

sharps →
F C G D A E B
← flats

Half a step up from last sharp
2nd to last flat

Major Roman Numerals

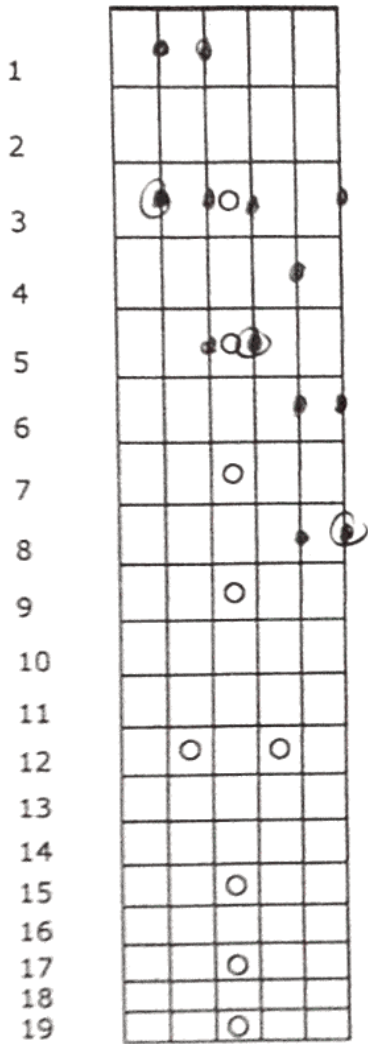
I ii iii' IV V vi vii°

i ii° III iv v VI VII

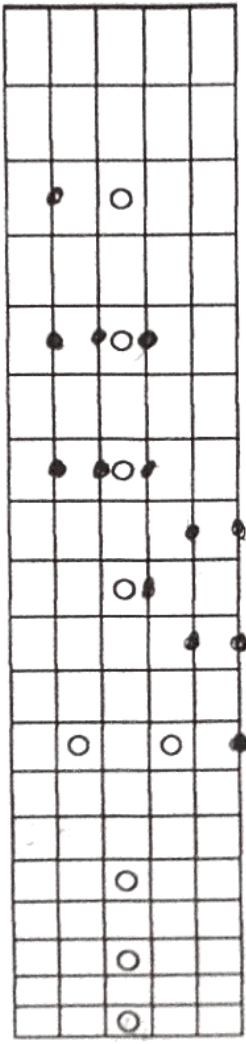
Minor

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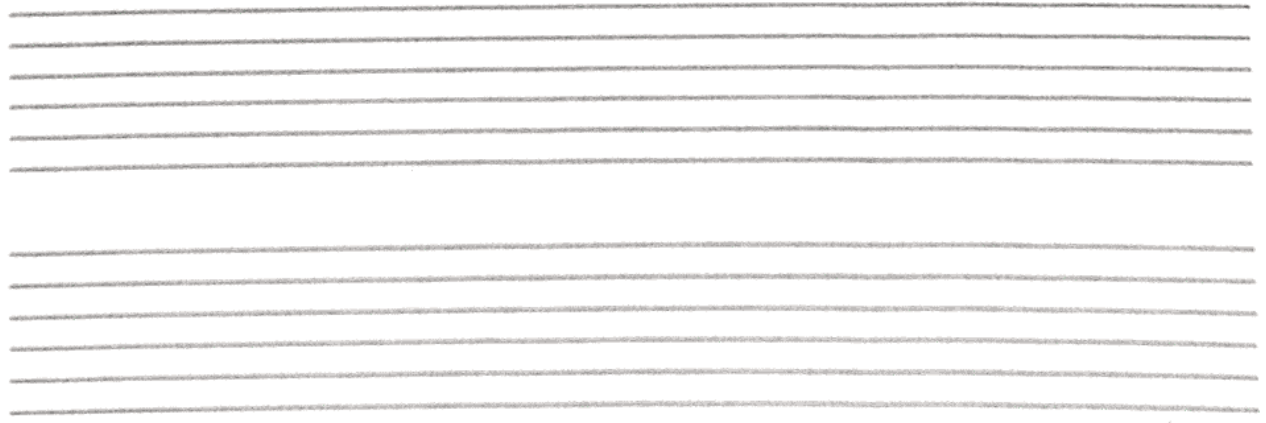
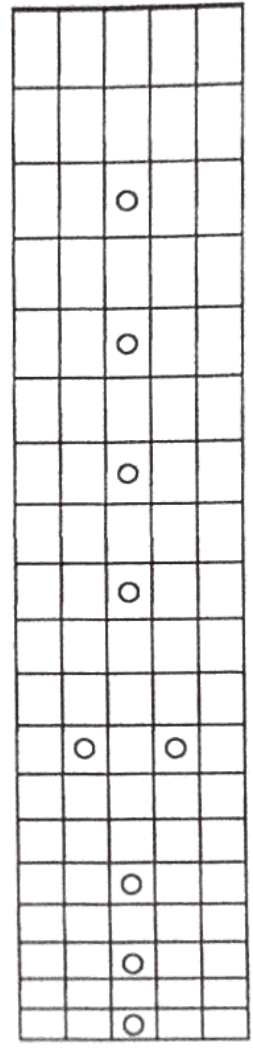
C maj
Pent
Bar II



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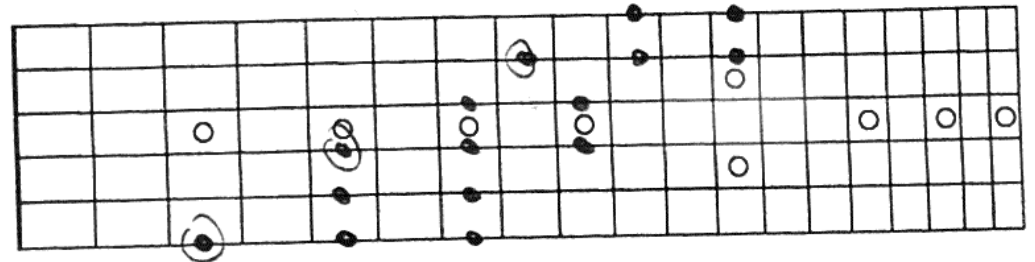


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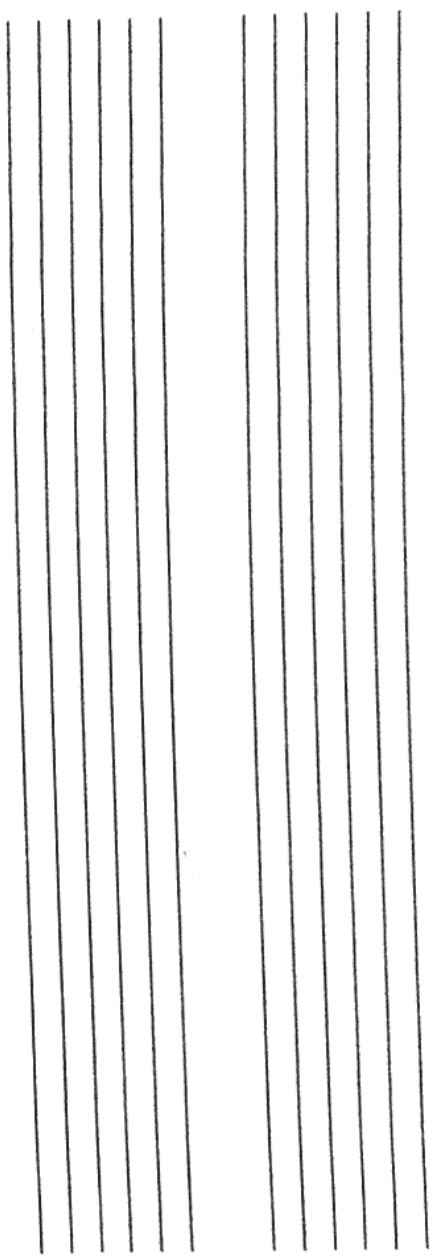
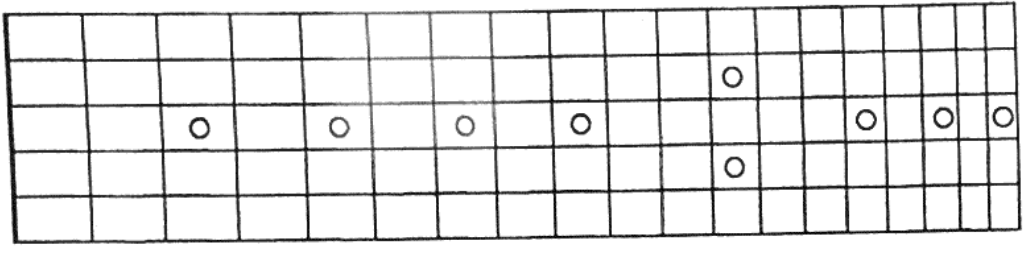
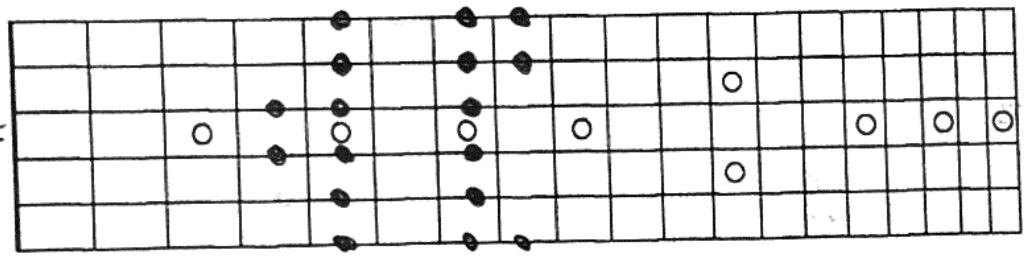


Maj Pent.
Dorian Mode
A

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19



THE MAJOR SCALE

C F B \flat E \flat A \flat D \flat G \flat C \flat G D A E B F \sharp C \sharp

Scale formula from Root C: C D E F G A B C

Triads in Scale	C	Dmi	E mi	F	G	A mi	B dm
Seventh chords in Scale	C MA7	Dmi7	E mi7	F MA7	G7	A mi7	B min7 \flat 5
Sixth chords in Scale	C \flat 6	Dmi6		F6	G6		

THE MAJOR SCALE IN MUSIC NOTATION

The guitar fingerings: \square = Lowest Root

Try playing the C major scale over these progressions:

- 1) Dmi7 G7 Cma7 Cma7 2) Ami G F F G
 3) Emi7 Ami7 Dmi7 G7
- //// // // // // // // // // // // //

/ = 1 beat or strum

THE MAJOR PENTATONIC SCALE

Scale formula from Root C: C D E G A
 R 2 3 5 6
 (9) (13)

This scale is called the Major Pentatonic because 1) The interval from C to E is a *major* third, and helps to spell the chord C major, found in this scale (CEG); 2) "Pentatonic" comes from Greek/Latin "penta" meaning *five*. There are *five* notes in this scale.

When two numerals are shown under a letter in the scale spelling (See the "D" note above) the numerals are there to indicate that the note has *two* functions or titles in the scale and its chords.

C	D	E	F	G	A	B	C	D	E	F	G	A
1	2	3	4	5	6	7	8	9	10	11	12	13

As you can see, the D note is both the 2nd note, *and* the 9th note of the C Major Scale. The A note is both the sixth *and* the thirteenth. You should keep this piece of info stored away for later use.

Please note: 1) that this scale is like the C major scale except that it's missing the 4th—F, and the 7th—B. 2) This scale spells a chord when all of the notes are sounded together. The chord is called C 6/9.

C	E	G	A	D
1	3	5	6	9

THE MAJOR PENTATONIC SCALE IN MUSIC NOTATION

Try playing the C major pentatonic scale over the same progressions shown with the major scale.

□ = Lowest Root

THE MIXOLYDIAN SCALE

Scale formula from Root C: C D E F G A B \flat C
 1 2 3 4 5 6 b7

In the C Mixolydian Scale we're calling the B \flat note a b7. Why? Because we're comparing this C mixolydian scale to the C major scale. In the major scale the seventh note is B. Here it's lowered (flatted) to B \flat . Hence the description b7.

We will do this throughout the book. The major scale and its notes are the ruler by which all other scales and their notes are measured and described.

THE MIXOLYDIAN SCALE IN MUSIC NOTATION

The guitar fingerings: □ = Lowest Root

Try playing the C mixolydian scale in the following progressions:

1) C C F B \flat 2) C7 G7 C7 G7
 // // // // // // // //

Here, play the scales as shown, and play the chords slowly.

A7 D7 G7 C7
 // // // //
 A mix. D mix. G mix. C mix.

THE JM 6 SCALE

Scale formula from Root C: C D Eb F Gb Ab Bb C
 1 2 Eb 3 4 b5 b6 b7 9

JM6 refers to the fact that this scale was "created" by playing the Jazz Minor Scale from the sixth degree of the scale instead of the first, thus rearranging the sequence of intervals. The JM6 scale is in effect a "mode" of the Jazz Minor Scale.

THE SCALE IN MUSIC NOTATION

Another sound for mi7b5 chords — this time the scale contains a b6(♯5) as well.

Cmi7b5	F7	Bbma7	Bbma7
////	////	////	////
C JM6	Bb Maj.		

THE H.M. 2 SCALE

Scale formula from Root C: C D \flat E \flat F G \flat A B \flat C

1	b2	b3	4	b5	6	b7	C
	b9	#9	11	#11		b7	

HM2 refers to the fact that this scale was "created" by playing the Harmonic Minor Scale (HM) from the second degree of the scale instead of the first, thus rearranging the sequence of intervals. The HM2 scale is in effect a "mode" of the Harmonic Minor Scale.

Seven

THE H.M. 2 SCALE IN MUSIC NOTATION

Once again this scale works with m7b5 chords, but it contains *more alterations*. (This is my favorite.)

Cmi7b5	F7	Bbma7	Bbma7
////	////	////	////
C HM2	Bb Maj.		

THE PLAIN Mi7b5 SCALE

(So called because the only alterations to the scale are the notes 1b3b5b7.)

Scale formula from Root C: C D Eb F Gb A Bb C
 1 2 b3 4 b5 6 b7

THE PLAIN Mi7b5 SCALE IN MUSIC NOTATION

This scale works with the mi7b5 chord best of all. Try the example below.

- | | | | | | | | |
|-----------|---------|-------|-------|-----------|--------|------------|---------|
| 1) Cm7b5 | F7 | Bbma7 | Bbma7 | 2) Cm7b5 | F7 | Bbmi7b5 | Eb7 |
| //// | //// | //// | //// | //// | //// | //// | //// |
| C "Plain" | Bb Maj. | | | C "Plain" | F Mix. | Bb "Plain" | Eb Mix. |

THE JM2 SCALE

Scale formula from Root C:

C	D ^b	E ^b	F	G	A	B ^b	C
1	b2	b3	4	5	6	b7	
1	b9	#9	11	5	13	b7	

JM2 refers to the fact that this scale was "created" by playing the Jazz Minor (JM) from the second degree instead of the first, thus rearranging the sequence of intervals. The JM2 scale is in effect a "mode" of the Jazz Minor Scale.

THE JM 2 SCALE IN MUSIC NOTATION

The scale can be played over the following chords C7^b9, G11^b9, C13^b9 and C7[#]9. As before you can also play the scale over plain Dominant chords (not containing these altered sounds). Proceed as before.

Gm17	C7 ^b 9	Fma7	Fma7
////	////	////	////
F Maj.	C JM2	F Maj.	

THE HM 4 SCALE

Scale formula from Root C: C D Eb F# G A Bb C
 1 2 b3 #4 5 6 b7 C
 #9 #11 13

HM4 refers to the fact that this scale was "created" by playing the Harmonic Minor Scale (HM) from the fourth degree instead of the first, thus rearranging the sequence of intervals. The HM4 is in effect a "mode" of the Harmonic Minor Scale.

THE HM 4 SCALE IN MUSIC NOTATION

Once again, we have a scale that contains only two alterations, and functions with dominant chords; 7#9, 7b5, 7#9b5, 13#11, and 9b5.

Gmi7	C7#9#5	Fma7	Fma7
////	////	////	////
F Maj.	CHM4	F Maj.	

THE JM 5 SCALE

Scale formula from Root C:

C	D	E	F	G	Ab	Bb	C
1	2	3	4	5	b6	b7	
	9		11		#5		

JM5 refers to the fact that this scale was "created" by playing the Jazz Minor Scale from the fifth degree of the scale instead of the first, thus rearranging the sequence of intervals. The JM5 is in effect a "mode" of the Jazz Minor Scale.

THE JM 5 SCALE IN MUSIC NOTATION

This scale can be used over 7#5 and 9#5 chords, and contains few other alterations.

G M17	C9#5	Fma7	Fma7
////	////	////	////
F Maj.	C J.M.5	F Maj.	

THE WHOLE-HALF SCALE

Scale formula from Root C:

C	D	E \flat	F	F \sharp	G \sharp	A	B	C
1	2	b3	4	#4	#5	6	7	
	9	#9		#11				

OK. This is the scale you just saw, started with the whole step first. . . I'll admit that. How many different versions of this scale are there really? Does it repeat every two frets? Every three or four?

THE WHOLE-HALF SCALE IN MUSIC NOTATION

This scale is also known as the Diminished Scale because it contains the notes found in a diminished 7th chord: 1, b3, b5, bb7(6).

- C \circ 7 = E \flat \circ 7 = G \flat \circ 7 = A \circ 7
- C \sharp \circ 7 = E \circ 7 = G \circ 7 = B \flat \circ 7
- D \circ 7 = F \circ 7 = A \flat \circ 7 = B \circ 7

This scale fingering definitely requires some shifts, and the scale is used well over diminished chords.

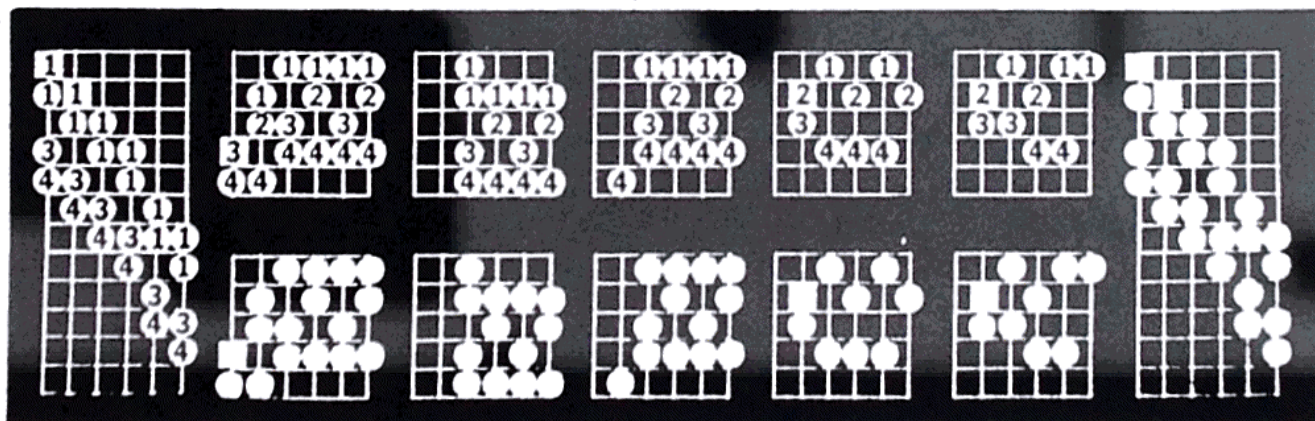
- | | | | | | | | |
|---------|-------------|----------------|--------------|---------|----------------------|--------|------|
| 1) Bma7 | C \circ 7 | C \sharp mi7 | F \sharp 7 | 2) Cma7 | C \sharp \circ 7 | Dmi7 | G7 |
| //// | //// | //// | //// | //// | //// | //// | //// |
| B Maj. | C Dim. | B Maj. | | C Maj. | C \sharp Dim. | C Maj. | |

THE HALF-WHOLE SCALE

Scale formula from Root C: C D^b E^b E F[#] G A B^b C
 1 b9 #9 3 #11 5 6 b7

And yes, this scale is made by alternating half steps and whole steps between the notes. (Measure 'em if you don't believe me. . . .) This scale also contains 8 different tones instead of 7, which does turn the fingering around a little bit.

THE HALF-WHOLE SCALE IN MUSIC NOTATION



This scale can be played over 7^b9, 13^b9, 13[#]11, 7[#]9, 7[#]5, 7[#]5^b5, 9[#]11, and 7^b9^b5 chords. (It's another spicy choice for plain dominant 7 chords too.)

Gm7	C7 ^b 9(etc.)	Fm7	Fm7
////	////	////	////
F Maj.	C Half-whole	F Maj.	

THE WHOLE TONE SCALE

Scale formula from Root C: C D E F# G# A# (Bb) C
 1 2 3 #4 #5 #6
 9 #11 b7

OK, the origin of the name of this scale isn't so difficult, I'll admit. The distance between each note and its neighbor notes is a . . . whole tone . . . How many different whole tone scales are there really? Three, four? Does the scale repeat every few frets?

THE WHOLE TONE SCALE IN MUSIC NOTATION

C Whole Tone = D = E = F# = G# = A# Whole Tone Scales, C# Whole Tone = D# = E# (F) = G = A = B Whole Tone Scales

The Whole Tone Scale works well over dom. 7#5 and dom. 9#5 chords.

Gm7	C9#5	Fma7	Fma7
////	////	////	////
F Maj.	C Whole Tone	F Maj.	

THE ALTERED DOMINANT SCALE

Scale formula from Root C: C Db Eb Fb Gb Ab Bb C

1	b2	b3	b4	#11	b6	b7	C
	b9	#9	3	b5	#5		

The Altered Dominant Scale gets its name from the fact that it contains *all* of the alterations a dominant 7th chord can have—b9, #9, b5 #5.

THE ALTERED DOMINANT SCALE IN MUSIC NOTATION

This scale can be played, with care, over 7b5, 7#5, 9b5, 9#5, 7b9, 7#9, 7b9b5, 7b9#5 and 7#9#5 chords. You can also play it over a plain dominant 7 chord and add a lot of "spice"

Gm7	C7b9#5(etc.)	Fmaj7	Fmaj7
////	////	////	////
F Maj.	C Alt. Dom.	F Maj.	

THE OVERTONE DOMINANT SCALE

Scale formula from Root C: C D E F# G A Bb C

C	D	E	F#	G	A	Bb	C
1	2	3	#4	5	6	b7	
	9		#11		13		

The overtone dominant scale is derived from playing the melodic minor scale from the 4th degree. We might want to call it "Melodic minor #4", but it has an even stronger identifying element than that. The notes in this scale approximate the natural overtone series.

THE OVERTONE DOMINANT SCALE IN MUSIC NOTATION

This scale can be used with dominant family chords, especially 9#11 and 13#11, where it sounds rich and full. Play the example below as illustrated.

Gmi7	C9#11	Fma7	Fma7
////	////	////	////
F Maj.	C Over. Dom.	F Maj.	

THE H.M. 5 SCALE

Scale formula from Root C:

C	D ^b	E	F	G	A ^b	B ^b	C
1	b2	3	4	5	b6	b7	
	b9		11		#5		

HMS refers to the fact that this scale was "created" by playing the Harmonic Minor Scale (HM) from the fifth degree instead of the first, thus rearranging the sequence of intervals. The HMS is in effect a "mode" of the Harmonic Minor Scale.

THE H.M. 5 SCALE IN MUSIC NOTATION

This scale is the first scale we're showing you that should be applied to one chord, i.e. you're going to have to change scales as the chords change.

1) Gm7	C7b9	Fma7	Fma7	2) Am7	D7b9	Gm7	C11b9	Fma7	Fma7
////	////	////	////	////	////	////	////	////	////
F Maj.	C.H.M.5	F Maj.		G Maj.	D.H.M.5	F Maj.	C.H.M.5	F Maj.	

THE MELODIC MINOR (JAZZ MINOR)

Scale formula from Root C:

C	D	E ^b	F	G	A	B	C
1	2	b3	4	5	6	7	

Triads in the Scale } Cmi Dmi E^b+ F G Adim Bdim

Seventh chords in the Scale } Cmi/m7 Dmi7 E^bma7#5 F7 G7 Ami7b5 Bmi7b5

THE MELODIC MINOR (JAZZ MINOR) IN MUSIC NOTATION

This progression should help you get the sound of this scale. Play C melodic minor over the changes.

Dmi7 G7#5 Cmi(6) Cmi(6)
 // // // //

THE HARMONIC MINOR SCALE

Scale formula from Root C: C D Eb F G Ab B C
 1 2 b3 4 5 b6 7

Triads found in
 the Scale }
 "Seventh" chords
 found in the Scale }

Cmi	Ddim	Eb +	Fmi	G	Ab	Bdim
Cmi/ma7	Dmin7b5	Ebma7#5	Fmi7	G7	Abma7	Bdim7

THE HARMONIC MINOR SCALE IN MUSIC NOTATION

The best progression to help you get used to this scale's "new" sound is shown below in two keys.

- 1) Dmi7b5 G7(b9) Cmi Cmi 2) Bmi7b5 E7(b9) Ami Ami
 // // // // // // // //
 C Harm. Minor A Harm. Minor

THE NATURAL MINOR SCALE

Scale formula from Root C } C D Eb F G Ab Bb C

Triads found in the Scale } Cmi Ddim Eb Fmi Gmi Ab Bb

Seventh chords found in the Scale } Cmi7 Dmin7b5 Ebma7 Fmi7 Gmi7 Abma7 Bbma7

This scale is really the major scale started from the sixth degree. That is, A natural minor equals C major. The question is, does that knowledge do you any good? What about key signatures? Does A natural minor have the same key signature as C major? If it does, how could you tell which scale/tonality you are playing in?

THE NATURAL MINOR SCALE IN MUSIC NOTATION

Try this scale over these progressions:

- 1) Am7 Am7 Dmi7 Dmi7 F G Am7 Am7 2) Am7 G Fma7 Fma7
 //// //// //// //// //// //// //// //// //// //// //// ////

THE LYDIAN SCALE

7th of 500 e

The Lydian Scale is an unusual scale in that its only alteration is a #4 (b5). It has 7! The only chords whose spellings coincide with this scale are: Major 7b5 (Major 7#11) Major 9b5 (major 9#11) Major 13#11

Scale formula from Root C:

C	D	E	F#	G	A	B	C
1	2	3	#4 b5	5	6	7	
	9		#11		13		

THE LYDIAN SCALE IN MUSIC NOTATION

The guitar fingerings: □ = Lowest Root

The Lydian Scale is very useful in playing over Major chords occurring out of the key. Try the following example:

The more you play the Lydian Scale the more natural the scale becomes to your ear. For many players the Lydian is a preferred choice to Major Scale. They might use the Lydian anyway a Major Scale could be used.

IMPROVISING WITH SCALES WE'VE SEEN SO FAR

So far all of the scales we've seen belong together in a single group. The special qualification these scales have is this. EACH OF THESE SCALES MAY BE PLAYED OVER AN ENTIRE PROGRESSION. YOU DO NOT HAVE TO CHANGE SCALES WHEN YOU CHANGE CHORDS. The examples below will illustrate this more clearly. Before we see those examples, however, I'd like to discuss briefly the scale similarities and how they effect improvising.

The major scale and the major Pentatonic scale can be used interchangeably because the major Pentatonic is actually inside the major scale. (See Examples 1-2.)
 The major Pentatonic can also be used instead of the Mixolydian (examples 5-6). The major scale and Mixolydian scale have only one difference—the 7th (in C Major the 7 is B; in C Mixolydian, the 7 is Bb). This is a big difference in sound!! (Compare the scales and play all the examples.)

We have a similar situation in the minor scale area. The minor Pentatonic scale is inside the Dorian scale and the Blues scale. If you'll look at the examples you'll see how the scales can be used.
EMPHASIZING THE DIFFERENCE IN SCALES is the key to learning the special sounds each scale contains. To hear the major scale spend 450 weeks playing solos that always start on the ♯7 note (the B note in the C major scale). To hear the mixolydian scale, start 10,751 solos with the b7 note (a Bb note in a C Mixolydian scale). TIP (About 15%, if service is good): Try building licks and solos in both these scales starting 7 to 3, 3 to 7, b7 to 3 or 3 to b7. In the minor scale area . . . Once you've bored your head full of the minor Pentatonic scale, move to the Dorian and start all your solos and licks on the 9 (D is the 9th note in C Dorian) or the 6 (A is the 6th note in C Dorian) you'll get a very smooth, jazzy sound. Then take the blues scale and start solos with the notes #4 - 5. That's the sound there. You can combine major and minor scale sounds by playing the b3 note (from minor) and then the ♯3 note.

Shown below are sample progressions and the scales that you might use over each of the progressions. As you can see, some progressions have several scales that may be used. It's up to you to experiment and listen to each.

#1) Dm7 G7 Cma7 Cma7

1. C Major scale
2. C Major Pentatonic

#3) D D C G

1. D Mixolydian
2. D Major Pentatonic

#2) C Am F G7

1. C Major scale
2. C Major Pentatonic

#4) Am7 D9 Am7 D9

1. A Minor Pentatonic
2. A Blues scale
3. A Dorian

#5) C C C C F F C C G F C C

1. C Major scale (kind of plain sounding)
2. C Major Pentatonic (a bit of country rock)
3. C Mixolydian (country-rock/blues feel)
4. C Minor Pentatonic ("bluesier")
5. C Blues scale ("bluesier")
6. C Dorian (jazz-blues feel)

#6) D7+9 D7+9 F G

1. D Minor Pentatonic
2. D Blues scale
3. D Dorian

THE DORIAN SCALE

2nd of scale

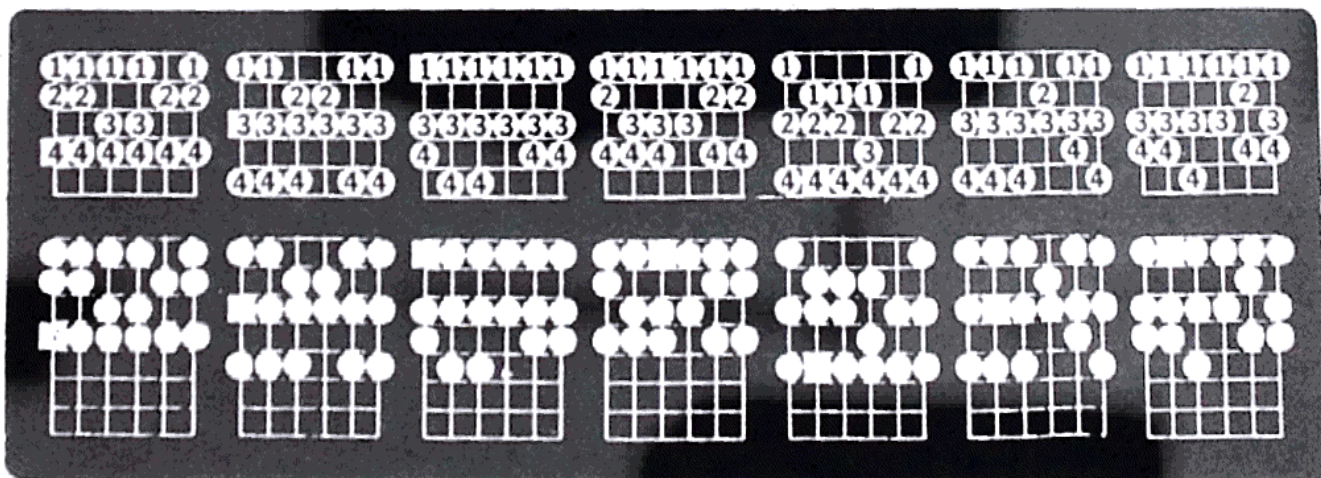
Scale formula from Root C: C D Eb F G A Bb C
 1 2 b3 4 5 6 b7

This "scale" is really the major scale started from the second degree. That's a cute fact that might help you finger the scale, but will confuse you if you try improvising and transposing at the same time. (C dorian = Bb maj)

THE DORIAN SCALE IN MUSIC NOTATION



The guitar fingerings: □ = Lowest Root



Try the A dorian scale over these progressions:

- 1) A7#9 E G 2) Am7 D9
 // // // - // - //

THE BLUES SCALE

Scale formula from Root C: C Eb F F# G Bb

1	b3	4	#4	5	b7
	#9		b5		

As you can see, the Blues Scale is really just the minor pentatonic scale with another note added, the #4. This one note adds an interesting and powerful sound however, and is of major importance in rock, blues, and jazz improvising. The guitar fingerings require a little jockeying around and all seven are not "required" for that reason.

THE BLUES SCALE IN MUSIC NOTATION

Bb Blues

Play the A blues scale with the progression examples shown for the dorian and minor pentatonic scales.

Bb | Eb | Bb | Bb | Eb | Eb | Bb | Bb | F | Eb | Bb | Bb F |

THE MINOR PENTATONIC SCALE

Scale formula from Root C: C Eb F G Bb C
 1 b3 4 5 b7

Here you can see that we're calling Eb a b3 because in the C Major scale the third note is E. This scale is called the Minor Pentatonic because C Eb G Bb spells a C mi 7 chord, and the scale contains 5 different notes.

THE MINOR PENTATONIC SCALE IN MUSIC NOTATION

The guitar fingerings: □ = Lowest Root

Try the A minor pentatonic scale over these progressions:

1) Am7 D9 Am7 D9 2) Am7 Dmi7 Am7 Am7 3) A7#9 F G

Does the A minor pentatonic resemble the C major pentatonic in any way??

THE LOCRIAN SCALE

Scale formula from Root C: C Db Eb F Gb Ab Bb C
 1 b2 b3 4 b5 b6 b7

Triads in the Scale { Cdim Db Ebmi Fmi Gb Ab Bbmi

Seventh chords in the Scale { Cm7b5 Dbma7 Ebmi7 Fmi7 Gbma7 Ab7 Bbmi7

"Sixth" chords in the scale { Db6 Ebmi6 Gb6 Ab6

B Locrian has the same notes as C major. I just wanted to let you know.

THE LOCRIAN SCALE IN MUSIC NOTATION

This mode of the Major Scale contains the most alterations you can have over a mi7b5 chord. This is getting "farther out" when the mi7b5 chord is behaving as a ii chord.

Cm7b5	F7	Bbma7	Bbma7
////	////	////	////
C Locrian	Bb Major		