Diatonic harmony simply put is a system of melody and harmony that uses only the notes from the key of the song you’re playing. In steel guitar, that usually means a major key built on one of the 15 major scales. Let's look at the parent scale for the key of C, the C major scale.

Elements of the Major Scale
The C major scale shown starts on middle C and coincides with the white keys of the piano. All major scales can be generated using the sequence of whole steps (W) and half steps (H) shown. [See the Music Theory Quickstart on how to read the treble clef and how to generate the major scales.] Each note of the scale is assigned a degree number and a name as shown.

Building Diatonic Triads
From each scale degree you can generate a triad built on that scale degree and carrying the name associated with that degree. So the tonic triad is built on degree 1, 3, and 5; the supertonic triad is built on degree 2, 4, and 6; and so on. The seven diatonic triads for the key of C are shown in the diagram (right) and are commonly labeled using the Roman numeral equivalent of the degree number upon which the triad is built. Lower case numerals are used for the minor triads and the diminished triad (leading tone).

Chord Inversions
The triads shown in diagram 2 are in root position, which means that the root of the chord is on the bottom. You can generate inversions of the triad by successively shifting the low note of the triad up an octave. Using inversions, you allow each note of the chord to function as the top note or melody.

Diatonic Triads and Inversions on Steel Guitar
What does all this mean for the steel guitarist? The strength of the basic sixth tunings is that almost all the diatonic triads and their inversions are available in the "straight bar" position. Only the leading tone triads are missing. Using only the 18 diatonic triads shown below you can harmonize almost any song in a very professional manner.