

I (Major)	ii (minor)	iii (minor)	IV (Major)	V (Major)	vi (minor)	vii (diminished)
C#	D#m	E#m	F#	G#	A#m	B#dim
F#	G#m	A#m	B	C#	D#m	E#dim
B	C#m	D#m	E	F#	G#m	A#dim
E	F#m	G#m	A	B	C#m	D#dim
A	Bm	C#m	D	E	F#m	G#dim
D	Em	F#m	G	A	Bm	C#dim
G	Am	Bm	C	D	Em	F#dim
C	Dm	Em	F	G	Am	Bdim
F	Gm	Am	Bb	C	Dm	Edim
Bb	Cm	Dm	Eb	F	Gm	Adim
Eb	Fm	Gm	Ab	Bb	Cm	Ddim
Ab	Bbm	Cm	Db	Eb	Fm	Gdim
Db	Ebm	Fm	Gb	Ab	Bbm	Cdim
Gb	Abm	Bbm	Cb	Db	Ebm	Fdim
Cb	Dbm	Ebm	Fb	Gb	Abm	Bbdim

**The Main Diatonic Chords are I, IV and V**

So some example chord sequences would be:

I, IV, V, I	IV, I, V, IV	V, I, IV, V
I, V, IV, I	IV, V, I, IV	V, IV, I, V
I, I, IV, V	IV, IV, I, V	V, V, I, IV
I, I, V, IV	IV, IV, V, I	V, V, IV, I
I, IV, I, V	IV, I, IV, V	V, I, V, IV
I, V, I, IV	IV, V, IV, I	V, IV, V, I

**But now we can use minor substitutions**

'I' can also be substituted for 'vi'  
 'IV' can also be substituted for 'ii'  
 'V' can also be substituted for 'iii'

e.g. in the Key of C  
 Cmaj and Amin  
 Fmaj and Dmin  
 Gmaj and Emin

Giving us a few more options:

C, F, G, C	can now look like these	C for Am	Am, F, G, Am
		or	Am, F, G, C
		F for Dm	C, F, G, Am
		G for Em	C, Dm, G, C
			C, F, Em, C

In fact there are now numerous permutations for us to play around with on this one chord sequence alone...

C, Dm, Em, Am	C, F, Em, Am	C, Dm, G, Am
Am, Dm, Em, C	Am, F, Em, C	Am, Dm, G, C

The simple truth is that most modern 'pop' chord sequences use 'I', 'IV', 'V' and 'vi' and a great way to add variation is to then use maj/min chord substitutions.

I, I, IV, V	to	I, vi, IV, V	to	I, vi, ii, V	or	vi, vi, ii, iii
	or	vi, vi, IV, V		vi, vi, ii, V		vi, I, ii, iii
	or	vi, I, IV, V		vi, I, ii, V		

Notice how I did not change the 'V' chord if the 1st chord in the sequence was a 'I'. I find this makes a stronger resolution i.e. 'V' - 'I' but with the vi chord as 1st in the sequence, it sometimes works better to use the 'iii' instead of the 'V'. Do remember that this is completely up to your ear as to what is better sounding as there is NO right/wrong in music, only learnt guides as to what generally tends to sound nicer or more popular.

## The minor IV chord:

The next set of ideas we shall work on is some other substitutions.

The 'IV' chord, as fantastic as it is, occasionally we can swap it for a 'iv' chord instead.

So a basic	I, vi, IV, V	C, Am, F, G
can now be	I, vi, iv, V	C, Am, Fm, G

Please check out songs like 'Sleepwalk' by Santo and Johnny or 'Free as a Bird' by The Beatles for great examples of this in full use, or for a more modern take, check out the ending of 'Don't Look Back In Anger' by Oasis.

Now we can also have some fun with the minor substitute as well...

Fmaj - Dmin to Fmin - Ddim

Err, ok, so what happened there?

Well, in order to make the 'Fmaj' an 'Fmin', we have to flatten the 'A' note in the chord.

Fmaj - F A C	to	Fmin - F Ab C
Dmin - D F A	to	Ddim - D F Ab

And it actually works really well:

C, Am, F, G	to	C, Am, Fm, G
	or	C, Am, Ddim, G

The truth is that we can get really scary with substitution variants but will stick with the more simplistic for now.

## Secondary Dominants: The power of the V chord

In the chart we have above, any chord you see in 'V' column wants to (or sounds like it wants to) go to the chord in the 'I' column in that key/row.

Take for example a Gmaj in the 'V' column, now look in the 'I' column and you will see a Cmaj chord. The Gmaj will sound like it wants to go to Cmaj. In fact if you look at it carefully enough, you will see the a Cmaj in the 'V' column wants to go to and Fmaj and so on...

Cmaj to Fmaj to Bbmaj to Ebmaj to Abmaj to... etc

Well, we can 'use and abuse' this to a good extent. First let us take the chords in the key of 'C'

I	ii	iii	IV	V	vi	vii(dim)
Cmaj	Dmin	Emin	Fmaj	Gmaj	Amin	Bdim

Now we can turn any of the minor chords into (what is known as) a secondary dominant by making it major and adding a b7 to the chord. For now we will just make it major and leave out the flattened 7th to make life simple.

So if we now look:

I	II	III	IV	V	VI	VII
Cmaj	Dmaj	Emaj	Fmaj	Gmaj	Amaj	Bmaj

Okay, so that does not seem like any use at all. It now just seems like we can just play major chords on each degree of the scale. But let us have a look again at where those chords are positioned in the 'V' column and which chord they 'resolve' to.

I	II	III	IV	V	VI	VII
Cmaj	Dmaj	Emaj	Fmaj	Gmaj	Amaj	Bmaj
resolves to	resolves to	resolves to	resolves to	resolves to	resolves to	resolves to
Fmaj	Gmaj	Amaj	Bbmaj	Cmaj	Dmaj	Emaj

Right, this helps us a lot more when we see things like this or how about a few examples first?

Cmaj, Emin, Amin, Gmaj          turn the Emin into an Emaj          Cmaj, Emaj, Amin, Gmaj

Why do this? Well Emaj wants to resolve to an A chord, now this can be a major or a minor chord.  
So an Emajor chord can go to an Amajor or an Aminor? Yup, it sure can  
The product is something similar to Eric Clapton's 'Bell Bottom Blues'

[ C ][ E/B ][ Am ][ C/G ][ F ][ G ][ F C ][ G ]

Here we see the second chord is an Emajor with B in the bass.  
The E resolves to Am perfectly.

[ C ][ F ][ D ][ G ]

Here we can see the 3rd chord 'Dmaj' resolving to G

[ C ][ A ][ Dm ][ G ]

Here the 2nd chord ('Amaj') resolves to Dm. Equally we could also use a Dmaj to resolve to G

## The Tritone Sub

Ok, so now we move to a big one, the 'Tritone Substitute'. This is where we can use a chord a b5 away from the V chord resolving to our destination chord...

e.g.          C is where we want to go, G is the V chord that leads to it.  
A b5 interval from G is Db, ergo we can use a Db chord of some type to go/resolve to C

[ C ][ Eb ][ Dm ][ Db ]

In this example there are 2 tritone subs, the Eb and the Db.  
The Eb is a b5 from A which is a V chord to D or Dm.  
The Db is a b5 from G which is a V chord to C.

[ C ][ Am ][ Ab ][ G ]

Here we can see the Ab is a tritone sub.  
The Ab is a b5 from D which is a V chord to A or Am.

[ C ][ F ][ Bb ][ Db ]

Ok, so the original idea I had here was a chord sequence of C, B7, Em, G  
The B7 is a secondary dominant wanting to go to Em,  
so I used a tritone sub which is F.  
The Em was tritone subbed for a Bb and the G was tritone subbed for a Db. Just showing how you can totally use and abuse these ideas to make sequences that hopefully sound a bit more unique than the run of the mill ideas that seem to flow from us in some automated fashion.

Now if we were to look at some really advanced reharmonisations of Jazz standards, you will see these ideas used all over the place and even a few more tricks to boot. But hopefully this short lesson will give you more than enough to work with and keep you busy...