Three Notes Per String one system for every major scale and mode

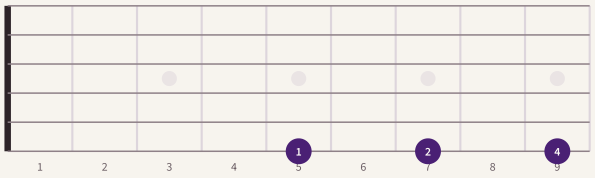
You do not need a book of scale diagrams. Every three-notes-per-string pattern of the major scale, in every key and every mode, is three small finger shapes arranged by two rules. This page is a synthesis of Michael Pillitiere's Building the Better Scale, redrawn with this site's diagrams.

Open C major in the fretboard explorer

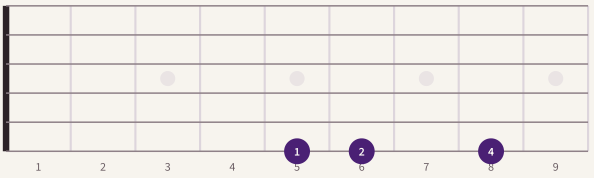
THE IDEA

Play the major scale with exactly three notes on every string and something tidy happens: each string can only carry one of three interval layouts. Either two whole steps, or a half step then a whole step, or a whole step then a half step. Call them X, Y, and Z. Seven patterns of eighteen notes collapse into three shapes plus the rules for stacking them, which is a far better deal for your memory than 126 dots.

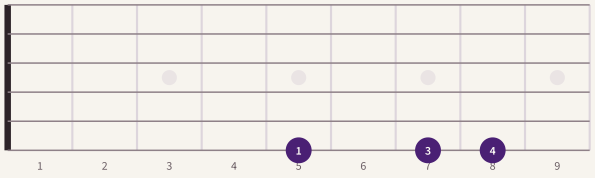
THE THREE SHAPES



X: whole step, whole step (finger numbers on the dots)



Y: half step, whole step (finger numbers on the dots)



Z: whole step, half step (finger numbers on the dots)

THE ORDER AND THE TWO RULES

Across the strings the shapes always appear in the same repeating cycle: X X X Y Y Z Z, then around again, forever. A six-string guitar only ever shows you a six-shape window of that cycle, which is why the seven patterns look different from each other while being the same wheel viewed from seven starting points.

> The cycle, on an endless guitar: … X X X Y Y Z Z X X X Y Y Z Z …

1. When a Y shape follows an X shape, its first finger sits one fret higher than the X before it.

2. Crossing from the 3rd string to the 2nd string, the first finger also moves one fret higher. This is the guitar's own tuning quirk, the same one that bends every barre chord.

BUILDING ANY PATTERN

To build any pattern on the spot you need two facts: which scale degree you are starting from, and the first shapes of that pattern. The cycle and the two rules fill in the rest string by string. Degrees 1 and 5 both open with X X; the difference is that degree 5 runs to a third X while degree 1 does not, and that is the single exception worth memorizing.

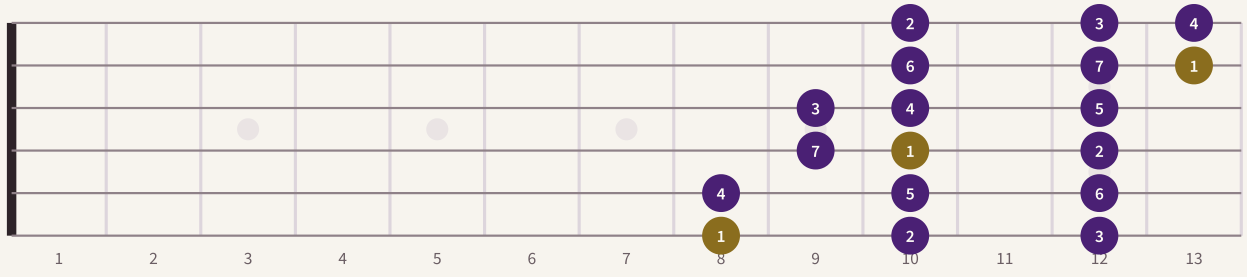
Starting degree	First shapes	Mode
1	XX	Ionian
2	ZX	Dorian
3	YZ	Phrygian
4	XY	Lydian
5	XXX	Mixolydian
6	ZZ	Aeolian
7	YY	Locrian

THE PATTERNS ARE THE MODES

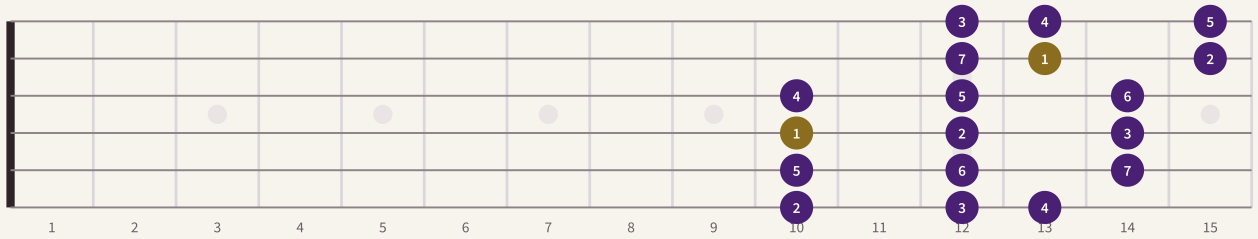
Because each pattern starts on a different degree of the scale, each pattern simply is one of the seven modes, played from its own root. Learn the seven patterns and you have learned every mode's fingering; deciding which mode you are hearing is then the job of the root underneath, not your fretting hand.

This site's mode guides teach the same seven modes as a pentatonic skeleton plus color tones, and the fretboard explorer draws them that way. The two framings are complementary lenses on one object. The skeleton lens tells you what to lean on when improvising; the three-shape lens tells you how to run the whole scale fluently up and across the neck. Use the explorer to see the skeleton inside any pattern on this page.

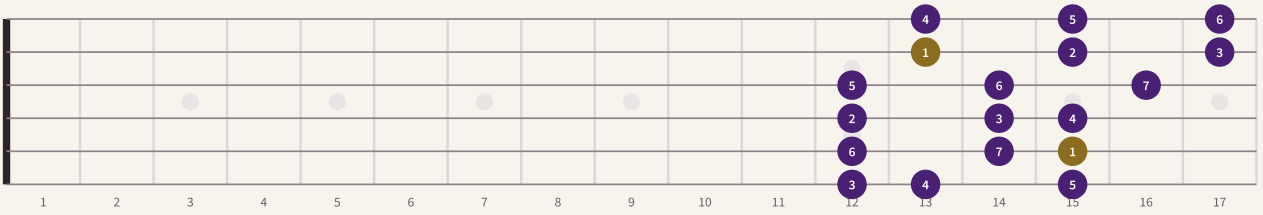
PATTERN 1: FROM DEGREE 1, SHAPES X X Y Y Z Z



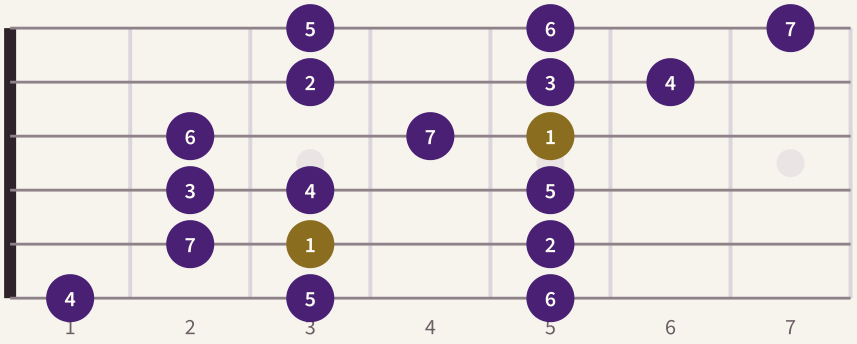
PATTERN 2: FROM DEGREE 2, SHAPES Z X X X Y Y



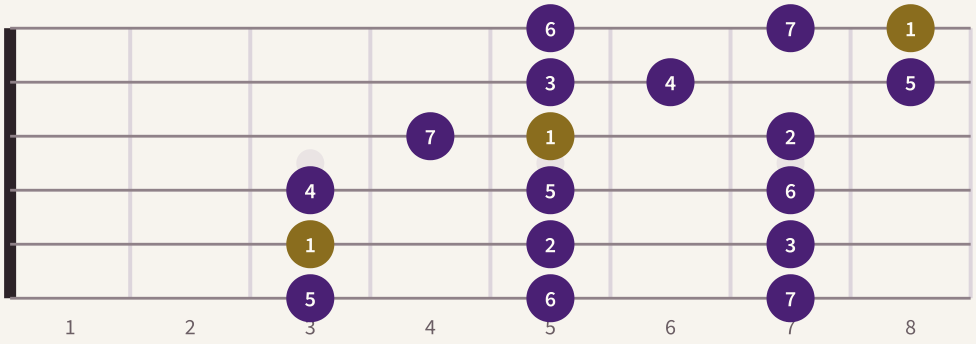
PATTERN 3: FROM DEGREE 3, SHAPES Y Z Z X X X



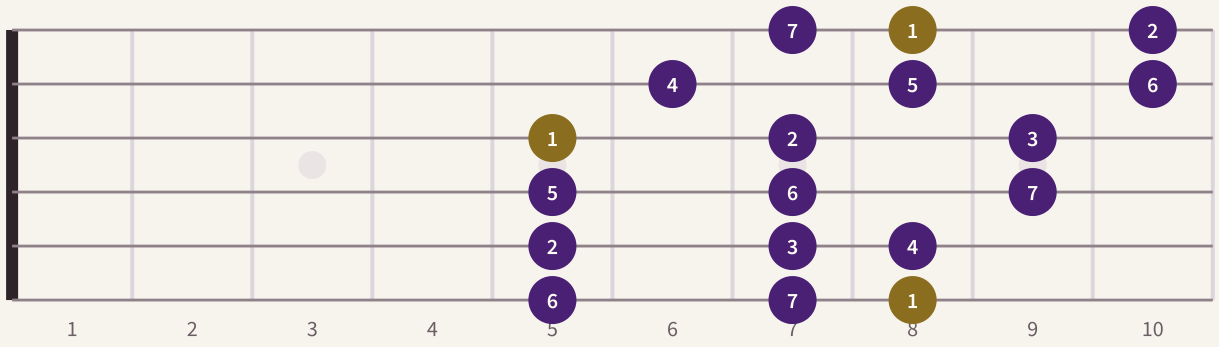
PATTERN 4: FROM DEGREE 4, SHAPES X Y Y Z Z X



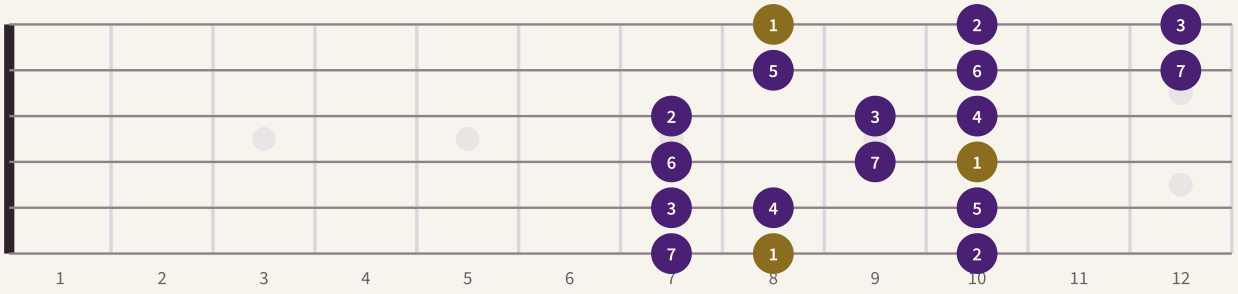
PATTERN 5: FROM DEGREE 5, SHAPES X X X Y Y Z



PATTERN 6: FROM DEGREE 6, SHAPES Z Z X X X Y



PATTERN 7: FROM DEGREE 7, SHAPES Y Y Z Z X X



Gold dot = root (C). Labels are scale degrees. All seven patterns are drawn in C major; slide any pattern to move key.

ETUDE (84 BPM)

Pattern 5, up and down. Also generated as `three-notes-per-string-etude.gp` : open it in the course player for playback, tempo control, and looping.

```
e|----------------------|----------------------5--|7--8--7--5--------------|------------
B|----------------------|------------5--6--8-----|------------8--6--5-----|------------
G|----------------------|---4--5--7--------------|----------------------7--|5--4--------
D|------------------3--5--|7-----------------------|------------------------|------7--5--
A|---------3--5--7--------|------------------------|------------------------|------------
E|3--5--7-----------------|------------------------|------------------------|------------

e|----------------------|
B|----------------------|
G|----------------------|
D|----------------------|
A|3---------------------|
E|------7-----5-----3-----|
```

PRACTICE PLAN

1. **Build, do not recall**
   Pick a degree, name its first shapes from the table, and construct the pattern slowly on the neck, saying each shape aloud as you place it. The point of this method is that the pattern is derived while you play, not remembered as a picture.

2. **One note, every scale**
   Pick a single note, say A, and play through every major scale that contains it, building each pattern from wherever A falls. Seven keys contain any given note, so this one drill covers the whole system.

3. **Improvise across patterns**
   Over a backing track or a looped drone, improvise while deliberately crossing from one pattern into its neighbor instead of staying boxed. The patterns tile the neck; the seams are where fluency shows.

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guitar-study original material, synthesizing Michael Pillitiere's "Building the Better Scale". Diagrams generated by the site's own fretboard renderer; the tables and every etude note are validated against the derived patterns before this page builds.