

SCALES

Scale (from L. *scala*, ladder): A progression of notes in a specific order.

Scales are very important to know, especially when it comes to playing a solo. This section is an easy reference for constructing, locating and playing all the essential scales on your guitar. By the end of this section, you'll be using scales to improvise over the "Jam Session" on the CD.

Essential ingredients...

We've given you three ways to build (or "spell") each scale:

1. Step Pattern (ex. W-H-W-W-H-W+H-H)

This pattern tells you how many steps to move from one scale tone to the next, using abbreviations for whole step (W), half step (H) and 1 1/2 steps (W+H). Simply start on any note and move up accordingly.

Here's an example starting on the root note C:

step pattern = W-W-H-W-W-W-H
result = A-B-C#-D-E-F#-G#-A

2. Formula (ex. 1-2-b3-4-5-b6-b7-8)

Take the numbers in the formula (which correspond to a particular major scale tone) and alter them as indicated by the flats and/or sharps. Try this one...

A major scale = A-B-C#-D-E-F#-G#-A
formula = 1-2-b3-4-5-b6-b7-8
result = A-B-C-D-E-F-G-A



IMPORTANT: These formulas are always based on the **major scale** (including any sharps or flats) not just the letter names of the notes. That is, 3 for the key of E major is actually G# (not G). So, if the formula calls for b3, play G (one half-step lower than G#) not Gb.

3. Note Name (ex. A-B-C-D-E-F-G-A)

Although we don't have room to show all the scales on all twelve root notes (actually seventeen if you count the enharmonics!), the note names shown are relative to the root note used. Of course, a scale built on a different root note will have a different list of note names.

Let's get organized...

Several fretboard locations are given for each scale in this book. Use the one that feels the most comfortable for you. (Or, heck, memorize all of them!)

Caged System

The fingerings in this system generally apply the one-finger-per-fret rule, staying within a specific four-fret position. In some cases, you may have to reach out of position one fret above or below this basic position. (Try not to hurt yourself!)

Two moveable patterns are given for each scale—one with its root on the sixth string, the other with its root on the fifth string. (For more on **moveable patterns**, flip to page 46.)

Three-Notes-Per-String System

These require a bit more of a stretch but generally span a full 2 1/2 octaves. Two moveable fingerings are given for each scale. Again, one with a sixth string root and one with a fifth string root.

Horizontal System

Depending on the scale, these are found as either sliding scales, or four-notes-per-string patterns. The fingerings in this system spread up to 16 frets (Ouch!), but they're handy in trying to connect distant areas of the fretboard or to smoothly transfer from one position to another.

Like the **caged** and **three-notes-per-string** systems, two moveable patterns also accompany each scale in the **horizontal** system.

Get in sync!

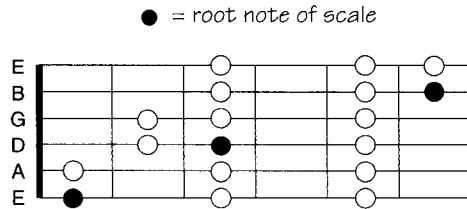
Practicing scales requires both hands to work together in perfect synchronization. Strike each note clearly and precisely, making sure you pick and finger the note at exactly the same time. Remember to always use **alternate picking** (successive downstroke and upstroke attacks) to avoid excessive hand strain.



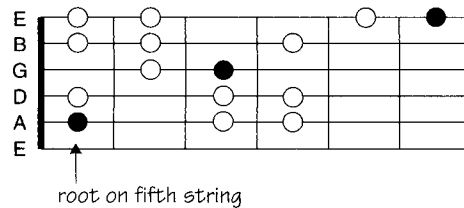
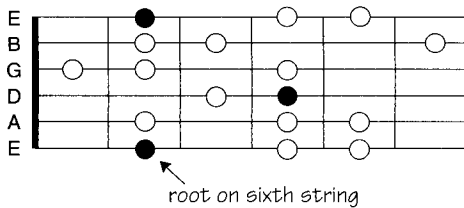
PRACTICE TIP: Make sure you play each scale forward and then backward. And, as always, start out slow and gradually build up speed as you build up confidence.

MOVEABLE PATTERNS

All of the scale patterns given in this book are **moveable**—that is, they can be easily shifted up or down the fingerboard to accommodate any key or root note. To do this, take note of the darkened root notes:



You can use any of these root notes as a point of reference for moving patterns. However, the roots located on the fifth and sixth strings are usually the easiest places to start.



To play the scale pattern in any particular key, match one of the root notes to its respective note on the fingerboard. (For example, the key of C has a root note of C.) The rest of the pattern follows accordingly—it's as simple as shifting the shape.

Check out the example below:

Moveable Major Scale Pattern	Beginning Fret (fret the root is on)	Resulting Scale
	fret 1	F major scale
	fret 3	G major scale
	fret 6	B \flat major scale
	fret 10	D major scale
	fret 12	E major scale

Picture this...

Use the **Guitar Fingerboard Chart** below to help you quickly locate all the notes within the first twelve frets. As described on the previous page, this chart will be especially useful as you begin using the moveable scale patterns in the pages ahead.

STRINGS
6th 5th 4th 3rd 2nd 1st
E A D G B E

FRETS

STRINGS
6th 5th 4th 3rd 2nd 1st

open →

first fret →

second fret →

third fret →

fourth fret →

fifth fret →

sixth fret →

seventh fret →

eighth fret →

ninth fret →

tenth fret →

eleventh fret →

twelfth fret →

E A D G B E

That's about all...good luck!

MAJOR

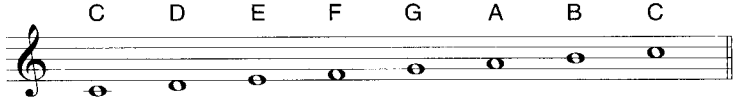
The most common scale used in music is the major scale, so learn it well! It consists of eight consecutive notes ascending or descending.

Step pattern: W-W-H-W-W-W-H

Formula: 1-2-3-4-5-6-7-1

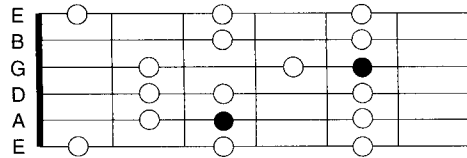
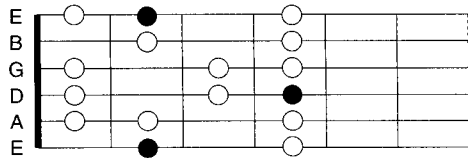
Notes: C-D-E-F-G-A-B-C

C major scale

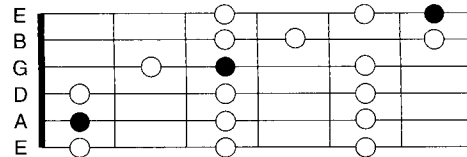
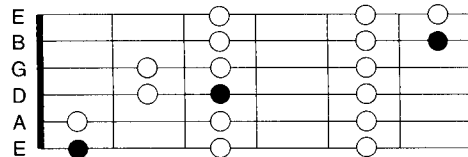


IMPORTANT: Scale patterns played on the guitar cover all of the notes within a certain fretboard area. In other words, the notes in the scale are repeated in different octaves for a more complete and practical fingering.

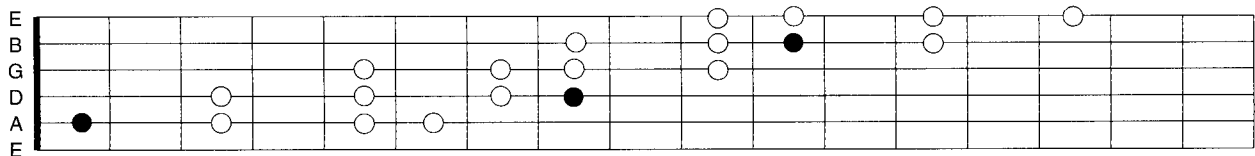
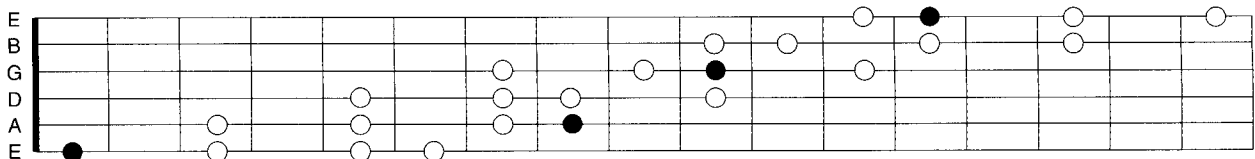
Caged System



Three-Notes-Per-String System



Horizontal System



MINOR

This scale is used in nearly all styles of Western music. It's sometimes referred to as the "pure minor," "relative minor," or "Aeolian mode."

Step pattern: W-H-W-W-H-W-W

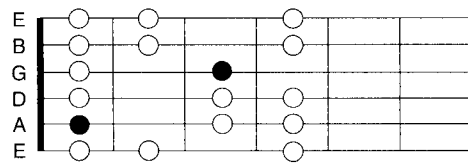
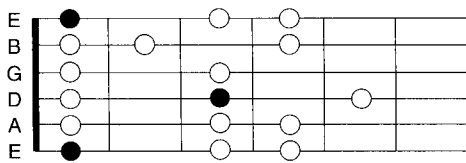
Formula: 1-2- \flat 3-4-5- \flat 6- \flat 7-1

Notes: C-D-E \flat -F-G-A \flat -B \flat -C

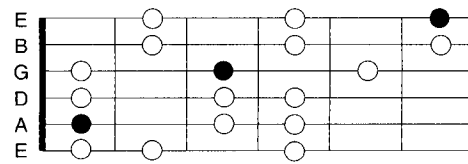
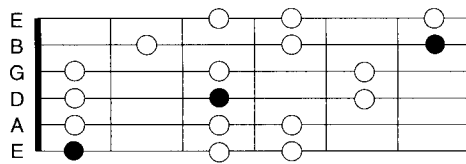
C natural minor scale



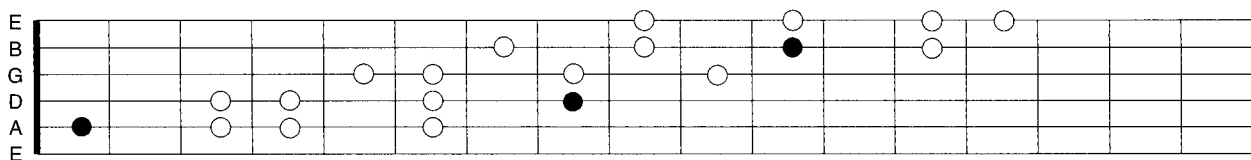
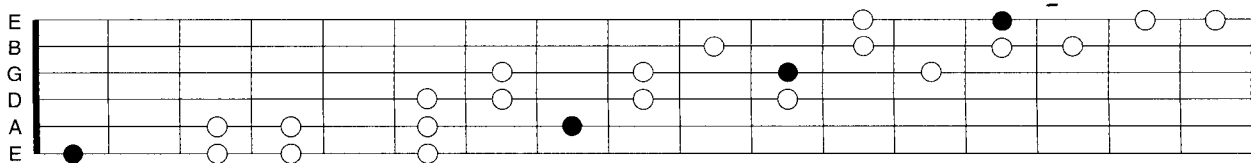
Caged System



Three-Notes-Per-String System



Horizontal System



HARMONIC MINOR


This scale provides another alternative minor scale type and is very common in classical music.

Step pattern: W-H-W-W-H-W+H-H

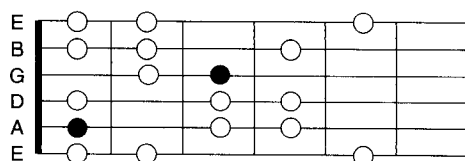
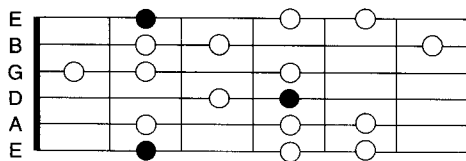
Formula: 1-2- \flat 3-4-5- \flat 6-7-8

Notes: C-D-E \flat -F-G-A \flat -B-C

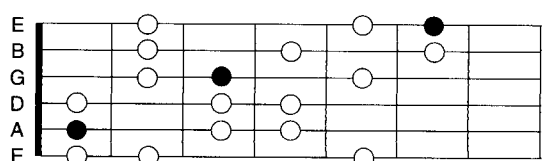
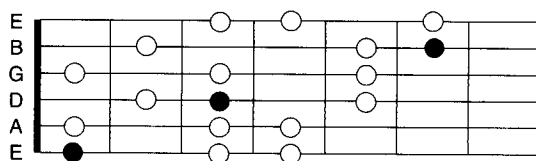
C harmonic minor scale



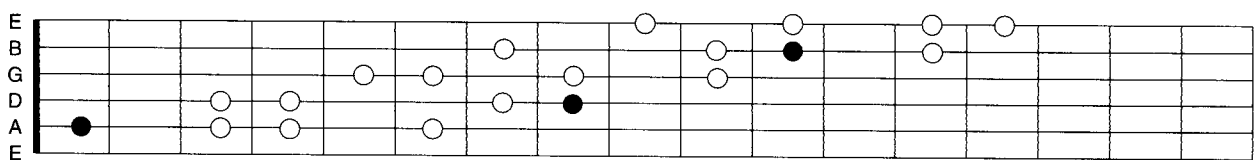
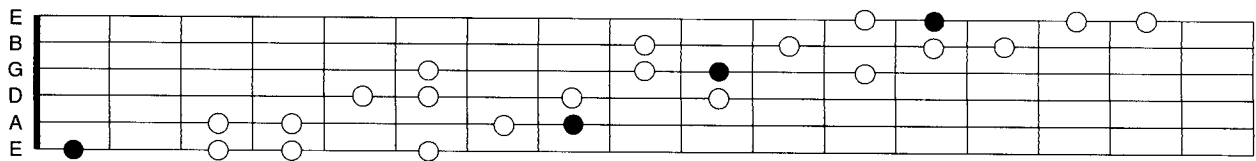
Caged System



Three-Notes-Per-String System



Horizontal System




MELODIC MINOR

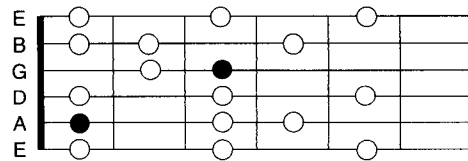
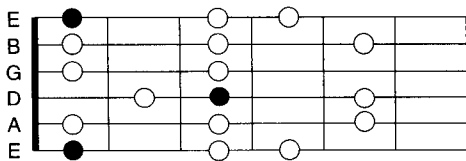
This scale can also be used over minor chords and is commonly referred to as the "jazz minor" scale.

Step pattern: W-H-W-W-W-W-H
 Formula: 1-2- \flat 3-4-5-6-7-8
 Notes: C-D-E \flat -F-G-A-B-C

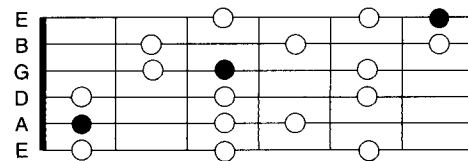
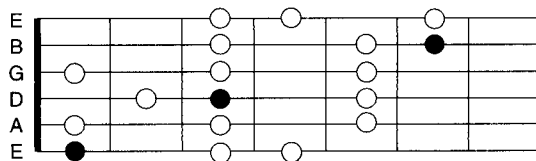
C melodic minor scale



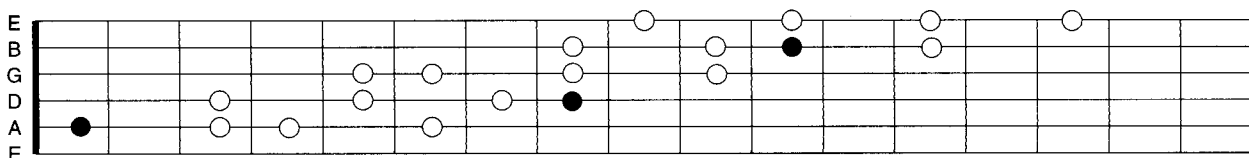
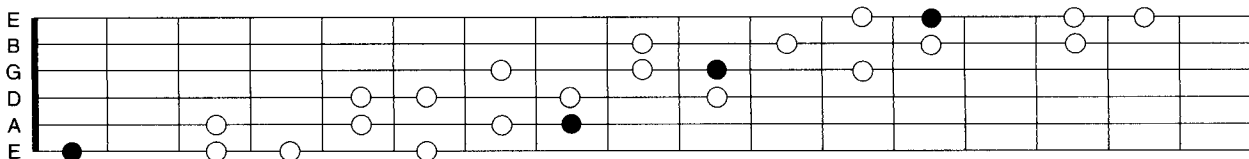
Caged System



Three-Notes-Per-String System



Horizontal System



MINOR PENTATONIC

This is undeniably the most prevalent scale used by rock and blues players. As its name suggests ("penta" means five), this scale contains only five different tones.

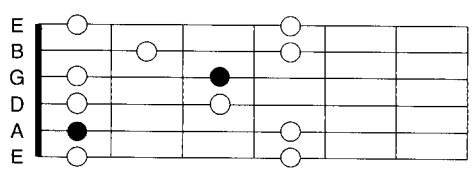
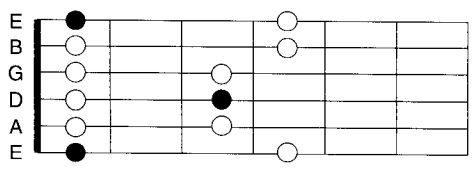
Step pattern: W+H-W-W-W+H-W

Formula: 1- \flat 3-4-5- \flat 7

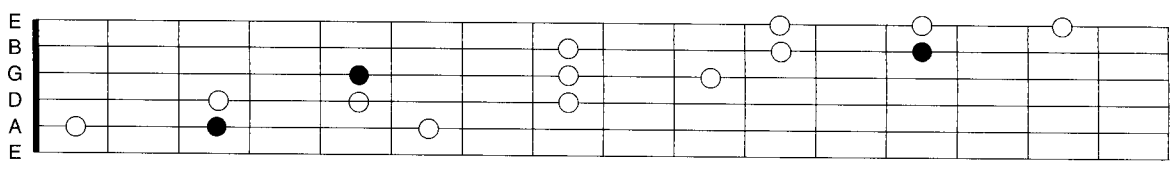
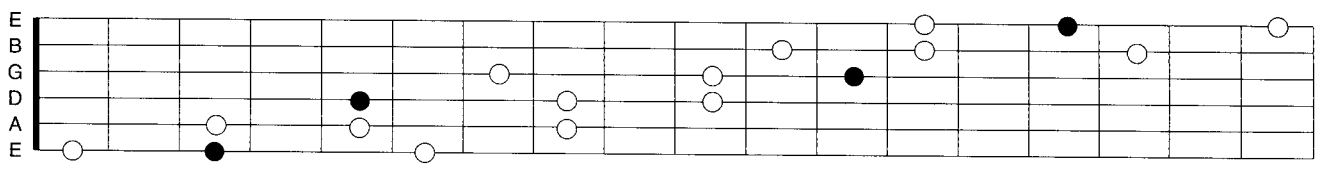
Notes: C-E \flat -F-G-B \flat -C

C minor pentatonic scale

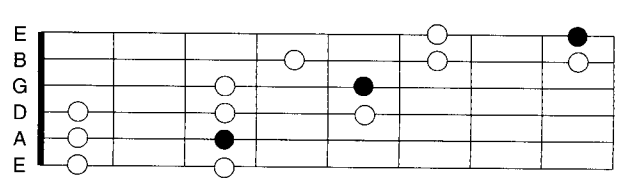
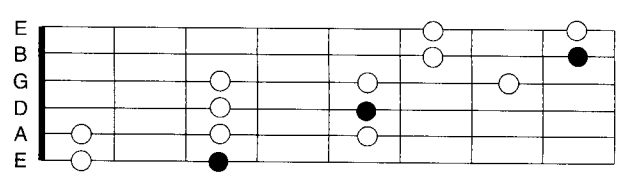
Caged System



Three-Notes-Per-String System



Horizontal System



MAJOR PENTATONIC

This is another 5-tone (“pentatonic”) scale common in many styles of music. It has a “bright” sound that especially lends itself well to country music.

Step pattern: W-W-W+H-W-W+H

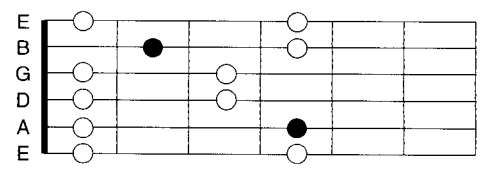
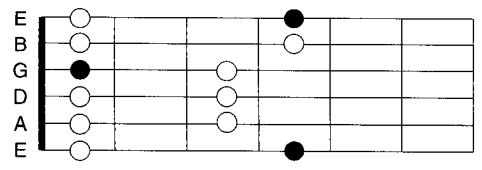
Formula: 1-2-3-5-6-1

Notes: C-D-E-G-A-C

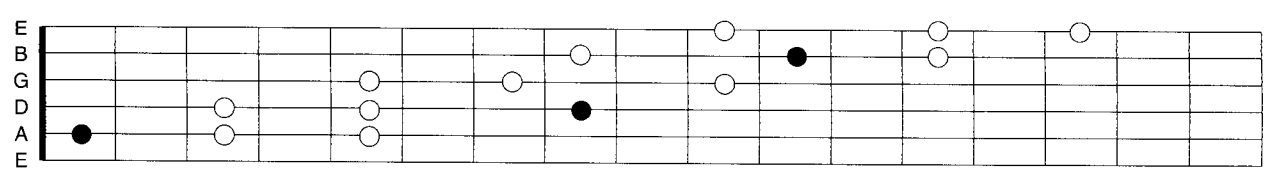
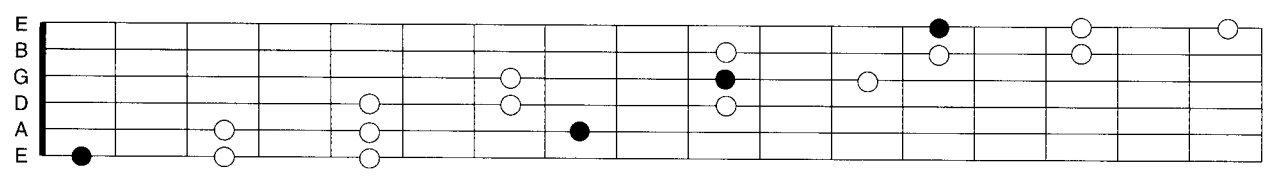
C major pentatonic scale



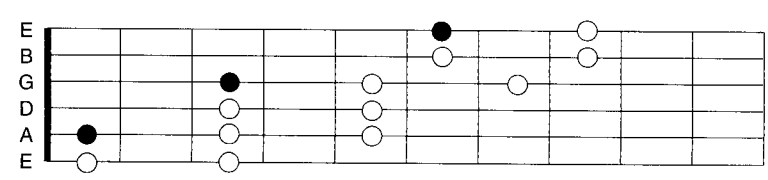
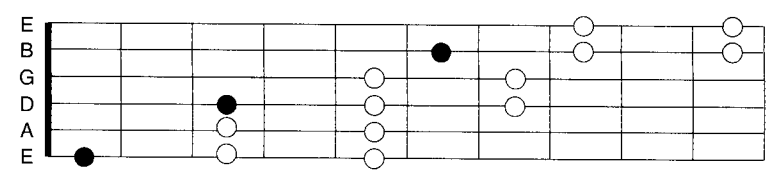
Caged System



Three-Notes-Per-String System



Horizontal System



BLUES


The blues scale is common in jazz, rock, and (you guessed it!) **blues music**. It contains an added blues note ($\flat 5$) from the minor pentatonic scale but has only six tones.

Step pattern: W+H-W-H-H-W+H-W

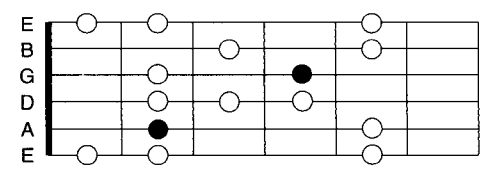
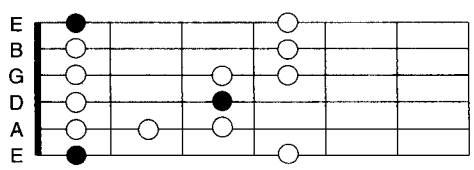
Formula: 1- $\flat 3$ -4- $\flat 5$ -5- $\flat 7$ -1

Notes: C-E \flat -F-G \flat -G-B \flat -C

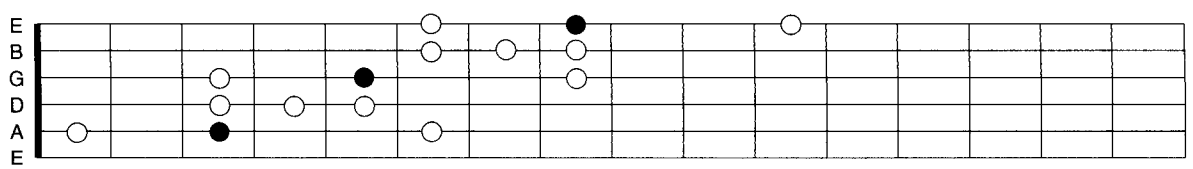
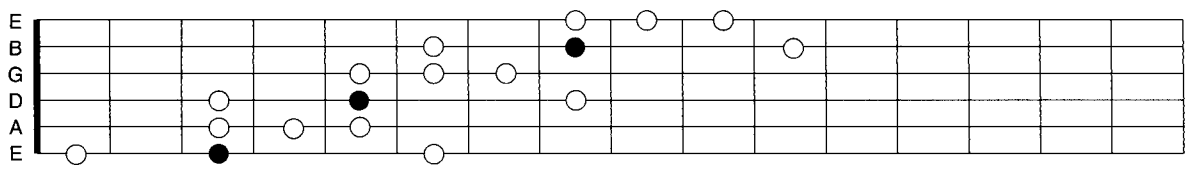
C blues scale



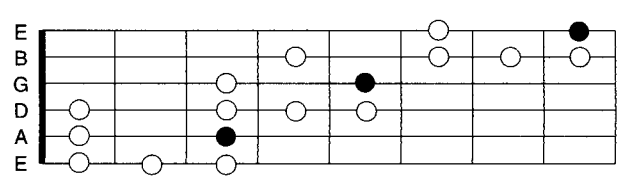
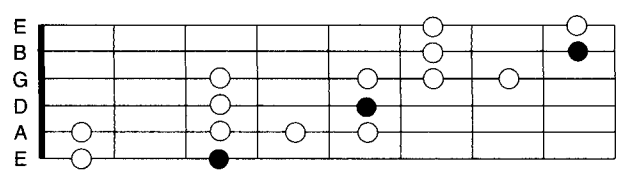
Caged System



Three-Notes-Per-String System



Horizontal System



DIMINISHED

This scale is popular in jazz and heavy metal music (turn it up!). NOTE: It's not a typo, there really are eight different tones in this scale.

Step pattern: W-H-W-H-W-H-W-H

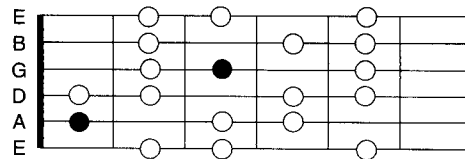
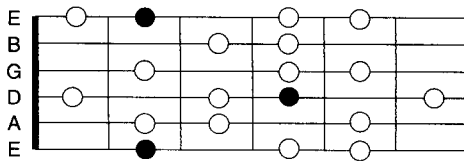
Formula: 1-2- \flat 3-4- \flat 5- \flat 6-6-7-8

Notes: C-D-E \flat -F-G \flat -A \flat -A-B-C

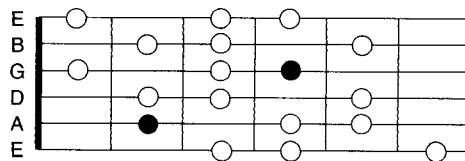
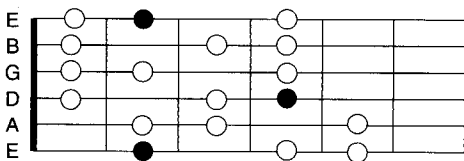
C diminished scale



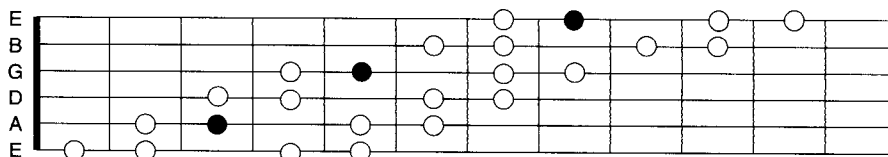
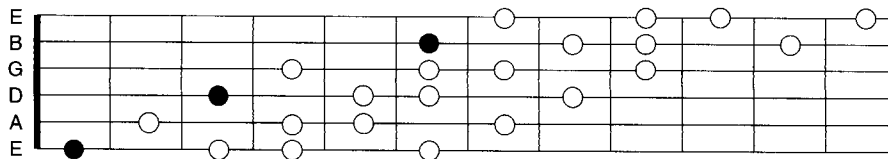
Caged System



Three-Notes-Per-String System



Horizontal System



MODES

Modes are like scales—each uses a specific pattern of whole steps and half steps. The difference is that a mode is not related to the key of its root note. That is, a Dorian mode built on C is not in the key of C. The seven modes in common practice today are derived from the seven notes of the major scale:

$$\begin{array}{c} \text{C Ionian} \\ \text{(same as C major)} \end{array} = \begin{array}{cccccccc} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} & \text{W} & \text{H} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{C} & \text{D} & \text{E} & \text{F} & \text{G} & \text{A} & \text{B} & \text{C} \end{array}$$

$$\text{D Dorian} = \begin{array}{cccccccc} & \text{W} & \text{H} & \text{W} & \text{W} & \text{W} & \text{H} & \text{W} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{D} & \text{E} & \text{F} & \text{G} & \text{A} & \text{B} & \text{C} & \text{D} \end{array}$$

$$\text{E Phrygian} = \begin{array}{cccccccc} & \text{H} & \text{W} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{E} & \text{F} & \text{G} & \text{A} & \text{B} & \text{C} & \text{D} & \text{E} \end{array}$$

$$\text{F Lydian} = \begin{array}{cccccccc} & \text{W} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} & \text{H} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{F} & \text{G} & \text{A} & \text{B} & \text{C} & \text{D} & \text{E} & \text{F} \end{array}$$

$$\text{G Mixolydian} = \begin{array}{cccccccc} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} & \text{H} & \text{W} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{G} & \text{A} & \text{B} & \text{C} & \text{D} & \text{E} & \text{F} & \text{G} \end{array}$$

$$\begin{array}{c} \text{A Aeolian} \\ \text{(same as A natural minor)} \end{array} = \begin{array}{cccccccc} & \text{W} & \text{H} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{A} & \text{B} & \text{C} & \text{D} & \text{E} & \text{F} & \text{G} & \text{A} \end{array}$$

$$\text{B Locrian} = \begin{array}{cccccccc} & \text{H} & \text{W} & \text{W} & \text{H} & \text{W} & \text{W} & \text{W} \\ & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup & \diagdown & \diagup \\ \text{B} & \text{C} & \text{D} & \text{E} & \text{F} & \text{G} & \text{A} & \text{B} \end{array}$$

As you can see, each mode is actually a variation of the major scale. They differ only in the arrangement of the intervals.

The next page gives you two usable patterns for each of the seven modes...

