

## Notes & Scales

Pictured below is a standard piano keyboard. The white keys are the notes C, D, E, F etc., and the black keys are the sharp & flat notes.

Starting from the left, the first two white keys are C & D. The black key positioned midway between C & D is marked with 2 notes, D $\flat$  & C $\sharp$ . D $\flat$  is the same note as C $\sharp$  and is midway between C & D.



The first 8 white keys are marked as C,D,E,F,G,A,B,C. This is an “octave” (8 notes), and you will see that in that octave are only 5 black keys. There are no black keys between E & F or B & C. Why is this?

This all started with the Ancient Greeks over 2500 years ago. I do not want to delve in too deep, because it will be confusing, and there is no need to do so for our purposes.

Simply put, the musical distance between each key is know as a “Semitone”. So from C to C $\sharp$  is one semitone, and from C $\sharp$  to D is also one semitone. Therefore, the distance between C & D is 2 semitones.

This continues throughout until we get to E. There is no black key between E & F because the distance between E & F is one semitone. This is the same from B to C.

It is clearer to see this if you look at the attached diagram of a Ukulele fretboard. Each fret is one semitone from the next fret. So from C you move one fret to C $\sharp$ , then one fret to D. Therefore, from C to D is 2 frets, D to E is 2 frets, E to F is 1 fret and so on.

## Tonic Solfa Scale

The Tonic Solfa Scale was invented 200 years ago by S, rearah Ann Glover of Norfolk, England, and developed and popularised by John Curwen in 1850. It is a commonly used teaching aid to help children understand musical scales.

It calls the root note “do” (pronounced doh), and then proceeds through each note in the scale – do, re, mi, fa, sol, la, ti, do.

The musical distance between each of the notes is set, so the scale works for all keys.

Note	DO	RE	MI	FA	SOL	LA	TI	DO
No of frets up	-	2	2	1	2	2	2	1
Semitones up	-	2	2	1	2	2	2	1

Using this you can work out the notes in any major scale, starting from the Root Note (or Key Note), and working along the fretboard.

The following are examples of commonly used keys, using the above formula:-

Root Note/Key	DO	RE	MI	FA	SOL	LA	TI	DO
C	C	D	E	F	G	A	B	C
G	G	A	B	C	D	E	F#	G
F	F	G	A	Bb	C	D	E	F
D	D	E	F#	G	A	B	C#	D
A	A	B	C#	D	E	F#	G#	A

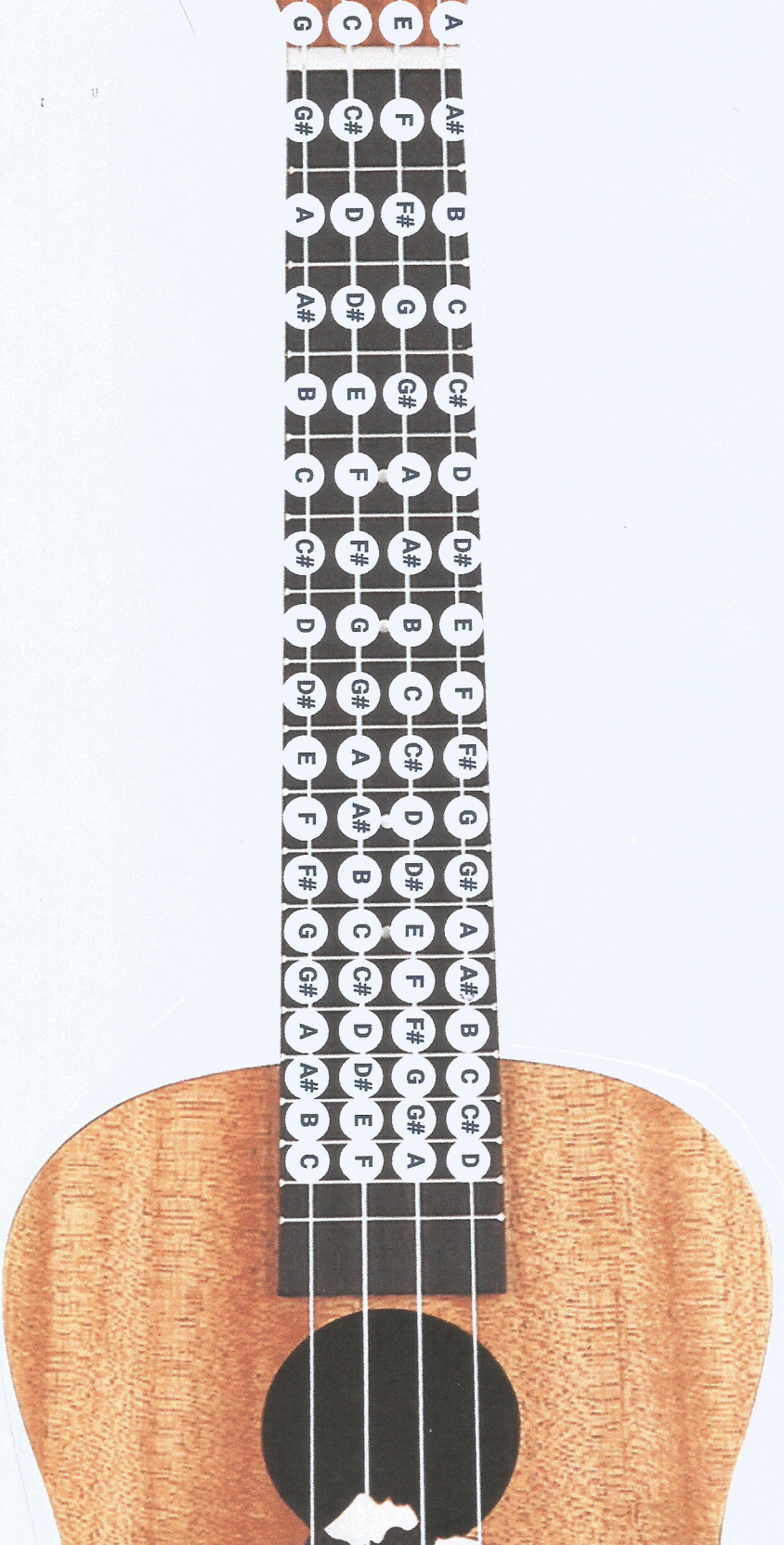
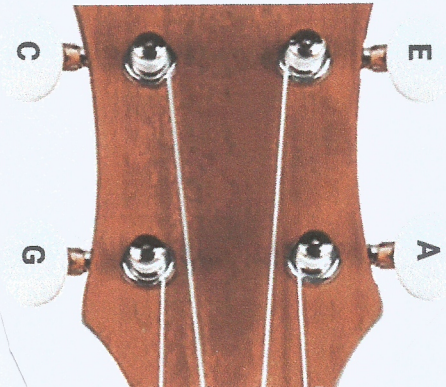
This also works in reverse. For example if a song has a C#, an F#, and a G# in it, it will probably be in the key of A. The chords used in a song may also correspond to this, but that is for the next session. We will move on to look at alternative chord positions, and how we can use known chords in a different position to make a different chord.

You are not expected to memorise all the notes in a key, but try to familiarise yourself with where some notes are on the fretboard, as this may help you, and make it easier to follow the next part.

# Ukulele Fretboard

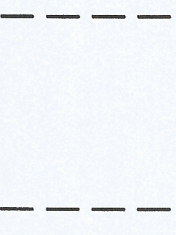
String 2  
C string

String 1  
E string



String 3  
C string

String 4  
G string



**Note:** Conventionally the strings are from bottom to top G, C, E, A, but they number from top to bottom 1, 2, 3, 4. So String 1 is A, String 2 is E, String 3 is C, and String 4 is G.