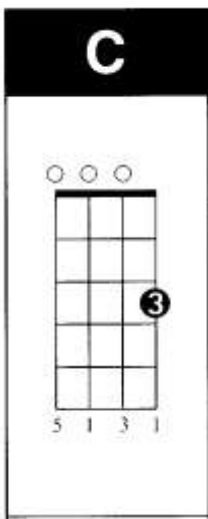


Intervals: This doesn't mean the break for refreshments. Here we are talking about the distance between the notes of a scale. The intervals between the notes are just a simple count. The only odd thing (well it seems odd to me) is that when you count you actually *include* the starting note as part of the count. For example, let's work out the interval between C and E. C (count 1), D (count 2), E (count 3) so C to E is a count of 3. This interval is called a 3rd. Picking another starting note, E, the interval of a 3rd gives G (E is 1, F is 2, G is 3). When the notes that have an interval of a 3rd between them are played together, they sound harmonious.

Triads: A lot of chords are made from just three different notes picked from the scale and played together (or almost together). That arrangement is known as a, "triad" (not to be confused with Chinese gangster families of the same name.) Just now we worked out two examples of nice sounding intervals of a 3rd that is C to E and E to G. If we combine those two examples, we get the triad of C, E and G. Notice the interval by counting straight from C to G is a count of 5 and so it is known as a.....wait for it.....a 5th

Make a Major Chord: There is a rule for making the major chord triad and it's simpler than counting two separate intervals of a 3rd like we did above. The formula is 1 - 3 - 5. The numbers are the intervals, so count from the starting note (known as the "root") each time. Count 1, then 3, and on to 5.

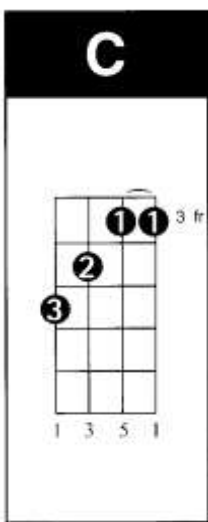
Let's do it for C major. **C (1) D (2) E (3) F (4) G (5)** – giving us C, E and G.



Playing the Chord: If a musical instrument can sound more than three notes at once, then one or more of the triad notes can be duplicated when the chord is actually played. The duplicated note (or notes) can be played in either the same or a different octave to make a fuller, richer, sounding chord.

Let's look at the four strings on a Uke when holding down a standard C chord. Working the note on each string, we get G,C,E,C.

Notice the authors of the chord book this picture was taken from have helpfully shown the intervals along the bottom of the diagram.



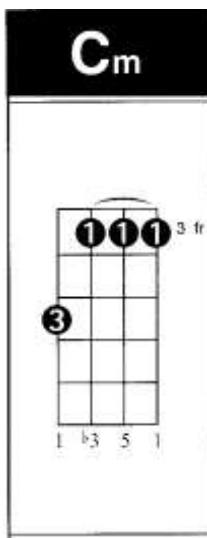
Inversions: If you use the Bb shape and slide it up to the third fret you also get a C Major chord, and to prove it, working out the notes gives C,E,G,C. For Ukes that have a low G string, this fingering gives us a C on the lowest string, then E then G. So the notes are arranged in the "correct" order of 1-3-5 from lowest to highest. Any other arrangement of the notes across the strings, for example, 5-1-3, is known as an "inversion". A lot of the chords we play on the Ukulele are inversions. They all valid chords, but sound slightly different to each other when played.

Recap:

- Major chords follow the formula, 1 - 3 - 5.
- The starting note (1) is called the root and gives the chord its name.
- The three notes that make up the chord are known as a triad and can be duplicated at will.
- Making the same chord with a different order of its notes is known as an inversion.

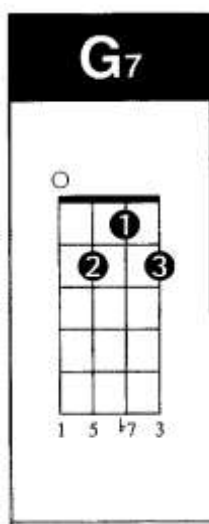
Minor Chords: They are based on this formula: 1 - 3^b - 5.

Going back to intervals; when we counted up three from the root note, that interval is actually termed a “major third”. If we now make that same interval lower by a semi-tone, like in the above formula, then it becomes what is known as a “minor third” and that is what gives minor chords their distinctive quality. One semi-tone is one fret on the Uke, so look at the example of C minor:



The only difference in the notes that make up this C minor chord and the C major in the figure above is the note on the C string. It has gone down by one semi-tone (1 fret) from an E on the fourth fret to an Eb on the third fret. You can see the intervals marked along the bottom of the diagram showing the minor third.

Seventh Chords: There is more than one type of seventh chord. Firstly, I will illustrate the type we use a lot of the time in songs, and for which we use the shorthand of G7, A7, etc. It is known as the dominant 7th and follows the formula: 1 - 3 - 5 - 7^b. The interval of a 7th, when flattened by a semi-tone is known as a “minor seventh” in the same logic as the minor third shown above. This time I will show an example with the root of G.



So this chord is made up from the notes, in order, G (1), B (3), D (5) and the flattened 7th. But what note is the 7^b? Remember we are working now with the notes in the scale of G. To fit the major scale pattern we looked at last time, the notes worked out to G, A, B, C, D, E, F# and back to G.

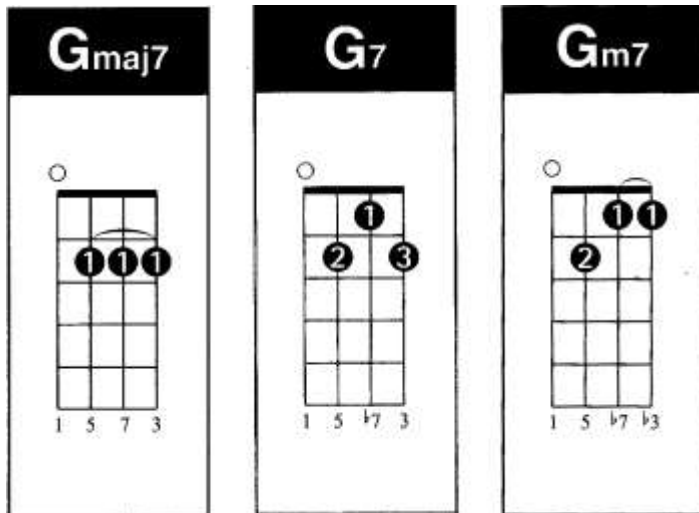
The interval of a major 7th thus gives us F#. To make our G7 chord, we need to make this a minor 7th, as stated by the formula. Dropping down by a semi-tone, we get F natural.

Looking at the example, the notes across the strings are G, D, F and B.

OK, so what if we used the formula, 1 - 3 - 5 - 7, which almost the same as above, except we use the interval of a major 7th, not a minor 7th when working out the chord? So in this example, we would use F# and not F. The new chord is called G major 7 (written as Gmaj7). Looking at the picture, all you have to do to make that Gmaj7 is to finger a barre across the first three strings at the second

fret. The note on the E string then becomes F# and the rest of them remain unchanged.

Another possibility with the 7th chord is to make it with both the 3rd AND the 7th as minors. The formula is now becomes, 1 – 3b - 5 – 7b. And the chord would be called, in this example, G minor 7, usually written Gm7. Again, to change the G7 in the picture to Gm7, we only need to drop the note on the first string by a semi-tone, so the B becomes Bb. Again, only one note changes. Below are the chord diagrams.



Recap:

- Intervals of a 3rd may be major or minor.
- Intervals of a 7th may be major or minor.
- Minor chords follow the formula, 1 - 3b - 5.
- Dominant 7th chords follow the formula 1 - 3 - 5 - 7b
- Major 7th chords follow the formula 1 - 3 - 5 - 7
- Minor 7th chords follow the formula 1 – 3b - 5 - 7b