

HOW MUSIC WORKS



How Music Works: Scales, Keys, Intervals & Chords

Do you feel lost when the subject of scales or what notes make up a chord come up?

These things are the building blocks of music, harmony and soloing.

For the next few sessions, we'll be doing a short series on How Music Works.

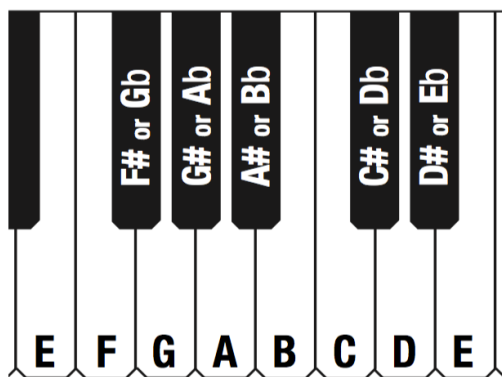
You'll learn...

- What Notes are in Any Major Scale
- How to Tell the Key of Any Song
- Major and Minor Intervals
- What Notes are in Any Major, Minor, Diminished, or Augmented Chord

Half-Steps & Whole Steps

A HALF-STEP is the distance from any note to the very next note. A WHOLE STEP is two half-steps put together.

On a guitar, each fret is a half-step apart. On a piano, each key, whether white or black, is a half-step apart from the next key.



Even though some white keys on a piano are next to each other, often they will have a black key in between them.

The distance from the first white key to the in-between black key is a half-step. From a white key to another white key, with a black key in between, is a whole step.

The only naturally occurring half-steps are between E to F and B to C.

Naturally occurring means that without using sharps or flats the intervals of E to F and B to C are the only adjacent pairs that are half-steps. Between these two intervals there is only a half-step difference. All of the other pairs of adjacent notes, without sharps or flats involved, are whole steps.

On our keyboard there are no black keys between E - F and B - C. On a guitar, each of these two pairs of notes are side by side with no note in between them.

Major Scales

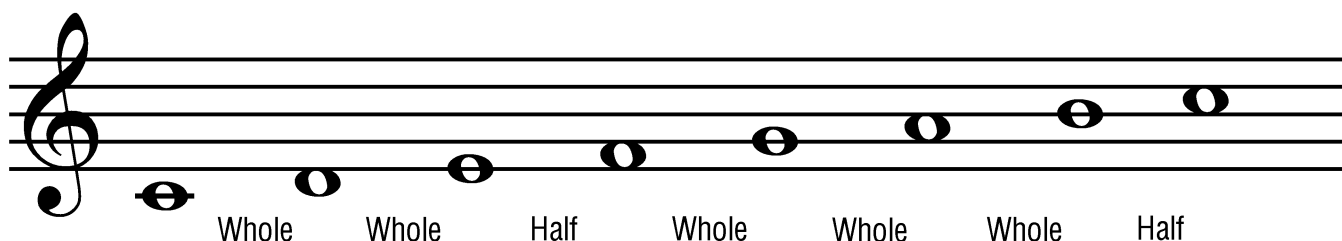
Scales are the alphabet of music – the very building blocks of every solo, chord progression and song.

Major scales are built on a specific pattern of half-step and whole-step intervals.

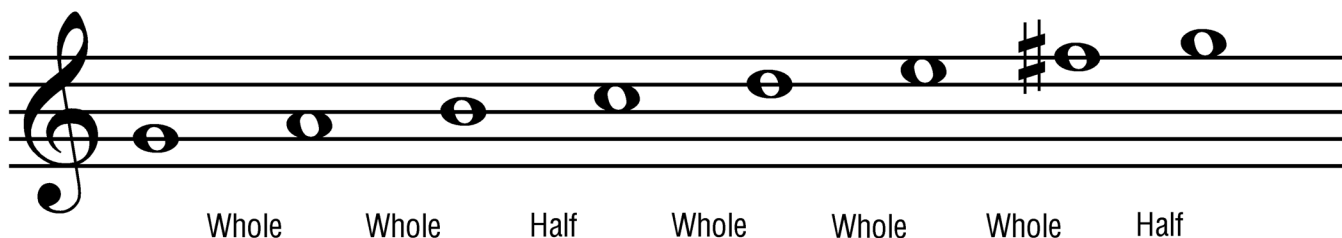
The pattern for a major scale is **Whole-step, Whole-step, Half-step, Whole-step, Whole-step, Whole-step, Half-step**.

Starting on any note, if you follow this pattern you will build a major scale in the note's key.

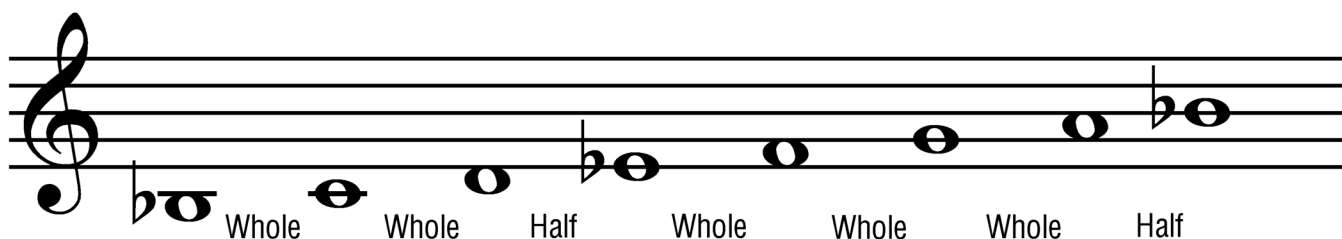
If we started on a C and built up whole-steps and half-steps in the major scale pattern you would get a C major scale.



If we started on a G and built up whole-steps and half-steps in the major scale pattern you would get a G major scale with the added sharp on F# in order to make the pattern work.



If we started on a Bb and built up whole-steps and half-steps in the major scale pattern you would get a Bb major scale with the added flats on Bb and Eb in order to make the pattern work.



Major Scales Worksheet

Fill in the major scale notes following the whole-step half-step major scale interval pattern. Determine the number of different sharps and flats for each scale. List the sharps or flats used in each scale in the proper order.

Completing this worksheet numerous times helps build the necessary memory recognition of these major scales.

✓ Check your answers with the answer key at the back of the book.

	Whole	Whole	Half	Whole	Whole	Whole	Half	How many sharps (#) or flats (b)?	What are they?
C	<u>D</u>	<u>E</u>	_____	_____	_____	_____	_____	<u>none</u>	_____

The following scales all contain SHARPS.

G	_____	_____	_____	_____	_____	<u>F#</u>	_____	_____	<u>F#</u>
D	_____	<u>F#</u>	_____	_____	_____	<u>C#</u>	_____	_____	<u>F#, C#</u>
A	_____	_____	_____	_____	_____	_____	_____	<u>3#'s</u>	_____
E	_____	_____	_____	_____	_____	_____	_____	_____	_____
B	_____	_____	_____	_____	_____	_____	_____	_____	_____
F#	_____	_____	_____	_____	_____	_____	<u>E#</u>	_____	_____

The following scales all contain FLATS.

F	_____	_____	<u>Bb</u>	_____	_____	_____	_____	_____	_____
Bb	_____	_____	_____	_____	_____	_____	_____	_____	_____
Eb	_____	_____	<u>Ab</u>	_____	_____	_____	_____	<u>3b's</u>	_____
Ab	_____	_____	_____	_____	_____	_____	_____	_____	<u>Bb, Eb, Ab, Db</u>
Db	_____	_____	_____	_____	_____	_____	_____	_____	_____
Gb	_____	_____	<u>Cb</u>	_____	_____	_____	_____	_____	_____

Major Scales Mixed Worksheet

The order of the scales is mixed between flat and sharp major scales. Fill in major scale notes following the whole-step half-step major scale interval pattern. Determine the number of different sharps and flats for each scale. List the sharps or flats used in each scale in the proper order.

✓ Check your answers with the answer key at the back of the book.

	<i>Whole</i>	<i>Whole</i>	<i>Half</i>	<i>Whole</i>	<i>Whole</i>	<i>Whole</i>	<i>Half</i>	<i>How many sharps (#) or flats (b)?</i>	<i>What are they?</i>
C	_____	_____	_____	_____	_____	_____	_____	_____	_____
Bb	_____	_____	_____	_____	_____	_____	_____	_____	_____
D	_____	_____	_____	_____	_____	_____	_____	_____	_____
Ab	_____	_____	_____	_____	_____	_____	_____	_____	_____
E	_____	_____	_____	_____	_____	_____	_____	_____	_____
Gb	_____	_____	_____	_____	_____	_____	_____	_____	_____
F#	_____	_____	_____	_____	_____	_____	_____	_____	_____
Db	_____	_____	_____	_____	_____	_____	_____	_____	_____
A	_____	_____	_____	_____	_____	_____	_____	_____	_____
Eb	_____	_____	_____	_____	_____	_____	_____	_____	_____
B	_____	_____	_____	_____	_____	_____	_____	_____	_____
F	_____	_____	_____	_____	_____	_____	_____	_____	_____
G	_____	_____	_____	_____	_____	_____	_____	_____	_____

Major Scale Table Worksheet

Fill in the major scale notes on the following table. Remember, the naturally occurring half-steps are between E-F and B-C.

Check your answers with the answer key at the back of the book.

	<i>Whole Step</i>	<i>Whole Step</i>	<i>Half Step</i>	<i>Whole Step</i>	<i>Whole Step</i>	<i>Whole Step</i>	<i>Half Step</i>
C	D						
F		A					
Bb			Eb				
Eb				Bb			
Ab					F		
Db						C	
Gb							Gb
F#						E#	
B					G#		
E				B			
A			D				
D		F#					
G	A						

The Ultimate Major Scale Mixup

Fill in the major scale notes on the following table. The order of the scales has been mixed up. Each scale will have one note given in a specific place in the major scale pattern. Given the one starting clue you should be able to fill in the rest of the scale by following the major scale pattern.

<i>Whole Step</i>	<i>Whole Step</i>	<i>Half Step</i>	<i>Whole Step</i>	<i>Whole Step</i>	<i>Whole Step</i>	<i>Half Step</i>
				F		
		F#				
						E
B						
						D
		E				
				Db		
		G#				
						F#
						Db
	B					
					D#	
			Db			