

How to Construct a Major Scale

In the last lesson, we learned that there are 12 notes possible in the musical alphabet.

A musical score for the A major scale on a guitar. The top staff is a treble clef in 4/4 time, showing the notes A, A#, B, C, C#, D, D#, E, F, F#, G, G#, and A. The bottom staff is a guitar fretboard diagram with frets 2 through 6, and an open string (0). The notes are: 2 (A), 3 (A#), 4 (B), 5 (C), 6 (C#), 0 (D), 1 (D#), 2 (E), 3 (F), 4 (F#), 5 (G), 6 (G#), 0 (A).

A A# B C C# D D# E F F# G G# A

OR

A musical score for the A minor scale on a guitar. The top staff is a treble clef in 4/4 time, showing the notes A, Bb, B, C, Db, D, Eb, E, F, Gb, G, Ab, and A. The bottom staff is a guitar fretboard diagram with frets 2 through 6, and an open string (0). The notes are: 2 (A), 3 (Bb), 4 (B), 5 (C), 6 (Db), 0 (D), 1 (Eb), 2 (E), 3 (F), 4 (Gb), 5 (G), 6 (Ab), 0 (A).

A Bb B C Db D Eb E F Gb G Ab A

The distance between those notes is measured in **half steps** and **whole steps**. A half step is the distance between each consecutive note in our 12 tone musical alphabet, while a whole step is the distance between two consecutive notes.

Ex. C to C# = half step
D to E = whole step

The major scale is probably the most familiar set of tones that can be derived from these twelve notes. Major scales can be constructed by selecting any individual note as a "root note" and adding other notes using the following series of whole steps and half steps.

Whole Step - Whole Step - Half Step - Whole Step - Whole Step - Whole Step - Half Step

OR

W W H W W W H

Starting on an A note and using the formula, we get the following set of notes for the A Major Scale

A	A#	B	C	C#	D	D#	E	F	F#	G	G#	A
↑		↑		↑	↑		↑		↑		↑	↑
	W		W		H		W		W		W	
												H

The image shows the A Major Scale on a guitar. The top staff is a treble clef staff with notes: A (open), A# (2nd fret), B (2nd fret), C (3rd fret), C# (3rd fret), D (open), D# (2nd fret), E (2nd fret), F (3rd fret), F# (3rd fret), G (2nd fret), G# (2nd fret), and A (open). The bottom staff is a guitar fretboard diagram with fret numbers: 0, 2, 4, 6, 0, 2, 4, 6, 0.

Try building a major scale starting on an E note, using the same formula as above.

The image shows the E Major Scale on a guitar. The top staff is a treble clef staff with notes: E (open), F# (2nd fret), G (2nd fret), A (open), B (2nd fret), C (3rd fret), D (3rd fret), and E (open). The bottom staff is a guitar fretboard diagram with fret numbers: 2, 4, 6, 7, 9, 10, 12, 14, 15.