

Pentatonic Scales

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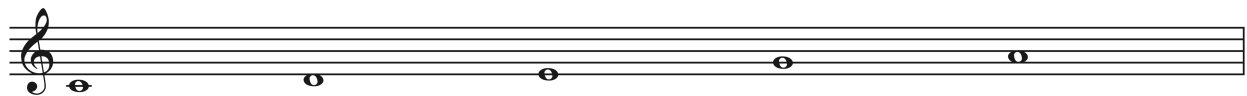


The pentatonic scale has been used in a wide variety of non-Western and traditional Western art music. Composers like Debussy, Ravel, and Bartok are responsible for giving it a home in classical music.¹ Pentatonic scales also have been extensively used by musicians in all genres of popular music. Most of us unknowingly learned the pentatonic scale when we played the black keys on the piano.

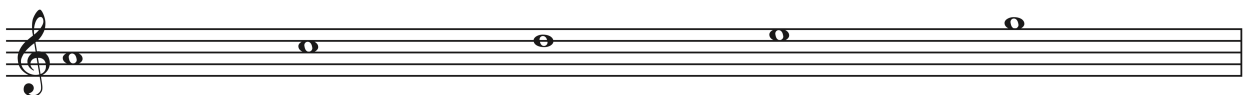
The pentatonic scale is an attractive choice for improvisers and composers alike for several important reasons:

- Its asymmetrical five note construction allows us to generate a wide variety of shapes. The scale's combination of steps and skips allows for increased melodic angularity.
- Because it only has five notes, improvisers (and composers) can target specific harmonic colors with their note choices. These cells often line up well with traditional piano voicings.
- On most instruments, pentatonic scales "lay" well (even on brass instruments) and are easy to learn.
- It is a subset of the minor blues scale.
- The pentatonic scale is easily modified to match up with altered chords.

Musicians tend to learn the pentatonic scale as either a major pentatonic scale or minor pentatonic scale. The major pentatonic scale consists of scale degrees 1, 2, 3, 5, and 6.



The minor pentatonic scale consists of scale degrees 1, 3, 4, 5, and 7.



¹ Day-O'Connor, Jeremy. "Pentatonic." *Grove Music Online*. Edited by Deane Root. Accessed 15 May 2021. <http://www.oxfordmusiconline.com>.

These, of course, are the same scales. The relationship between them is the same as that of the major and relative minor scales. It truly does not matter how you think of the scale – do whatever feels best for you. To be efficient, I will refer to the pentatonic scales as major pentatonic scales throughout this handout.

Exercises for learning the pentatonic scale

I recommend starting with these three permutations of the pentatonic scale in all 12 keys to gain fluency (reduce octaves if necessary... the shape is more important than the range):

Playing the scale up and down



Groups of 4 notes



Skipping notes – same concept as playing a major scale in thirds



Harmonic applications of the pentatonic scale

Once we gain mastery of the scales, we turn our attention to implementing them in our playing and composing.

The simplest application of the major pentatonic scale is to a major 7th or dominant 7th chord:

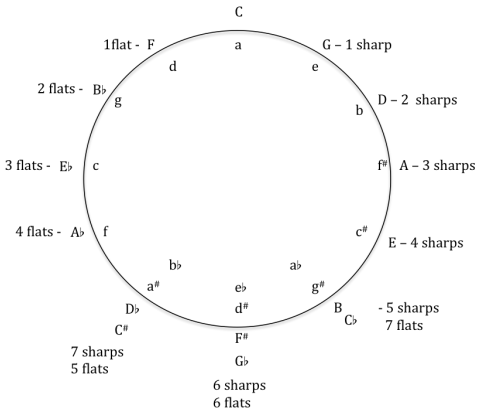
C^{Maj7} → C major pentatonic scale

C⁷ → C major pentatonic scale

The same is true of a minor 7th chord (using a minor pentatonic scale):

A^{min7} → A minor pentatonic (or C major pentatonic)

However, because we are dealing with five note shapes, there are multiple pentatonic scales that sound good on most chords. To begin with, it is useful to remind ourselves of the “clockface of keys” (around the circle of 4ths/5ths)²:



The clockface helps us to see relationships between closely related (and distantly related) keys, which help us to identify some additional pentatonic scales to play over certain chords. Jazz musicians prefer to use the terms “inside” and “outside” (rather than “consonance” and “dissonance”) when referring to playing over jazz harmony.

Working from inside to slightly more outside the harmony, we are able to play the pentatonic scale based on the root, then the 5th, and then the 9th of major 7th and minor 7th chords as follows:

Over C^{Maj7} (**major pentatonic scales**):

Pentatonic Scale	Notes	Scale Degrees over CMaj7
C major pentatonic	C-D-E-G-A	1-2-3-5-6
G major pentatonic	G-A-B-D-E	5-6-7-2-3
D major pentatonic	D-E-F#-A-B	2-3-#4-6-7

Over A^{min7} (**minor pentatonic scales**):

Pentatonic Scale	Notes	Scale Degrees over Amin7
A minor pentatonic	A-C-D-E-G	1-3-4-5-7
E minor pentatonic	E-G-A-B-D	5-7-1-2-4
B minor pentatonic	B-D-E-F#-A	2-4-5-6-1

² Image retrieved from <https://musictheorysite.files.wordpress.com/2015/06/circle-all.png>

Spend some time playing over these chords and slowly trying out each of the three most inside pentatonic scales to work to hear the various colors that the scales present to you.

Pentatonics as a means to play outside the harmony

As we venture further outside the harmony, we move to more distantly related keys, the ones that are directly across the clockface. For example, the most distantly related keys to C major are F#, B, and Db, and they are the furthest away on the clockface.

While it is very much an acquired taste, try playing the Db pentatonic scale over a C major chord to hear its exceptional dissonance.

Most players who are especially effective at playing outside the harmony use those moments to generate extreme tension and great resolution. I encourage my students to start by playing something inside the harmony, then moving outside, and then coming back inside, like this example using the C and Db major pentatonic scales over C^{Maj7}:

The image shows a musical staff in treble clef with a C^{Maj7} chord symbol above it. The staff contains three measures of music. The first measure is labeled 'C pent' and contains the C major pentatonic scale (C, D, E, G, A). The second measure is labeled 'Db pent' and contains the D-flat major pentatonic scale (D-flat, E-flat, F, G, A). The third measure is labeled 'C pent' and contains the C major pentatonic scale (C, D, E, G, A). Dotted lines connect the labels to their respective measures.

Continue to experiment with this concept as you improvise. You can also study the solos of musicians like the great trumpeter Woody Shaw, who has especially effective at this sort of approach.

Further resources for studying the pentatonic scale

I recommend two outstanding books as resources on the pentatonic scale.

1. Ramon Ricker – *Pentatonic Scales for Jazz Improvisation*
2. Jerry Bergonzi – *Inside Improvisation Volume 2 – Pentatonics* (Jerry includes some demonstration tracks with his book that are sensational, and he includes a lot of really useful material on altered pentatonic scales)

I also encourage you to dream up as many shapes on the pentatonic scales as you can!

The pentatonic scale is an extraordinarily flexible and expansive shape that can be used in virtually every style of music. Work hard to add this to your vocabulary!