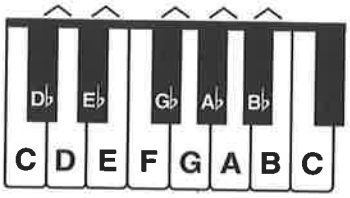
Flats

The FLAT sign (♭) before a note lowers the pitch of that note. On the keyboard, play the next key to the left, whether black or white.

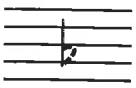


When speaking of flatted notes, the word "flat" comes after the letter name, as in **A flat**. However, in written music, the flat sign comes before the note.

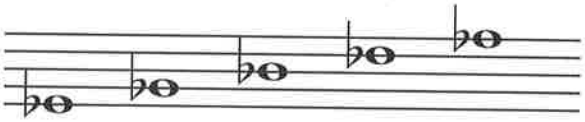
A flat

To draw a flat sign, first draw a vertical line:

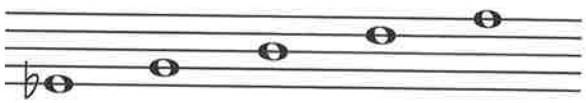
then add the heavier curved line:



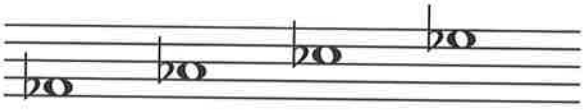
When a flat sign is attached to a line note, the flat is centered on the line.



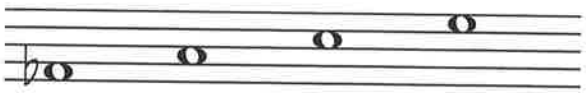
Add flat signs to the line notes below.



When a flat sign is attached to a space note, the flat is centered in the space.



Add flat signs to the space notes below.

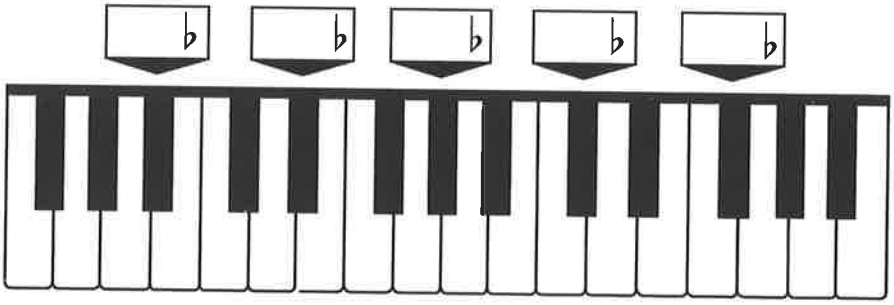


Exercises

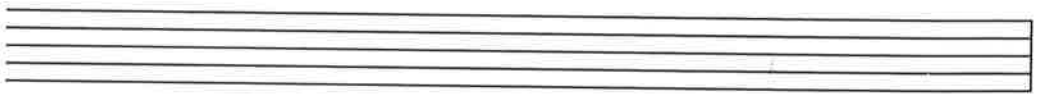
1 In the example, write flat signs before each note, then name the notes.

_____ _____ _____ _____ _____ _____ _____ _____ _____

2 Write the names of the piano keys in the boxes.

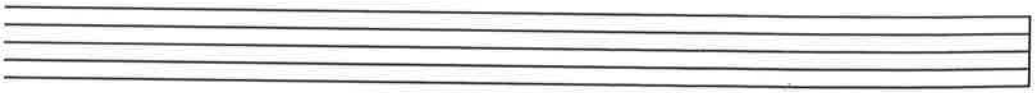


3 Write a treble clef and the notes indicated on the staff using half notes.



G♭ D♭ C♭ A♭ E♭ B♭ F♭

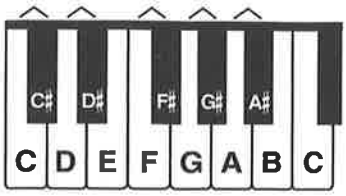
4 Write a bass clef and the notes indicated on the staff using quarter notes.



E♭ C♭ F♭ A♭ D♭ B♭ G♭

Sharps

The SHARP sign (♯) before a note raises the pitch of that note. On the keyboard, play the next key to the right, whether black or white.



When speaking of sharped notes, the word "sharp" comes after the letter name, as in **C sharp**. However, in written music, the sharp sign comes before the note.

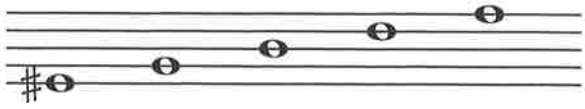
C sharp

To draw a sharp sign, first draw two vertical lines:

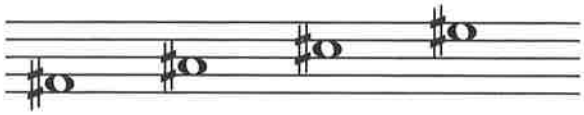
then add the heavier slanting lines:

When a sharp sign is attached to a line note, the sharp is centered on the line.

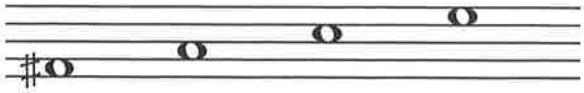
Add sharp signs to the line notes below.



When a sharp sign is attached to a space note, the sharp is centered in the space.

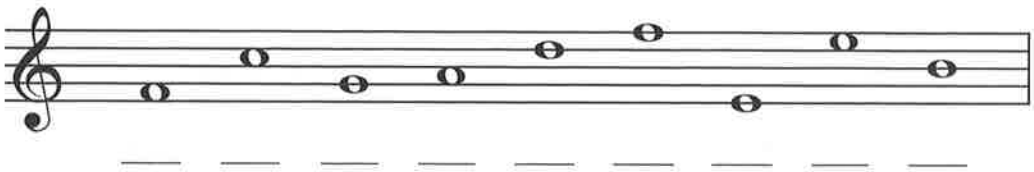


Add sharp signs to the space notes below.

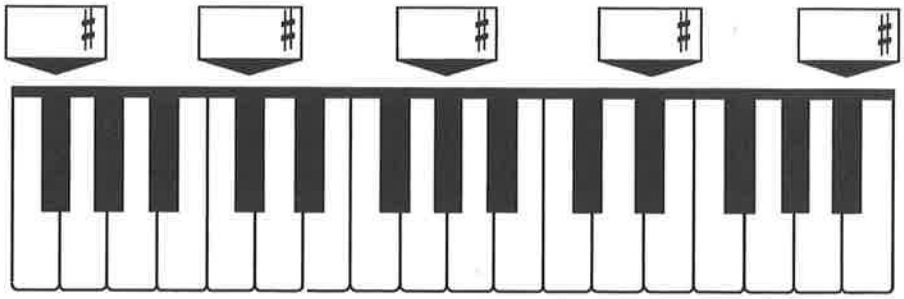


Exercises

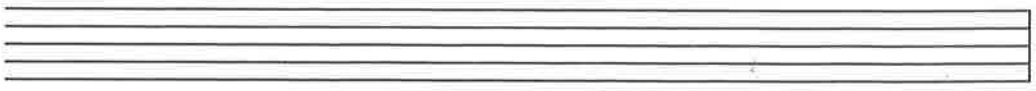
1 In the example, write sharp signs before each note, then name the notes.



2 Write the names of the piano keys in the boxes.

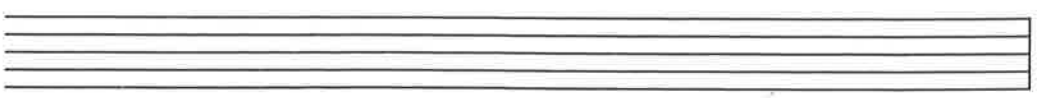


3 Write a treble clef and the notes indicated on the staff using single 8th notes.



F♯ B♯ D♯ A♯ G♯ E♯ C♯

4 Write a bass clef and the notes indicated on the staff using dotted half notes.



C♯ A♯ F♯ B♯ G♯ D♯ E♯

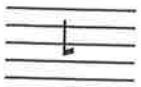
Naturals

The NATURAL sign (♮) before a note cancels a previous sharp or flat.
On the keyboard, a note after a natural is *always* a white key.

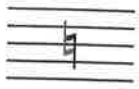
When speaking of natural notes, the word "natural" comes after the letter name, as in **B natural**. However, in written music, the natural sign comes before the note.

B natural

To draw a natural sign, first draw the left half:

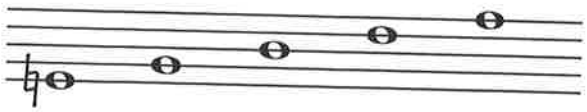


then draw the right half:

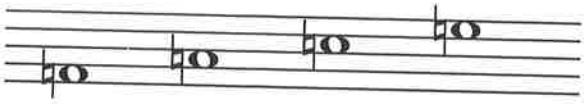


When a natural sign is attached to a line note, the natural is centered on the line.

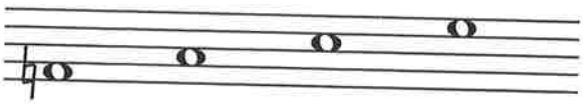
Add natural signs to the line notes below.



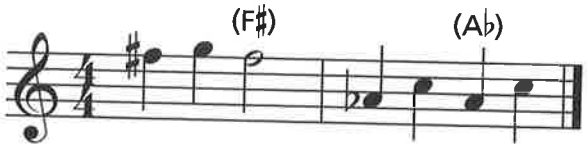
When a natural sign is attached to a space note, the natural is centered in the space.

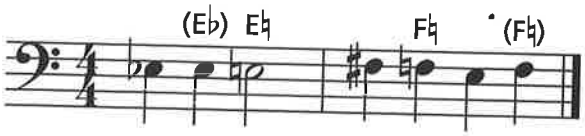


Add natural signs to the space notes below.

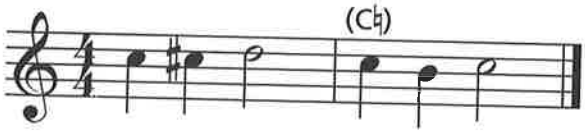


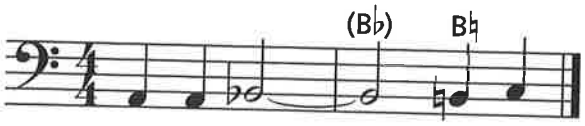
When ♭, ♯ or ♮ signs appear within a musical piece, they are called ACCIDENTALS.
An accidental sign affects the notes written on the same line or space following it *for that measure only.*





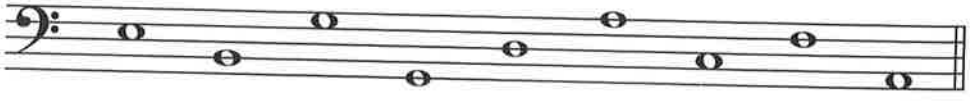
A bar line cancels all accidentals in the previous measure, except if a note is tied across the bar line.





Exercises

1 In the example, write natural signs before each note, then name the notes.



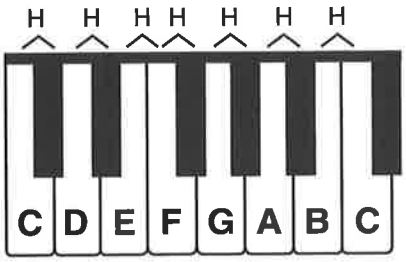
2 Write the names of the notes on the lines below the staff.

Circus March (from "Entry of the Gladiators")

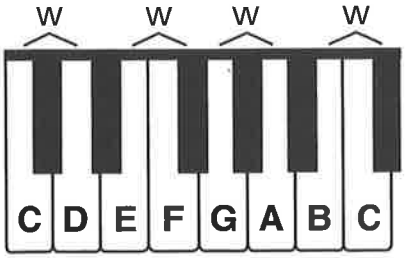
Julius Fučik (1872–1916)

Whole Steps, Half Steps and Enharmonic Notes

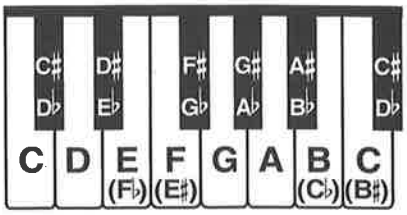
The distance from any key on the keyboard to the very next key above or below, whether black or white, is a HALF STEP (H).



The distance from any key to two keys above or below, is a WHOLE STEP (W).



The key a half step up from C is C♯. This key is also a half step down from D, and is also known as D♭.



Many notes sound the same but are written differently. These notes are called ENHARMONIC NOTES.

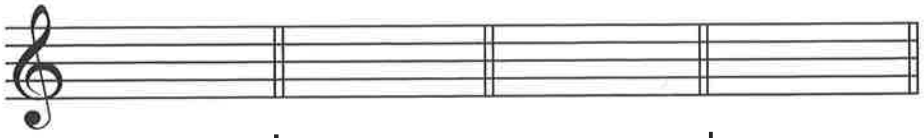
Exercises

1 The enharmonic note for F♭ is _____. The enharmonic note for E♯ is _____.

The enharmonic note for C♭ is _____. The enharmonic note for B♯ is _____.

2 Write the 2 indicated enharmonic notes on the staff and name the notes in the spaces below:

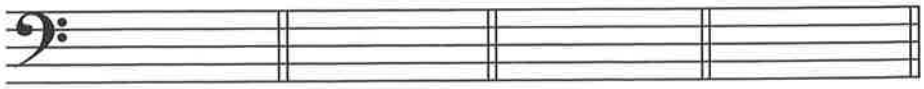
a. one half step above G
b. one half step below F
c. one half step below B
d. one half step above D



a. ___ ___ **b.** ___ ___ **c.** ___ ___ **d.** ___ ___

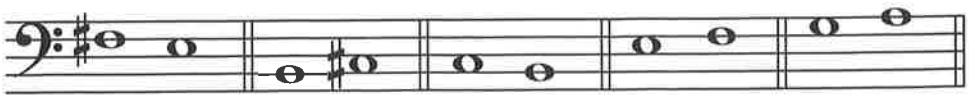
3 Write the indicated notes on the staff and the name of the note in the spaces below. If there are enharmonic notes, write both.

a. one whole step above G♯
b. one whole step below F
c. one whole step below A
d. one whole step above E



a. ___ ___ **b.** ___ ___ **c.** ___ **d.** ___ ___

4 Name the notes and indicate whether the distance between each pair of notes is a whole step (W) or a half step (H).



F♯ E ___ ___ ___ ___ ___ ___ ___ ___

W ___ ___ ___ ___

1. Circle one: The flat sign (♭) **raises** or **lowers** the pitch.

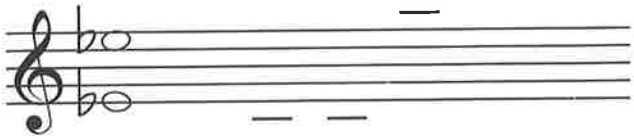
2. Circle one: The sharp sign (♯) **raises** or **lowers** the pitch.

3. A natural sign _____ a previous sharp or flat.

4. An accidental is in effect for _____ measure(s) only.

5. Write the following notes on the staff below. Write the notes in two places, one above the other.

E♭ G♯ C♯ B♭ A♭ F♯ D♭



6. The note F is _____ half step(s) above E.

7. The note D is _____ whole step(s) above C.

8. The note F is _____ whole step(s) below G.

9. Name 2 notes that are a half step away from A. _____ _____.

10. The enharmonic note for:

E♯ is _____.

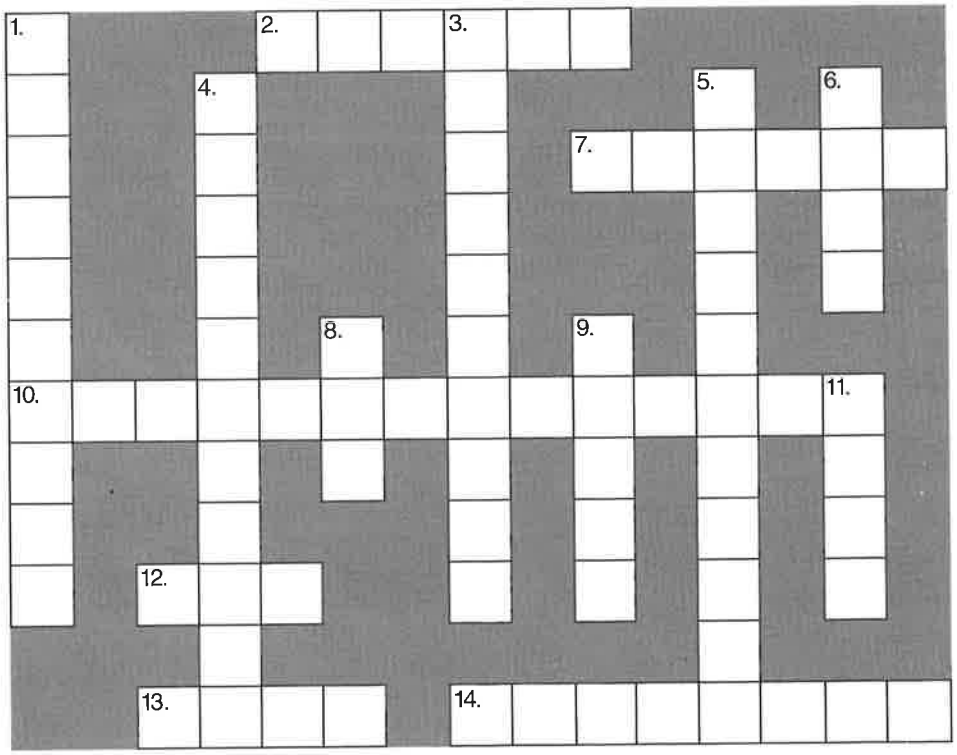
B♯ is _____.

F♭ is _____.

C♭ is _____.

Music Crossword

Fill in the boxes with the correct answers. Do not leave a space between words.



ACROSS

2. Smoothly connected
7. The name of the staff used for higher pitches
10. $\frac{2}{4}, \frac{3}{4}, \frac{4}{4}$
12. This symbol increases the value of the note by half
13. Musical silence
14. On a keyboard, the distance from one key to the next key (either right or left)

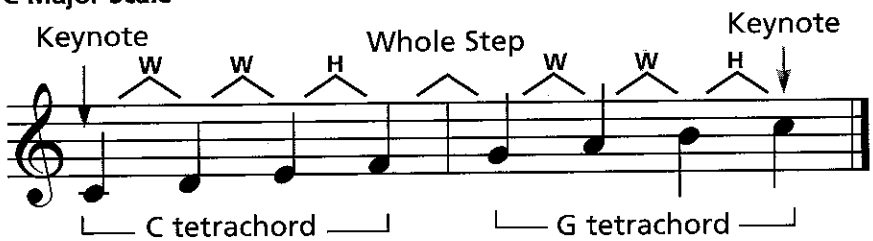
DOWN

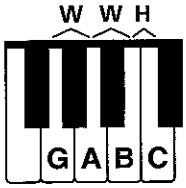
1. Treble and Bass staffs together
3. Flat, Sharp or Natural
4. What receives one beat in $\frac{3}{4}$ time
5. Lines added to a staff to extend the range
6. Lowers the pitch by a half step
8. Curved line connecting 2 or more notes of the same pitch
9. 5 lines and the spaces between
11. Curved line connecting 2 or more notes of different pitches

Tetrachords and Major Scales

The word TETRA means four. A TETRACHORD is a series of four notes having a pattern of whole step, whole step, half step. The four notes of a tetrachord must be in alphabetical order.

C Major Scale



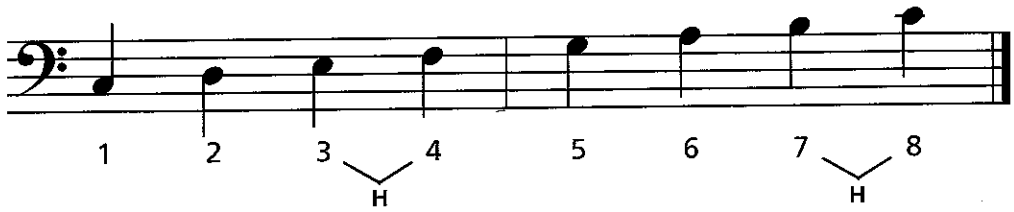


The MAJOR SCALE consists of eight notes—two tetrachords joined by a whole step.

Each scale begins and ends on a note of the same name, called the KEYNOTE. A scale can begin on any note.

The tones of a scale are also called the DEGREES (or steps) of the scale.

There are eight degrees in a major scale:

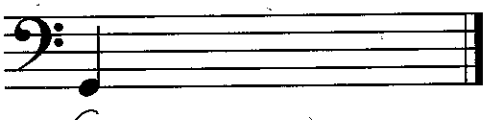


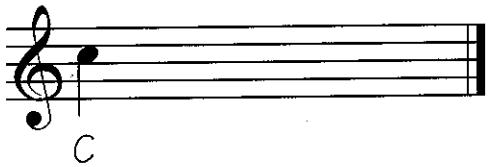
In all major scales, half steps occur between the 3rd and 4th and the 7th and 8th scale degrees.

The distances between all other scale degrees are whole steps.

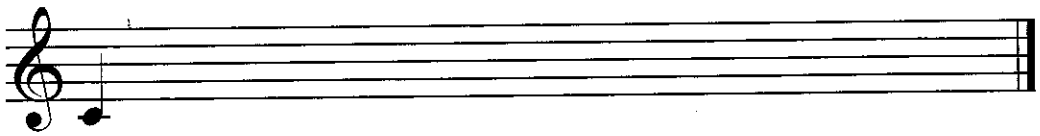
Exercises

1 Write tetrachords starting on the following notes, then add the note names under the staff. The notes must be in alphabetical order. Write where the whole (W) and half (H) steps occur above the staff.

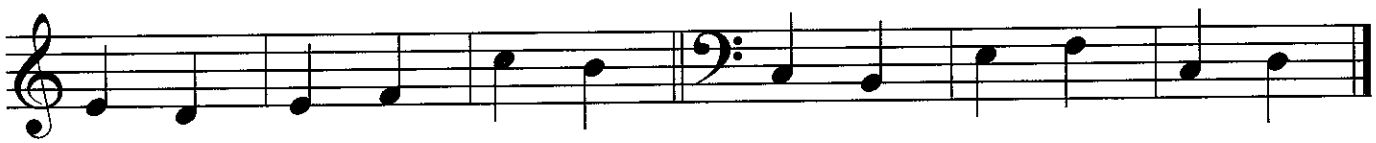




2 Write a C major scale. Add the scale degrees under each note and indicate where the whole and half steps occur above the staff.



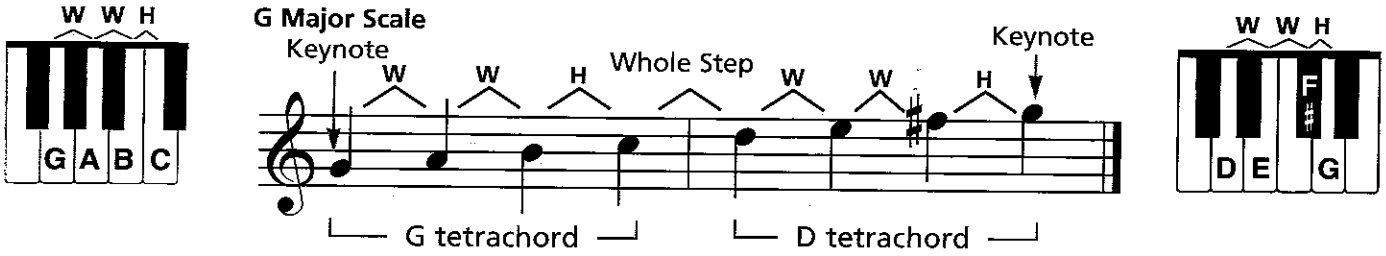
3 Write whether the distance between each note is a whole step (W) or half step (H).



___ ___ ___ ___ ___ ___

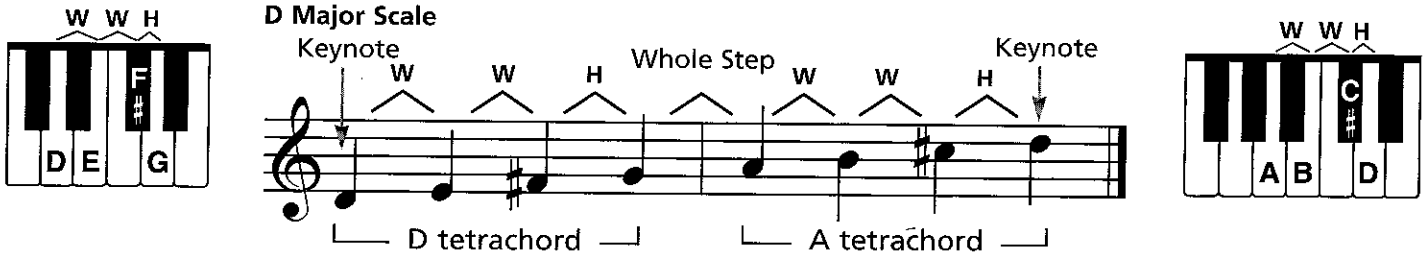
The Sharp Scales — G and D Major

Using the same pattern for tetrachords of whole step, whole step, half step, you can build the sharp scale of G major with the G and D tetrachords. G is the 2nd tetrachord of the C major scale.



The F must be raised to F♯ to create a whole step.
An F♯ is used instead of G♭ to stay in alphabetical order.

Using the same pattern for tetrachords, you can build the sharp scale of D major with the D and A tetrachords. D is the 2nd tetrachord of the G major scale.



The C must be raised to C♯ to create a whole step.
A C♯ is used instead of D♭ to stay in alphabetical order.

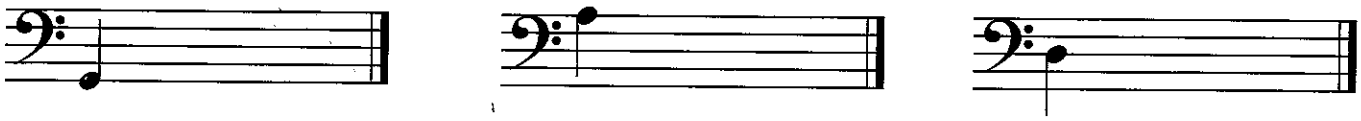
Important!

- The 2nd tetrachord of the C major scale is the 1st tetrachord of the G major scale.
- The 2nd tetrachord of the G major scale is the 1st tetrachord of the D major scale.

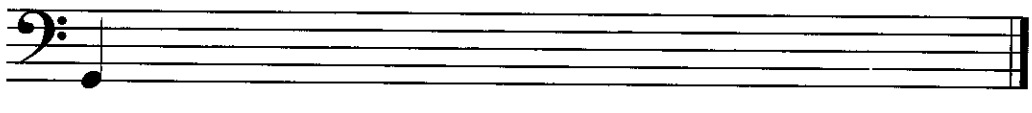
Starting with the C major scale, the 2nd tetrachord is always the 1st tetrachord of the following sharp scale. This overlapping pattern continues through all the major sharp scales.

Exercises

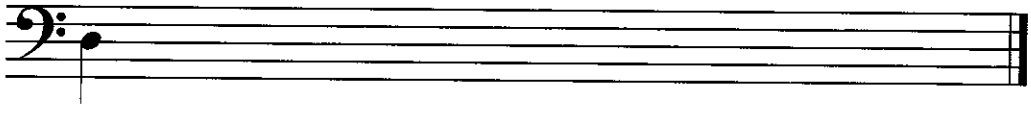
1 Write tetrachords starting on the following notes, then add the note names below the staff. The notes must be in alphabetical order. Remember to include the necessary accidentals. Write where the whole and half steps occur above the staff.



2 Write a G major scale. Add the scale degrees and indicate where the whole and half steps occur.

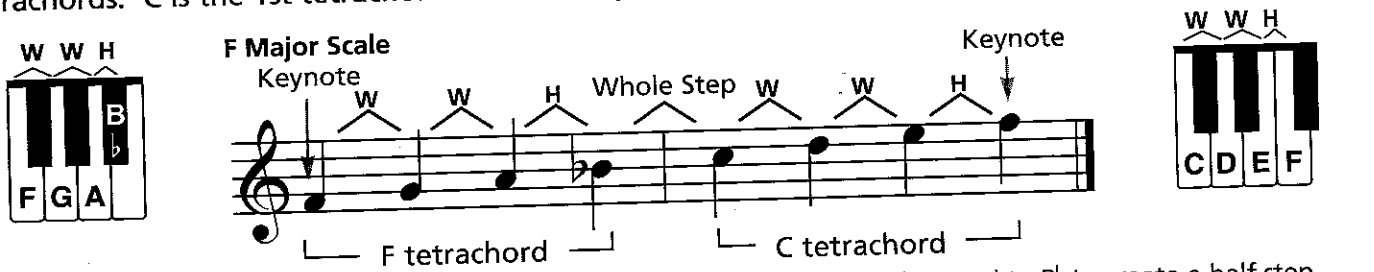


3 Write a D major scale. Add the scale degrees and indicate where the whole and half steps occur.



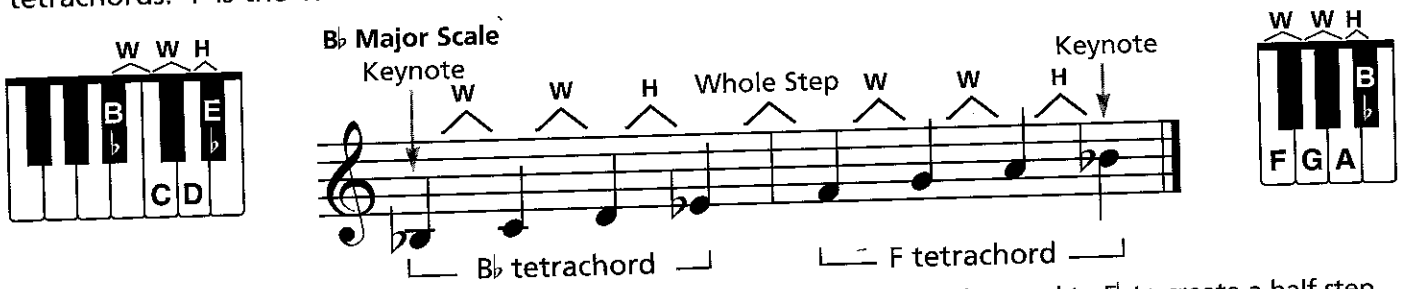
The Flat Scales — F and B♭ Major

Using the same pattern for tetrachords, you can build the flat scale of F major with the F and C tetrachords. C is the 1st tetrachord of the C major scale.



The B must be lowered to B♭ to create a half step.
A B♭ is used instead of A♯ to stay in alphabetical order.

Using the same pattern for tetrachords, you can build the flat scale of B♭ major with the B♭ and F tetrachords. F is the 1st tetrachord of the F major scale.



The E must be lowered to E♭ to create a half step.
An E♭ is used instead of D♯ to stay in alphabetical order.

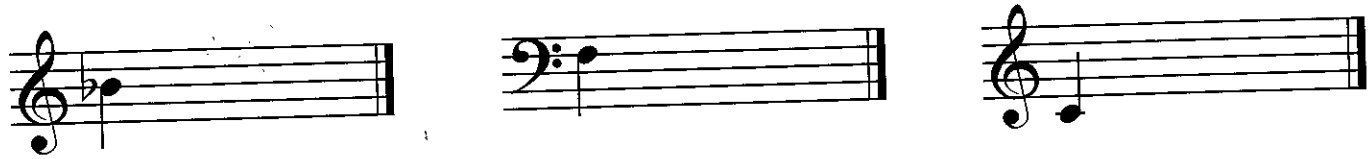
Important!

- The 4th scale degree of the C major scale (F) is the 1st scale degree of the F major scale.
- The 4th scale degree of the F major scale (B♭) is the 1st scale degree of the B♭ major scale.

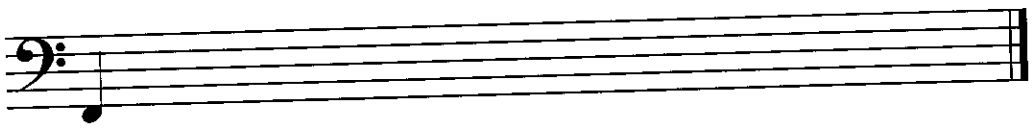
  Starting with the C major scale, the 4th scale degree is always the 1st scale degree (keynote) of the following flat scale. This pattern continues through all the major flat scales.

Exercises

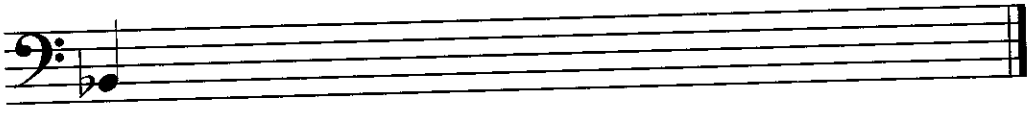
1 Write tetrachords starting on the following notes, then add the notes names below the staff. The notes must be in alphabetical order. Remember to include the necessary accidentals. Write where the whole and half steps occur above the staff.



2 Write an F major scale. Add the scale degrees and indicate where the whole and half steps occur.



3 Write a B♭ major scale. Add the scale degrees and indicate where the whole and half steps occur.

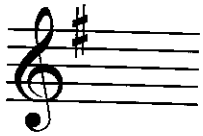


Key Signatures — The Sharp Keys

When writing the scales on page 44, you added sharp signs before the appropriate notes.

In the **G** scale, you added a sharp sign before each F; in the **D** scale, you added sharp signs before each F and C.

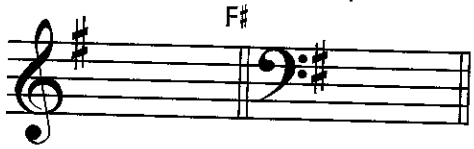
To make writing and reading music easier, you can place all of the sharps used in a scale or piece immediately after the clef sign. This is called the KEY SIGNATURE. It indicates the notes that will be sharped each time they appear for the *entire* piece.



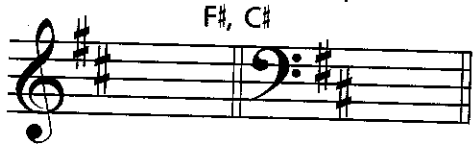
In this case, any F will always be played sharp (unless there is a natural sign before the F).

Sharps written in the key signature always appear in a specific order. Here are the sharp key signatures of the scales you know:

Key of G — 1 sharp:
F♯



Key of D — 2 sharps:
F♯, C♯



The order of sharps in the key signature for up to two sharps is F C.

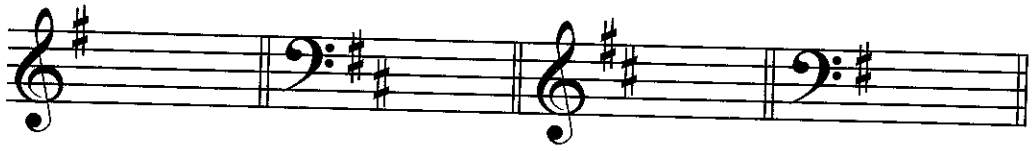
Important!
To figure out the name of a major key from the key signature, go up a half step from the last sharp.
As an example: a key signature of F♯ would be the key of G major;
a key signature of F♯ and C♯ would be the key of D major.

Exercises

1 Write the order of the first two sharps in a key signature. _____ _____

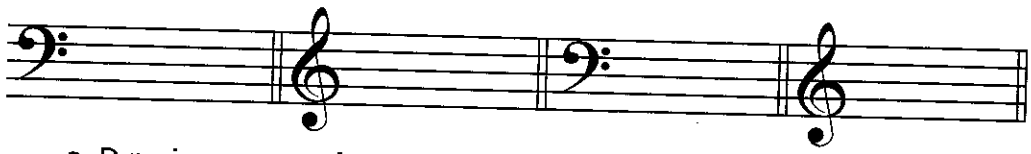
2 If C♯ is the last sharp in the key signature, the major key name would be _____.

3 Name the following major key signatures.



a. _____ b. _____ c. _____ d. _____

4 Write the following major key signatures.



a. D major **b.** G major **c.** G major **d.** D major

Key Signatures — The Flat Keys

When writing the scales on page 45, you added flat signs before the appropriate notes.

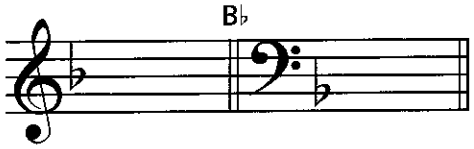
In the **F** scale, you added a flat sign before each B; in the **B♭** scale, you added flat signs before each B and E.

Just like sharp signs, you can place all of the flats used in a scale or piece in the KEY SIGNATURE. It indicates the notes that will be flatted each time they appear for the *entire* piece.

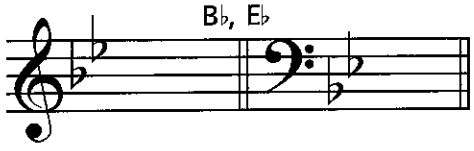
In this case, any B will always be played flat (unless there is a natural sign before the B).

Flats written in the key signature always appear in a specific order. Here are the flat key signatures of the scales you know:

Key of F — 1 flat:



Key of B♭ — 2 flats:



The order of flats in the key signature for up to two flats is **B E.**

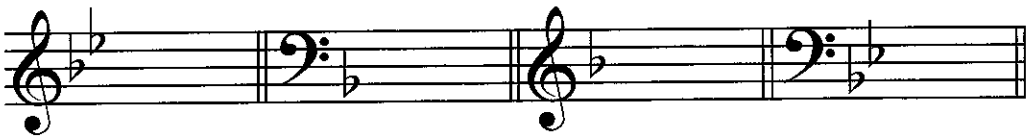
Important!
To figure out the name of a major key from the key signature, remember that one flat is the key of F; for two or more flats, the next-to-last flat is the name of the key. As an example, a key signature of B♭ and E♭ would be the key of B♭ major.

Exercises

1 Write the order of the first two flats in a key signature. _____ _____

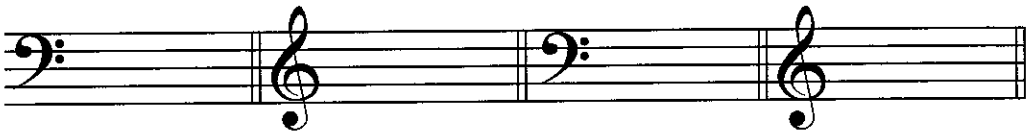
2 If B♭ is the next-to-last flat in the key signature, the major key name would be_____.

3 Name the following major key signatures.



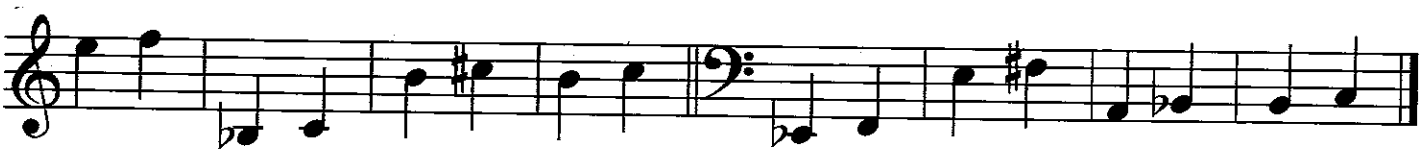
a. _____ **b.** _____ **c.** _____ **d.** _____

4 Write the following major key signatures.



a. F major **b.** B♭ major **c.** B♭ major **d.** F major

1 Indicate whether the distance between each note is a whole step (W) or half step (H).



_____ _____ _____ _____ _____ _____ _____ _____

2 The pattern of a tetrachord is whole step, _____ _____, _____ _____.

3 Write tetrachords below starting on the following notes. Remember to include the accidentals.

4 Draw a line to match each of the following:

The 2nd tetrachord of:	Is the 1st tetrachord of:
D major	D major
G major	G major
C major	A major

5 The major scale is made up of _____ tetrachords joined by a_____ _____.

6 How many notes are in a major scale?_____

7 In a major scale, half steps occur between the _____ & _____ and _____ & _____ scale degrees.

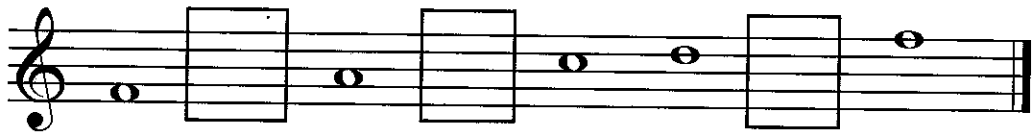
8 Write major scales (without key signatures) beginning on the following notes using whole notes.

a.

b.

9 Fill in the missing notes in the major scales and indicate with an H above the staff where the half steps occur.

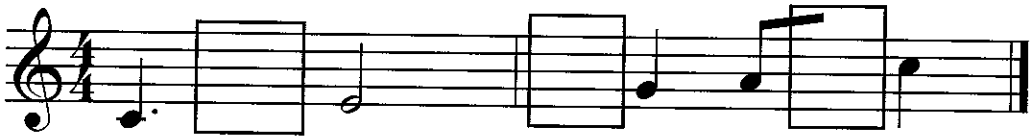
a.



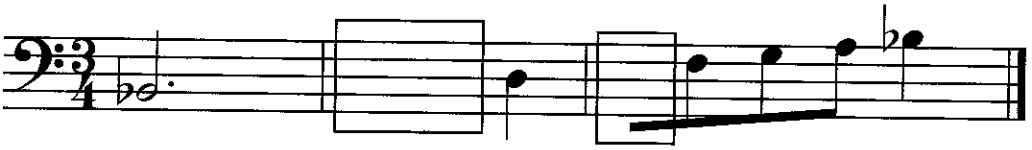
b.

10 Fill in the missing notes and note values in the major scales.

a.



b.

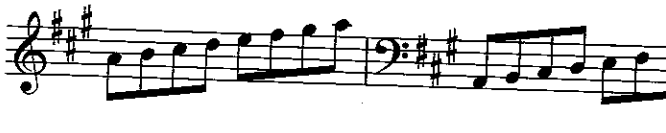


The Remaining Major Scales with Key Signatures

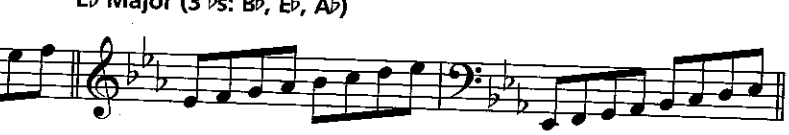
Once you are familiar with how to build tetrachords, it is easy to build any major scale. Altogether, there are 15 major scales: 7 sharp keys, 7 flat keys, and the key of C, which has no sharps or flats.

You are already familiar with the scales and key signatures of five of the 15: C, G (F♯), D (F♯, C♯), F (B♭) and B♭ (B♭, E♭). Here are the remaining 10.

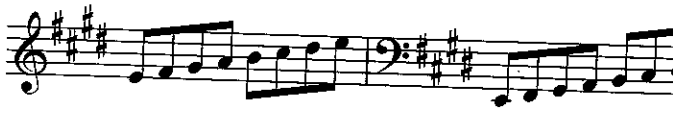
A Major (3 ♯s: F♯, C♯, G♯)



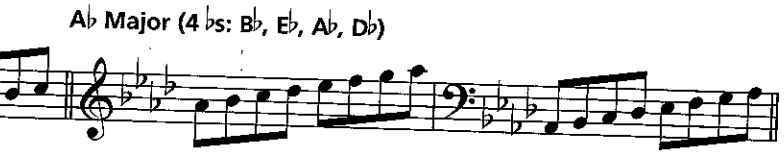
E♭ Major (3 ♭s: B♭, E♭, A♭)



E Major (4 ♯s: F♯, C♯, G♯, D♯)

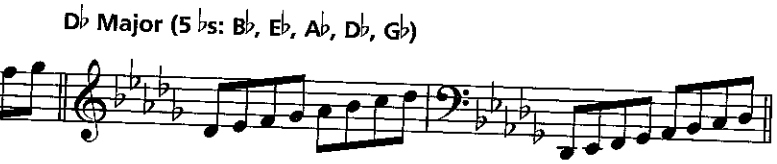


A♭ Major (4 ♭s: B♭, E♭, A♭, D♭)

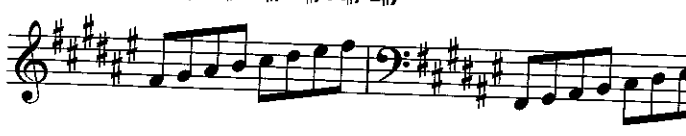


B Major (5 ♯s: F♯, C♯, G♯, D♯, A♯)

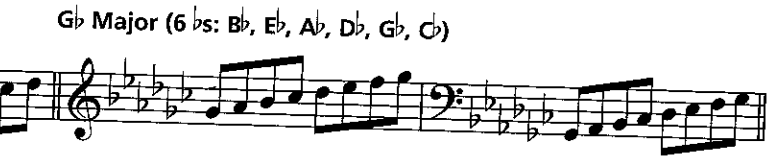
D♭ Major (5 ♭s: B♭, E♭, A♭, D♭, G♭)



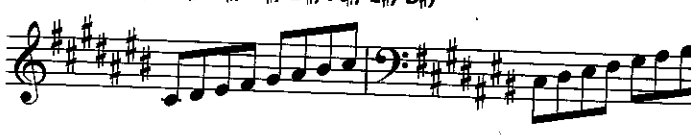
F♯ Major (6 ♯s: F♯, C♯, G♯, D♯, A♯, E♯)



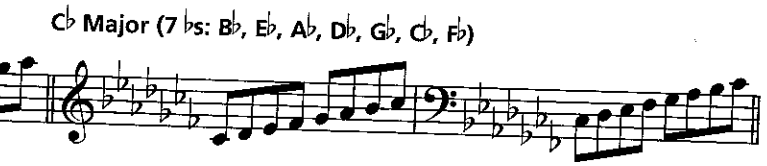
G♭ Major (6 ♭s: B♭, E♭, A♭, D♭, G♭, C♭)



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



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



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:

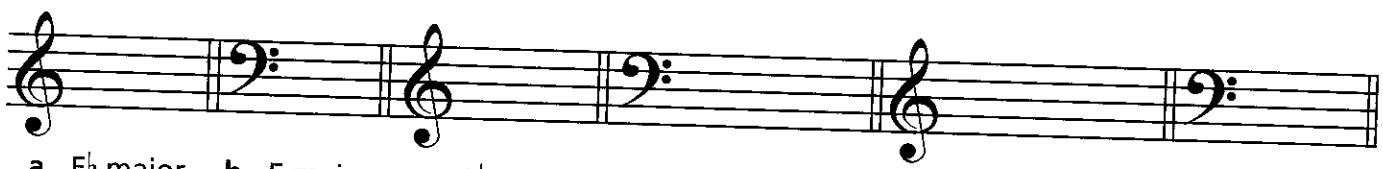
B major sounds the same as **C♭ major**
F♯ major sounds the same as **G♭ major**
C♯ major sounds the same as **D♭ major**

Exercises

1 Name the following major key signatures.

a. _____ b. _____ c. _____ d. _____ e. _____ f. _____

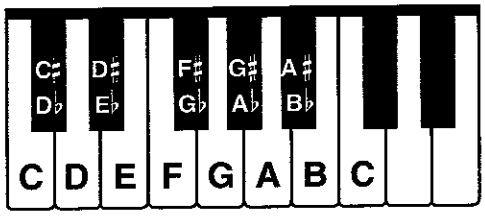
2 Write the following key signatures.



a. E♭ major **b.** E major **c.** A♭ major **d.** C♯ major **e.** C♭ major **f.** A major

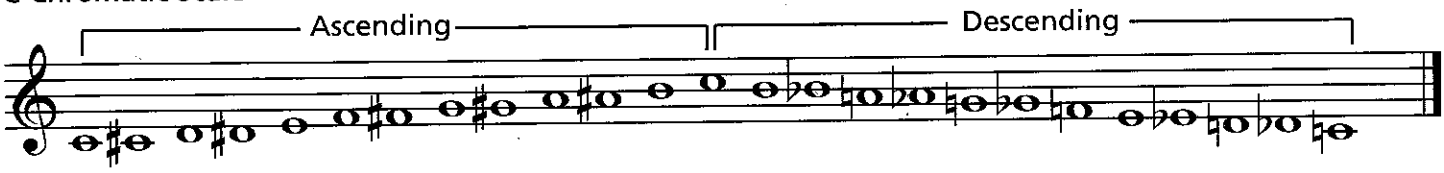
Chromatic Scale

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*.

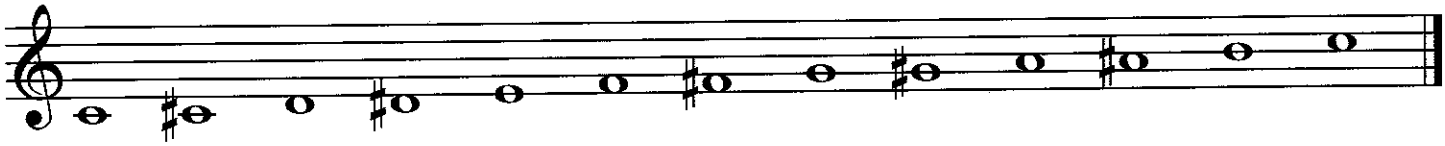


The chromatic scale may begin on any note.
In a chromatic scale, there are 12 tones.

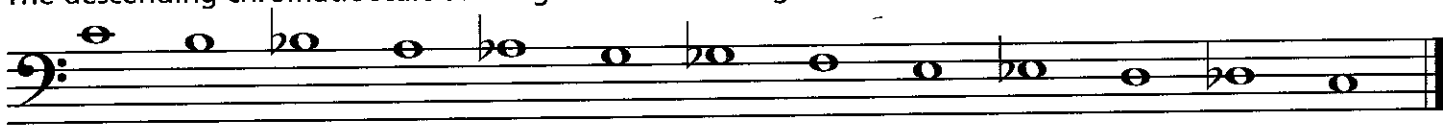
C Chromatic Scale



The ascending chromatic scale starting on C uses sharp signs.

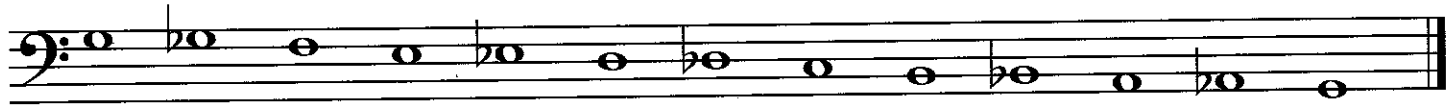


The descending chromatic scale starting on C uses flat signs.



An ascending chromatic scale starting on F looks like this:

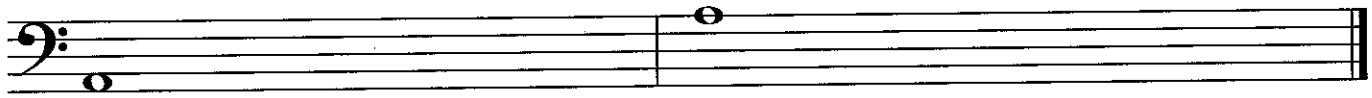
A descending chromatic scale starting on G looks like this:



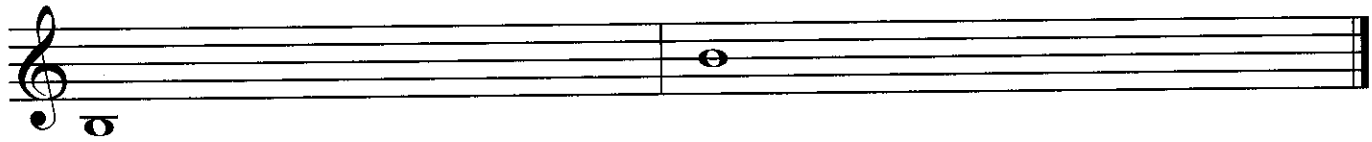
Exercises

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

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



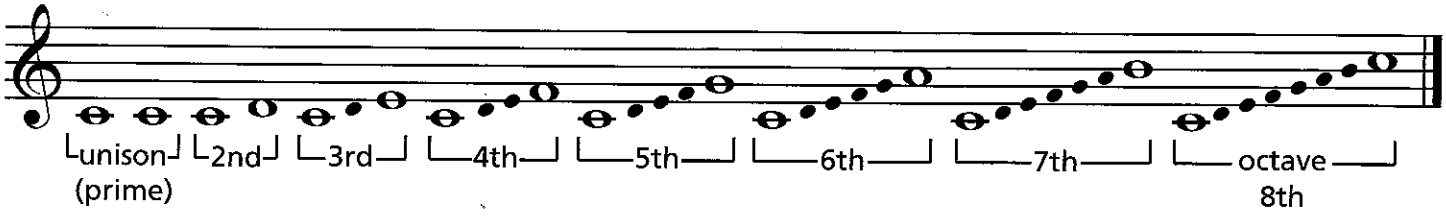
3 Write an ascending and descending chromatic scale starting on B.



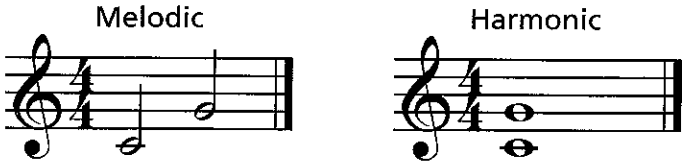
Intervals

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.

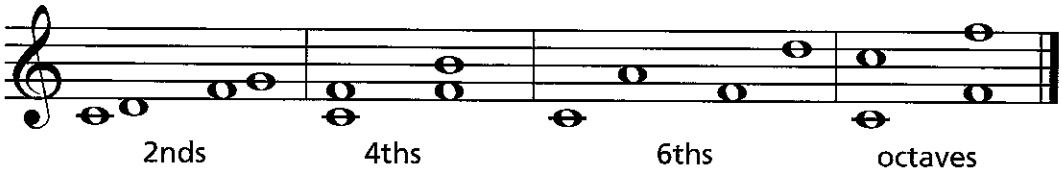
Intervals are named by the number of the upper note (2nds, 3rds, etc.) with two exceptions. The interval between notes that are identical is called a UNISON (also called a PRIME INTERVAL); the interval of an 8th is called an OCTAVE. The intervals below are all written with C as the lower note.



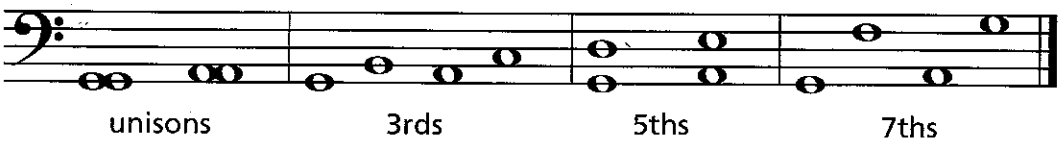
Intervals are called MELODIC INTERVALS when they are sounded separately and HARMONIC INTERVALS when they are sounded together.



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

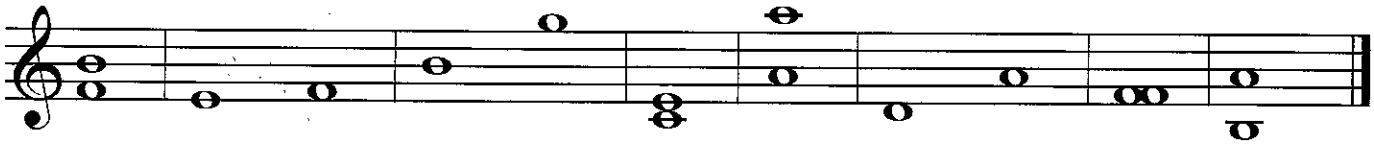


ODD NUMBERED INTERVALS of unisons, 3rds, 5ths and 7ths are written from line to line or space to space.



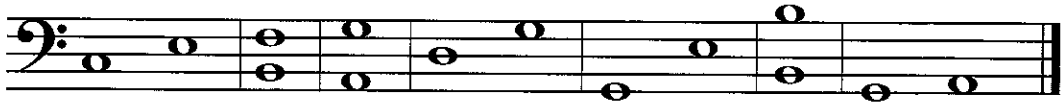
Exercises

1 Name the intervals.



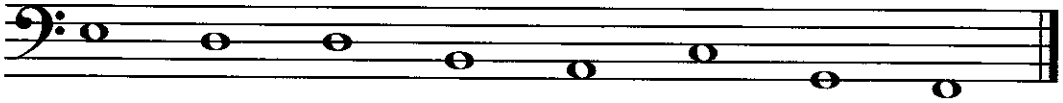
____ ____ ____ ____ ____ ____ ____ ____

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



____ ____ ____ ____ ____ ____ ____

3 Write the harmonic interval indicated above the following notes.



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

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.

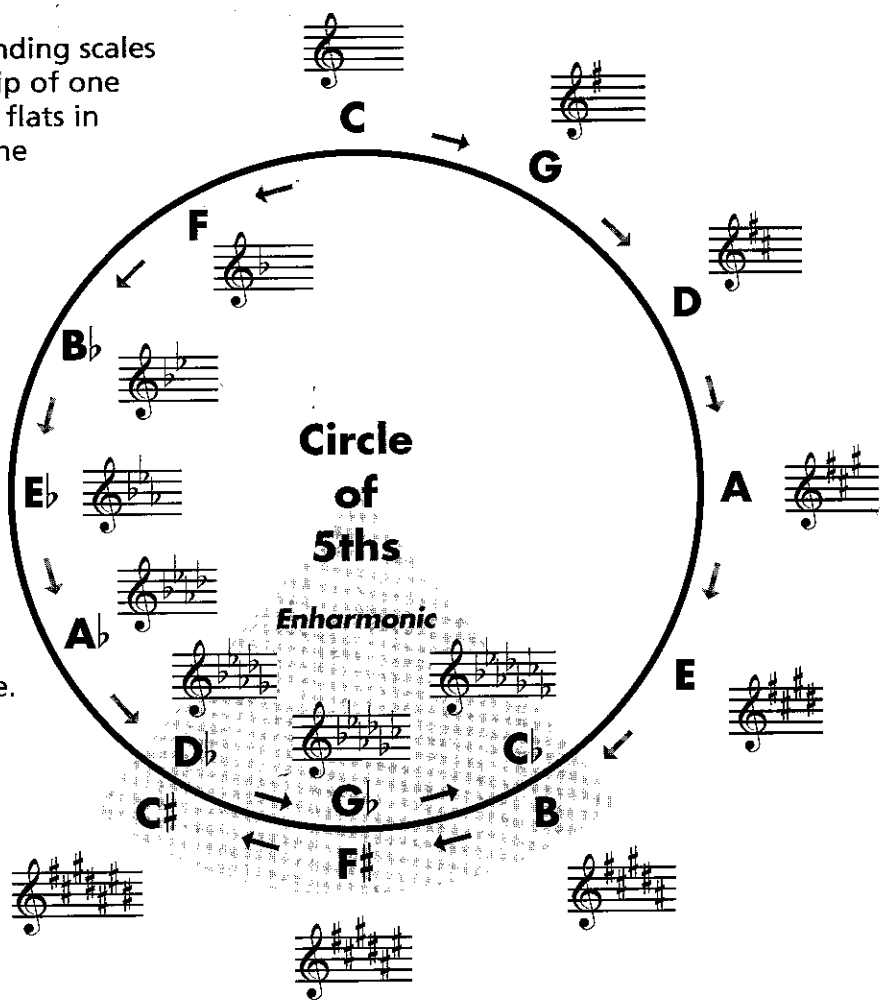
FLAT KEYS
Start with C and go counterclockwise in *descending* tetrachord order.

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♭, B♭ to E♭, etc.

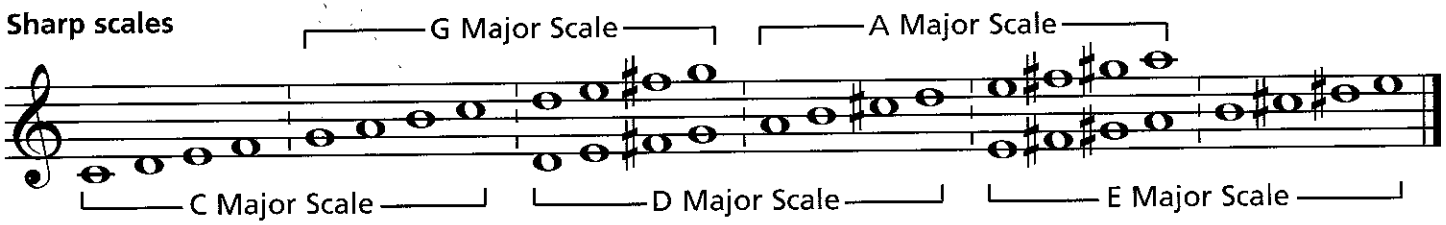


The order of sharps in the key signature:
F C G D A E B.

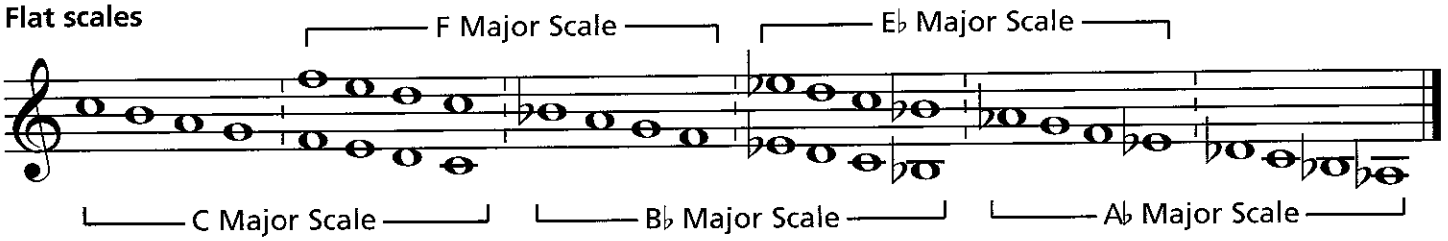
The order of flats in the key signature:
B E A D G C F.

OVERLAPPING TETRACHORD PATTERNS

Sharp scales



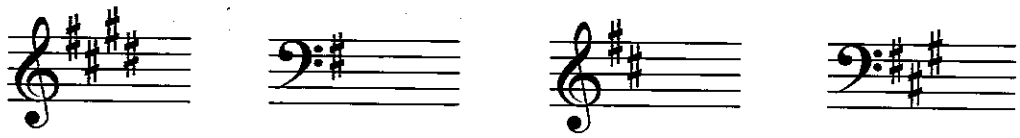
Flat scales



*W=Whole Step. H=Half Step.

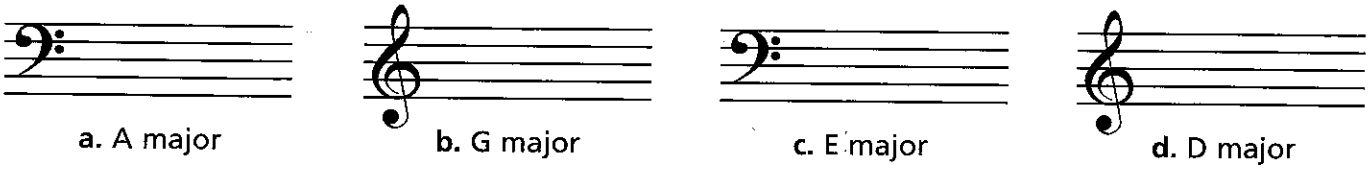
1 What is the complete order of sharps in a key signature? _____

2 Name the following major key signatures.



a._____ b._____ c._____ d._____

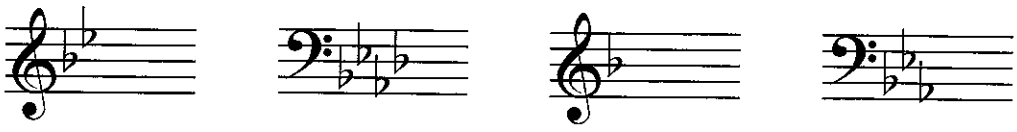
3 Write the following key signatures.



a. A major b. G major c. E major d. D major

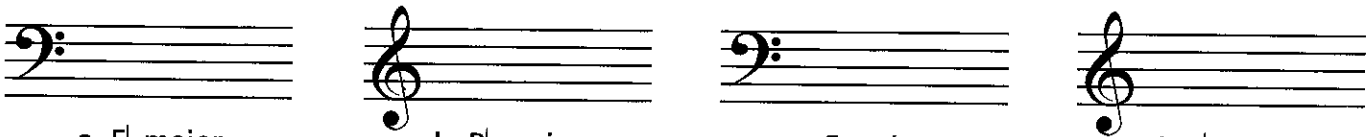
4 What is the complete order of flats in a key signature? _____

5 Name the following major key signatures.



a._____ b._____ c._____ d._____

6 Write the following key signatures.



a. E♭ major b. B♭ major c. F major d. A♭ major

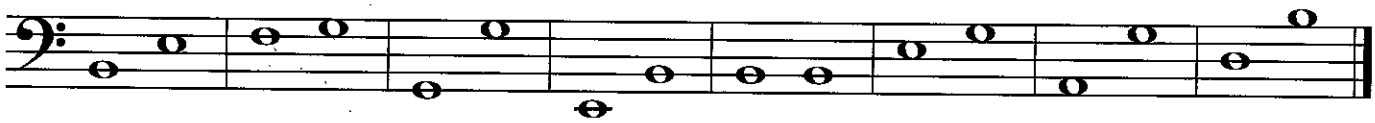
7 The C♭ major scale sounds the same as which other major scale? _____

8 The G♭ major scale sounds the same as which other major scale? _____

9 The D♭ 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.