DulcimerCrossing Wednesday Live Stream December 15, 2021 Steve Eulberg

What Are All These Numbers in Music? A basic discussion.

 Steps of the Scale (or Scale Degrees): from Do to do Arabic Numerals 1 2 3 4 5 6 7 Diatonic: 7 steps before they repeat Chromatic: 12 steps before they repeat (Western world) Other parts of the world have *more* notes available to them between Do and do



Bridging the gap between what you know and where you want your music to go.

2. Chords:

Roman Numerals: I ii iii IV V vi vii^o (Upper case is Major, lower case is minor) *Triads=Chords* are composed of the 1-3-5 (or 1-b3-5) steps or degrees of the name of the Key

- 3. Fingers: Piano: 1-2-3-4-5; Stringed instruments: T-1-2-3-4
- 4. **Diatonic** Frets on Mountain Dulcimer: common= 0 1 2 <u>3</u> 4 5 6 7 8 9 <u>10</u>... Extra frets 0 1 1+ 2 3 4 5 6 6+ 7 8 8+ 9 10...
- 5. **Chromatic** Frets on mountain dulcimer (or mandolin, or banjo or guitar...) 0 1 2 3 4 5 6 7 8 9 10 11 12
- 6. **Number of courses** (grouped strings) on hammered dulcimers per bridge e.g. 16/15; 15/14; 9/2/19/18
- 7. **Number of strings** per course on hammered dulcimer (or mandolin, or 12-string guitar, or 6-string dulcimer)
- 8. **Intervals**: the space between two notes or pitches Diatonic: Unison perfect 5th, perfect 4th, 2nd, major 3rd, minor 3rd, 6th flat 7th, 7th
- 9. Chromatic Intervals: <u>https://blog.flat.io/how-music-transpositions-works-intervals/</u>
- 10. Hertz (1 hz= one cycle per second) the frequency at which a vibrating string produces at pitch:
 e.g. A = 440 hz = the A in the middle of the treble clef, or the *middle string* of a mountain dulcimer tuned D-A-A or D-A-d played at the 7th fret.
- 11. **Octave** When we double or halve the frequency of a pitch, we get the same name of the note but in a higher or lower octave, respectively.
- 12. **Harmonics** relate to the *nodes* that are found along the length of the string when it is divided in half, quarters and thirds.