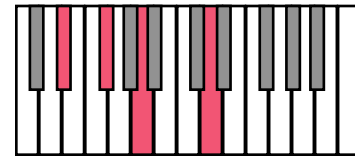
Flat 9 - interesting chord - adds tension and color.

F7sus



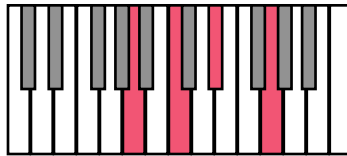
7 Suspended - flat 7, with note 3 replaced by note 4.

F13b9



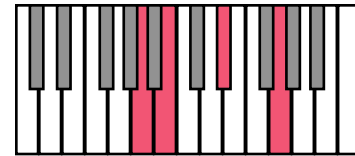
Thirteen Flat 9 - note 9 is flat.

F9



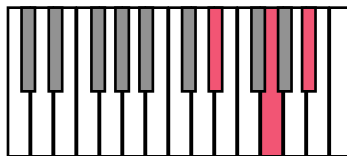
Nine - has a flat 7 in it. Note 1 is in the bass.

F9b5



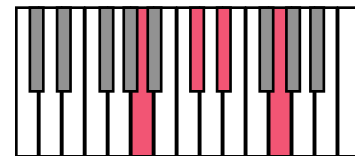
Nine Flat 5 - seventh chord with a 9 and a flat 5.

F11



Eleven - note 1 in bass.

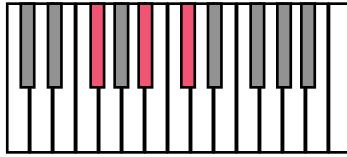
F9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

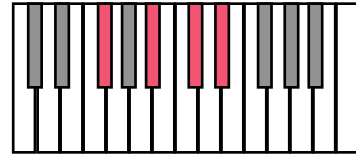
Chords with the Name Gb

Gb



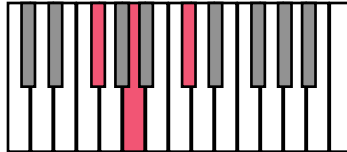
Major chord from which the others are derived.

Gb6



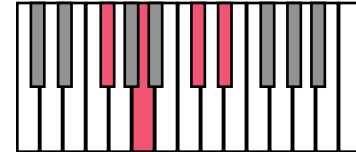
Major 6 - add note 6.

Gbm



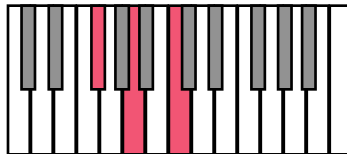
Minor - note 3 is flat.

Gbm6



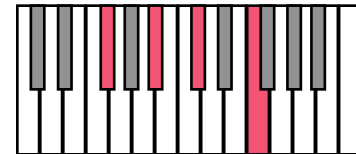
Minor 6 - note 3 flat, add 6.

Gbdim



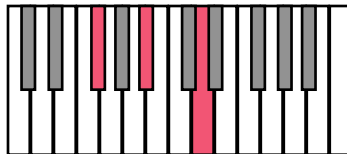
Diminished - notes 3 and 5 are flat.

GbM7



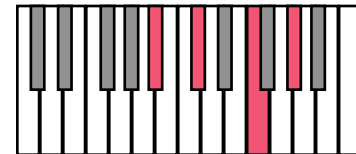
Major 7 - add note 7.

Gbaug



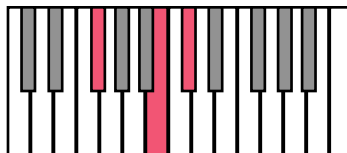
Augmented - note 5 is sharp.

GbM9



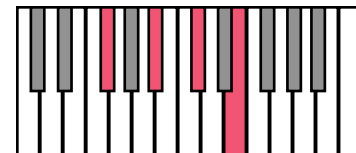
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Gbsus



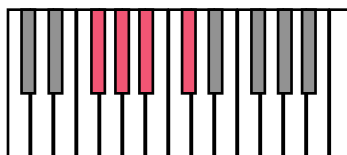
Suspended - note 3 is replaced by note 4.

Gb7



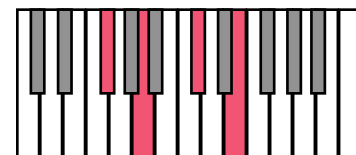
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Gbadd2



Add 2 - add note 2.

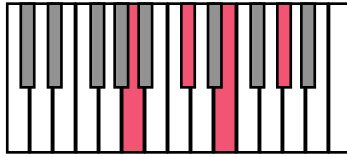
Gbm7



Minor 7 - minor chord with flat 7 added.

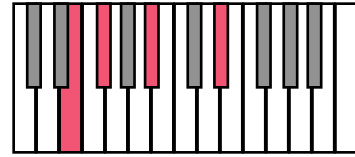
More Chords with the Name Gb

Gbm9



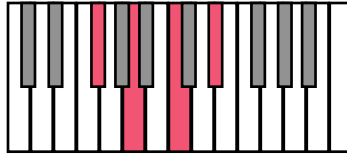
Minor 9 - play note 1 in bass.

Gb13



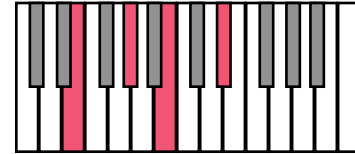
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Gbdim7



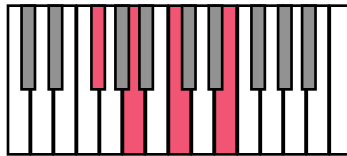
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

Gb13



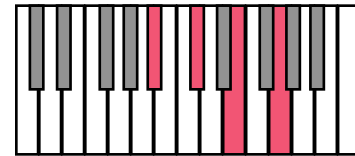
Thirteen - this variation has a flat 7, a 9, and an 11.

Gbm7b5



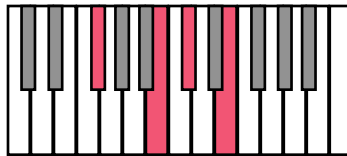
Minor 7 Flat 5 - this has also been called half-diminished 7.

Gb7b9



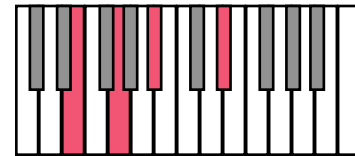
Flat 9 - interesting chord - adds tension and color.

Gb7sus



7 Suspended - flat 7, with note 3 replaced by note 4.

Gb13b9



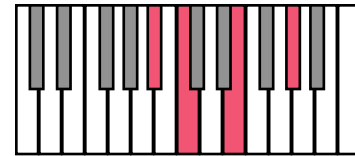
Thirteen Flat 9 - note 9 is flat.

Gb9



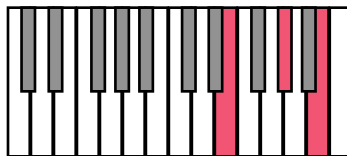
Nine - has a flat 7 in it. Note 1 is in the bass.

Gb9b5



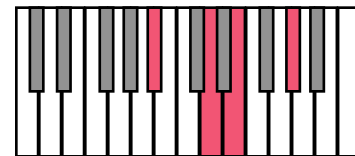
Nine Flat 5 - seventh chord with a 9 and a flat 5.

Gb11



Eleven - note 1 in bass.

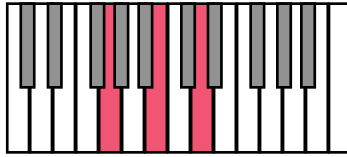
Gb9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

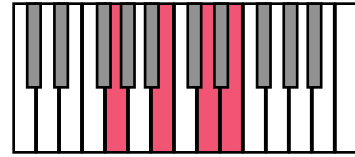
Chords with the Name G

G



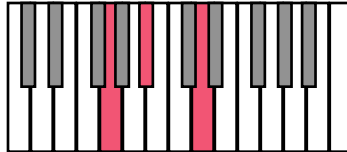
Major chord from which the others are derived.

G6



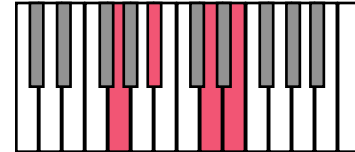
Major 6 - add note 6.

Gm



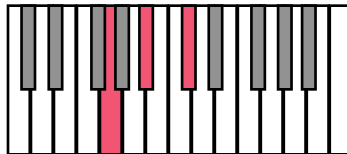
Minor - note 3 is flat.

Gm6



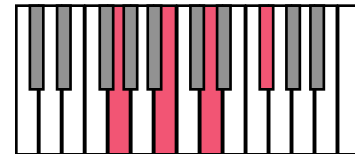
Minor 6 - note 3 flat, add 6.

Gdim



Diminished - notes 3 and 5 are flat.

GM7



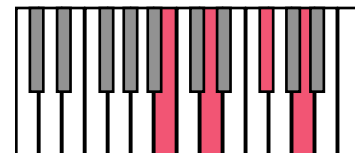
Major 7 - add note 7.

Gaug



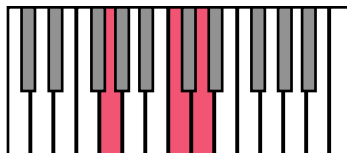
Augmented - note 5 is sharp.

GM9



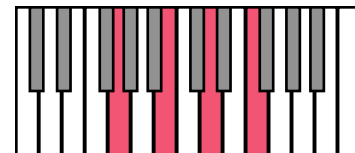
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Gsus



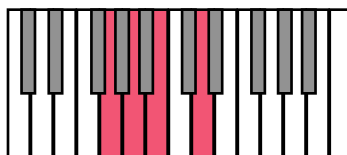
Suspended - note 3 is replaced by note 4.

G7



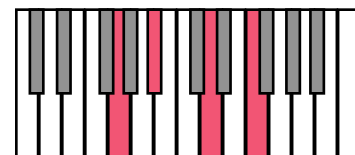
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Gadd2



Add 2 - add note 2.

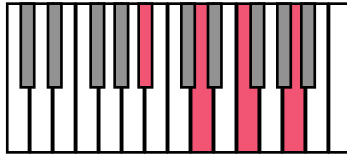
Gm7



Minor 7 - minor chord with flat 7 added.

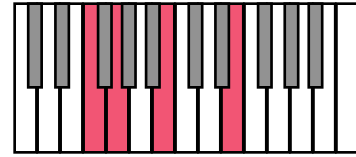
More Chords with the Name G

Gm9



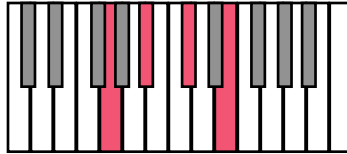
Minor 9 - play note 1 in bass.

G13



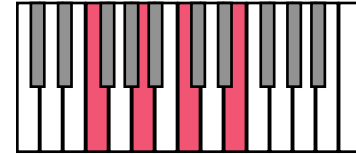
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Gdim7



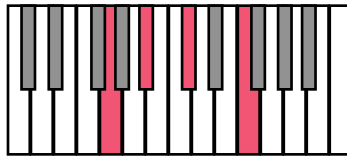
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

G13



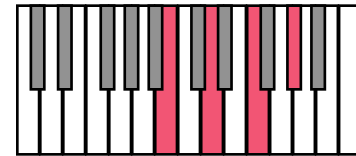
Thirteen - this variation has a flat 7, a 9, and an 11.

Gm7b5



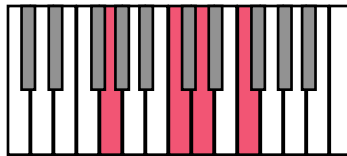
Minor 7 Flat 5 - this has also been called half-diminished 7.

G7b9



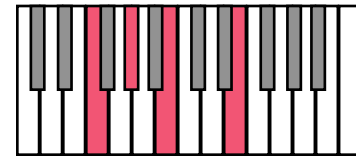
Flat 9 - interesting chord - adds tension and color.

G7sus



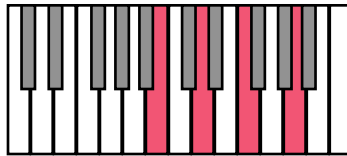
7 Suspended - flat 7, with note 3 replaced by note 4.

G13b9



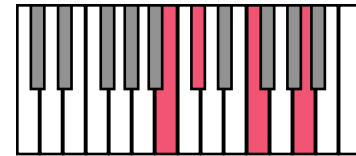
Thirteen Flat 9 - note 9 is flat.

G9



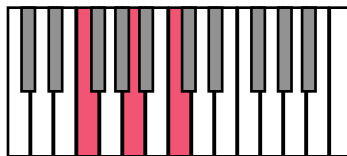
Nine - has a flat 7 in it. Note 1 is in the bass.

G9b5



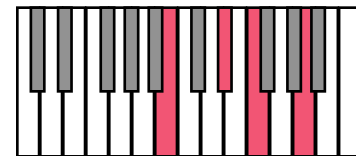
Nine Flat 5 - seventh chord with a 9 and a flat 5.

G11



Eleven - note 1 in bass.

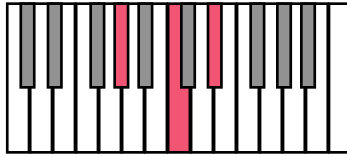
G9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

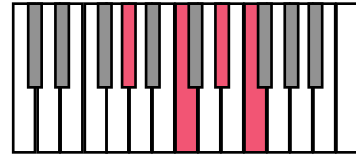
Chords with the Name Ab

Ab



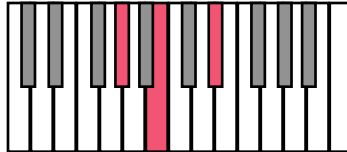
Major chord from which the others are derived.

Ab6



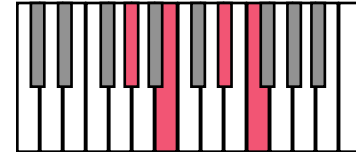
Major 6 - add note 6.

Abm



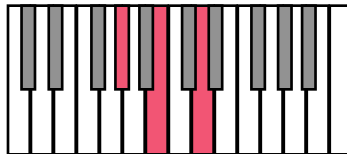
Minor - note 3 is flat.

Abm6



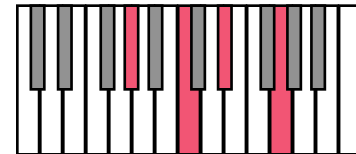
Minor 6 - note 3 flat, add 6.

Abdim



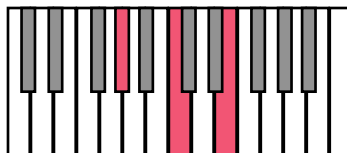
Diminished - notes 3 and 5 are flat.

AbM7



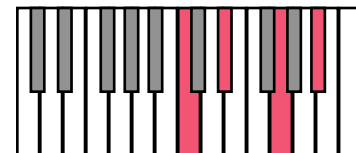
Major 7 - add note 7.

Abaug



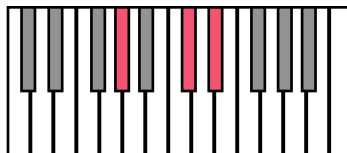
Augmented - note 5 is sharp.

AbM9



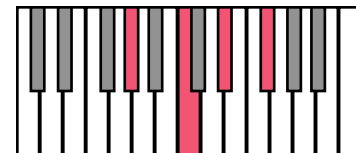
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Absus



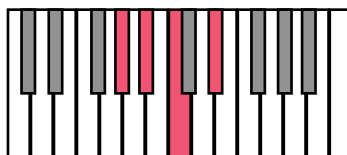
Suspended - note 3 is replaced by note 4.

Ab7



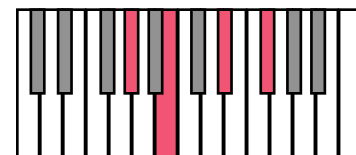
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Abadd2



Add 2 - add note 2.

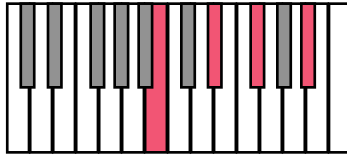
Abm7



Minor 7 - minor chord with flat 7 added.

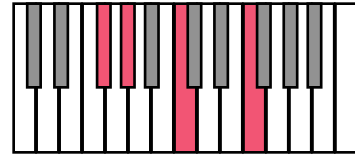
More Chords with the Name Ab

Abm9



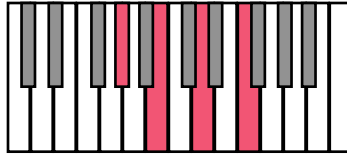
Minor 9 - play note 1 in bass.

Ab13



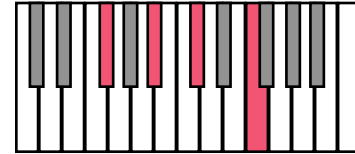
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Abdim7



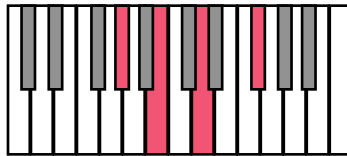
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

Ab13



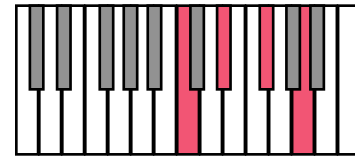
Thirteen - this variation has a flat 7, a 9, and an 11.

Abm7b5



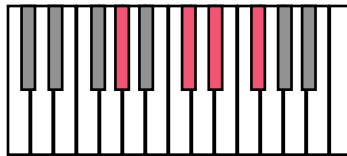
Minor 7 Flat 5 - this has also been called half-diminished 7.

Ab7b9



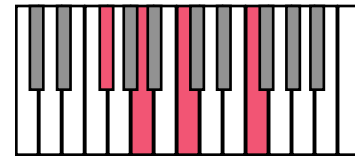
Flat 9 - interesting chord - adds tension and color.

Ab7sus



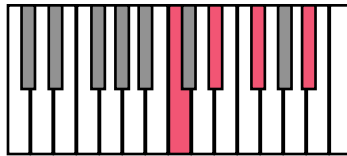
7 Suspended - flat 7, with note 3 replaced by note 4.

Ab13b9



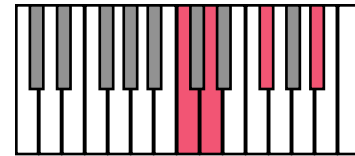
Thirteen Flat 9 - note 9 is flat.

Ab9



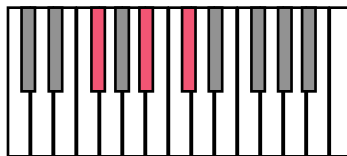
Nine - has a flat 7 in it. Note 1 is in the bass.

Ab9b5



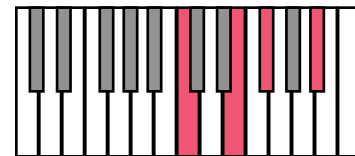
Nine Flat 5 - seventh chord with a 9 and a flat 5.

Ab11



Eleven - note 1 in bass.

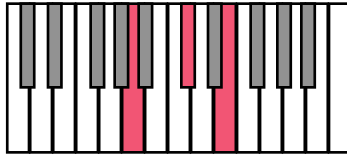
Ab9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

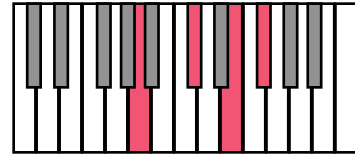
Chords with the Name A

A



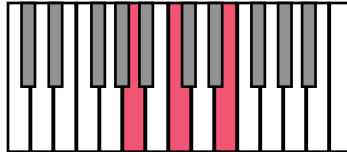
Major chord from which the others are derived.

A6



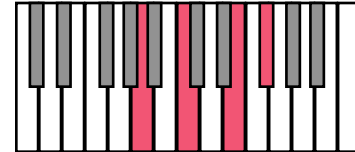
Major 6 - add note 6.

Am



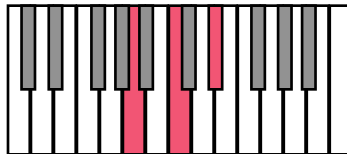
Minor - note 3 is flat.

Am6



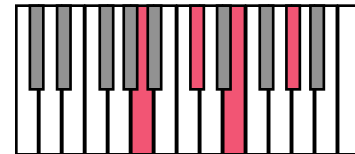
Minor 6 - note 3 flat, add 6.

Adim



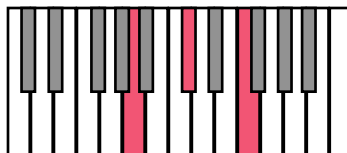
Diminished - notes 3 and 5 are flat.

AM7



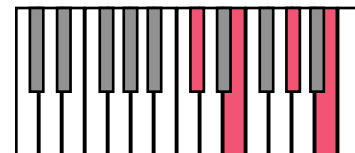
Major 7 - add note 7.

Aaug



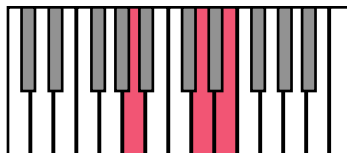
Augmented - note 5 is sharp.

AM9



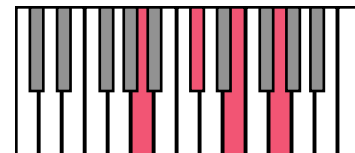
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Asus



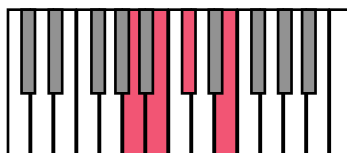
Suspended - note 3 is replaced by note 4.

A7



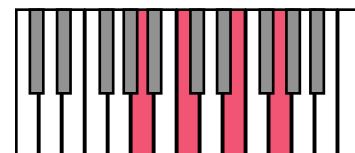
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Aadd2



Add 2 - add note 2.

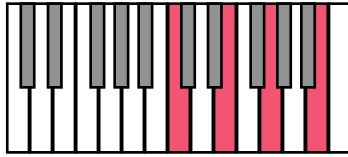
Am7



Minor 7 - minor chord with flat 7 added.

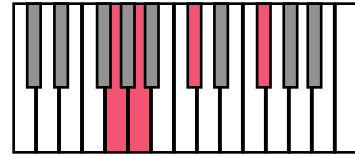
More Chords with the Name A

Am9



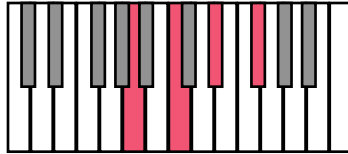
Minor 9 - play note 1 in bass.

A13



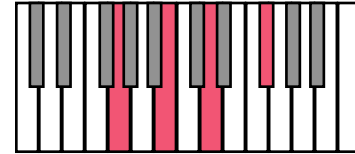
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Adim7



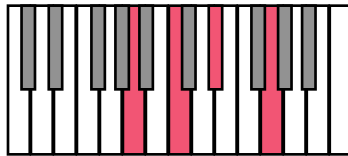
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

A13



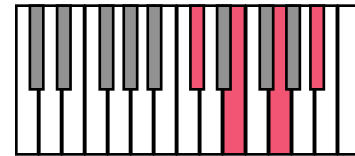
Thirteen - this variation has a flat 7, a 9, and an 11.

Am7b5



Minor 7 Flat 5 - this has also been called half-diminished 7.

A7b9



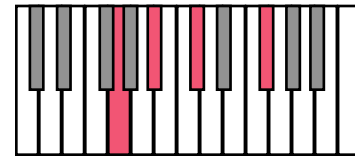
Flat 9 - interesting chord - adds tension and color.

A7sus



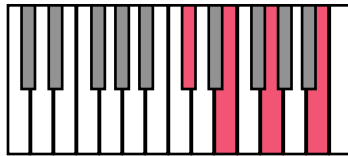
7 Suspended - flat 7, with note 3 replaced by note 4.

A13b9



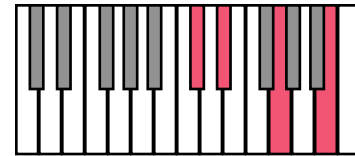
Thirteen Flat 9 - note 9 is flat.

A9



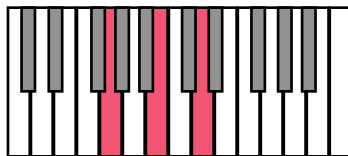
Nine - has a flat 7 in it. Note 1 is in the bass.

A9b5



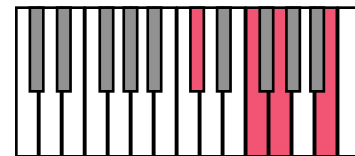
Nine Flat 5 - seventh chord with a 9 and a flat 5.

A11



Eleven - note 1 in bass.

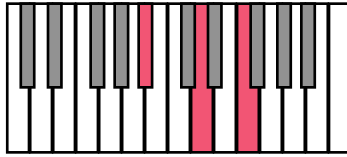
A9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

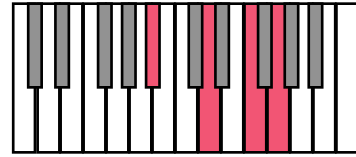
Chords with the Name Bb

Bb



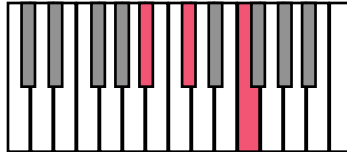
Major chord from which the others are derived.

Bb6



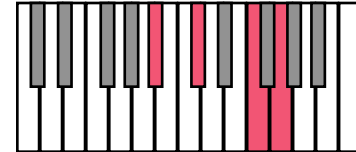
Major 6 - add note 6.

Bbm



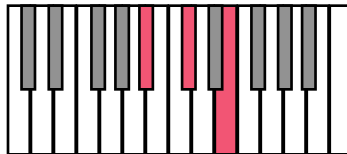
Minor - note 3 is flat.

Bbm6



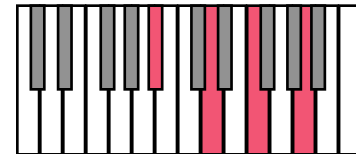
Minor 6 - note 3 flat, add 6.

Bbdim



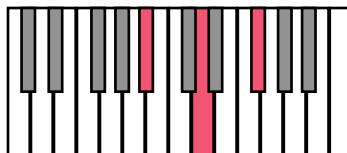
Diminished - notes 3 and 5 are flat.

BbM7



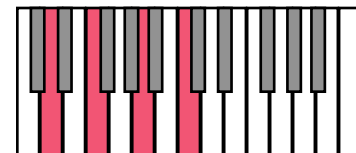
Major 7 - add note 7.

Bbaug



Augmented - note 5 is sharp.

BbM9



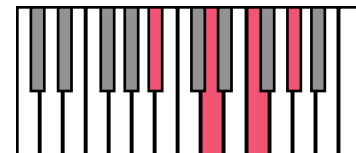
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Bbsus



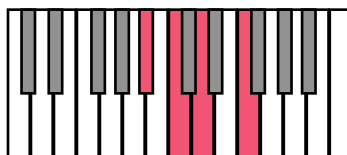
Suspended - note 3 is replaced by note 4.

Bb7



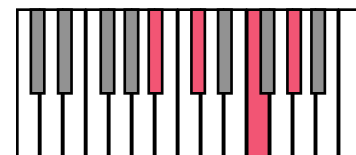
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Bbadd2



Add 2 - add note 2.

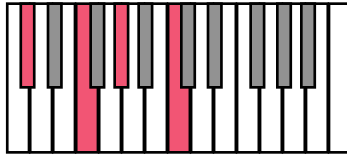
Bbm7



Minor 7 - minor chord with flat 7 added.

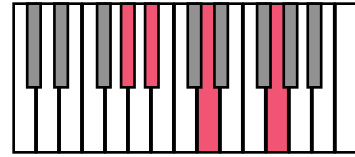
More Chords with the Name Bb

Bbm9



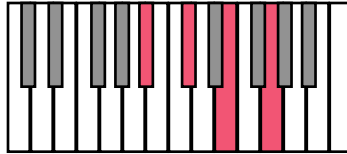
Minor 9 - play note 1 in bass.

Bb13



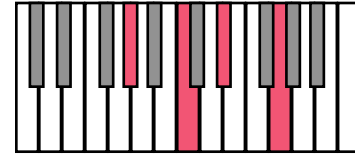
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Bbdim7



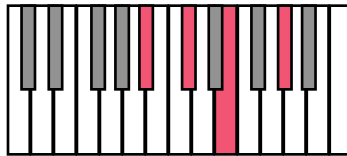
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

Bb13



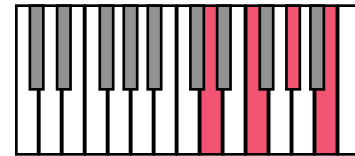
Thirteen - this variation has a flat 7, a 9, and an 11.

Bbm7b5



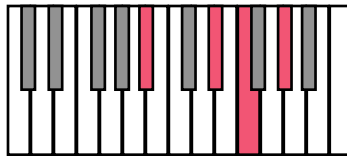
Minor 7 Flat 5 - this has also been called half-diminished 7.

Bb7b9



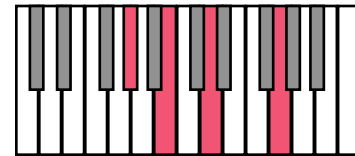
Flat 9 - interesting chord - adds tension and color.

Bb7sus



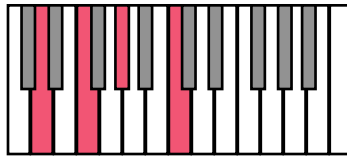
7 Suspended - flat 7, with note 3 replaced by note 4.

Bb13b9



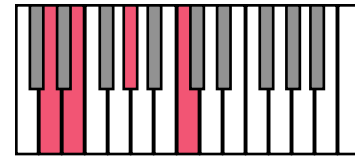
Thirteen Flat 9 - note 9 is flat.

Bb9



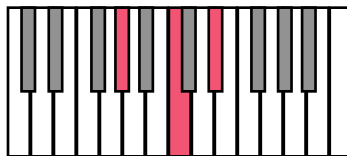
Nine - has a flat 7 in it. Note 1 is in the bass.

Bb9b5



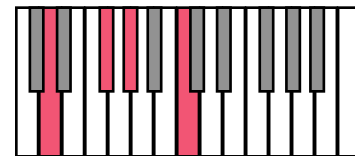
Nine Flat 5 - seventh chord with a 9 and a flat 5.

Bb11



Eleven - note 1 in bass.

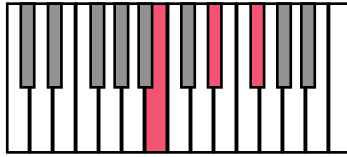
Bb9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

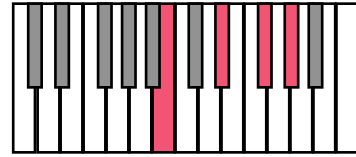
Chords with the Name B

B



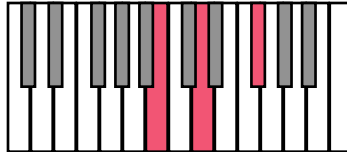
Major chord from which the others are derived.

B6



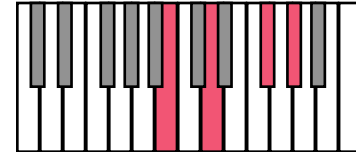
Major 6 - add note 6.

Bm



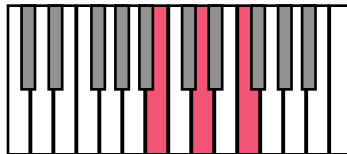
Minor - note 3 is flat.

Bm6



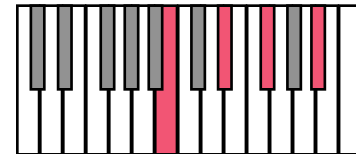
Minor 6 - note 3 flat, add 6.

Bdim



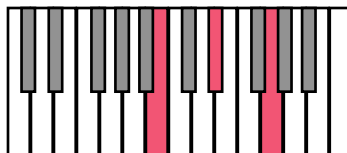
Diminished - notes 3 and 5 are flat.

BM7



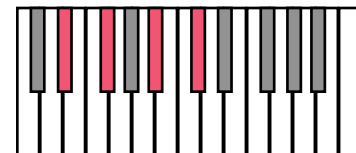
Major 7 - add note 7.

Baug



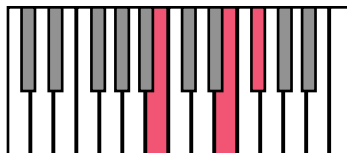
Augmented - note 5 is sharp.

BM9



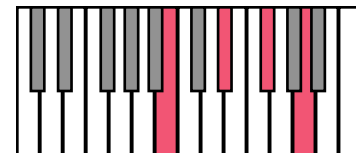
Major 9 - note 1 is omitted. Left hand plays it in the bass.

Bsus



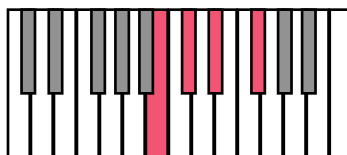
Suspended - note 3 is replaced by note 4.

B7



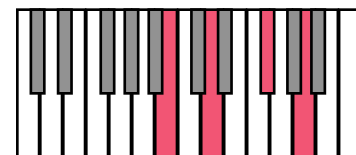
Dominant 7 - called 7 for short. The 7th note of the scale is flat.

Badd2



Add 2 - add note 2.

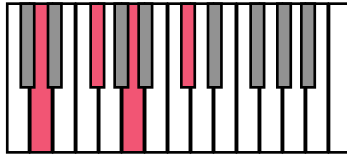
Bm7



Minor 7 - minor chord with flat 7 added.

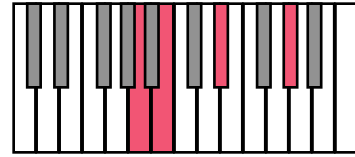
More Chords with the Name B

Bm9



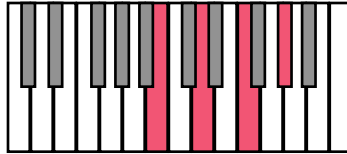
Minor 9 - play note 1 in bass.

B13



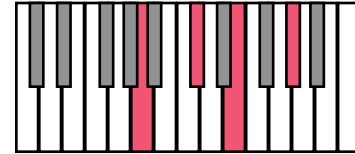
Thirteen - when a flat 7 is in the chord, note 6 is called 13.

Bdim7



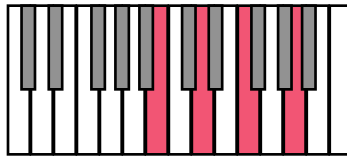
Diminished 7 - the note that looks like 6 is actually a double flatted 7.

B13



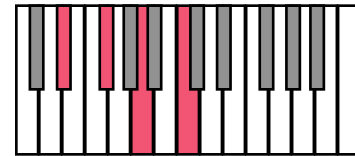
Thirteen - this variation has a flat 7, a 9, and an 11.

Bm7b5



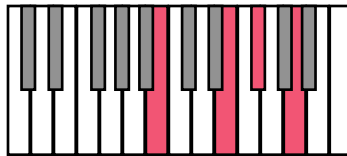
Minor 7 Flat 5 - this has also been called half-diminished 7.

B7b9



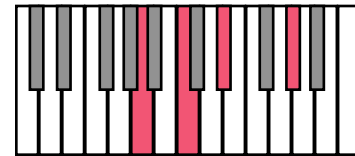
Flat 9 - interesting chord - adds tension and color.

B7sus



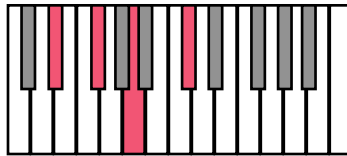
7 Suspended - flat 7, with note 3 replaced by note 4.

B13b9



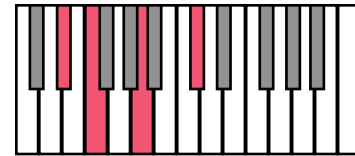
Thirteen Flat 9 - note 9 is flat.

B9



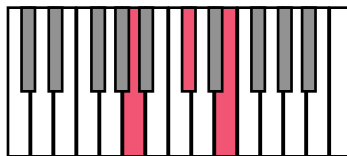
Nine - has a flat 7 in it. Note 1 is in the bass.

B9b5



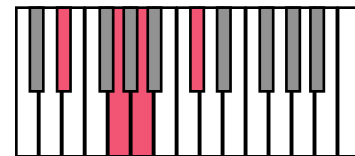
Nine Flat 5 - seventh chord with a 9 and a flat 5.

B11



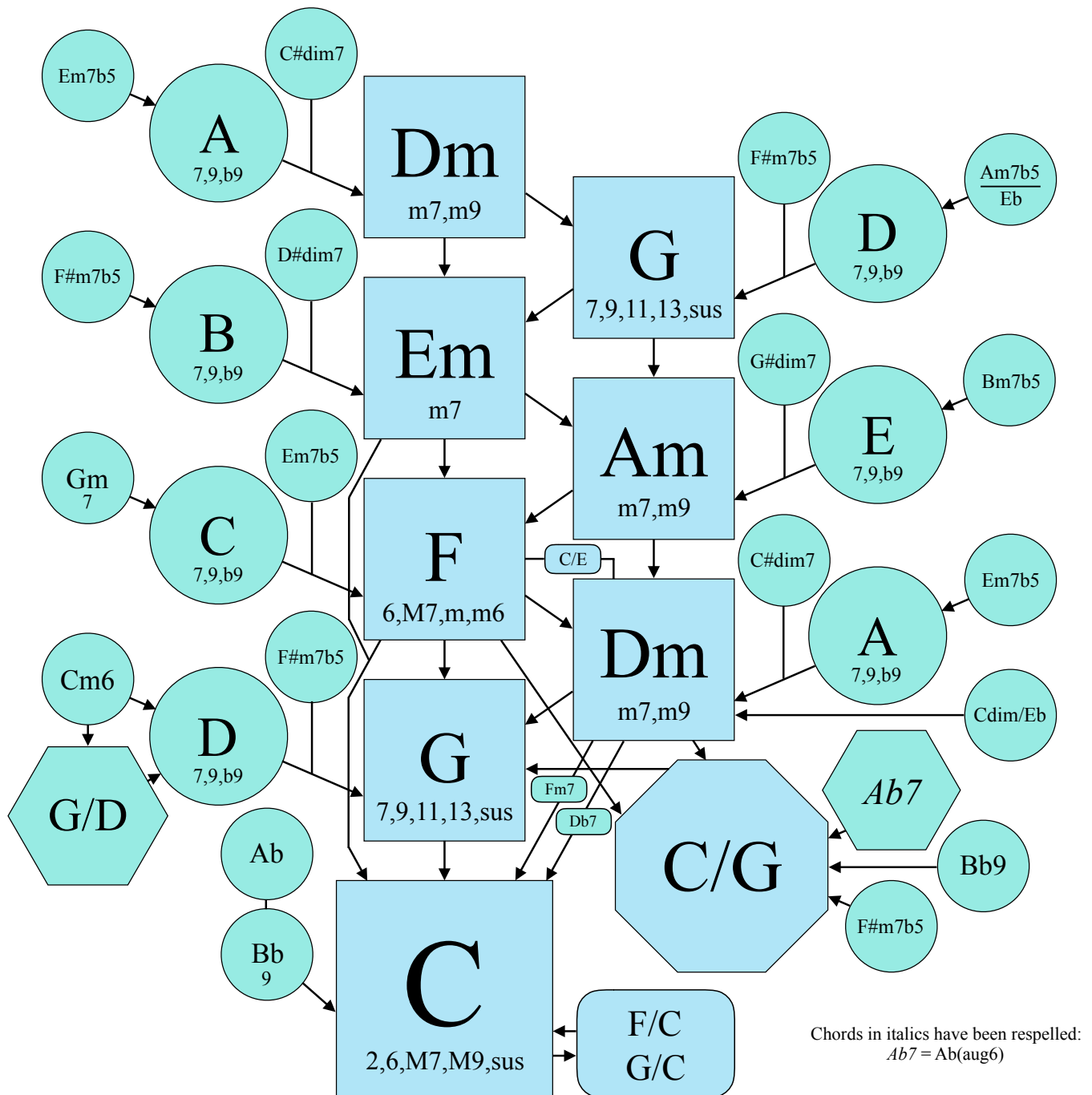
Eleven - note 1 in bass.

B9#5



Nine Sharp 5 - seventh chord with a 9 and a sharp 5.

A Progression Map for C Major



Chords in italics have been respelled:
Ab7 = Ab(aug6)

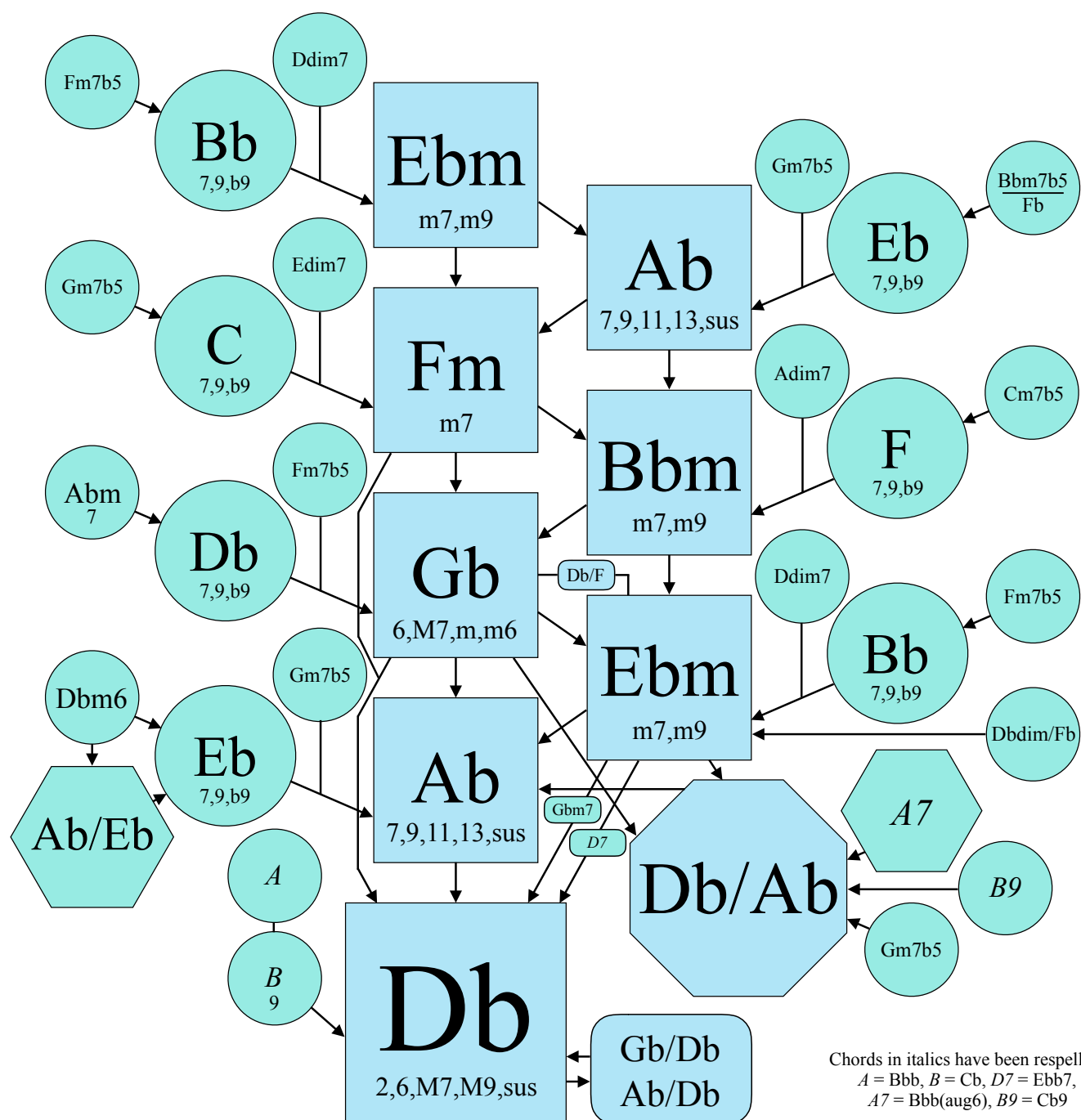
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: C-F-G-C)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Dm-G-C or Am-F-Dm-G)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for Db Major



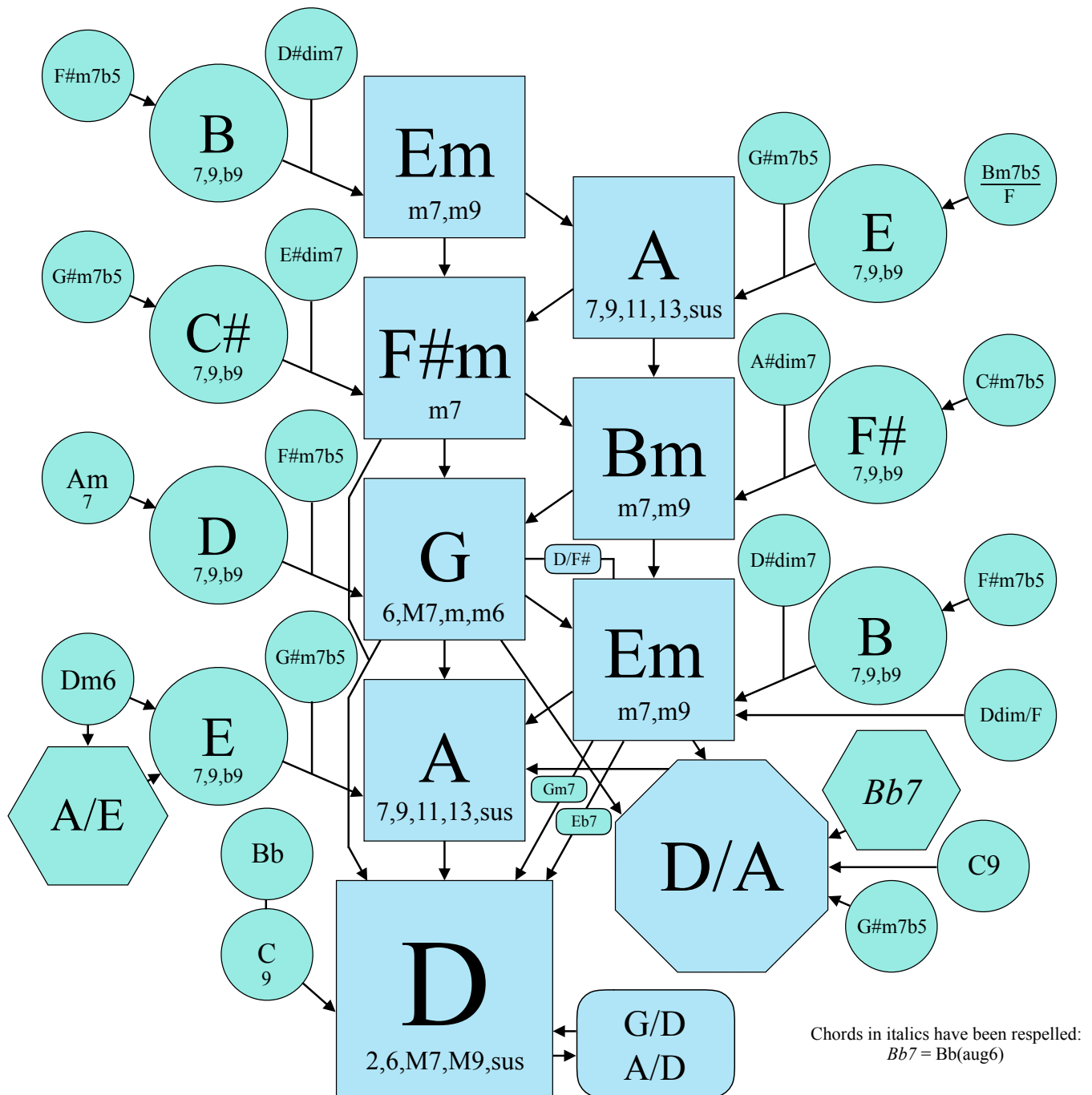
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: Db-Gb-Ab-Db)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Ebm-Ab-Db or Bbm-Gb-Ebm-Ab)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

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A Progression Map for D Major



Chords in italics have been respelled:
Bb7 = Bb(aug6)

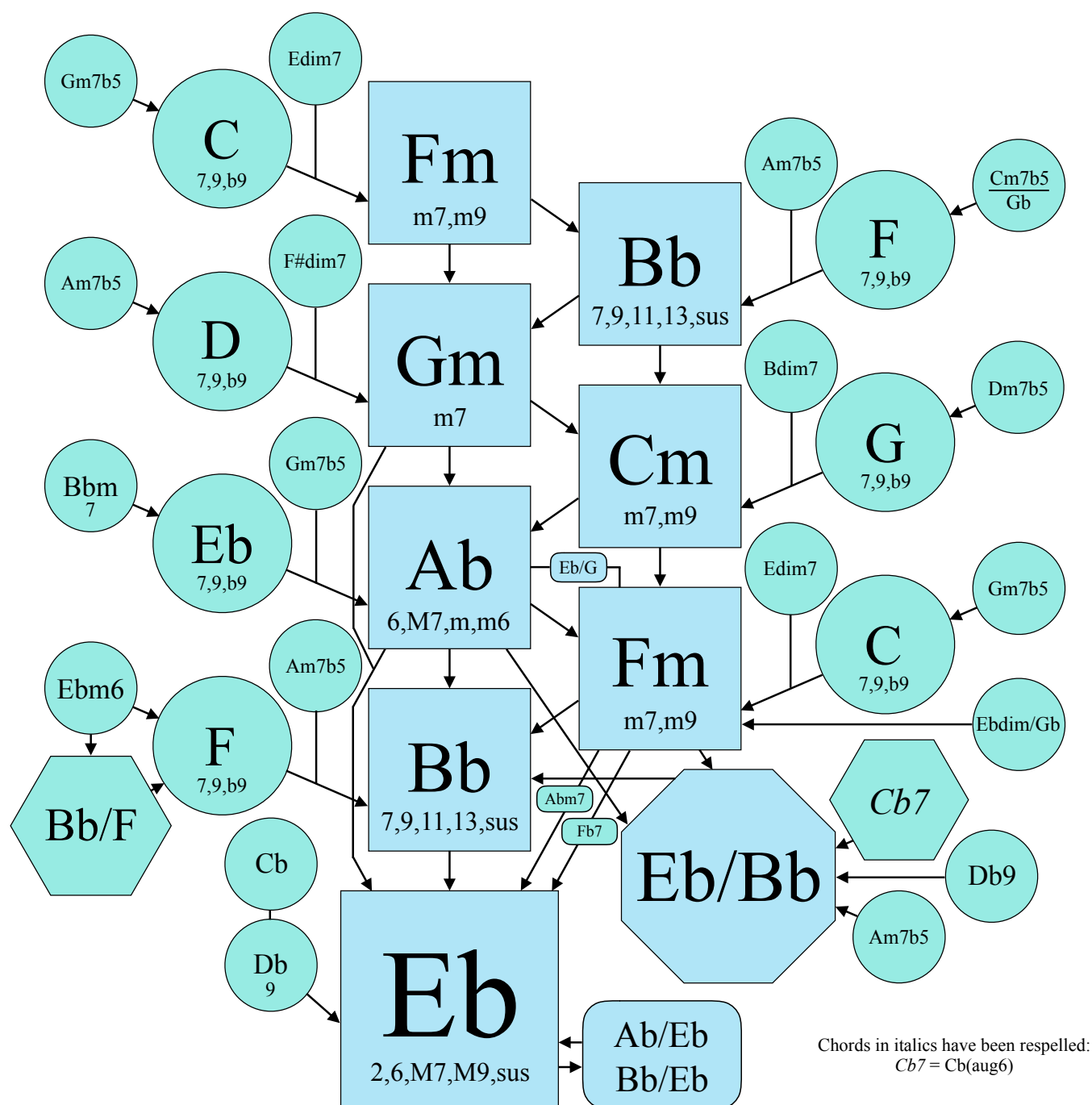
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: D-G-A-D)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Em-A-D or Bm-G-Em-A)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

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A Progression Map for Eb Major



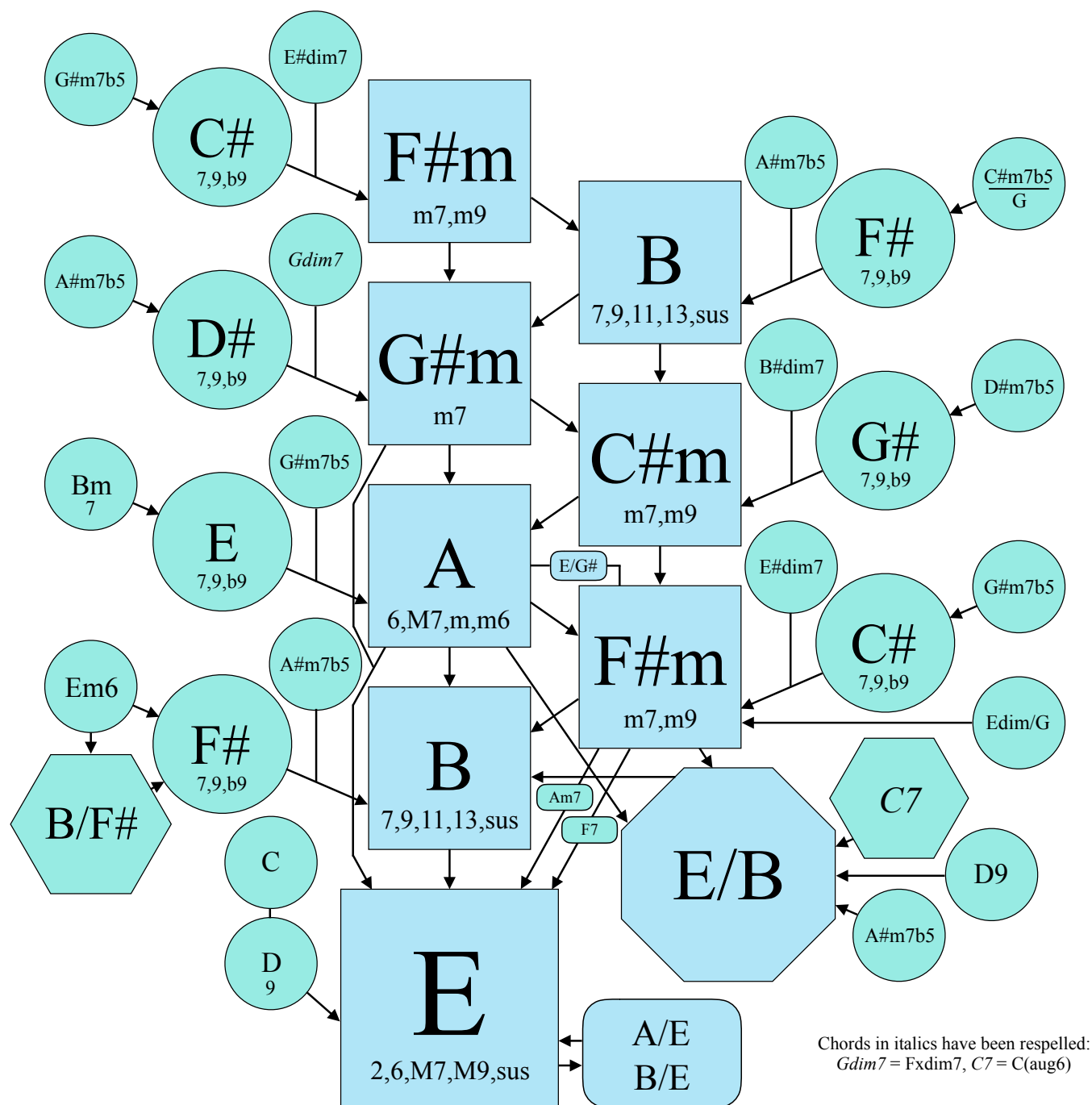
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: Eb-Ab-Bb-Eb)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Fm-Bb-Eb or Cm-Ab-Fm-Bb)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

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A Progression Map for E Major



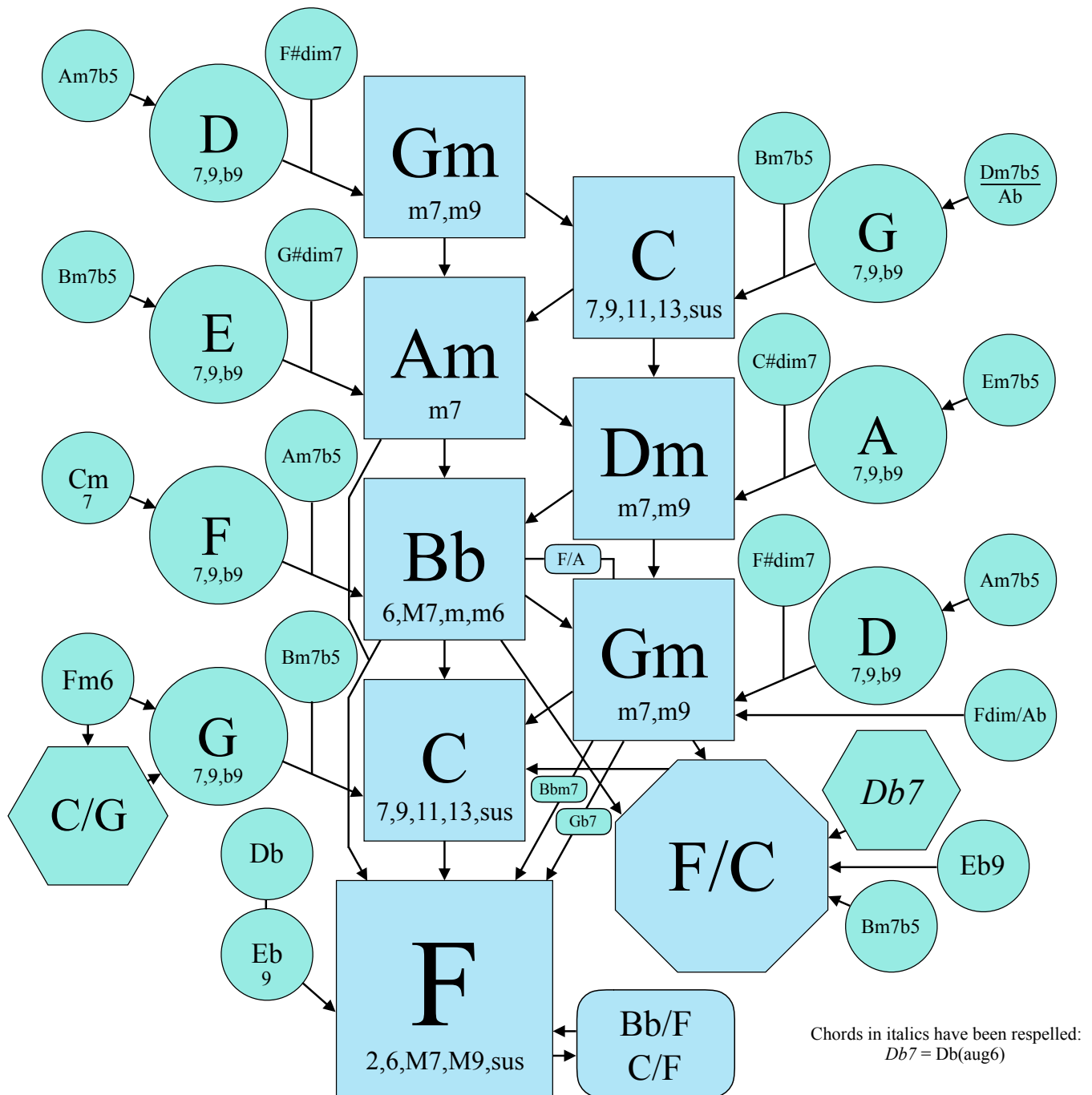
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: E-A-B-E)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: F#m-B-E or C#m-A-F#m-B)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for F Major



Chords in italics have been respelled:
Db7 = Db(aug6)

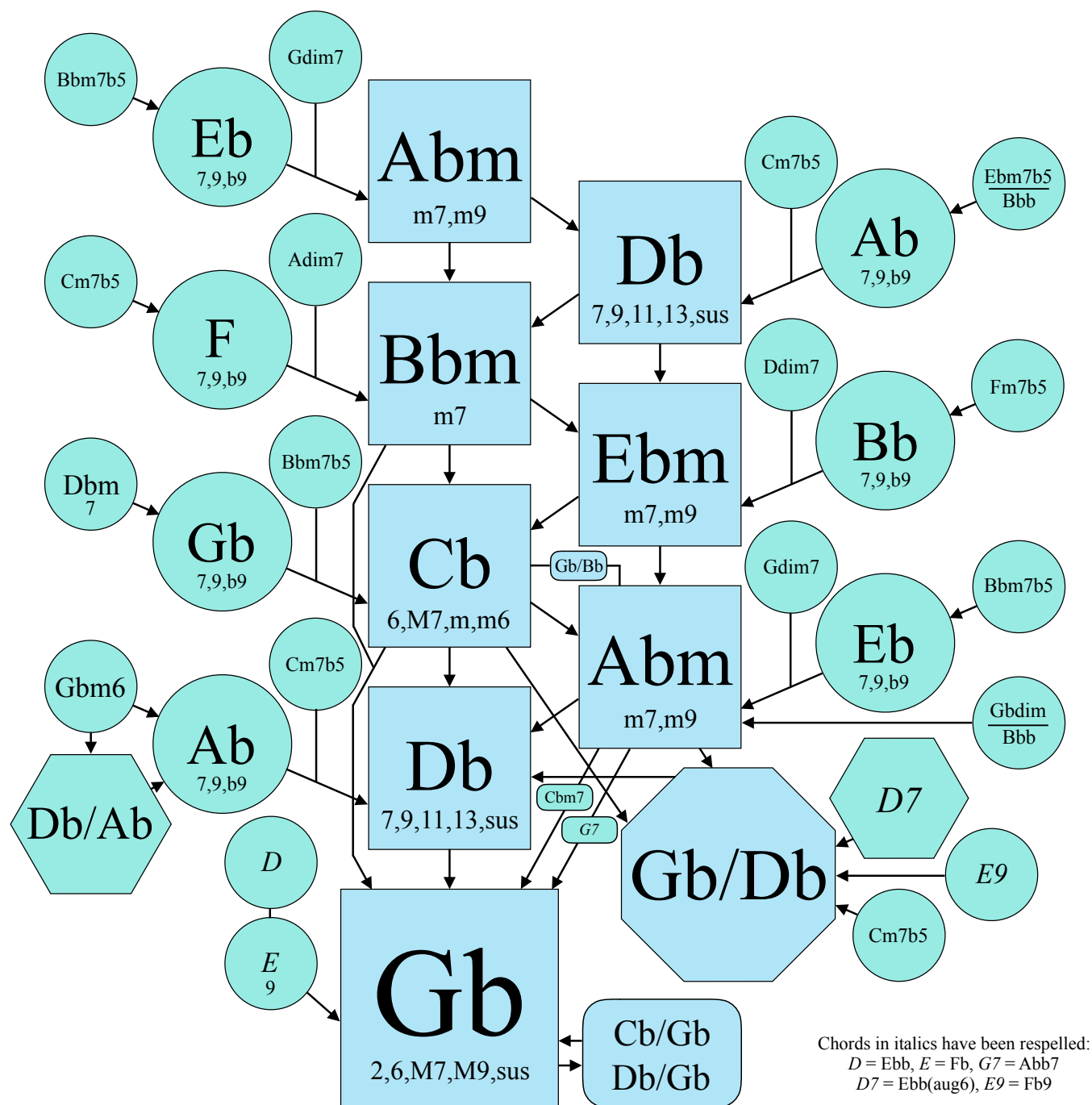
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: F-Bb-C-F)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Gm-C-F or Dm-Bb-Gm-C)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for Gb Major



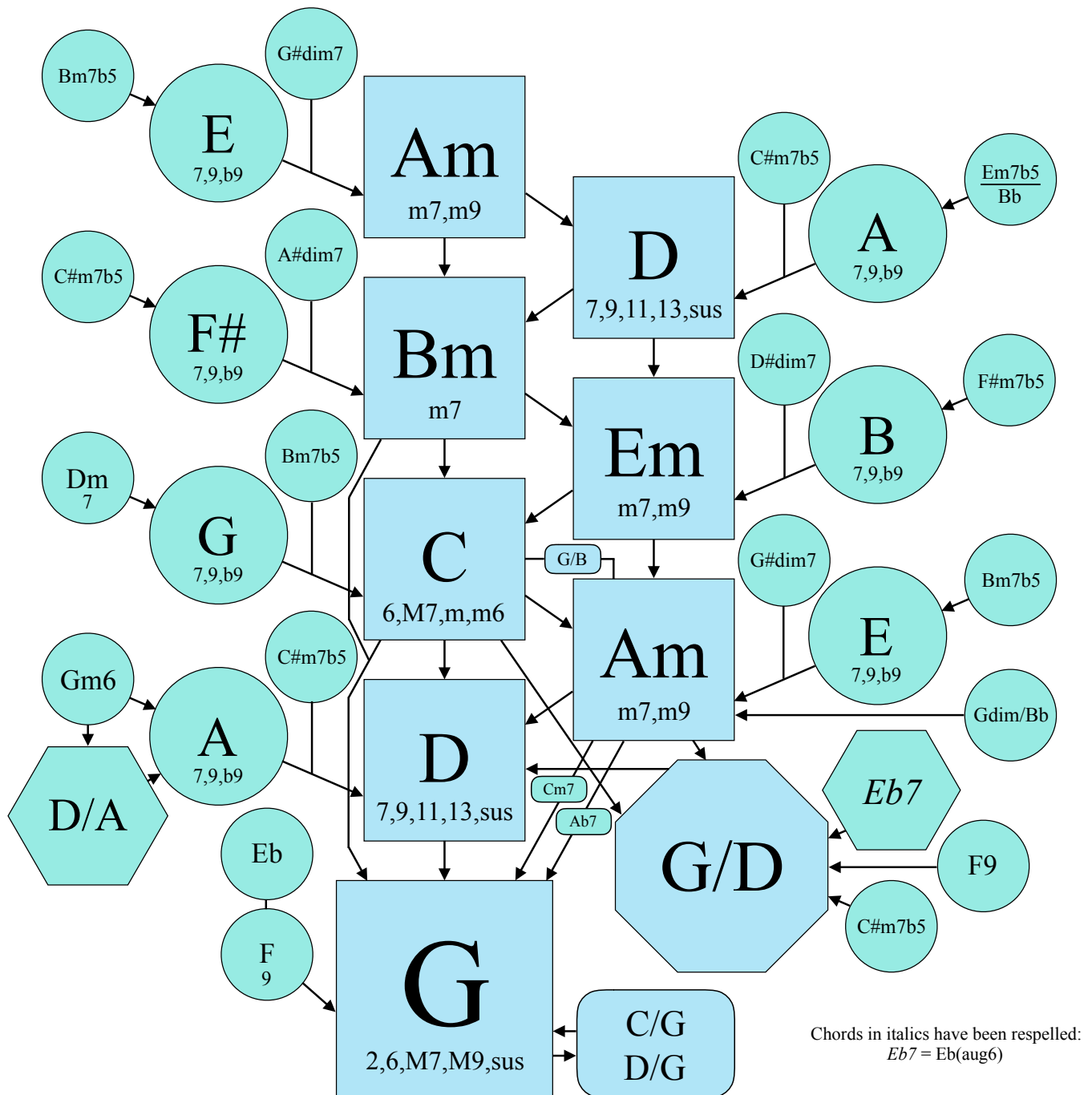
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: Gb-Cb-Db-Gb)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Abm-Db-Gb or Ebm-Cb-Abm-Db)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for G Major



Chords in italics have been respelled:
Eb7 = Eb(aug6)

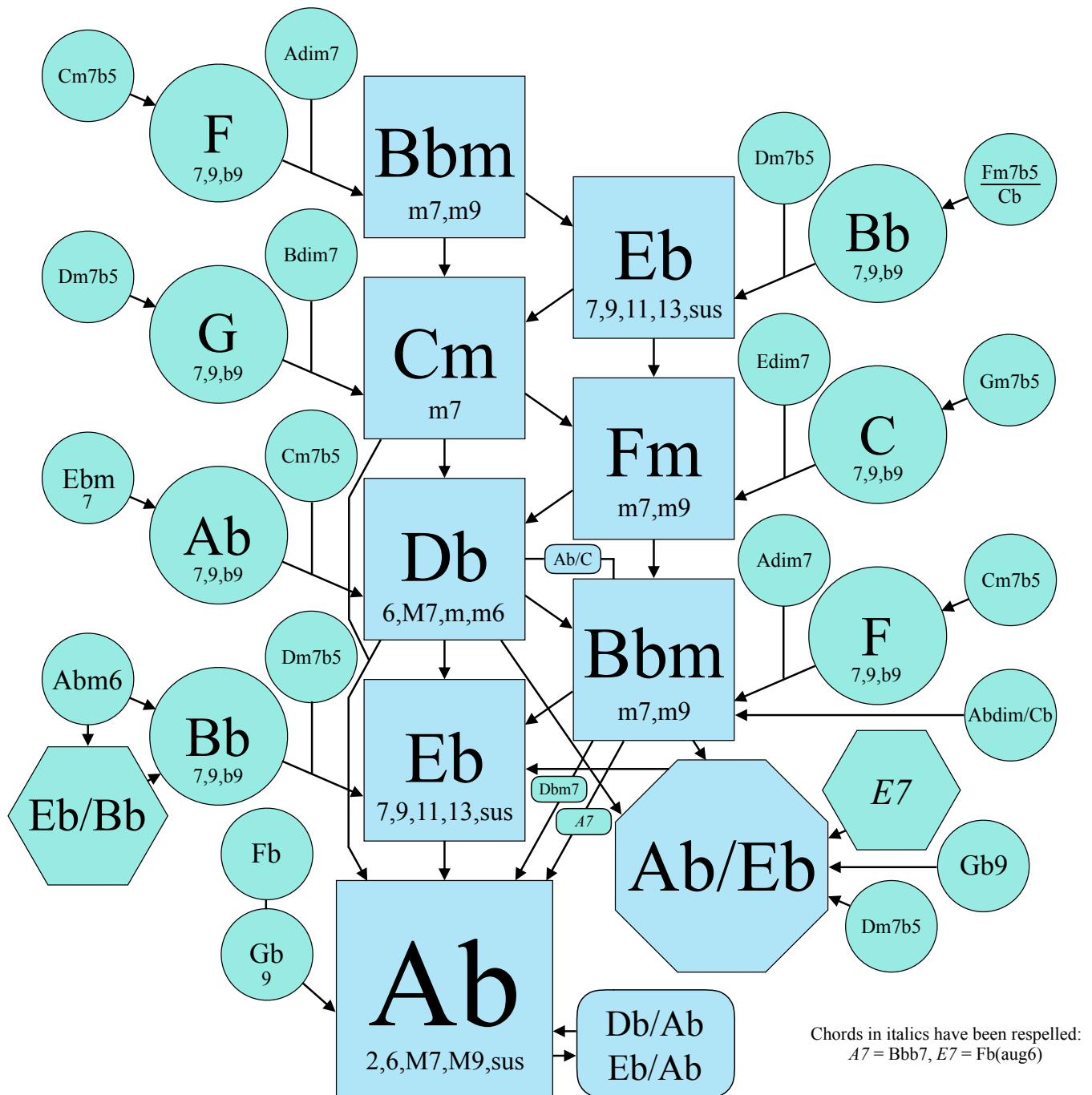
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: G-C-D-G)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Am-D-G or Em-C-Am-D)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for Ab Major



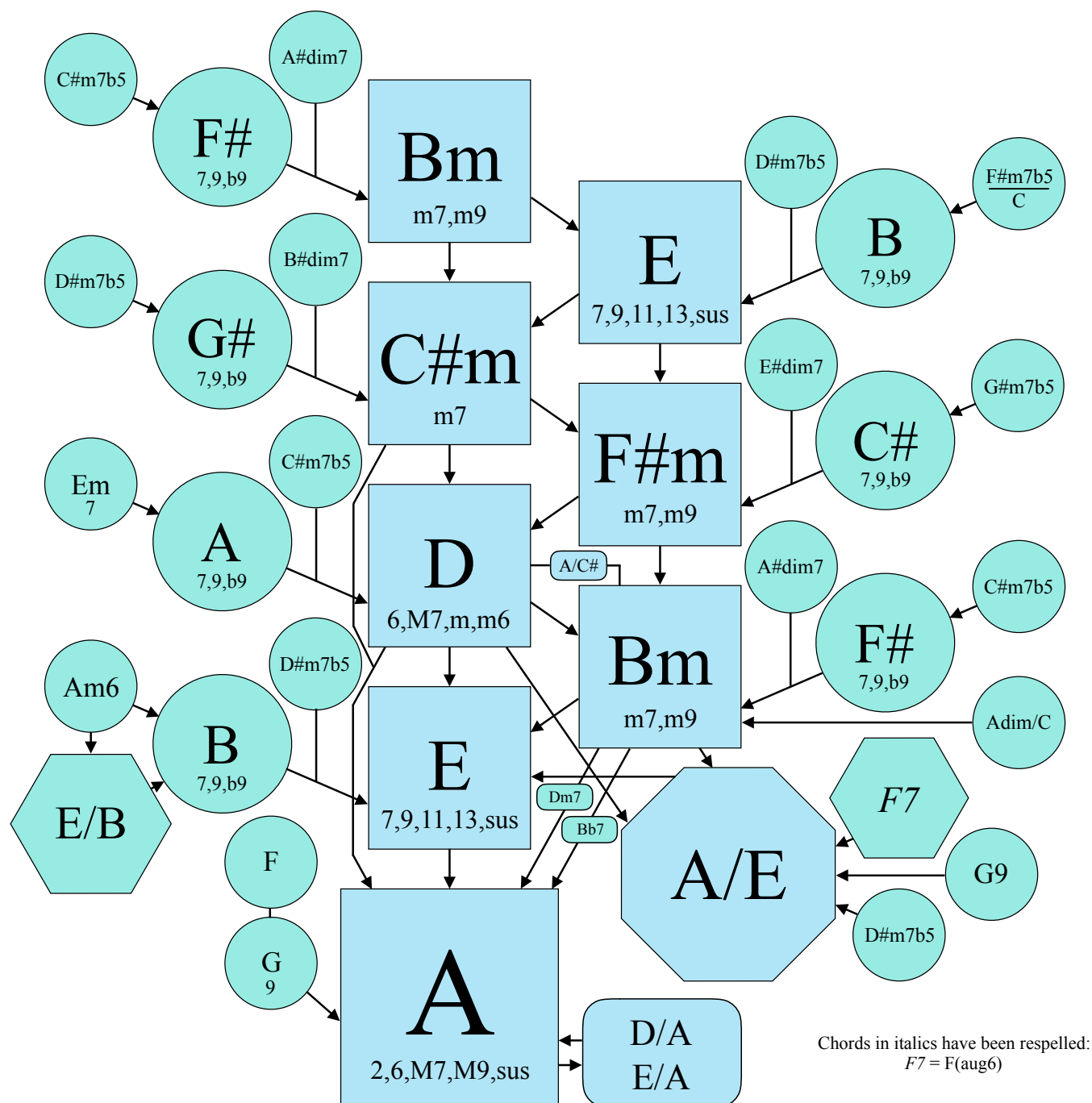
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: Ab-Db-Eb-Ab)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Bbm-Eb-Ab or Fm-Db-Bbm-Eb)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for A Major



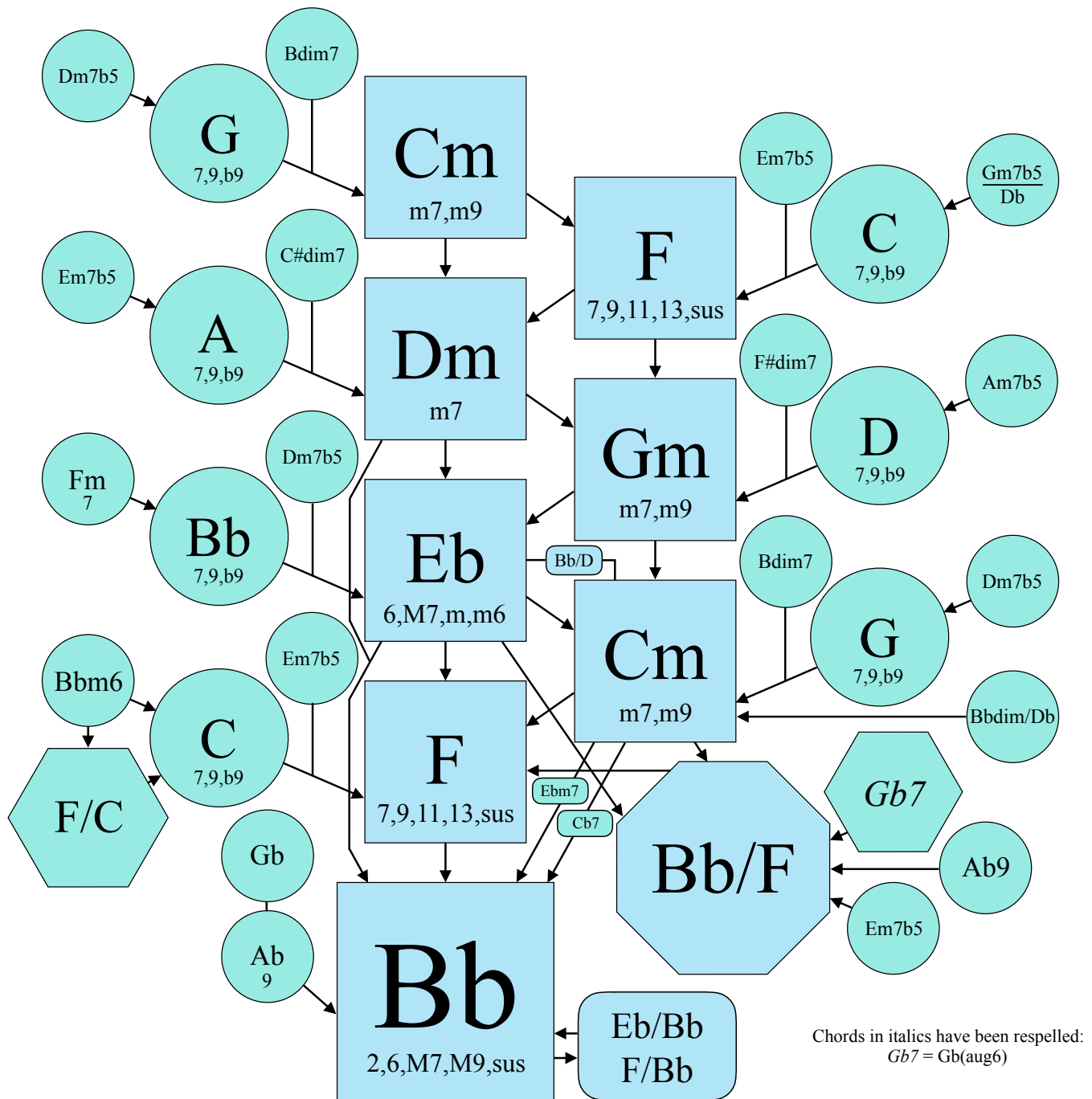
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: A-D-E-A)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Bm-E-A or F#m-D-Bm-E)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for Bb Major



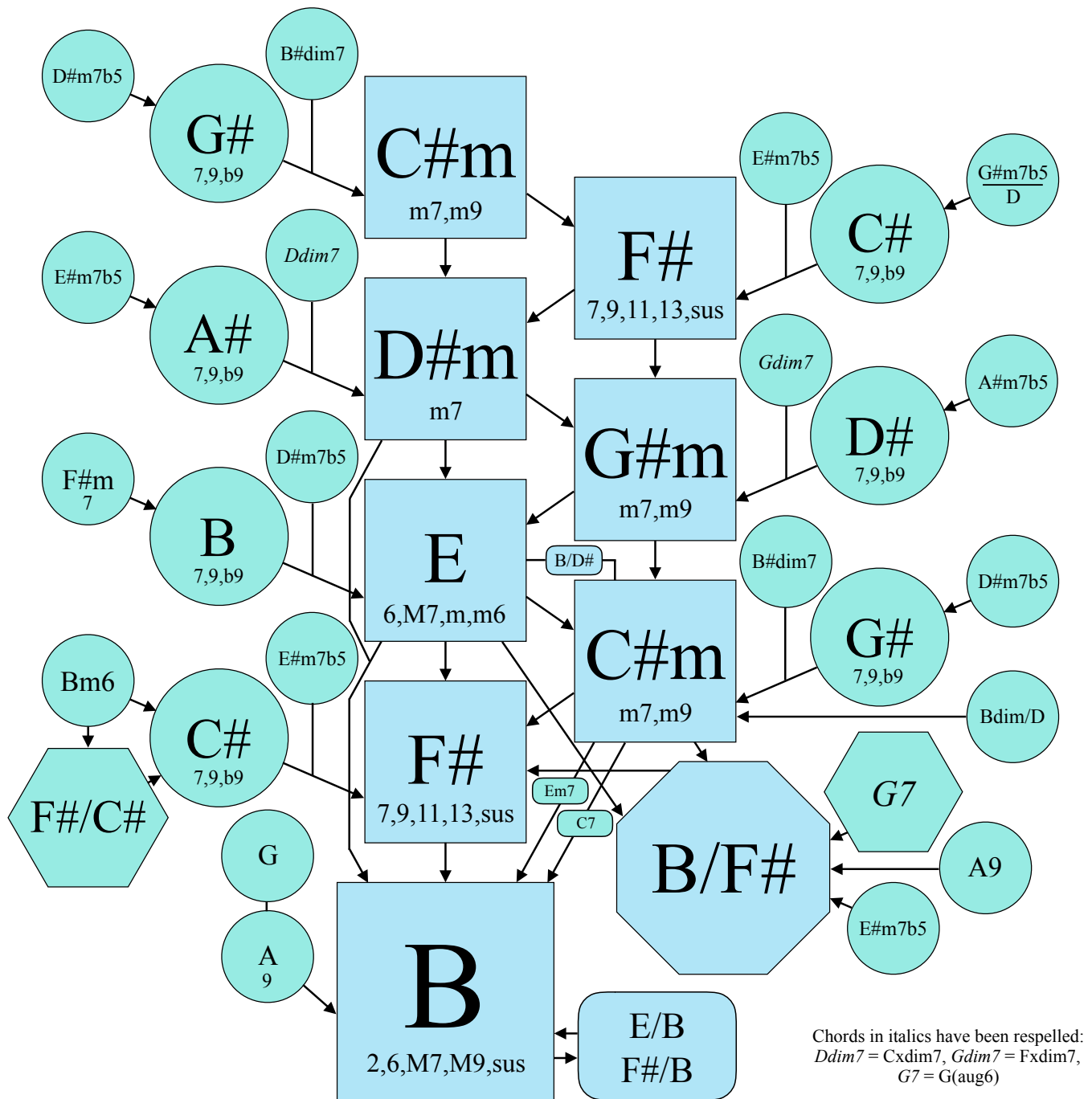
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: Bb-Eb-F-Bb)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: Cm-F-Bb or Gm-Eb-Cm-F)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for B Major



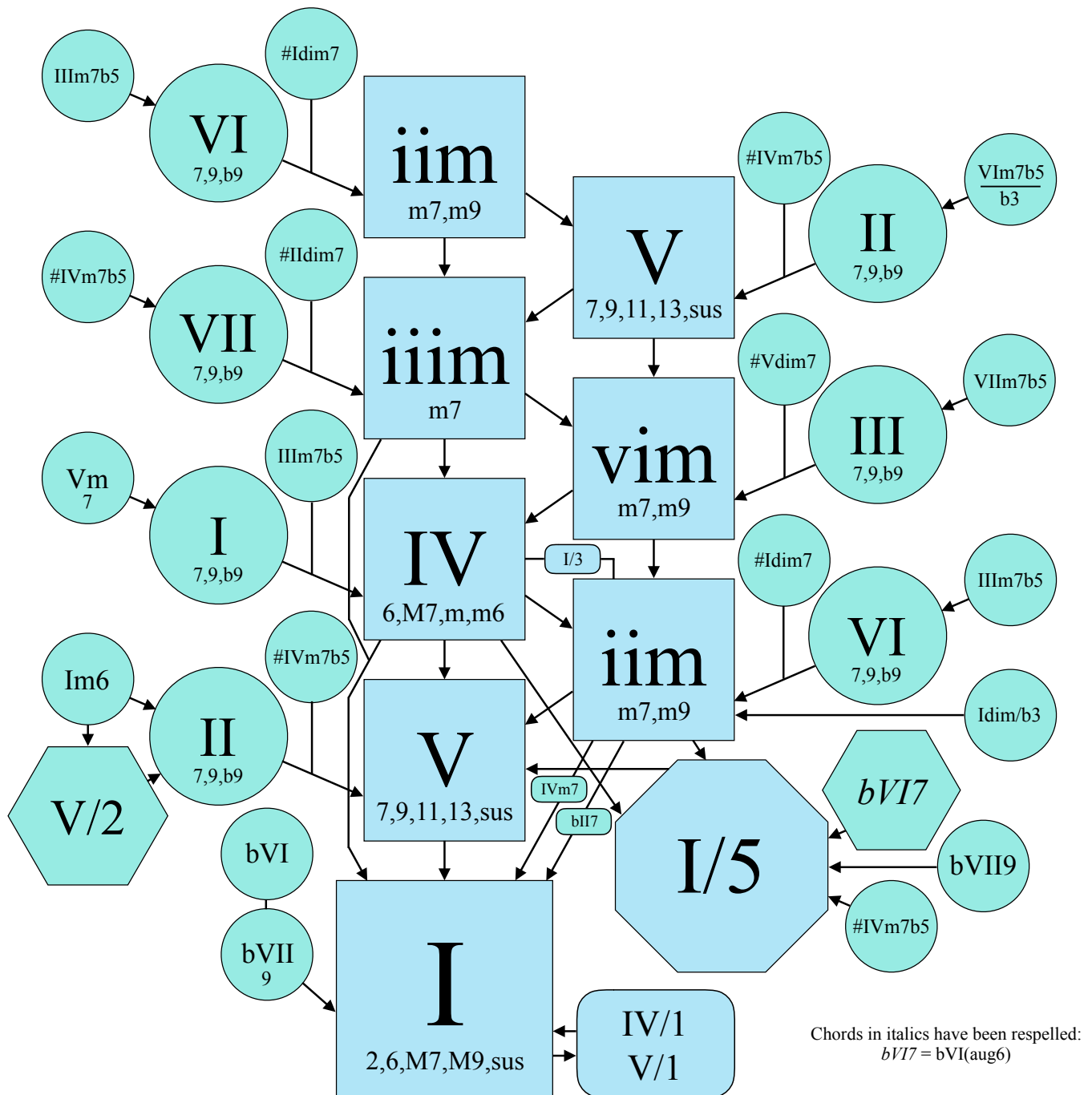
Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: B-E-F#-B)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: C#m-F#-B or G#m-E-C#m-F#)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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A Progression Map for Major Keys



Suggestions for Use

- 1 - Begin with the blue boxes. Start at I. Jump to another blue area. Follow the arrows back toward I. (Example: I-IV-V-I)
- 2 - Start with any blue box. Create a 3 or 4-chord progression by following the arrows. (Examples: ii-V-I or vi-IV-ii-V)
- 3 - You may jump to a green location at any time. When you do, there is a tendency to follow the arrows back toward the blue locations.
- 4 - If two locations have the same name, you may switch from one to the other. This gives more options for choosing the next chord.
- 5 - The arrows indicate strong, natural-sounding progressions. For interest, sometimes go opposite the direction of the arrows.

The expression X/Y indicates chord X with scale note Y in the bass.

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Part Six

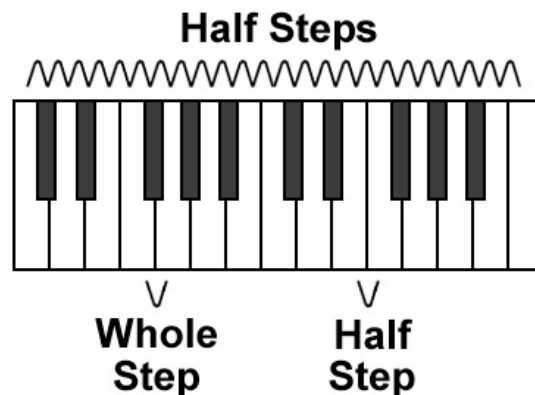
Major Scales - I

In this part of our discussion, we'll be leaving the world of chords and progressions to talk about music played one note at a time. Welcome to the world of scales.

Concept - Half Steps and Whole Steps

First, a definition. On a keyboard, the distance from a note to the nearest note on the right or left is called a half step. A distance of two half steps is called a whole step. (On a guitar, each fret represents another half step.)

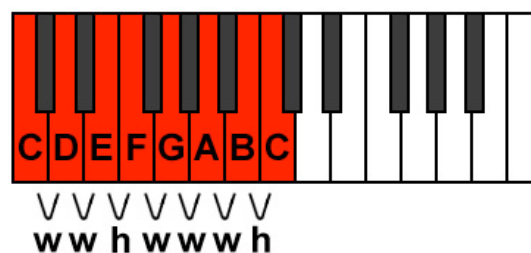
When counting half steps and whole steps on a keyboard, look at the back edge of the keys, where white notes and black notes are side by side. If you look at the front edge, where only white notes are next to each other, you might make a mistake. (The distance from one white note to the next can be a half step or a whole step. It depends on whether or not a black note is between them.)



Concept - Formula for the Major Scale

Half steps and whole steps allow us to describe a scale as a series of jumps. The major scale follows the formula "whole, whole, half, whole, whole, whole, half" or WWHWWWH.

Beginning on the note C and following this pattern gives us C, D, E, F, G, A, B, C.



Notice that the words "whole" and "half" do not refer to any of the notes. They describe the distances between them. It could be written this way...

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

Using numbers instead of notes gives us...

1-w-2-w-3-h-4-w-5-w-6-w-7-h-1

Challenge - Learning the Major Scale in 12 Keys

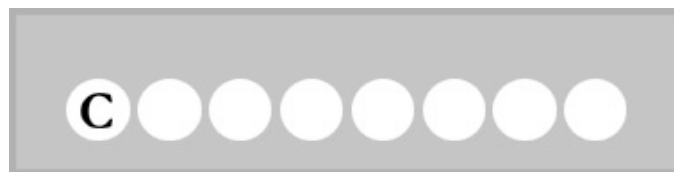
It's a good idea to make it your goal to learn the major scale in all 12 major keys. This will take a while, but it's well worth it. When you have a good understanding of these 12 keys, playing will be more natural, and it will also be easier to talk about chord names.

Secondly, while playing scales up and down is a helpful exercise, it's also beneficial to play song melodies, one note at a time. This forces you to jump around in the key and land on the correct notes.

So the challenge is really two challenges: one is memorizing the scales, and the other is playing songs using the notes found in those scales.

We'll Start with C Major

It's true that each of the major scales follows the formula WWHWWWH, and if you need to you can generate them that way, but that isn't how we memorize them. We memorize them as "shapes" or "pictures" or "collections of notes grouped together." For example, the "shape picture" for C major might look like this.



The starting note (Note 1) is C, and the piano keys needed to play this scale are all white notes.

Look at the white circles for a moment. Can you mentally picture the rest of the letter names? Do you "see" C, D, E, F, G, A, B, C? What if we numbered them? Can you see 1, 2, 3, 4, 5, 6, 7, 1? Which key is number 5? The key E is what number? Number 6 is what letter? And finally, if you were asked to play the sequence 5-3-2-1-6-4-5, do you see which notes you would play and in what order?

So when we say the challenge is to learn all 12 major scales, what we mean is...

- first, to be able to picture each scale
- second, to know the letter name of each note in the scale
- third, to know the number of each note in the scale
- fourth, to play sequences of notes when given the numbers

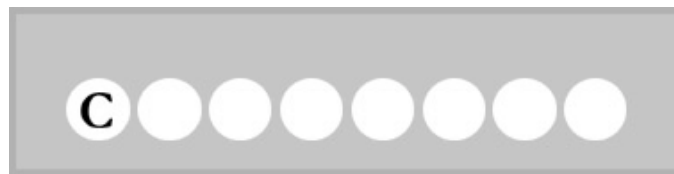
A Moment for Perspective

If this is the first time you've seen this challenge, it may look like a long journey. In some ways, that's true. But the good news is that if we walk slowly through the material - not rushing, but enjoying the process - and if we spend some time in all the various places, eventually it will become easier. And you will be a better musician for having been on the journey.

Let's Review

In this section we learned about whole steps and half steps. We also learned that a scale can be described as a series of whole and half steps. When we know the "formula" for the scale, we can choose a starting note and generate the rest of the scale by following the jumps indicated by the formula. (Also, the whole and half steps are not actual notes themselves; they are the distances between the notes.)

The major scale has the formula WWHWWWH. Beginning with C and following the jumps, we get C, D, E, F, G, A, B, C. These notes happen to be white notes, so the C scale picture looks like this diagram.



Looking at this picture, we realize we need to know each note as both a letter and a number, and then be able to play number sequences. We hope eventually to be able to play in the key of C major, and also in the other eleven major keys.

When you feel good about the concepts and ideas in this section, move on to [Part Seven](#).

Part Seven

Major Scales - II

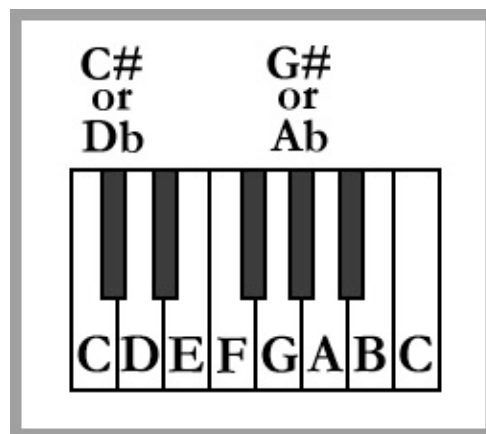
Concept - Sharps and Flats

On a keyboard, moving one half step to the right (going higher in pitch) is called "sharp," and moving one half step to the left (going lower in pitch) is called "flat."

The symbol for sharp is # and the symbol for flat looks a little like a lower case "b." (It's not exactly a "b," but it's similar, so we'll use the symbol "b" in our discussion.)

Each black note has two names.

The note between C and D is either C sharp or D flat.
The note between D and E is either D sharp or E flat.
The note between F and G is either F sharp or G flat.
The note between G and A is either G sharp or A flat.
The note between A and B is either A sharp or B flat.



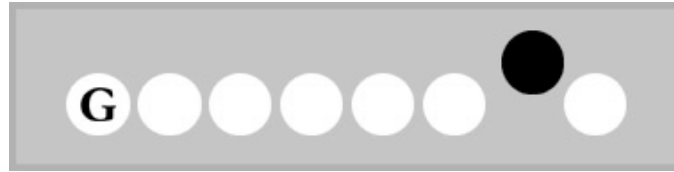
(To be complete, there are also times when certain white notes can be named sharp or flat. It doesn't happen very often, but there are occasions when the note B might be called Cb, or the note C might be called B#. E and F work the same way. It's also possible to have double sharps (written x) or double flats (written bb). For example, Fx would mean play the note G, and Gbb would mean play the note F.)

Now that we understand sharps and flats, let's look at another scale.

The G Major Scale

If you begin by playing the note G and then follow the formula for the major scale (WWHWWWH), you will get the following...

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



Take a look at the G scale. Which note is number 5? Which letter is associated with number 3? Could you play the sequence 6, 5, 8, 3, 2, 5, 1?

(Side note: one of the rules of naming notes in a major scale is that each letter from A to G must be assigned as you move from note 1 up to note 7. That's why note 7 in this scale is called F# and not Gb.)

Above and Below the Scale

Although some songs can be played using only notes 1 through 8, many songs go above or below the scale at some point. This would be a good time to say again that note 8 is really note 1 starting over. We say it's note 1 moved up an "octave." So, even though we say 1, 2, 3, 4, 5, 6, 7, 8, we understand that it really goes 1, 2, 3, 4, 5, 6, 7, 1, 2, 3, 4, 5, 6, 7, 1, 2, 3, 4, 5, 6, 7 and so on.

This creates a question when writing down melodies as numbers. If you are asked to play 1, 2, 7, do you play the 7 that's a big jump up the keyboard, or do you play the 7 that's right next to 1 on the left side?

In order to make this clearer, I'll write the notes in the next octave down as underlined numbers, and the notes in the next octave up as numbers with lines through the middle. Now our system looks like this.

1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7

Why Do We Use Numbers?

The nice thing about numbers is that when we change to a different major scale, though the letter names at the various locations change, the numbers stay the same. So, if a melody is played 3, 5, 2, 3, 1 in one major key, it will be played 3, 5, 2, 3, 1 in the other major keys as well.

It's true that the phrase played will sound higher or lower in pitch when you move it to a new key, and the letter names associated with note 3, or note 5, or note 2 will be different in the new key, but the tune will sound the same.

One suggestion is to experiment with the notes in a scale until something you play reminds you of a song you already know. Then see if you can figure out a couple phrases from that particular song. Play it a few times in the key you are in, and write down the numbers using the system just explained. Then take those numbers and play them in another key of your choice. This exercise will show you how melodies keep the same numbers when they are played in different keys.

One Important Idea to Consider

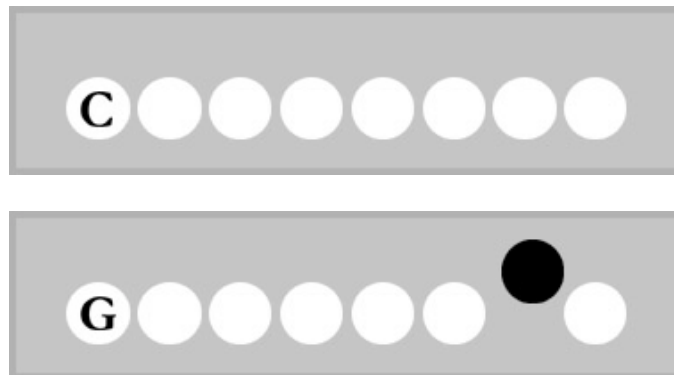
There is another idea to consider, because in the long run it will be more and more valuable to you. As you play tunes you know, and as you experiment writing your own melodies, you will eventually begin to "recognize the numbers" even when they are not written down. You will hear the notes in your mind and recognize almost by "feel" which number comes next. You'll hear a song, and know which notes to play. You will begin to improvise music freely, and make tunes up spontaneously. Then music becomes a lot of fun!

Let's Review

In this section we discussed sharps and flats. The symbol for sharp is #. It indicates a note one half step higher in pitch (to the right on a keyboard). The symbol for flat is similar to b. It indicates a note one half step lower in pitch (to the left on the keyboard). These definitions allow us to name the black notes, each of which has two names. Named as sharps, the black notes are C#, D#, F#, G#, and A#. Named as flats, the black notes are Db, Eb, Gb, Ab, and Bb.

When naming the notes in a major scale, we use each of the letters from A to G on scale notes 1 through 7. This determines whether black notes are named as sharps or flats.

We looked at the G major scale. We now have two scale pictures, one for the C scale, which is all white notes, and one for the G scale, which has a black note at position 7.



We also thought about the idea that a melody may go above or below scale notes 1 through 8. To write these other notes down, we introduced underlined numbers for the octave to the left, and numbers with a line through the middle to indicate notes in the octave to the right.

1 2 3 4 5 6 7 1 2 3 4 5 6 7 1 2 3 4 5 6 7

We considered the possibility of exploring a phrase in a given key, writing down what we played as a sequence of numbers, and then playing the same phrase in another key.

We also considered the idea that someday we may be able to hear a tune and know which notes to play, because the sound of the various numbers, and the jumps between them, will have become recognizable.

You may want to experiment with these ideas. Then move on to [Part Eight](#).

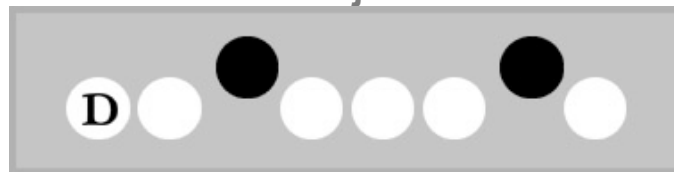
Part Eight

Major Scales - III

Concept - Major Keys with Sharps

We've already introduced the key of G, which has one sharp. Let's look at D, A, E, and B. You don't have to memorize them all at once, but you might want to look at them to see the patterns.

The D Major Scale



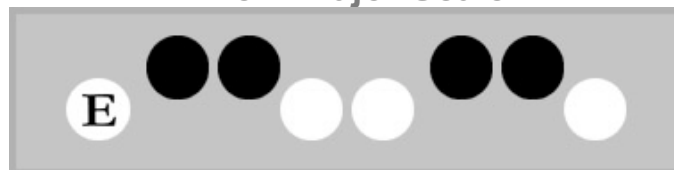
D, E, F#, G, A, B, C#, D
The sharps are at positions 3 and 7.

The A Major Scale



A, B, C#, D, E, F#, G#, A
The sharps are at positions 3, 6, and 7.

The E Major Scale



E, F#, G#, A, B, C#, D#, E
The sharps are at positions 2, 3, 6, and 7.

The B Major Scale



B, C#, D#, E, F#, G#, A#, B
The sharps are at positions 2, 3, 5, 6, and 7.

Are All These Keys Used Equally?

Actually, no. Beginning keyboard players usually start out in the key of C (no sharps or flats). Then, after getting familiar with C, they move on to keys with one sharp or one flat, then two, and so on. Even after playing the piano for years, it's rare to find a piece written with more than five flats (the key of Db), or more than four sharps (the key of E). The key of B, the last one pictured above, is very rarely used.

Guitarists tend to favor C, G, D, A, and E. The reason is because the "open" chords (chords where some of the guitar strings don't have to be pressed down) work well in these keys. Guitar players usually learn the open chords first and the "movable" (or "barre") chords later. The movable chords work in any key, but because of the sound of the open chords, acoustic players still tend to favor the keys of C, G, D, A, and E.

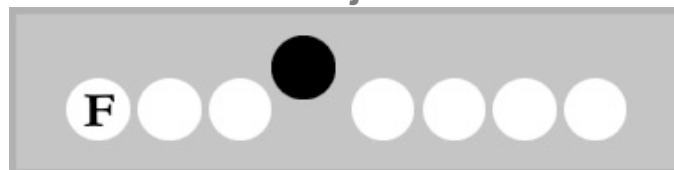
Guitarists also have the option of using a "capo," which clamps all the strings down at whichever fret is chosen, effectively shortening the guitar, which means you can play open chords just like you would in the keys of C, G, D, A, and E, while the guitar gives off a sound in a different key, depending on where the capo is placed.

(Side note: it grows even more complicated when adding brass (or woodwinds) into the picture, because many of these instruments don't sound in the key that's written. A Bb trumpet, for example, when reading the note C on paper, actually sounds the note Bb. This isn't the place to explain it, but it's a good idea to be aware of the challenge, because if you decide to add brass players to a group, the writing of the parts will require some extra understanding.)

Major Keys with Flats

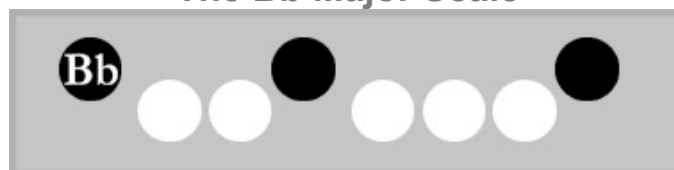
Let's take a look at the flat keys.

The F Major Scale



F, G, A, Bb, C, D, E, F
The flat is at position 4.

The Bb Major Scale



Bb, C, D, Eb, F, G, A, Bb
The flats are at positions 1 and 4.

The Eb Major Scale



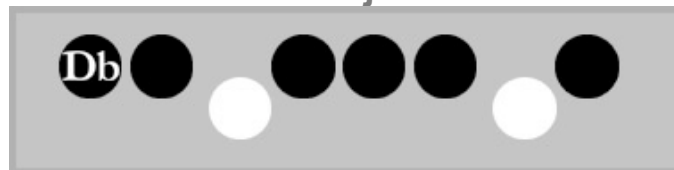
Eb, F, G, Ab, Bb, C, D, Eb
The flats are at positions 1, 4, and 5.

The Ab Major Scale



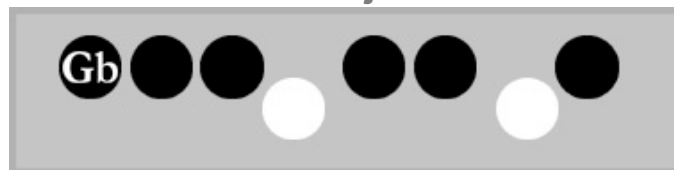
Ab, Bb, C, Db, Eb, F, G, Ab
The flats are at positions 1, 2, 4, and 5.

The Db Major Scale



Db, Eb, F, Gb, Ab, Bb, C, Db
The flats are at positions 1, 2, 4, 5, and 6.

The Gb Major Scale



Gb, Ab, Bb, Cb, Db, Eb, F, Gb
The flats are at positions 1, 2, 3, 4, 5, and 6.
(Notice that the white note at position 4 is named Cb.)

Side note: to be complete, I should also add that three of these major scales can be written in another way.

Db (five flats - Db, Eb, F, Gb, Ab, Bb, C, Db) can be rewritten as...
C# (seven sharps - C#, D#, E#, F#, G#, A#, B#, C#)
Of these two, Db is preferred. Five flats is
easier to read than seven sharps.

Gb (six flats - Gb, Ab, Bb, Cb, Db, Eb, F, Gb) can be rewritten as...
F# (six sharps - F#, G#, A#, B, C#, D#, E#, F#)
These keys are seldom used.

B (five sharps - B, C#, D#, E, F#, G#, A#, B) can be rewritten as...
Cb (seven flats - Cb, Db, Eb, Fb, Gb, Ab, Bb, Cb)
B is preferred, but not seen very often.

Let's Review

In this section we looked at the remaining major key "shape pictures," giving us a total of 12 major keys (plus three more if you count the ones that can be rewritten as different names). So, in the written sense, there are actually 15: one key with no sharps or flats (C), seven sharp keys (G, D, A, E, B, F#, and C#), and seven flat keys (F, Bb, Eb, Ab, Db, Gb, and Cb).

Of these keys, some are seen more often than others. C is used a lot, especially by beginners. On the flat side, it's common to see music written in keys all the way up to five flats, specifically the keys of F, Bb, Eb, Ab, and Db. On the sharp side, it's very common to see keyboard music in G (one sharp) and D (two sharps). Songs using three or more sharps can be found, but they are not seen as often.

Guitarists, however, often play in the sharp keys: C, G, D, A, E.

The challenge is to eventually play easily in all the keys, and to explore them over time. Enjoy the process.

When finished with this page, here's [Part Nine](#).

Part Nine

The Circle of Fifths

Suppose we take the 15 written major keys and put them in a straight line, beginning with 7 flats on the far left, moving toward C (no sharps or flats), and then continuing to 7 sharps on the far right.

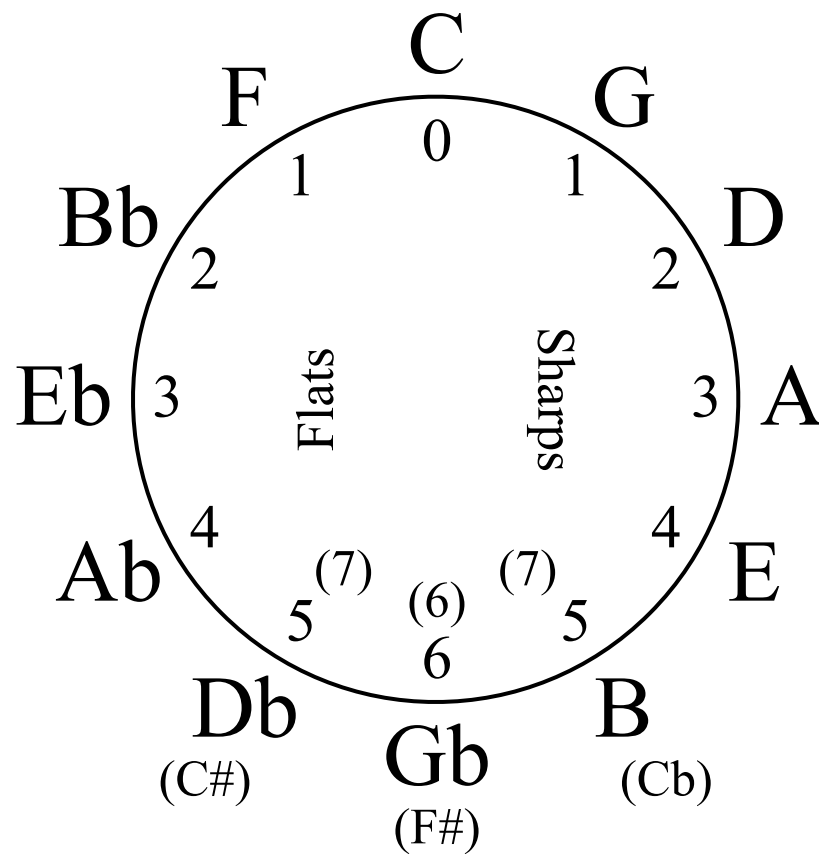
7b, 6b, 5b, 4b, 3b, 2b, 1b, 0, 1#, 2#, 3#, 4#, 5#, 6#, 7#

The names of the keys would be...

Cb, Gb, Db, Ab, Eb, Bb, F, C, G, D, A, E, B, F#, C#

Then imagine we wrapped this straight line around a clock with C at the top. (Because there are 15 keys represented on the line, and only 12 places on the clock, there will be a little bit of an overlap at the bottom.)

The resulting figure is called the "Circle of Fifths." In music theory, we call the interval from C to G a fifth, because G is the fifth note in the C major scale. D is the fifth note in the G major scale, and so on around the circle.



Learning the Circle

There will come a time, if you keep learning, playing, and writing, when you will know the circle of fifths because you will have spent time in all the keys, but when seeing it for the first time, it may help to have a few tricks. This is how I teach it to beginning students.

C and F

First, there are two locations you will just have to memorize: C, which is easy because it's zero, and F. To remember F, say this. "Flat has one F, and F has one flat."

G, D, A, E, B

The second group is G, D, A, E, and B. These are keys with sharps. To remember how many sharps each one has, just look at the letter. It takes a little imagination with G, but if you are willing to round the corners a bit, you can sort of draw a G with just one stroke of the pen.



Writing a D takes 2 strokes of the pen... an A takes 3 strokes... an E takes 4 strokes... and B... you can write the number 5 on top of a B without ever wandering off of the letter.



This is one way to remember that G is 1 sharp... D is 2 sharps... A is 3 sharps... E is 4 sharps... and B is 5 sharps.

Bb, Eb, Ab, Db, Gb

Once you get used to the sharp keys, the flats use the "add up to seven" rule. Like this: if G is 1 in your mind, then when you drop the symbol for flat into the picture (Gb), add enough to get a total of 7. In this case, you would need to add 6. So Gb is 6 flats. Or more simply, "G is 1 sharp, so Gb is 6 flats."

Let's try that with another letter: Db. You know D is 2 sharps, because it takes two strokes of the pen. Putting the flat in means we have to add up to seven, so we're looking for a 5. Therefore Db is 5 flats. Reducing it down, we get, "D is 2 sharps, so Db is 5 flats."

The same thing works for A, E, and B.

We can say the following:

G takes 1 stroke of the pen, so G is 1 sharp.
Therefore Gb is 6 flats. It adds up to seven.

D takes 2 strokes of the pen, so D is 2 sharps.
Therefore Db is 5 flats. It adds up to seven.

A takes 3 strokes of the pen, so A is 3 sharps.
Therefore Ab is 4 flats. It adds up to seven.

E takes 4 strokes of the pen, so E is 4 sharps.
Therefore Eb is 3 flats. It adds up to seven.

B can have a 5 written on top of it without ever leaving the B, so B is 5 sharps. Therefore Bb is 2 flats. It adds up to seven.

Cb, F#, C#

Finally, the three extra keys. The rule of seven still works.

Because F is 1 flat, F# is 6 sharps.
Because C is zero, C# is 7 sharps, and Cb is 7 flats.

Something Else About the Circle

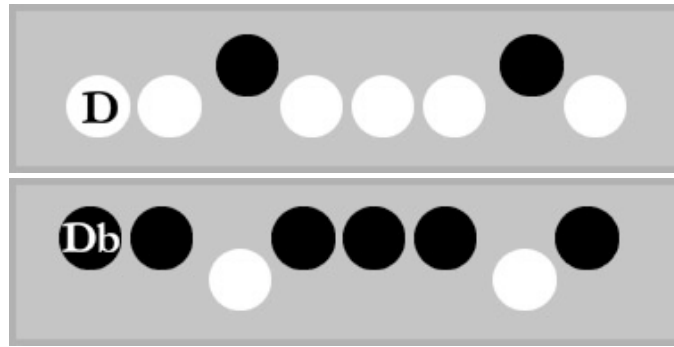
Another interesting thing about the circle is that it's possible to write songs that use part or all of the circle as a progression. For example, you could start with a C chord, move to F, follow that with Bb, and keep going until you get back to C. Or you could write a song using the progressions we explored in the maps, and somewhere in the middle of the song use a part of the circle. For example, you could use B - E - A - D - G - C.

(Side note: when I was studying music, one of my teachers assigned keyboard drills that went around the circle. For example, we would take a major 7 chord in root position (notes 1-3-5-7), and play it in both hands at the same time. So for CM7 we would play c-e-g-b in the left hand and c-e-g-b in the right hand; eight notes at once. Then we would play it around the circle - CM7 (cegb) - GM7 (gbd#) - DM7 (df#ac#) - AM7 (ac#eg#) - until we got back to CM7. If you would like the same challenge, choose a chord, play it in both hands, and then take it around the circle.)

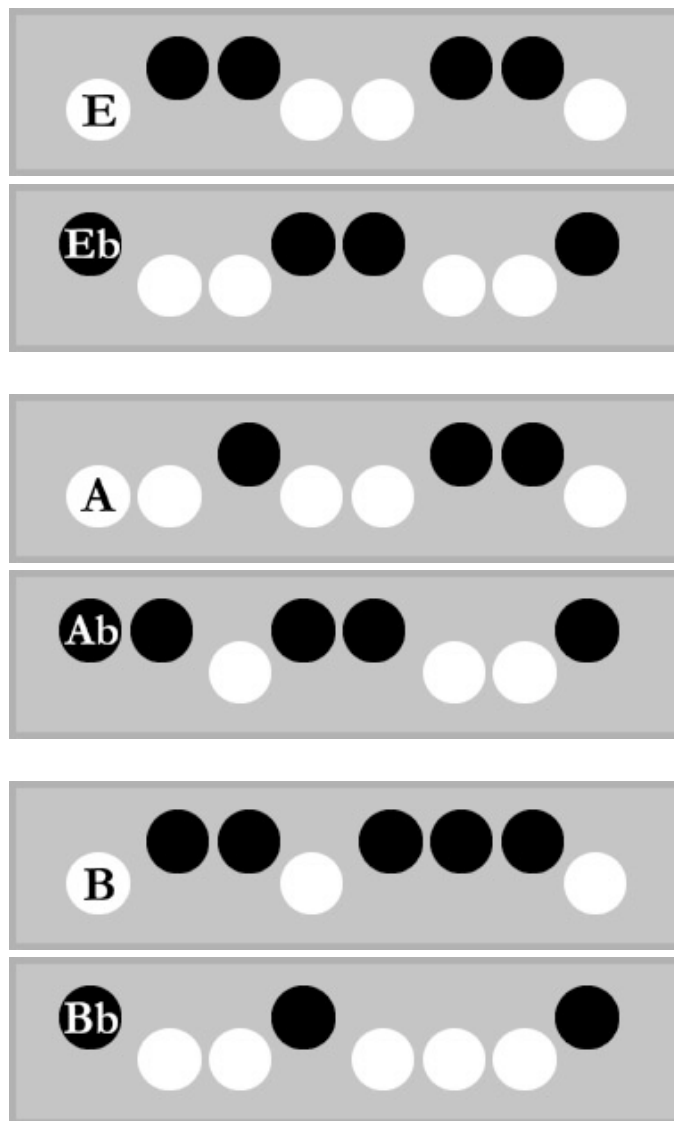
The “Photographic Opposites”

There are four sets of scales (D and Db, E and Eb, A and Ab, B and Bb) which might be easier to memorize if you realize they are like photographic negatives of each other.

Look at D and Db for a moment. Notice the D scale has black notes at positions 3 and 7. In the Db scale, there are white notes at positions 3 and 7.



The same idea can be seen with E and Eb, A and Ab, B and Bb. Notice how they mirror each other, but the colors are opposite.



What this means is when you learn to play one of them, you may want to spend a little time and learn the corresponding one also.

Let's Review

In parts 6, 7, 8, and 9, we spent some time looking at major keys and the major scale. We thought about the names of the notes, and the fact that numbers can be associated with each scale position.

We illustrated these scales, and we demonstrated that the names of the major keys can be wrapped around a circle called the Circle of Fifths.

Our goal is to learn to play these scales, explore melodies using these scales, and eventually write songs in these keys. If you continue learning, someday each of these scales and keys will be a comfortable place to play. Along the way, remember to enjoy the process. Take your time, learn well, and have fun!

When these discussions on major scales are understood, continue on to [Part Ten](#).

Part Ten

Understanding Modes

Imagine for a moment that time rolled backwards and you found yourself in a chapter in history where they hadn't yet discovered the sharps and flats, and "pianos" (which wouldn't have been around yet, but if they had been) had only white notes, and the only major scale available was C.

So you accepted those limitations, and wrote a few songs in the key of C major, but then you wanted a new sound, something that would be different. So you looked down at your hands, and the thought came, "What if I shifted my hands one note to the right?"

Let me pause here to correct a possible misunderstanding. In our modern world of music, we have a concept called "transposing." By it we mean that we can take a song and move every note up (or down) by a certain number of half steps. When we do this, the result is a little higher (or lower), but because we shifted every note the same amount, the song still sounds like it did before. The relative jumps from note to note have not changed.

Now, back to the "unusual piano missing the black notes." We know that the jumps from note to note in the C major scale follow the formula whole - whole - half - whole - whole - whole - half. In other words, the distance from note 1 to note 2 is a wider gap than from 3 to 4. So even though our unusual piano may look to our eyes as though each note is evenly spaced, we know in the world of sound and frequencies it isn't that way.

Perhaps we can say it like this: just because the black notes have not yet been discovered doesn't mean they are not there. We still have to leave a space for them in our minds, because we know they will come along later.

So you shifted your hands one note to the right and played one of the songs you had written in C major, but now, because the whole and half step jumps are at a different place under your hands, this new version of your song sounded quite different.

Great! We wanted a different sound. That was the purpose of shifting the song in the first place.

So you stepped back for a minute and asked, "What was it I just did?" And then you realized that you took the original key of C major (where we number the notes 1, 2, 3, 4, 5, 6, 7 - with the note C being note 1, D being note 2, and so on), and "renumbered" it so the D is now note 1, E is note 2, etc.

Then you realized there was nothing to stop you from shifting again. What if E was note 1, or F, or G? In fact, there are seven different notes, any one of which could be note 1. Therefore you could play your song in seven different places, the original (in C major) and six other places, by shifting the song to the right.

When this grows clear in your thinking, there's something else important to grasp. We used the key of C major in our example, because it's easy to see that all the notes are evenly spaced, and you can imagine shifting your hands one note to the right without any difficulty. But coming back into the present, we could have used any of the 12 major keys on our modern piano.

For example, the key of Db major has 5 black notes and 2 white notes. Keep those 7 notes, and remove the rest. Now 5 white notes are missing. It's not as easy this time to play the same song while shifting, because the scale notes, being both black and white, are not spaced evenly. Still, with practice, you could probably do it. And you could renumber the notes just like we did before; the math isn't any harder.

What this means is any song (using only scale notes) written in any of the 12 major keys can be played in its original location (where note 1 is the name of the key), and can also be played six other ways, each time shifting the hands one more scale note to the right, and renumbering the keys so that note 1 is at a new place.

This idea of shifting the notes needed some names, and so the ancient Greeks (because they were thinking about this) gave each of these locations a name.

IONIAN

Played in the original major scale.

DORIAN

Played one scale note to the right.
(The original note 2 is now note 1.)

PHRYGIAN

Played two scale notes to the right.
(The original note 3 is now note 1.)

LYDIAN

Played three scale notes to the right.
(The original note 4 is now note 1.)

MIXOLYDIAN

Played four scale notes to the right.
(The original note 5 is now note 1.)

AEOLIAN

Played five scale notes to the right.
(The original note 6 is now note 1.)

LOCRIAN

Played six scale notes to the right.
(The original note 7 is now note 1.)

Thinking This Through

To think this through and understand what's happening, first you need to know the major scale pictures we looked at back in parts 6, 7, and 8. Second, you also have to know that Ionian mode is associated with note 1 of the major scale, Dorian with 2, Phrygian with 3, Lydian with 4, Mixolydian with 5, Aeolian with 6, and Locrian with 7.

Knowing these two things, you can then work through an example.

A DORIAN - We'll take A Dorian as our example. We know that Dorian is built on note 2 of the major scale. Which major scale has A as note 2? The answer is G. The G major scale is the place where we will find A Dorian as one of the possible "shifts." So far, so good.

Now, what about the scale? We remember the G major scale starts on note G and climbs through the notes A, B, C, D, E, and F#. Also, these notes are numbered in our minds. G is 1, A is 2, and so on up to F#, which is 7.

To play A Dorian we play the same notes, but now A is 1, B is 2, all the way up to G, which is now 7. So the scale is A, B, C, D, E, F#, G, A.

Next, which chords are available. Again we use what we already know about G major. The basic chords found in G major are G, Am, Bm, C, D, and Em. (There is one more, the vii chord, which is F# diminished. You may include this chord if you like, but you'll probably find yourself using the first six chords a lot and the vii chord less often.) Because we are in Dorian, the Am chord is now the "home" chord, and the other chords are available to use in progressions.

Some progressions would come to you right away: Am-G-Am, or Am-Em-Am, or Am-C-D-Am. With a little experimenting, you might discover quite a few more. These are your building blocks then for writing songs in A Dorian.

You might wonder, "Do I need a big map for A Dorian?" The answer is no. Remember, there are five notes missing from each octave of the piano, so chords which might have used those extra five notes are not available. This knocks out a lot of possibilities. Playing just the six chords (or seven if you use the vii chord) keeps you in the mode.

Another Way of Thinking About It

There is another important way to consider this idea.

Suppose you are playing an instrument, perhaps an instrument that plays just one note at a time, and you don't want to associate A Dorian with the G major scale, because that takes a little time to think about. In fact, as soon as you hear the name A, you picture the A scale. So you would rather hear the word Dorian as indicating a change to be made to the A major scale, which was already in your mind as soon as you heard the name A. Somehow we've got to get to the A Dorian scale, beginning with the picture for the A major scale.

To do this we compare the A Dorian scale (A, B, C, D, E, F#, G) to the A major scale (A, B, C#, D, E, F#, G#). Notice the differences are in notes 3 and 7. Both are down a half step in the Dorian version. So we could make a "rule" to memorize. We'll use X as a variable, as in math, to stand for any note on our modern keyboard. Here's the rule - "To play X Dorian, play the X major scale with notes 3 and 7 down a half step."

The "Rules"

This idea of memorizing rules can be applied to the other modes as well. These rules, and a fairly intuitive way of deriving them, are listed here.

IONIAN

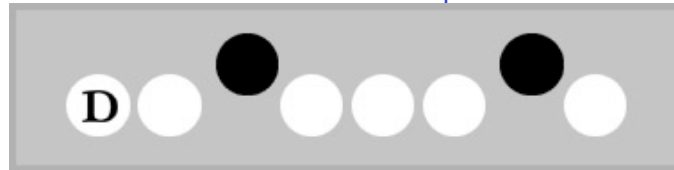
Played in the original major scale.

DORIAN

Played one scale note to the right.
(The original note 2 is now note 1.)

Another way of thinking about it...

X Dorian - play the X major scale with notes 3 and 7
down a half step



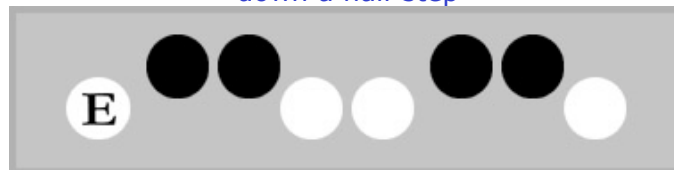
To remember this rule, picture the D major scale.
Notice that notes 3 and 7 need to be lowered to lose all the sharps and flats.

PHRYGIAN

Played two scale notes to the right.
(The original note 3 is now note 1.)

Another way of thinking about it...

X Phrygian - play the X major scale with notes 2, 3, 6, and 7
down a half step



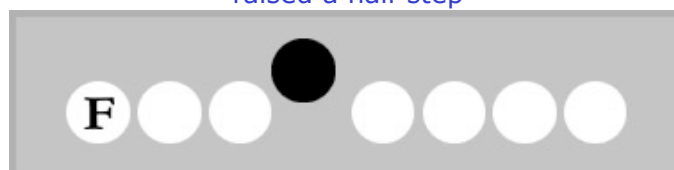
To remember this rule, picture the E major scale.
Notice that notes 2, 3, 6, and 7 need to be lowered to lose
all the sharps and flats.

LYDIAN

Played three scale notes to the right.
(The original note 4 is now note 1.)

Another way of thinking about it...

X Lydian - play the X major scale with note 4
raised a half step



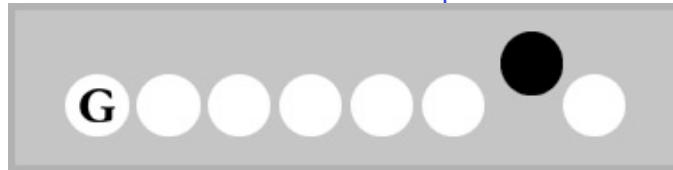
To remember this rule, picture the F major scale.
Notice that note 4 needs to be raised to lose all
the sharps and flats.

MIXOLYDIAN

Played four scale notes to the right.
(The original note 5 is now note 1.)

Another way of thinking about it...

X Mixolydian - play the X major scale with note 7
down a half step



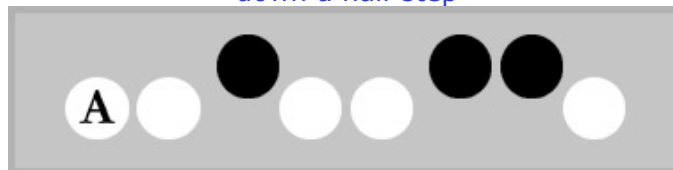
To remember this rule, picture the G major scale.
Notice that note 7 needs to be lowered to lose all
the sharps and flats.

AEOLIAN

Played five scale notes to the right.
(The original note 6 is now note 1.)

Another way of thinking about it...

X Aeolian - play the X major scale with notes 3, 6, and 7
down a half step



To remember this rule, picture the A major scale.
Notice that notes 3, 6, and 7 need to be lowered to lose
all the sharps and flats.

LOCRIAN

Played six scale notes to the right.
(The original note 7 is now note 1.)

Another way of thinking about it...

X Locrian - play the X major scale with notes 2, 3, 5, 6, and 7
down a half step



To remember this rule, picture the B major scale.
Notice that notes 2, 3, 5, 6, and 7 need to be lowered to lose
all the sharps and flats.

Experimenting with Modes

If you would like to experiment with modes, one of the easiest ways is to look at the chart we saw earlier in these lessons. Here it is again.

KEY	I	ii	iii	IV	V	vi
C	C	Dm	Em	F	G	Am
Db	Db	Ebm	Fm	Gb	Ab	Bbm
D	D	Em	F#m	G	A	Bm
Eb	Eb	Fm	Gm	Ab	Bb	Cm
E	E	F#m	G#m	A	B	C#m
F	F	Gm	Am	Bb	C	Dm
Gb	Gb	Abm	Bbm	Cb	Db	Ebm
G	G	Am	Bm	C	D	Em
Ab	Ab	Bbm	Cm	Db	Eb	Fm
A	A	Bm	C#m	D	E	F#m
Bb	Bb	Cm	Dm	Eb	F	Gm
B	B	C#m	D#m	E	F#	G#m

Take the six chords from any line (adding chord vii if you wish - it will be a diminished chord whose root is the seventh note of the major scale). Then choose a chord other than I as "home."

Explore the various progressions you can create using these six (or seven) chords. Keep in mind which chord is the home chord and keep coming back to it to establish that sound.

When chord I is home - Ionian.
 When chord ii is home - Dorian.
 When chord iii is home - Phrygian.
 When chord IV is home - Lydian.
 When chord V is home - Mixolydian.
 When chord vi is home - Aeolian.
 When chord vii is home - Locrian.

Each mode has its own feel. If you do this simple experiment, spending some time in each mode, your musical horizons will expand.

Let's Review

In this section we explored the concept of modes. We discussed where they come from, what we call them, and how to think about them.

From a chord perspective, we looked at the six (or seven) chords needed to write songs in the various modes. We are using the same chords we were using in major (Ionian), but the sound and feeling are new because a different chord is considered to be home. Also, because the notes in the scale are sometimes a whole step apart and sometimes a half step, shifting the scale puts the half steps in a different place. This helps produce the new sound and feel.

From a melodic perspective (for single note instruments, or for single note lines played on chordal instruments), we recognize that a player can memorize the major scales and think of the modes as changes to be made to the scales. In certain musical situations, this will be faster than trying to think of which major scale the mode comes from. To address this, we introduced "rules," and suggested a way to derive the rules in your mind using the major scale pictures for D, E, F, G, A, and B. Each of these pictures shows which notes must be changed to create a certain modal scale.

We then considered the idea of spending some time in each mode, exploring how the various home chords affect the feel of the progressions. Creating several progressions in each mode will help expand your songwriting resources.

On to [Part Eleven](#).

Part Eleven

Minor Keys - I

One of the first questions people ask, after seeing the maps for major keys, is "What about minor keys?"

To explore the world of minor keys, let's adopt the following strategy. We'll use "concepts" and "approaches." The "concepts" are ideas to consider until they become part of the way you think. The "approaches" are assignments or experiments you can do to gain skills working with minor keys.

Minor Keys - Concept #1

The first concept to consider is this: not all songs that sound minor are really "Minor." In other words, you can create music with that minor sound, but it may not be coming from the place we call "Minor," so let's talk about that for a minute.

Music tends to sound minor when the "home chord" is a minor chord. If you play a song, and a minor chord seems to be the center around which everything is happening, people will say, "That sounds like minor."

If you spent some time reading through the previous section on modes, you will remember there are three modes which have a minor chord as the home chord: the Dorian mode, the Phrygian mode, and the Aeolian mode. Let's review.

Reviewing the Dorian and Phrygian Modes

If we take any major scale, number the individual notes 1 through 7, and number the chords built on those notes as I, ii, iii, IV, V, vi, and vii (where I, IV, and V are major chords, ii, iii, and vi are minor chords, and vii is a diminished chord), we will be playing in the Ionian mode, or major.

If we keep these same notes and chords as a kind of family (related to one another, and meant to be played together), but think of note 2 as the starting point, and chord ii as the home chord, creating a song that keeps coming back to ii, we will be playing in the Dorian mode.

If we keep writing songs in this mode, we will eventually get so familiar with it that we will no longer think of the home chord as being chord ii in some major scale. Instead, we will begin to see it as chord i in this interesting scale that has a different sound. Also, we will no longer see the root note as note 2 of some other scale; we'll see it as note 1 of this new scale, the Dorian scale.

But regardless of how we label it or think about it, the song we play will sound to the casual listener as though we are playing in a minor-sounding key. It's not really minor, of course. It's Dorian.

The same line of reasoning can be used for the Phrygian mode, except that the home note is note 3 and the home chord is chord iii. Songs written in the Phrygian mode will have a minor feel to them, because the home chord is a minor chord.

What About the Aeolian Mode?

The Aeolian mode is built on note 6 of a major scale. This is where the "Minor Keys" discussion begins to get interesting.

Minor Keys - Concept #2

Our second concept is this: what we call minor develops out of the Aeolian mode. In fact, the Aeolian mode is sometimes called "Natural Minor."

Take any major scale, find note 6, and renumber everything so that note 6 is called 1. This new scale will be numbered 1 through 7, but the jumps between the notes will follow the formula "whole - half - whole - whole - half - whole - whole" or W-H-W-W-H-W-W.

To make it easier to see, let's choose C major, find note 6 (which is A), call that 1, and then play the Aeolian mode. The notes are A, B, C, D, E, F, G, A.

This is an interesting mode, and you can write songs in it using the same chords you were using in the key of C major - C, Dm, Em, F, G, Am, and Bdim - but the home chord is now Am. If you start with Am, end with Am, and keep coming back to Am, you will have established a minor chord in the listener's mind.

Now let's take another look at the chords we're using, paying particular attention to the five chord.

The one chord is Am.
The two chord is Bdim.
The three chord is C.
The four chord is Dm.
The five chord is Em.
The six chord is F.
The seven chord is G.

Minor Keys - Concept #3

Notice that the five chord is minor. Many years ago, musicians working with the Aeolian mode thought about this and decided it would be nice if the five chord was major instead of minor. This would allow the progression V to i to go from major to minor. But in order to make the five chord major, they had to change one note in the Aeolian scale: note seven. So they sharpened note seven (shifted it one half-step to the right).

In our example using A Aeolian, instead of playing the scale A, B, C, D, E, F, G, A, we would now play A, B, C, D, E, F, G#, A. This creates a rather unusual jump in the scale between notes 6 and 7, but it did accomplish the primary goal of getting a major chord as the five chord. This scale is called "harmonic minor."

So that brings us to our third concept: Harmonic minor is the Aeolian mode (sometimes called "natural minor") with note 7 raised a half-step, allowing the five chord to be a major chord.

Say It Again

Let's go through the process once more.

Start with any major scale... play those seven notes... then play the same seven notes beginning on note 6... renumber the notes so note 6 is now called 1... this new scale is the Aeolian mode or natural minor... now play the Aeolian mode with note 7 raised a half-step.

Let's do an example.

The F major scale: F, G, A, Bb, C, D, E, F. Find note 6. It's the D. Play the scale again, starting with note 6: D, E, F, G, A, Bb, C, D. So far, so good. That's D Aeolian or D natural minor. To get D harmonic minor, we raise note 7 a half-step: D, E, F, G, A, Bb, C#, D.

Again, notice the unusual jump from Bb to C#. It kind of grabs your attention. Well, it grabbed everyone's attention a long time ago too, and they found they didn't always like that big jump from note 6 to note 7, especially if someone was playing a musical line that was just one note at a time (like a voice singing, or a violin, or trumpet, for example).

One interesting way to smooth it out is to start with the harmonic minor scale and then "bump" note 6 a little higher when going up the scale, and "pull" note 7 when coming down.

In other words, we smooth out the big jump using two different adjustments: one adjustment when playing up the scale, and a different adjustment when coming back down. The result is notes 6 and 7 are played like the major scale when going up, and like the natural minor scale (or Aeolian) when going down.

This smoother scale is called "melodic minor," which brings us to our fourth concept.

Minor Keys - Concept #4

Starting with harmonic minor, we get melodic minor by raising note 6 when going up the scale, and lowering note 7 when coming down.

You Can Also Find Melodic Minor This Way

Start with any major scale. Number it 1 through 7, and also play note 8. It would look like this.

1-2-3-4-5-6-7-8

Now flat note 3.

1-2-b3-4-5-6-7-8

Good. You're halfway there. Now come back down the scale, but this time lower notes 7, 6, and 3.

1-2-b3-4-5-6-7-8-b7-b6-5-4-b3-2-1

That's Melodic Minor.

Minor Keys - Approach #1

Your first assignment: take well-known tunes in major keys... play just the melody, one note at a time... but flat notes 3 and 6. Listen carefully to this new sound. Notice especially the jump between notes 6 and 7. Remember that you can make this jump smoother by "bumping up" note 6 when playing up the scale and "pulling down" note 7 when playing down the scale.

Let's Review

In this section we saw how minor keys grow out of the Aeolian mode.

We had to make an adjustment however. The Aeolian mode (or natural minor) sounds minor and feels minor, but it doesn't have that nice V to i sound, because the five chord in Aeolian is minor. We can get the V to i sound by raising note 7 a half-step.

This gives us a major chord for chord five. It also gives us a wide jump between notes 6 and 7 of the scale.

Sometimes we like this jump, but sometimes we would rather close this gap to make musical lines play more smoothly. Raising note 6 in passages going up, and lowering note 7 in passages coming down gives us the melodic minor scale.

Because that takes a while to think through, we talked about another way to find it. Starting with any major scale, we can flat note 3 when playing up the scale, and flat notes 7, 6, and 3 when coming back down.

When you feel you understand these concepts, move on to [Part Twelve](#).

Part Twelve

Minor Keys - II

Having discussed the minor scales, let's talk about which chords are available when writing songs in minor keys.

Minor Keys - Concept #5

The place to begin is i - iv - V. When you stop to think about it, this is where many songwriters begin when writing in major keys, with the three chords I, IV, and V. Lots of songs have been written using these three chords. So when we begin to explore minor keys for the first time, it makes sense to start there, with i, iv, and V.

The i chord is minor. The iv chord is minor. But the V chord is major. This will be easy if you already know your major scales. Let's take an example: the key of D. Because we've written songs in D major (where D, G, and A are the I, IV and V chords), we simply shift our thinking a little, change the D major chord to D minor, change the G major chord to G minor, and keep the A major chord just like it is. Then playing the Dm chord as the "home chord," we begin creating phrases that include Gm and A.

Some of these simple phrases would be...

Dm - A - Dm
Dm - Gm - Dm
Dm - Gm - A - Dm
Dm - Gm - Dm - A - Dm
Gm - Dm - Gm - A - Dm

Minor Keys - Approach #2

At this point, especially if minor keys are somewhat new to you, I would encourage you to write simple songs, or at least several musical phrases using these three chords: i, iv, and V. Hearing this sound clearly in your mind is an important first step.

Minor Keys - Concept #6

After i, iv, and V become familiar, the next question is, "What about the chords built on notes 2, 3, 6, and 7?" Here's where we have a little bit of a departure from the way it works in major keys.

In major keys, if the bass note is note 2, there's a fairly good probability the chord is chord ii. The same can be said for notes 3 and 6. If the bass note is note 3 (or 6), the chord is quite often chord iii (or vi). It's not always true, but more often than not it is. (And when you are first beginning, it's a good place to start.)

But, in minor, it's a little different story. So we'll need to talk about each bass note. Let's choose the key of Cm, and list some of the chord possibilities.

When the Bass note is note 1

(In the key of C minor, this note is C.)

The most common chord would be Cm.

Other possibilities:

The iv chord with its fifth in the bass (Fm/C)

The VI chord with its third in the bass (Ab/C)

When the Bass note is note 2

(In the key of C minor, this note is D.)

When the bass note is note 2 (D), the scale suggests the chord D dim, made up of the notes D, F, and Ab. However, when you begin writing and playing songs in minor keys, this chord is not necessarily the most common when the bass note is 2.

Other possibilities:

The vii dim chord with its third in the bass (Bdim/D)

The V7 chord with its fifth in the bass (G7/D)

When the Bass note is note 3

(In the key of C minor, this note is Eb.)

When the bass note is note 3 (Eb), the scale suggests the Eb aug chord, made up of the notes Eb, G, and B. This chord is one possibility, but probably more common is Cm/Eb, using the three notes Eb, G, and C.

When the Bass note is note 4

(In the key of C minor, this note is F.)

When the bass note is note 4 (F), the most common chord is Fm.

Other possibilities:

The V7 chord with its seventh in the bass (G7/F)

The chord Db/F, known as the Neapolitan sixth chord

When the Bass note is note 5

(In the key of C minor, this note is G.)

When the bass note is note 5 (G), the most common chord is G or G7.

Other possibilities:

The i chord with its fifth in the bass (Cm/G)

This chord is quite often used to set up the progression V - i,
as in (Cm/G - G - Cm).

When the Bass note is note 6

(In the key of C minor, this note is Ab.)

When the bass note is note 6 (Ab), the VI chord (Ab) is a good option. Another good choice is the iv chord with its third in the bass (Fm/Ab).

When the Bass note is note 7

(In the key of C minor, this note is B.)

When the bass note is note 7 (B), the vii dim7 chord (Bdim7) is a good choice. So is the V or V7 chord with its third in the bass (G/B or G7/B).

The main idea here is this: in major keys there's a strong tendency to allow the bass note to be the root of the chord (especially when first learning to write songs). But in minor keys, even when you are beginning, certain bass notes tend not to be the root. When the bass note is 2, 3, 6, or 7, quite often that bass note is the third of the chord. Knowing this right from the beginning may help you as you explore progressions in minor keys.

Minor Keys - Concept #7

Each minor key is related to one of the major keys, or to put it another way, each major key has a relative minor key.

The names of the two keys, the major key and its relative minor, are always three half steps apart. For example, C major has a relative minor, A minor. Notice that the note A is three half steps down from the note C. Similarly, D major has a relative minor, B minor. The note B is three half steps down from the note D.

These two keys, the major key you've chosen and its relative minor, share the same "key signature." The key signature is the number of sharps or flats in that particular major scale, and it is written on the staff following the clef sign at the beginning of each line of music. For example, the F major scale has one flat in its key signature. So the Dm scale (the note D is three half steps below the note F) also has one flat in its key signature. In the same way, G major and Em share the same key signature (one sharp).

There are two things to notice about this. First, when you look at a piece of written music, the key signature won't necessarily tell you which key the song is in. It might be major, or it might be in the relative minor. We'll have to look at the notes and chords to tell which it is. (It could also be in one of the modes, but for now we'll limit our discussion to major and minor.)

Secondly, if the piece is written in minor, there will very likely be a number of "accidentals" (notes with a sharp, flat or natural sign in front of them). This is because the minor scale that uses the same key signature is what we call "natural minor," and harmonic minor (the minor scale that allows the V chord to be major) requires that we raise note 7 a half step. This raised note 7 has to be written into the music as it happens. For example, if you see one flat in the key signature, the song may be in F major, or it may be in Dm. But if it is in Dm, there's a good chance you'll see a number of C# notes in the score, because C# is the raised seven note which gives us the A major chord as the V chord.

Here is a list of the major keys and their relative minors.

C major (no sharps or flats) is related to A minor.

G major (1 sharp) is related to E minor.

D major (2 sharps) is related to B minor.

A major (3 sharps) is related to F# minor.

E major (4 sharps) is related to C# minor.

B major (5 sharps) is related to G# minor.

Gb major (6 flats) is related to Eb minor.

Db major (5 flats) is related to Bb minor.

Ab major (4 flats) is related to F minor.

Eb major (3 flats) is related to C minor.

Bb major (2 flats) is related to G minor.

F major (1 flat) is related to D minor.

The other possibilities, though rarely seen, would be...

F# major (6 sharps) is related to D# minor.

C# major (7 sharps) is related to A# minor.

Cb major (7 flats) is related to Ab minor.

This discussion of major keys and their relative minors leads us to a very important concept when writing music in minor keys.

Minor Keys - Concept #8

This is the "Switch-Over" concept. That's not its real name, but we'll call it that for the moment. The "Switch-Over" concept is this: if you are writing or playing in a minor key, there is a strong pull to switch over at some point to the relative major key. It's almost like driving a car on a highway and switching lanes. Then a little later, you might switch back to the minor key where you started. Once you get used to this, it happens quite easily.

You might ask, "If this happens in minor keys, does it also happen when writing in major keys? Do we switch over to the relative minor and back?" The answer is you could if you wanted to, but it doesn't seem to happen nearly as often. For some reason, writing in minor lends itself to jumping across to the relative major and then back.

In my own mind - this is a personal explanation; other teachers might explain it differently - I compare it to the concept of gravity. Earth has a strong gravitational pull, and anything spinning around the earth, like the moon or a satellite, has a predictable orbit. But what if you traveled to a place where gravity wasn't so strong, and where more than one planet was part of the picture? You might be sort of loosely pulled in the direction of one planet, and then, when another one came near, you might orbit that one instead. To me, minor keys have the feeling of "a little less gravity," or to put it another way, a little more freedom to escape and land in a different key center.

"Switching Over" - How Does It Work?

It's very simple once you catch it. It works like this. These two keys, the minor key and its relative major, share the same scale notes (except for the raised 7 note in harmonic minor), which means they share some of the same chords.

Let's take the key of A minor as an example. In the progression Am - Dm - Am (i - iv - i), we played Dm as the iv chord. But Dm is the ii chord in C major, and we already know from writing songs in C major that Dm - G - C is a nice, smooth progression. Because we've played this many times before, and because A minor is closely related to C major, you might someday, while experimenting in the key of A minor, play Am - Dm - G - C. In other words, having started the progression in A minor, when you hit the Dm chord, you might switch over to a progression you know from the key of C major. By the time you reach the C chord, you realize you've "changed lanes."

What really happened was you played a chord that could be "either or." It would be one thing in the key of A minor; it's something else in the key of C major.

In music theory, we call switching from one key center to another "Modulation." One of the ways of "modulating" is to find a chord that the two keys share. You approach the chord from one key, and leave the chord in the other key.

There are other chords that work also. The Am chord is chord i, but it's also vi in C major. Then there's the F chord. It's chord VI in A minor, but it's also IV in C major. With so many options, it's easy to step back and forth.

Here are some more to try.

Am - Dm - Am - G - C
 Am - E - Am - Dm - Am/E - FM7 - G - C
 Dm - Am - Dm - E - Am - F - Dm - G - C

Getting back to the key of A minor is also easy, especially if you use an E chord, or an E7 chord. The E chord has the note G# in it, which isn't part of the C major scale, so it tells the listener right away that something is happening. When you introduce the E chord or one of its variations (E7, or E7/B, or E7sus4 followed by E7, etc.), everyone can hear A minor coming back. You can also get back to A minor using shared chords like Dm and F.

What Does This Mean?

It means if you would like to write a song in a minor key, you may write it using just the chords we normally associate with harmonic minor, or you may widen your view a little, and step right off the map, landing in another key, the relative major. This adds a lot of possibilities.

Even More Possibilities

And one more thing: not only can a minor key jump to its relative major; it can also jump to its "parallel major." Jumping to the parallel major is easy. If you are playing in A minor, start playing in A major. If you are playing in C minor, start playing in C major. (If the song you are writing benefits from the sound of the parallel major, you can modulate instantly at any time, jumping back to minor when you are ready to come back.)

Let's Review

In this section we discussed four ideas.

First, when exploring minor keys, begin with i, iv, and V. This is the sound you will want to hear clearly before going any deeper.

Second, we allowed the bass note to play each note in the harmonic minor scale, and asked which chords would likely be played for each of these bass notes. We noticed that when the bass note is note 2, 3, 6, or 7, one of the common chord options is whichever chord has that bass note as its third.

Third, we talked about modulating (or "switching over") from a minor key to its relative major and then back. We saw that this happens easily because a minor key and its relative major share some of the same notes and chords.

Fourth, we mentioned that a minor key is quite close to its parallel major, so jumping to the parallel major and back is also an option.

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