

## The Remaining Major Scales with Key Signatures

Once you are familiar with how to build tetrachords, it is easy to build any major scale. Altogether, there are 15 major scales: 7 sharp keys, 7 flat keys, and the key of C, which has no sharps or flats.

You are already familiar with the scales and key signatures of five of the 15: C, G (F#), D (F#, C#), F (Bb) and Bb (Bb, Eb). Here are the remaining 10.

A Major (3 #s: F#, C#, G#)



Eb Major (3 bs: Bb, Eb, Ab)



E Major (4 #s: F#, C#, G#, D#)



Ab Major (4 bs: Bb, Eb, Ab, Db)



B Major (5 #s: F#, C#, G#, D#, A#)



Db Major (5 bs: Bb, Eb, Ab, Db, Gb)



F# Major (6 #s: F#, C#, G#, D#, A#, E#)



Gb Major (6 bs: Bb, Eb, Ab, Db, Gb, Cb)



C# Major (7 #s: F#, C#, G#, D#, A#, E#, B#)



Cb Major (7 bs: Bb, Eb, Ab, Db, Gb, Cb, Fb)



The complete order of sharps in the key signature is:

**F C G D A E B.**

A helpful reminder:

**Fat Cats Go Down Alleys Eating Bread.**

The complete order of flats in the key signature is:

**B E A D G C F.**

A helpful reminder: **BEAD + G C F.**

There are, however, only 12 unique *sounding* major scales. The following are **ENHARMONIC SCALES**; they sound the same but are written differently:

**B major** sounds the same as **Cb major**  
**F# major** sounds the same as **Gb major**  
**C# major** sounds the same as **Db major**

## Exercises

- 1** Name the following major key signatures.



a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_

- 2** Write the following key signatures.

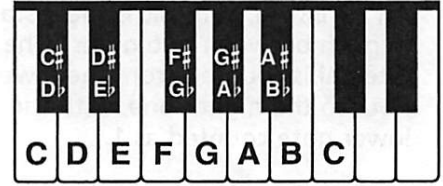


a. Eb major    b. E major    c. Ab major    d. C# major    e. Cb major    f. A major

## Chromatic Scale

The CHROMATIC SCALE is made up entirely of half steps in consecutive order. On a keyboard, therefore, it uses every key, black and white. When the scale goes up, it is called *ascending*; when the scale goes down, it is called *descending*.

The chromatic scale may begin on any note. In a chromatic scale, there are 12 tones.



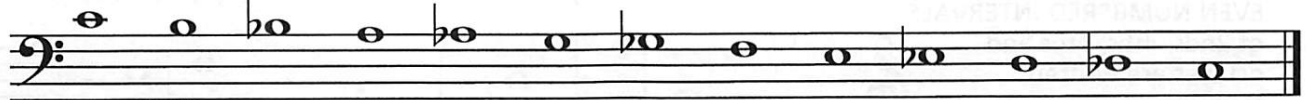
### C Chromatic Scale



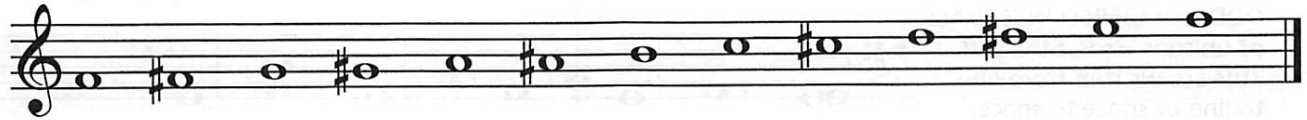
The ascending chromatic scale starting on C uses sharp signs.



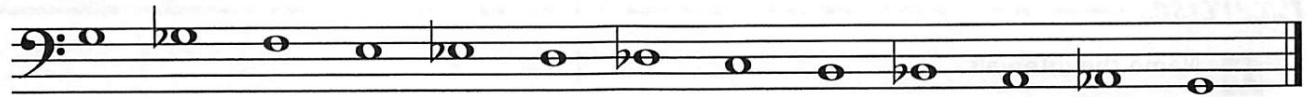
The descending chromatic scale starting on C uses flat signs.



An ascending chromatic scale starting on F looks like this:



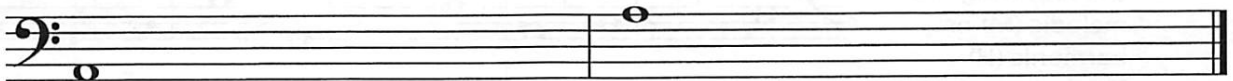
A descending chromatic scale starting on G looks like this:



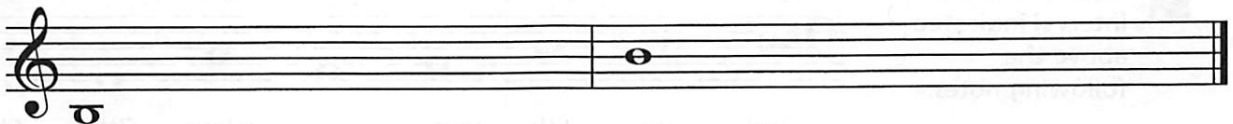
## Exercises

1 What is the distance between each pitch in a chromatic scale? \_\_\_\_\_

2 Write an ascending and descending chromatic scale starting on A.

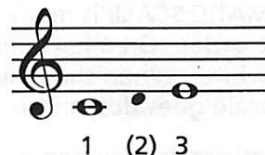
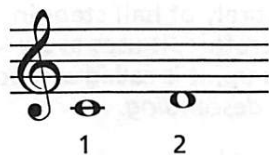


3 Write an ascending and descending chromatic scale starting on B.

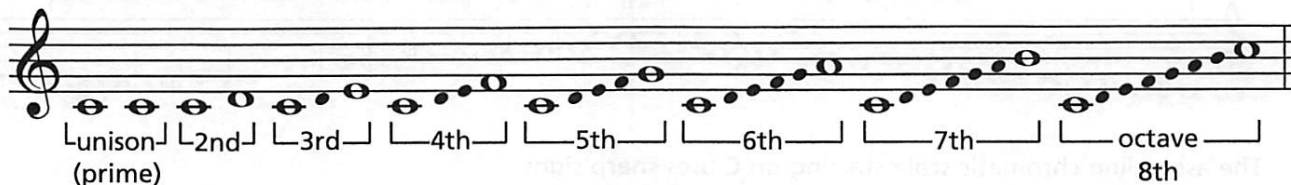


## Intervals

An INTERVAL in music is the distance in pitch between two notes. The interval is counted from the lower note to the higher one, with the lower note counted as 1.



Intervals are named by the number of the upper note (2nds, 3rds, etc.) with two exceptions. The interval between notes that are identical is called a UNISON (also called a PRIME INTERVAL); the interval of an 8th is called an OCTAVE. The intervals below are all written with C as the lower note.

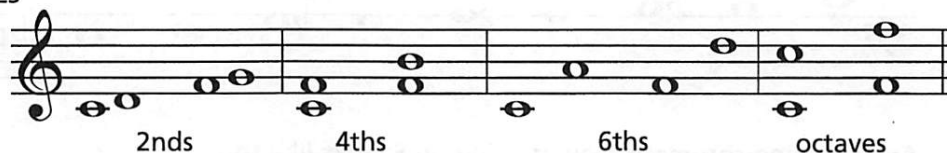


Intervals are called MELODIC INTERVALS when they are sounded separately and HARMONIC INTERVALS when they are sounded together.



### EVEN NUMBERED INTERVALS

of 2nds, 4ths, 6ths and octaves are written from line to space or space to line.



### ODD NUMBERED INTERVALS

of unisons, 3rds, 5ths and 7ths are written from line to line or space to space.

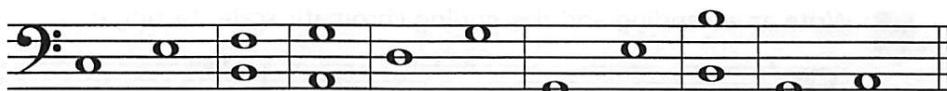


## Exercises

- 1** Name the intervals.



- 2** Indicate whether the following are melodic (M) or harmonic (H) intervals.



- 3** Write the harmonic interval indicated above the following notes.



# Circle of Fifths

The CIRCLE OF FIFTHS is useful in understanding scales and key signatures. It shows the relationship of one key to another by the number of sharps or flats in the key signature and the order in which the sharps or flats occur.

### SHARP KEYS

Start with C and go clockwise in ascending tetrachord order.

### FLAT KEYS

Start with C and go counterclockwise in descending tetrachord order.

The sharp keys ascend by 5ths (W W H W);\* the flat keys descend by 5ths (H W W W).

### SHARP SCALES

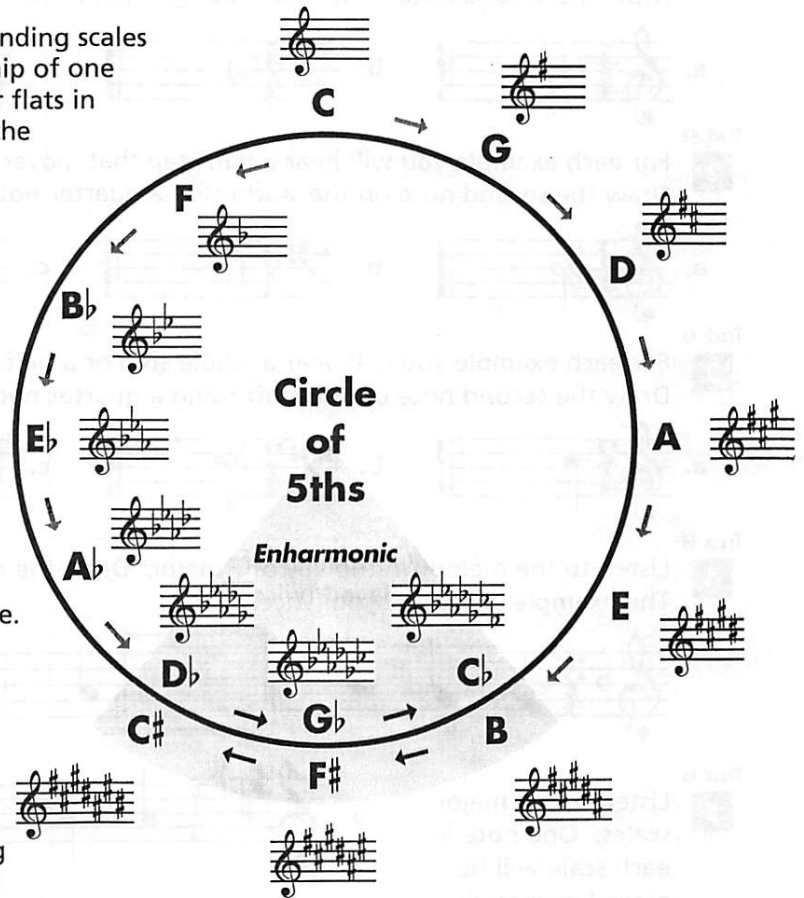
Starting with C, the 2nd tetrachord of the ascending major scale becomes the 1st tetrachord of the following ascending scale. The scale's name is derived from the 1st note of that tetrachord, and one sharp is added to the key signature.

### FLAT SCALES

Starting with C, the 2nd tetrachord of the descending major scale becomes the 1st tetrachord of the following descending scale. The scale's name is derived from the 1st note of that descending tetrachord, and one flat is added to the key signature.

### OPTIONAL

Another way to determine the order of the flat keys is to ascend by 4ths (W W H). Starting on C: C to F, F to B $\flat$ , B $\flat$  to E $\flat$ , etc.



The order of sharps in the key signature:

F C G D A E B.

The order of flats in the key signature:

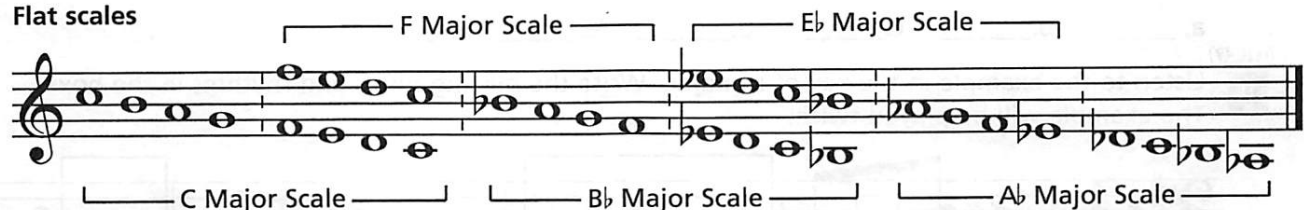
B E A D G C F.

## OVERLAPPING TETRACHORD PATTERNS

### Sharp scales






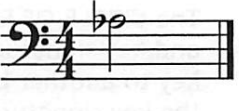
### Flat scales



\*W=Whole Step. H=Half Step.





Track 41

- 1** For each example you will hear a whole step that moves up or down.  
Draw the second note on the staff using a half note.

a.  b.  c.  d. 





Track 42

- 2** For each example you will hear a half step that moves up or down.  
Draw the second note on the staff using a quarter note.

a.  b.  c.  d. 

Track 43

- 3** For each example you will hear a whole step or a half step that moves up or down.  
Draw the second note on the staff using a quarter note. Each example will be played twice.

a.  b.  c.  d. 

Track 44

- 4** Listen to the melody in the key of F major. Draw the missing notes in the boxes.  
The example will be played twice.





Track 45

- 5** Listen to the major scales. One note in each scale will be played incorrectly. Circle the incorrect note.

a.  b.  c. 

Track 46

- 6** Listen to the major scale. Circle the correct rhythm pattern.

a.  b. 

Track 47

- 7** Listen to an ascending C chromatic scale. Next, eight ascending notes will be played in the following examples. Write whether it is a major (M) or chromatic (C) scale.

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_

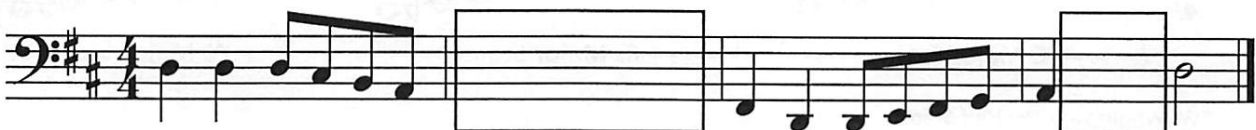
Track 48

- 8** Listen to a descending C chromatic scale. Next, eight descending notes will be played in the following examples. Write whether it is a major (M) or chromatic (C) scale.

a. \_\_\_\_\_ b. \_\_\_\_\_ c. \_\_\_\_\_ d. \_\_\_\_\_ e. \_\_\_\_\_ f. \_\_\_\_\_

Track 49

- 9** Listen to the example in the key of D major. Write the missing notes and rhythms in the boxes.  
The example will be played twice.

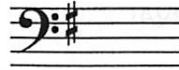


1 What is the complete order of sharps in a key signature? \_\_\_\_\_

2 Name the following major key signatures.



a. \_\_\_\_\_



b. \_\_\_\_\_

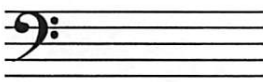


c. \_\_\_\_\_

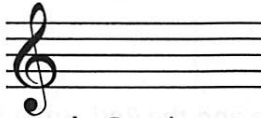


d. \_\_\_\_\_

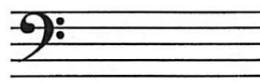
3 Write the following key signatures.



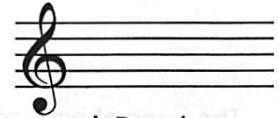
a. A major



b. G major



c. E major



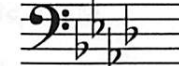
d. D major

4 What is the complete order of flats in a key signature? \_\_\_\_\_

5 Name the following major key signatures.



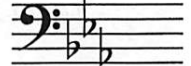
a. \_\_\_\_\_



b. \_\_\_\_\_

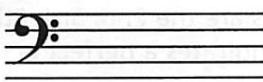


c. \_\_\_\_\_

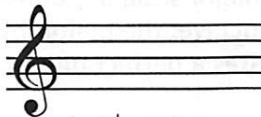


d. \_\_\_\_\_

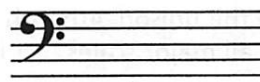
6 Write the following key signatures.



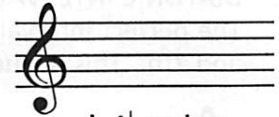
a. E $\flat$  major



b. B $\flat$  major



c. F major



d. A $\flat$  major

7 The C $\flat$  major scale sounds the same as which other major scale? \_\_\_\_\_

8 The G $\flat$  major scale sounds the same as which other major scale? \_\_\_\_\_

9 The D $\flat$  major scale sounds the same as which other major scale? \_\_\_\_\_

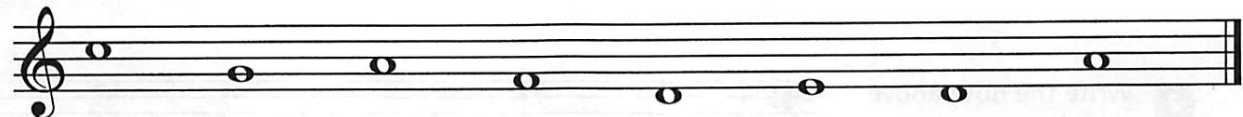
10 The chromatic scale is made up entirely of \_\_\_\_\_ in consecutive order.

11 Name the melodic intervals.



\_\_\_\_\_

12 Write the indicated harmonic interval above the following notes.



2nd      6th      3rd      octave      5th      7th      4th      unison

13 In the circle of fifths, go clockwise and ascend by 5ths for the \_\_\_\_\_ keys, and counterclockwise and descend by 5ths for the \_\_\_\_\_ keys.