Guitar Scales, Arpeggios and Chords

Part I

Diatonic Scale,

Dyad/Triad Arpeggios,

Pentatonic Scales,

Ionian and Aeolian Modes

in

CAGED, 3nps and MiniBox Systems

Jan de Jongh

GitHub Repository: ***https://github.com/jandejongh/guitar***

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Introduction

This document series contains scales, patterns, chords, etc. for guitar mostly for my own personal use (practice). I've released this material (XXX license) in public to hopefully the benefit of others.

In the document series, I focus on pattern shapes on the guitar fretboard exclusively, and do not provide *any* further details on the musical semantics, left-hand fingering, right-hand picking or tapping techniques, pick slanting, timing, phrasing, bending, vibrating, hammer-on-ing, pull-off-ing, pinch-harmonicking, interval practicing, hand positioning, muting, sweep-arpeggiating, your breathing, your pick thickness, your effects order, etc., etc., all of the latter aspects are probably equally if not more important for studying guitar from a *musician's* point of view than the mere shapes of the patterns on the fretboard. Instead, the only objective of this series is to provide a complete reference to CAGED, 3nps and MiniBox systems (for now, restricted to the Ionian and Aeolian modes of the diatonic scale) such that you can navigate seamlessly on the fretboard, switching from one system to the other, as well as switching between different ("adjacent") positions.

In order for these series (well, at least for part I) to be useful to you, I think you need the following luggage:

- The structure of your fretboard in terms of tones in standard tuning, inter-string intervals, and blindly name/find any CDEFGAB note on any string.
- An understanding of the meaning and structure of *chords*, *dyads*, and *triads*. Of major, minor, diminished and augmented triads. Power (1-5 or 1-5-1) chords.
- An understanding of the diatonic scale, the numbering of its notes, the intervals between these notes and their naming.
- The seven modes of the diatonic scale: their names and their relative starting position (Ionian, Dorian, Phrygian, Lydian, Mixolydian, Aeolian, Locrian). The notion that the Aeolian mode/chord is the "relative minor" to the Ionian.
- Immediate comprehension of what chords connect to a diatonic scale in 1-3-5 (I, IIm, IIIm, IV, V, VIIm, VIIImb5) and in 1-3-5-7 (IM7, IIm7, IIIm7, IVM7, V7, VIm7, VIIm7b5).
- Knowledge of major 7th and dominant 7th chords.
- Knowledge of sus2 and sus4 chords.
- Familiarity with the three types of diminished chords (half diminished or mb5, m7b5, full diminished).
- The open-string chords C, A, G, E, D, Am, Em, Dm, as well as C7, A7, AM7, G7, E7, D7, DM7, Am7, Em7, Dm7. Know the positions of their root, 3rd, 5th and 7th notes in the chords.
- Barred versions of E, A, Em, Am, C/D, E7, A7, Em7, Am7, C7/D7 chords.

- The framework outlined by the CAGED system and its (diatonic) Ionian and Aeolian mode shapes in all (CAGED) positions.
- Fully mastering the the pentatonic scale in major (Ionian) and minor (Aeolian) modes in all five positions.
- The 3nps systems with its seven distinct shapes, each named after the diatonic mode at its starting position on the lower-E string. The fact that in 3nps, the pattern (3xpI, 2xpII, 2xpIII) repeats itself 7 (virtual) strings from our starting position. The fact that the deviating interval between the G and B strings (maj3 versus 4) is dealt with by a simple shift in position.
- The all-fourths tuning and its relevance to 3nps and 4nps (both *not* relevant in part I).

Please make sure you master (at least to some extent) these theoretical and practical prerequisites before using this document.

Notation

In this series, patterns are represented on the six string of a guitar in standard tuning, unless otherwise noted. In each figures used, the six horizontal lines represent the strings of the guitar with the high-E (first string) on top and the low-E (sixth string) at the bottom of the figure. Vertical lines represent frets on the fretboard. All shapes shown are at an arbitrary position on the fretboard (between top on the left and neck on the right), and ignore the possible effects of the top and the end of the neck (think of it as a six-string guitar of infinite length with standard tuning).

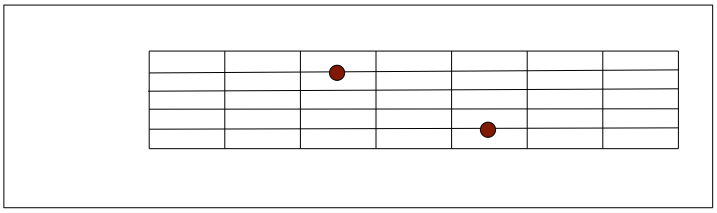
The notes in the shapes in a scale are color-coded as a function of their position in the scale according to the following (almost obsolete by now) color code for resistor values:

Note number	Notation
1	
2	
3	
4	
5	
6	
7	

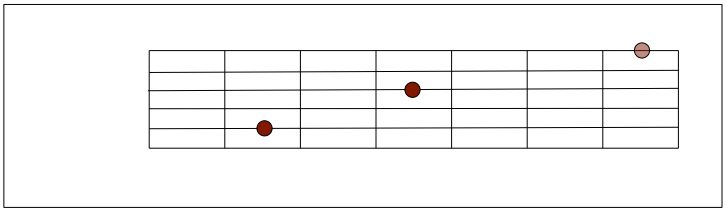
Admittedly, on my printer, the color nuances between notes 2 and 3 (red and orange, respectively), and between notes 6 and 7 (blue and violet, respectively) are quite low. We hope to improve this in a future release.

CAGED root notes [major/minor/dim/aug]

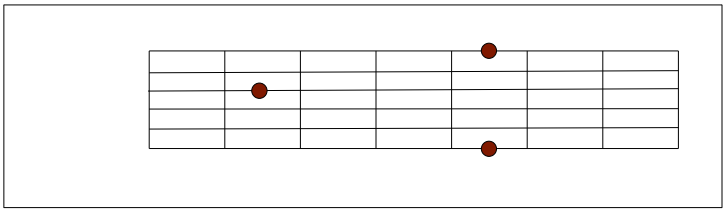
C-shape



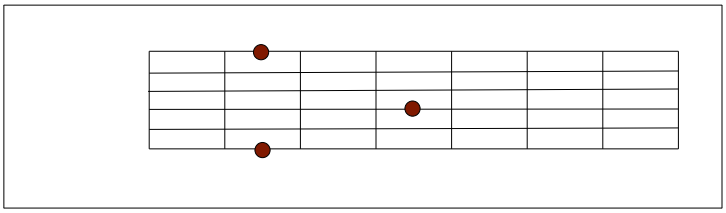
A-shape



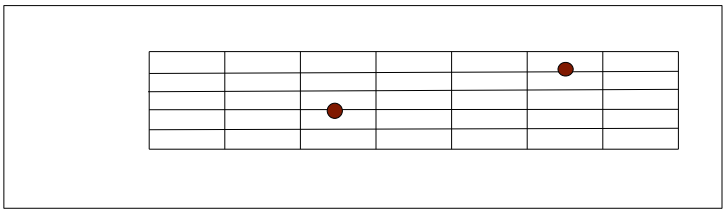
G-shape



E-shape

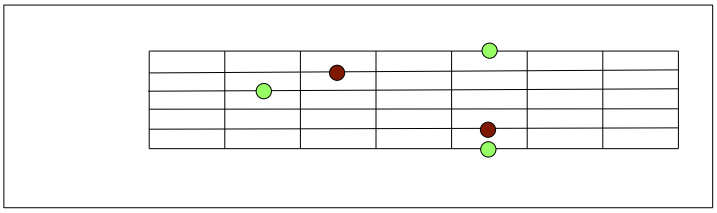


D-shape

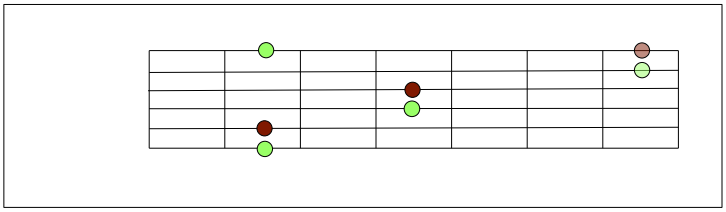


CAGED 1-5 dyad "arpeggios" [major/minor]

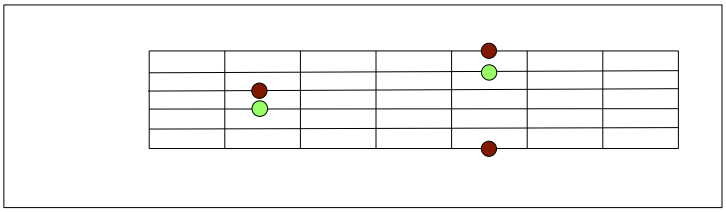
C-shape



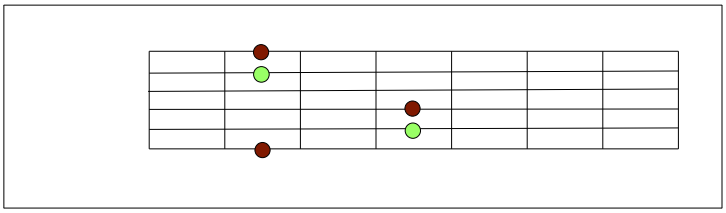
A-shape



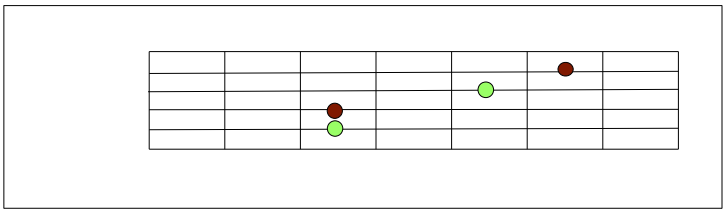
G-shape



E-shape

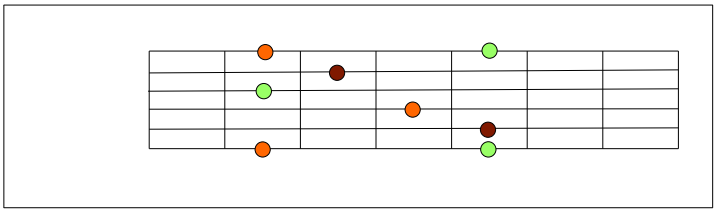


D-shape

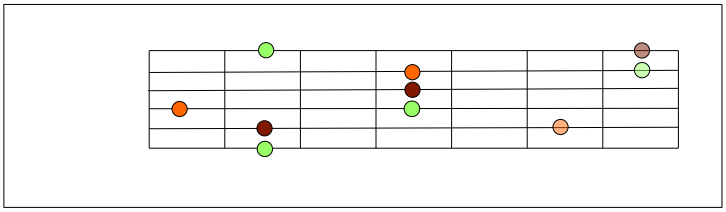


CAGED 1-3-5 arpeggios [major]

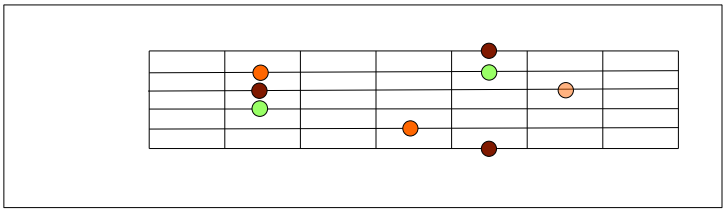
C-shape



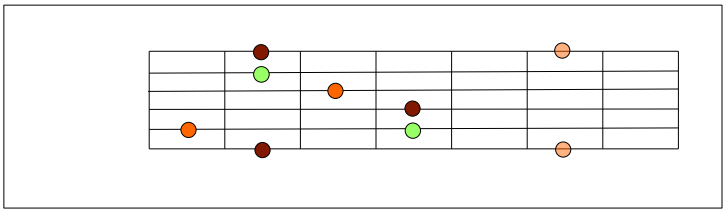
A-shape



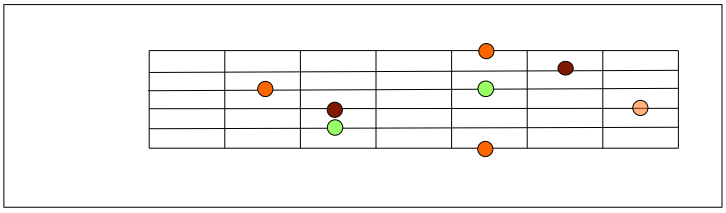
G-shape



E-shape

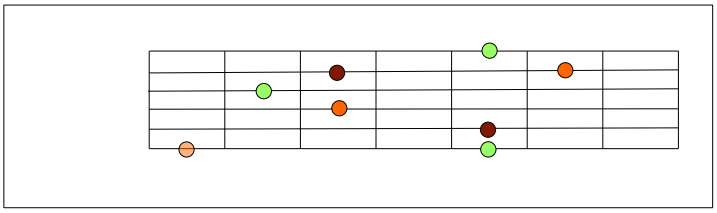


D-shape

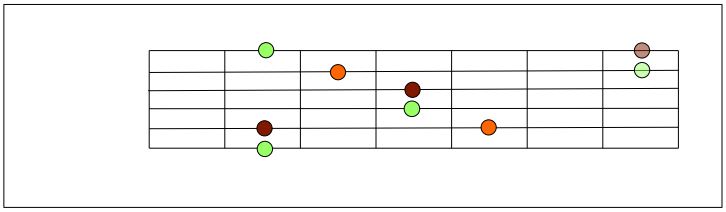


CAGED 1-b3-5 arpeggios [minor]

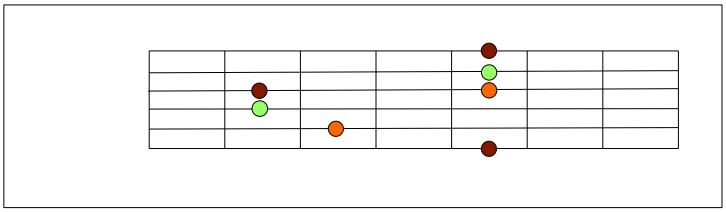
C-shape



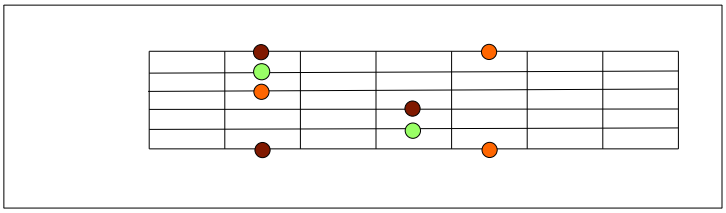
A-shape



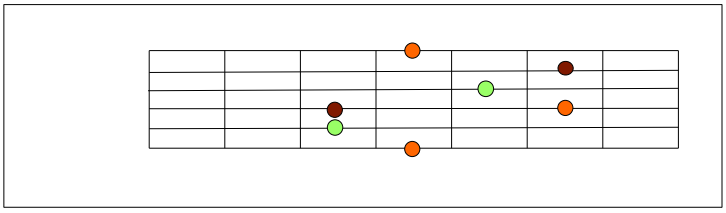
G-shape



E-shape

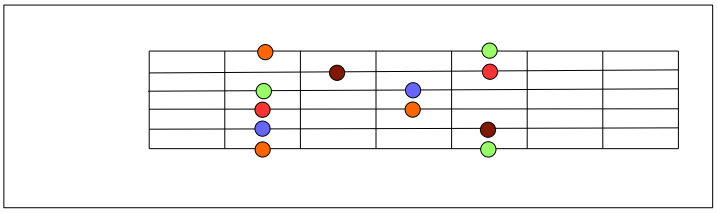


D-shape

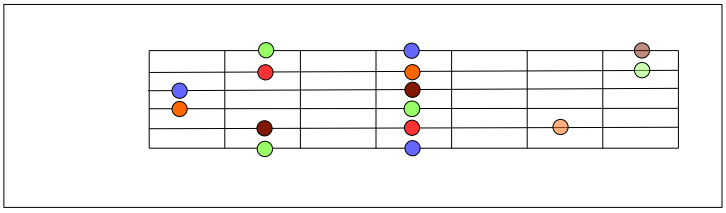


CAGED 1-2-3-5-6 "major pentatonic" scale [major]

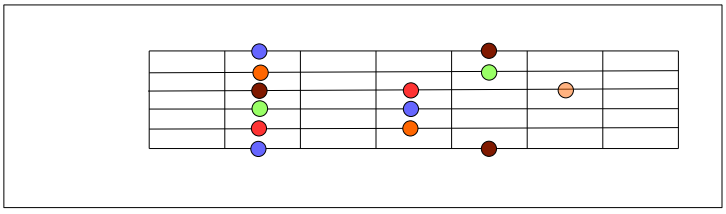
C-shape



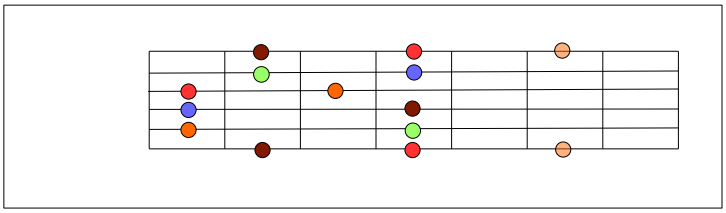
A-shape



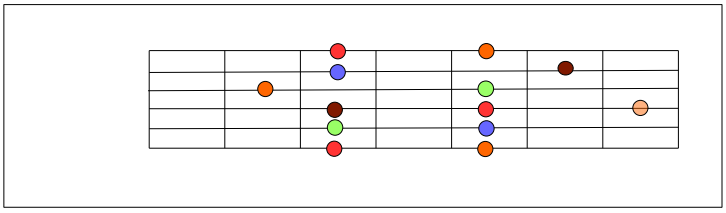
G-shape



E-shape

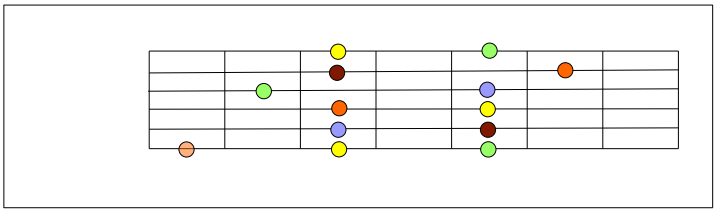


D-shape

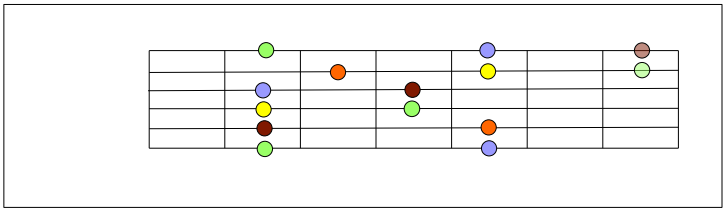


CAGED 1-b3-4-5-b7 "minor pentatonic" scale [minor]

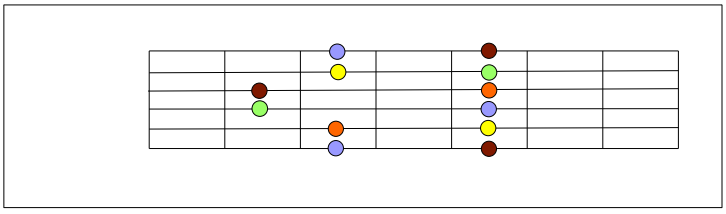
C-shape



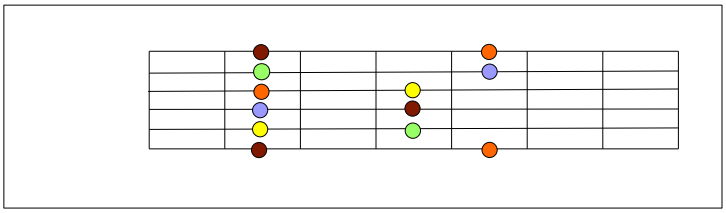
A-shape



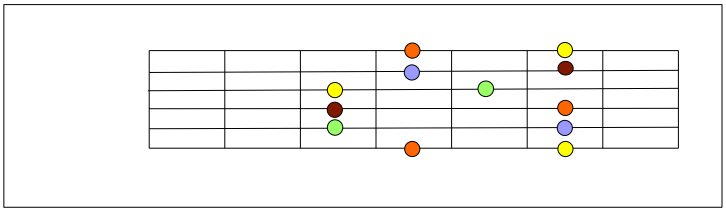
G-shape



E-shape

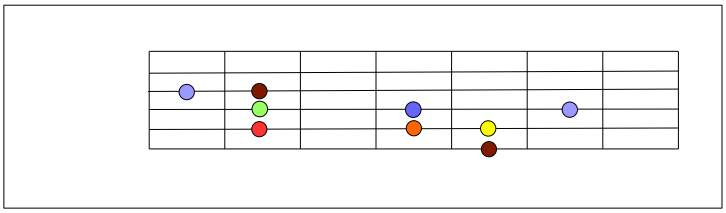


D-shape

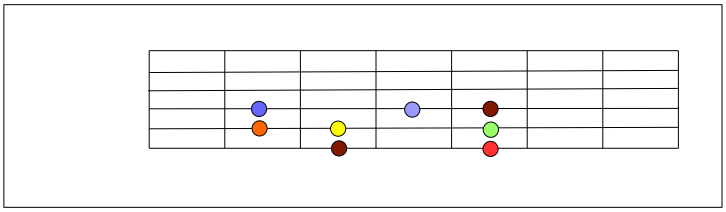


Ionian mini-boxes on lower-E string

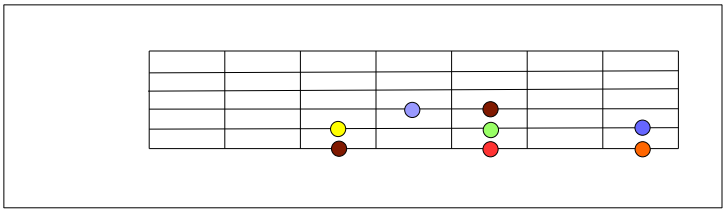
G-shape



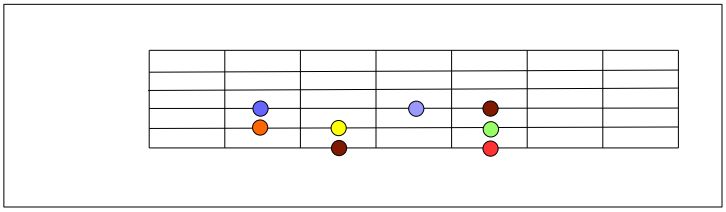
E-shape



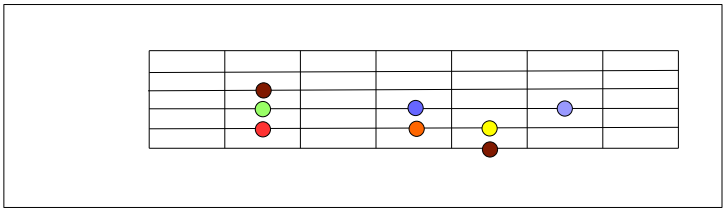
3nps "Ionian shape"



3nps "Locrian shape"

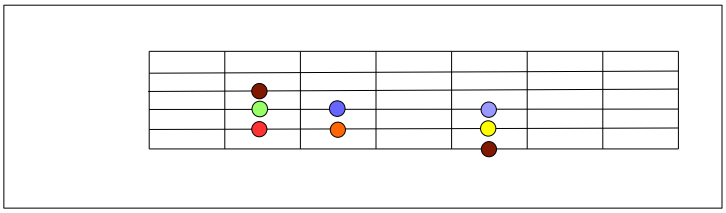


3nps "Aeolian shape"

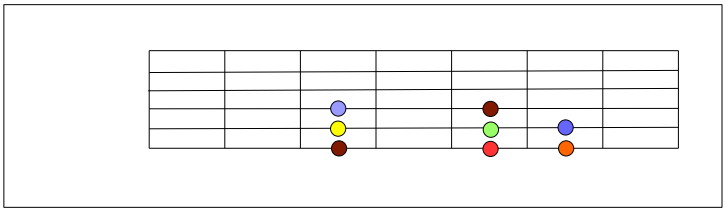


Aeolian mini-boxes on lower-E string

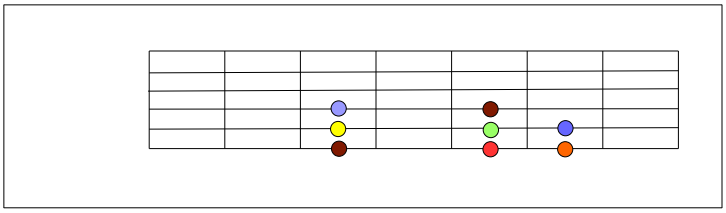
G-shape



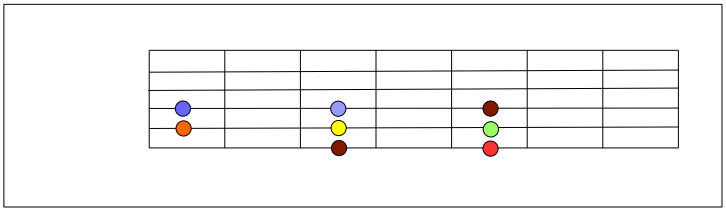
E-shape



3nps "Aeolian shape"



3nps "Mixolydian shape"



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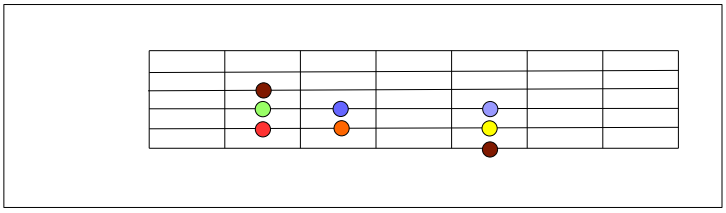
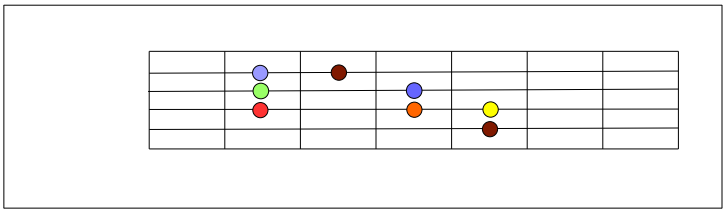
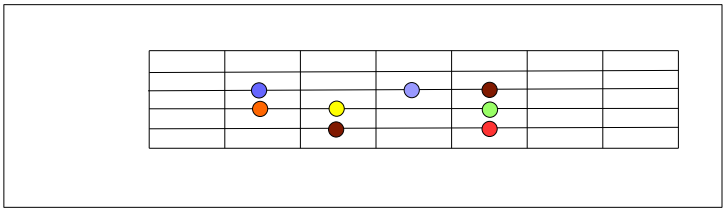


Ionian mini-boxes on A string

C-shape



A-shape



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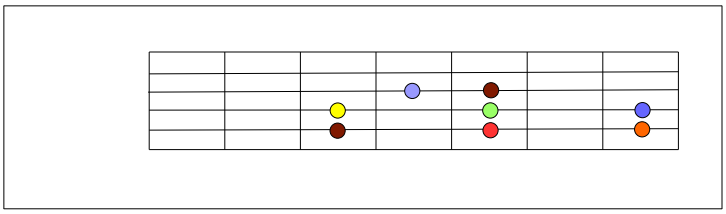

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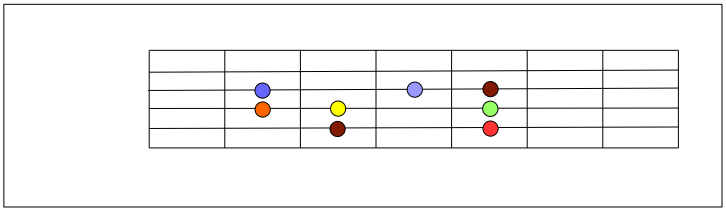
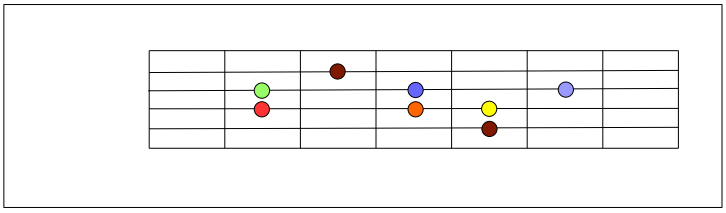
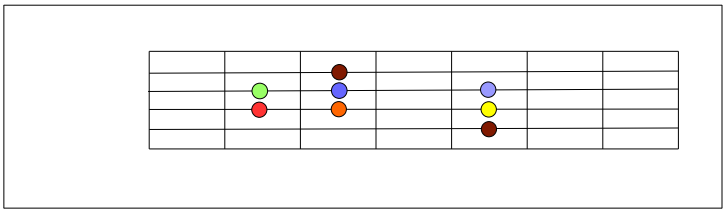


3nps "Phrygian shape"

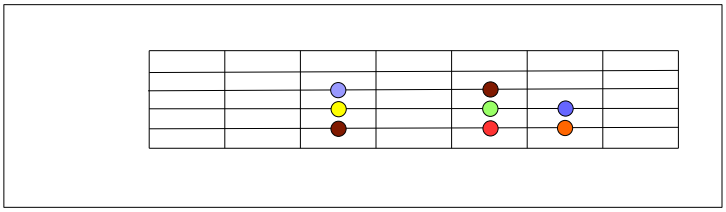


Aeolian mini-boxes on A string

C-shape



A-shape



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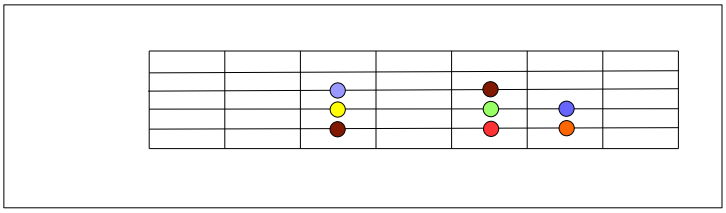
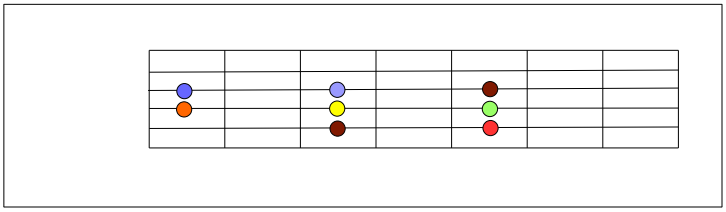
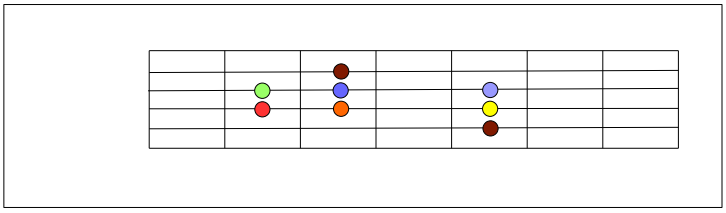


3nps "Dorian shape"

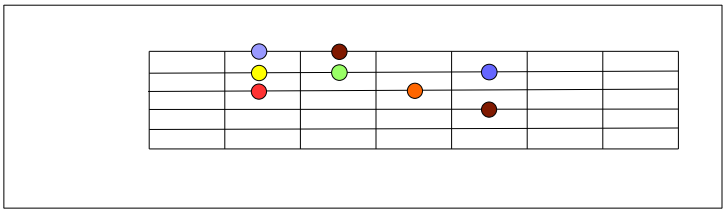


3nps "Ionian shape"

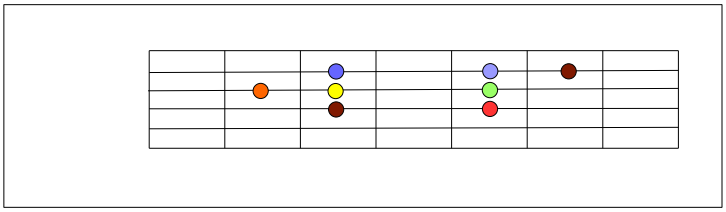


Ionian mini-boxes on D string

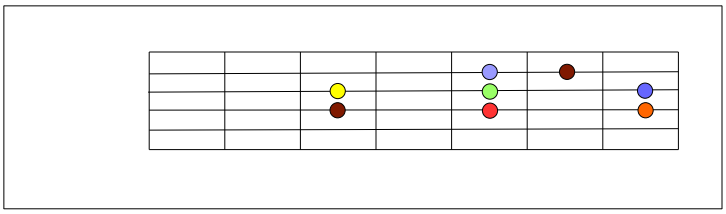
E-shape



D-shape



3nps "Dorian shape"



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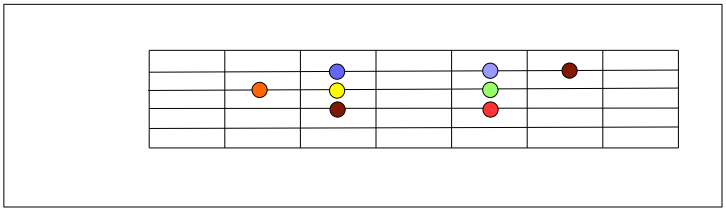
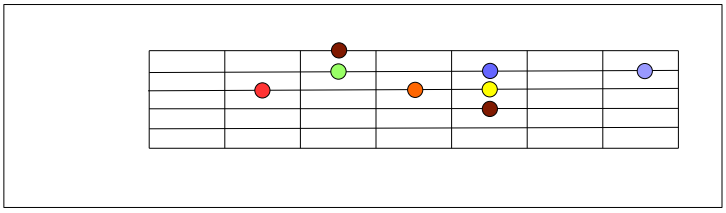
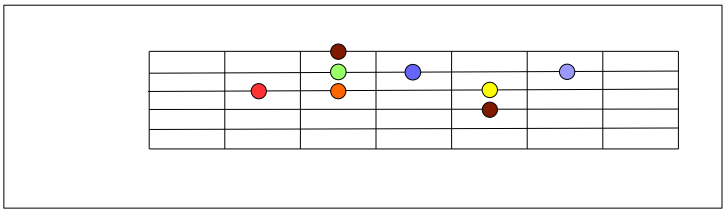


3nps "Locrian shape"

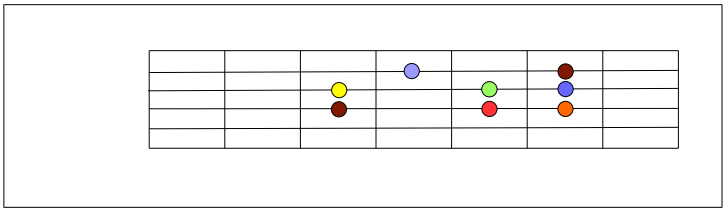


Aeolian mini-boxes on D string

E-shape



D-shape



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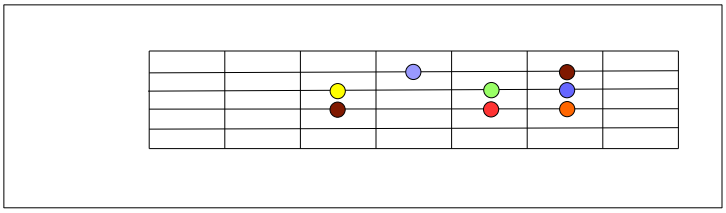

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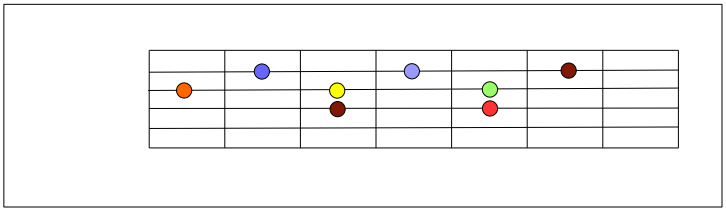
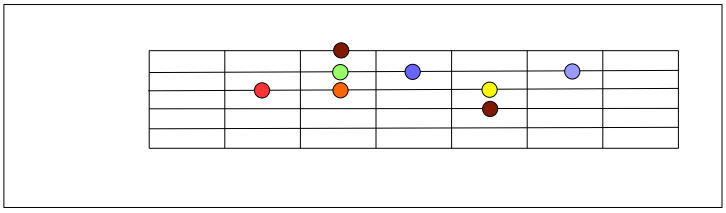
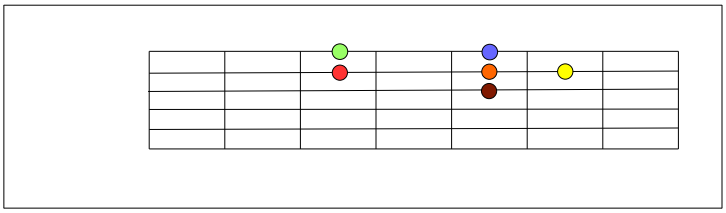


3nps "Ionian shape"

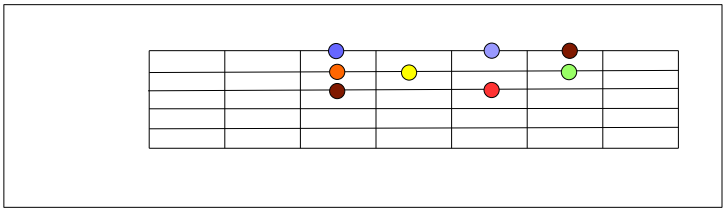


Ionian mini-boxes on G string

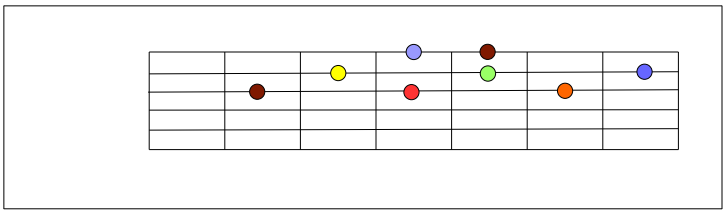
A-shape



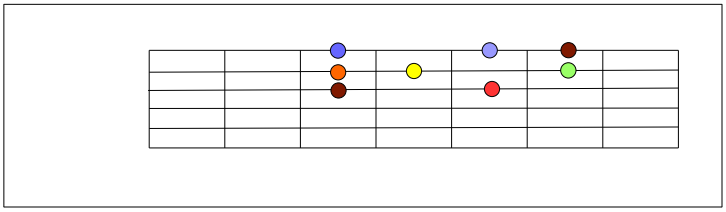
G-shape



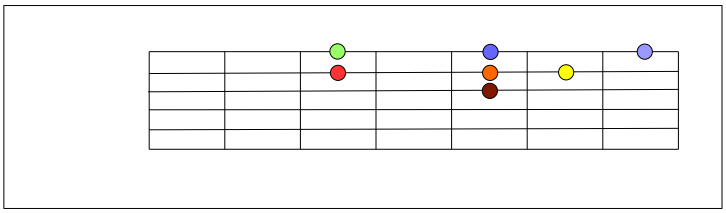
3nps "Aeolian shape"



3nps "Mixolydian shape"

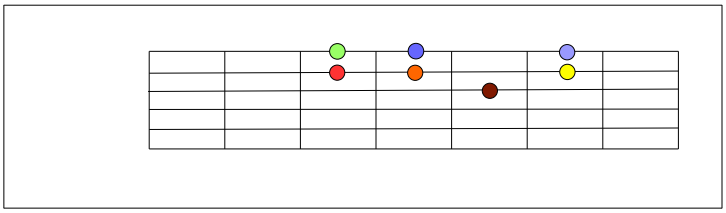


3nps "Lydian shape"

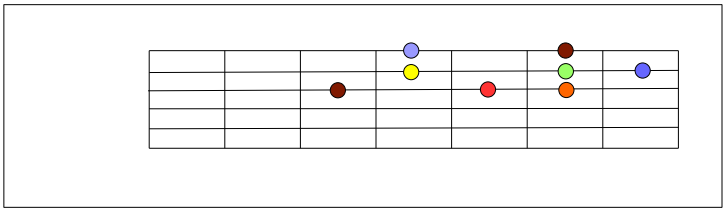


Aeolian mini-boxes on G string

A-shape



G-shape



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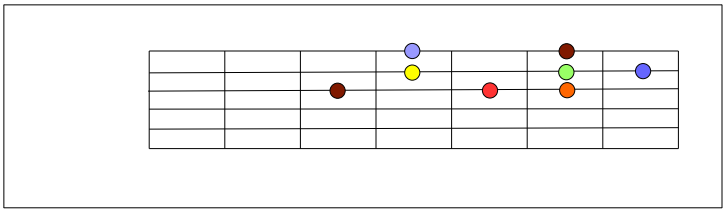
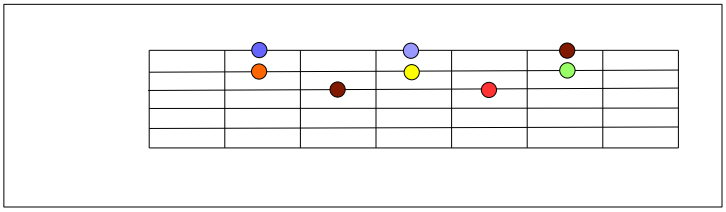
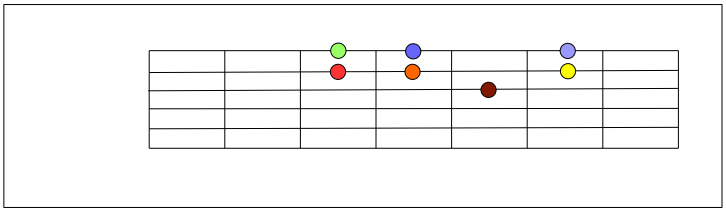


3nps "Phrygian shape"

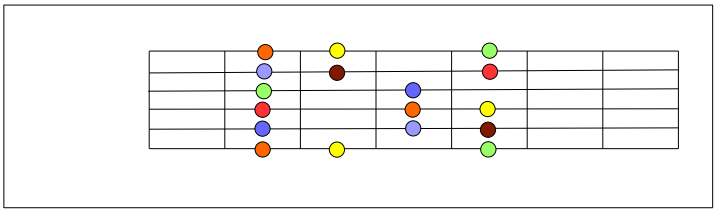


3nps "Dorian shape"

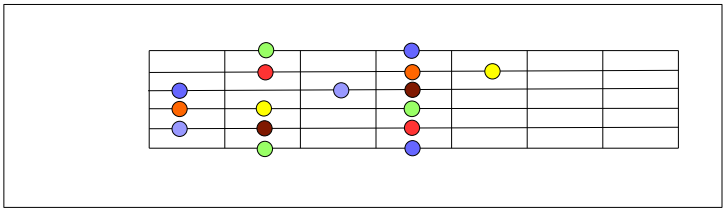


CAGED Ionian 6-string shapes

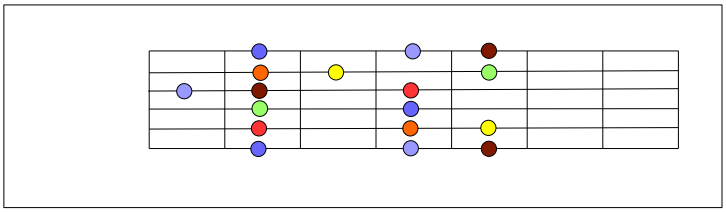
C-shape



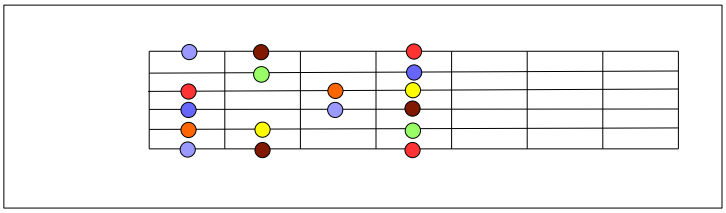
A-shape



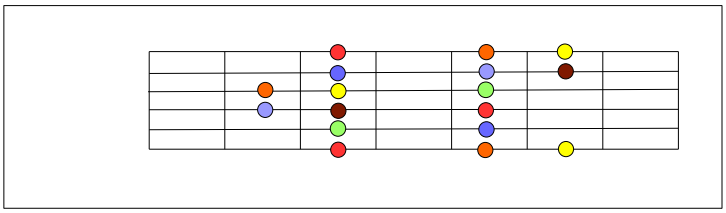
G-shape



E-shape

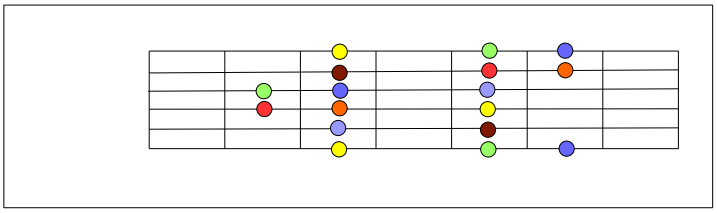


D-shape

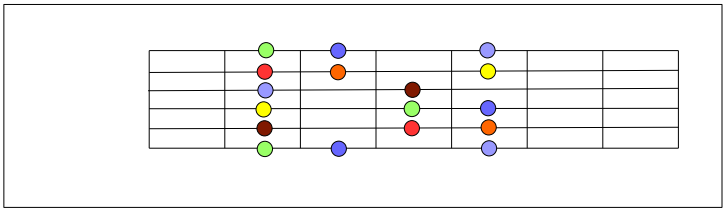


CAGED Aeolian 6-string shapes

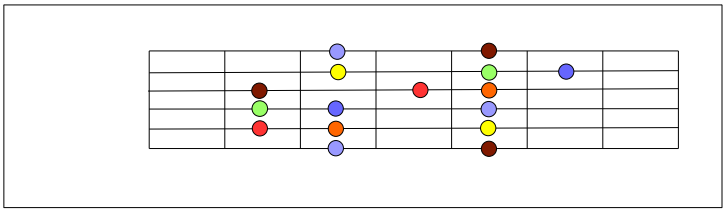
C-shape



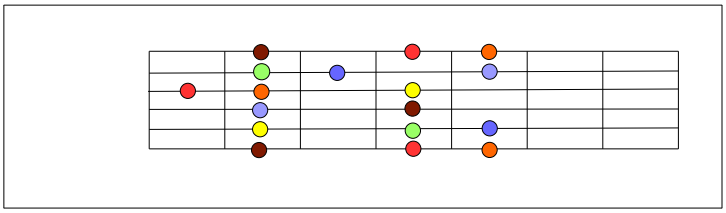
A-shape



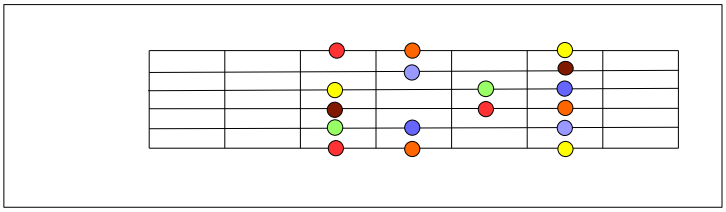
G-shape



E-shape

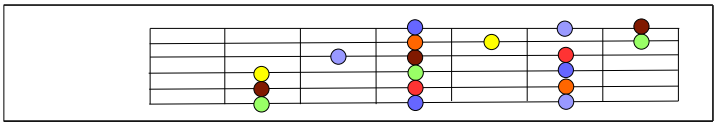


D-shape

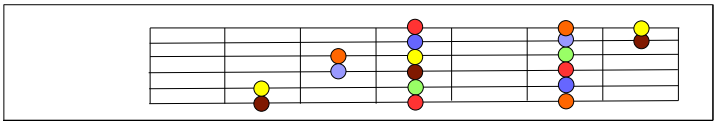


3nps Ionian 6-string shapes

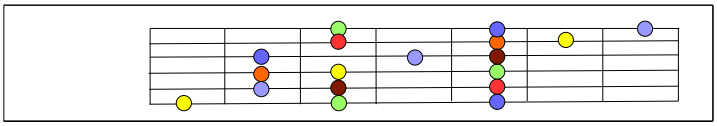
Mixolydian shape



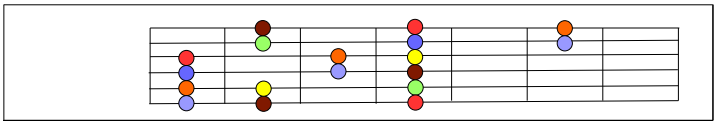
Ionian shape



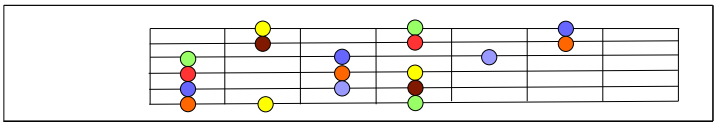
Lydian shape



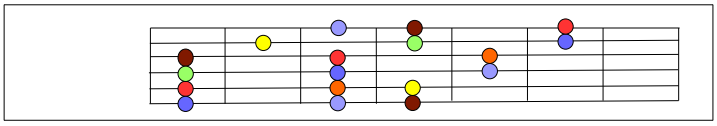
Locrian shape



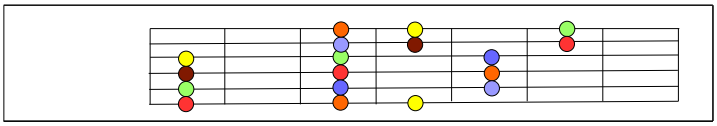
Phrygian shape



Aeolian shape

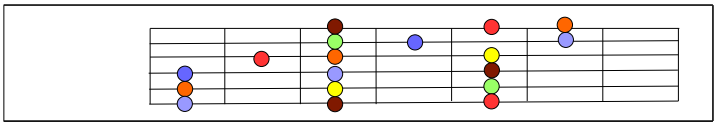


Dorian shape

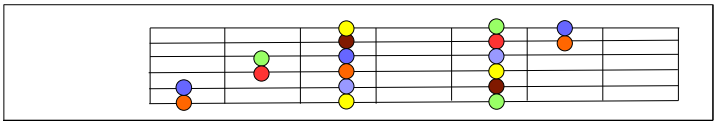


3nps Aeolian 6-string shapes

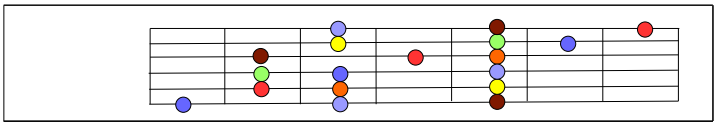
Mixolydian shape



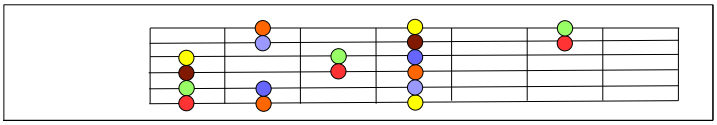
Ionian shape



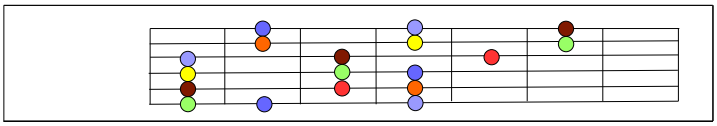
Lydian shape



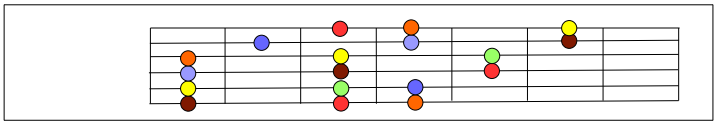
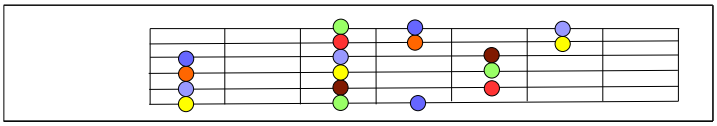
Locrian shape



Phrygian shape



Aeolian shape



Dorian shape