

Everything you need to know about Pentatonic scales (and quite a lot about other scales)

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1. **What is a scale?** A scale is a rising sequence of notes that can start on ANY note, can contain a variable number of notes, but always finishes on the same note that it started with one octave higher.

2. **What is a chromatic scale?** This is the easiest scale to understand, as it consists of ALL available notes in an octave. On a piano, you would start on any note, then play **every** key (black AND white) until you reach the start note one octave higher. You will play 12 DIFFERENT notes plus the octave note, so 13 notes in total. On a guitar, you play the notes on every fret until you reach the octave. The distance between each note (and between each fret) is known as a SEMITONE.

Example on guitar: Play the open low E string, then every fret until you reach the E note near the body, usually marked with 2 dots.

The actual notes are E, F, F# = Gb, G, G# = Ab, A, A# = Bb, B, C, C# = Db, D, D# = Eb, E

This article is not intended to explain everything about music, for example, what an octave is, and why the notes are called A to G. Briefly, # means "sharp", and b means "flat", and these are used for notes which do not have their own letter names. Therefore, the note between A and B can be called A sharp or B flat. For historical reasons, there is no note between E and F, or between B and C.

3. **What is a diatonic scale?** This is the technical name for the "ordinary" familiar scale, often sung as "do, re, me, fa, so, la, te, do". You can see that it has 7 DIFFERENT notes, plus the octave, so 8 notes in total. In fact, this "do, re, me" scale is technically known as the "diatonic **major** scale" to distinguish it from other eight-note scales, including the "diatonic **minor** scale". Usually, both of these common scales are simply called "major" or "minor" scales.

Obviously, some notes are missing compared with the chromatic scale, and therefore the gaps between notes are no longer equal gaps (semitones). Some gaps are 2 semitones, called a TONE.

The actual pattern of GAPS for the major scale is **T T S T T T S** where **T** = tone, **S** = semitone. **This pattern is well worth remembering.**

Example on guitar: Play the open E string, then a gap of 2 fret-spaces for each **T** and one fret-space for each **S**. You should end up on E (usually marked with 2 dots) and recognise the familiar "do, re, me" scale. You can obviously do the same on any string. You can also start at ANY fret, and provided you follow the same pattern of tones and semitones you will get a major scale. The name of the scale is the same as the note you start on, so in the example above it is E major. If you start on C, the scale will be C major, which is the simplest scale on the piano because it is played without any black notes (the notes are C, D, E, F, G, A, B, C).

4. **What is a pentatonic scale?** Penta means five, so it is a scale of **5 DIFFERENT NOTES**, plus the octave note.

5. **Why is it important and so widely used?** By removing 2 notes from the major diatonic scale, you end up with 5 notes that cannot clash with each other. In the C major scale shown above, the notes E and F played together clash dreadfully, (called a DISCHORD). The same happens for B and C. By removing the "clash" notes F and B, we get a C major pentatonic scale of C, D, E, G, A (plus the octave C). If a song is in the key of C major you can play these notes virtually at random and they will not clash with the song's melody or chords. As a result, the pentatonic scale is WIDELY USED in blues and rock music, and many famous guitar solos are made up only of the notes of the pentatonic scale. Obviously, the pattern can be repeated to get higher and lower notes, eg C, D, E, G, A, C, D, E, G etc. The C major pentatonic scale will also work with songs in A minor.