

Alfred's

COMPLETE

Essentials of MUSIC THEORY

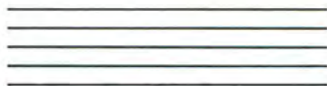
LESSONS • EAR TRAINING • WORKBOOK

ANDREW SURMANI • KAREN FARNUM SURMANI • MORTON MANUS



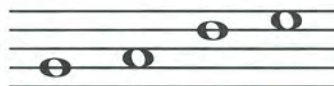
The Staff, Notes and Pitches

Music is written on a STAFF of five lines and the four spaces between.

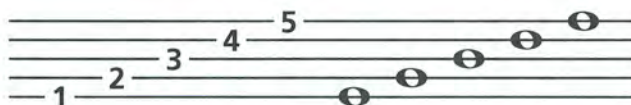


The STAFF

Music NOTES are oval-shaped symbols that are placed *on* the lines and *in* the spaces. They represent musical sounds, called PITCHES.



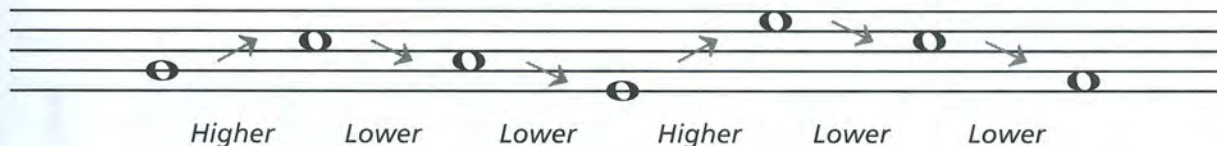
The lines of the staff are numbered from bottom to top.



The spaces between the lines are also numbered from bottom to top.



If the notes appear *higher* on the staff, they sound *higher* in pitch.
If the notes appear *lower* on the staff, they sound *lower* in pitch.

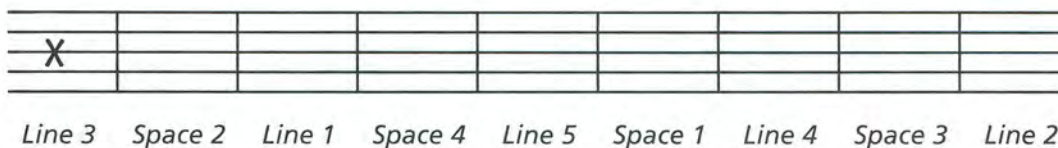



Exercises

- 1 Draw a staff by connecting the dots. Use a ruler or straight edge. Number the lines, then the spaces from low to high.



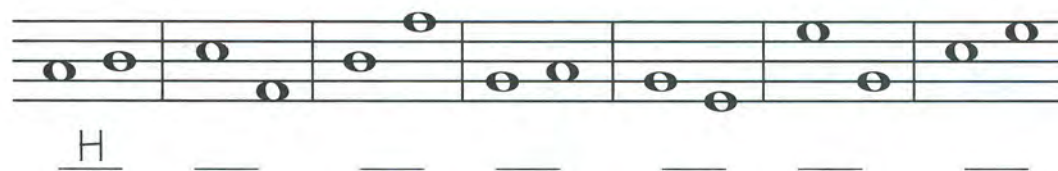
- 2 On the staff, mark an X in the following locations:



- 3 Write notes like this  on the following lines and spaces:



- 4 Indicate whether the 2nd note is higher or lower than the 1st note by using an H (higher) or L (lower).

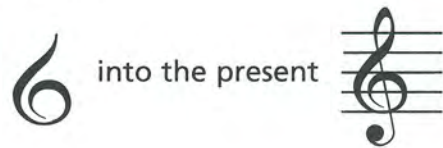


Treble Clef and Staff

Music notes are named after the first seven letters of the alphabet, from A to G. By their position on the staff, they can represent the entire range of musical sound.

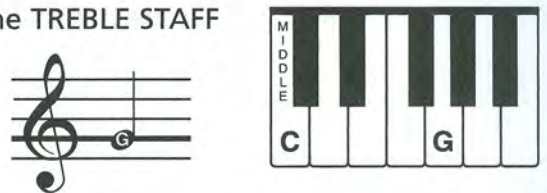
CLEF signs help to organize the staff so notes can easily be read.

The TREBLE CLEF is used for notes in the higher pitch ranges. The treble (or G) clef has evolved from a stylized letter G:



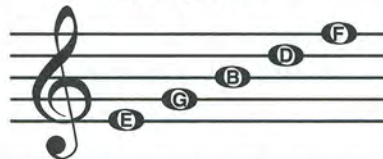
The curl of the treble clef circles the line on which the note G is placed. This G is above MIDDLE C (the C nearest the middle of the keyboard).

The TREBLE STAFF



In the treble staff, the names of the notes on the lines from bottom to top are E, G, B, D, F.

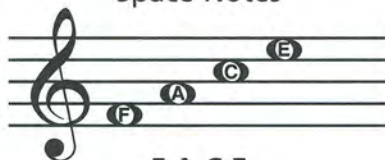
Line Notes



Every Good Boy Does Fine

The names of the notes in the spaces from bottom to top spell FACE.

Space Notes



FACE

All the notes of the TREBLE STAFF:

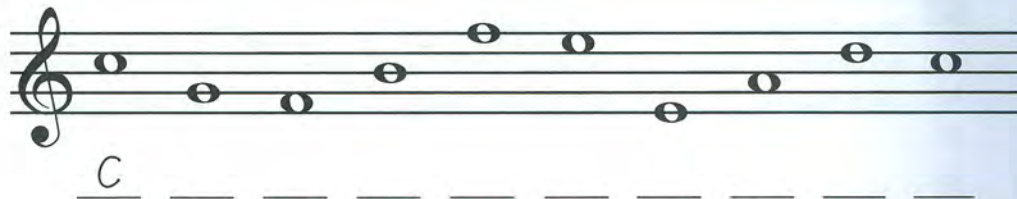


Exercises

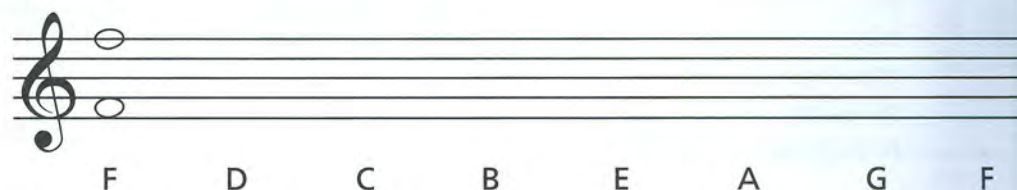
- 1** The treble clef is written in two motions. Trace along the dotted lines as indicated, then draw four more.



- 2** Write the letter names of the following notes. Use capital letters.

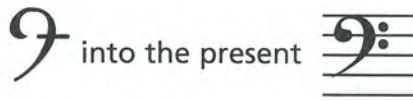


- 3** Write the notes on the staff indicated by the letters. If the notes can be written in two places, write one above the other.



Bass Clef and Staff

The BASS CLEF (pronounced "base") is used for notes in the lower pitch ranges. The bass (or F) clef has evolved from a stylized letter F:



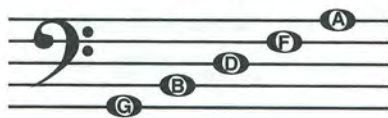
The two dots of the bass clef surround the line on which the note F is placed. This F is below middle C.

The BASS STAFF



In the bass staff, the names of the notes on the lines from bottom to top are G, B, D, F, A.

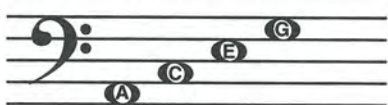
Line Notes



Good Boys Do Fine Always

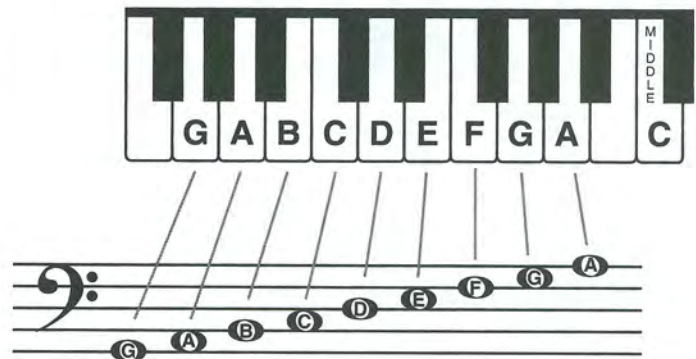
The names of the notes in the spaces from bottom to top are A, C, E, G.

Space Notes



All Cows Eat Grass

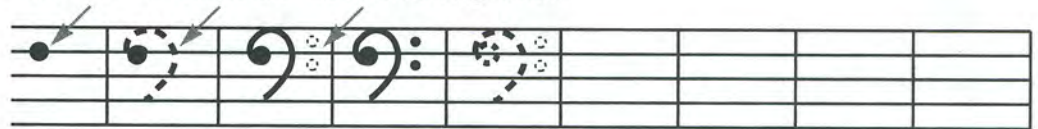
All the notes of the BASS STAFF:



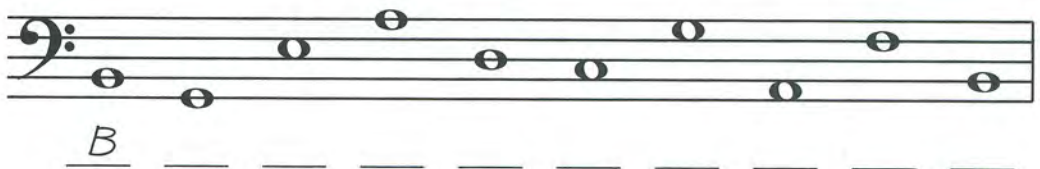
Exercises

- The bass clef is written in four motions. Trace along the dotted lines as indicated, then draw four more.

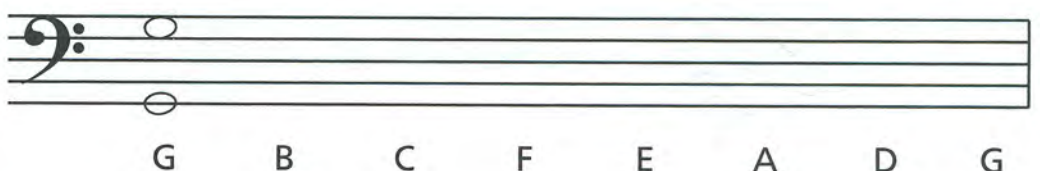
Motion 1: Dot on 4th line Motion 2: Curved line Motions 3 & 4: Dots surrounding 4th line



- Write the letter names of the following notes.

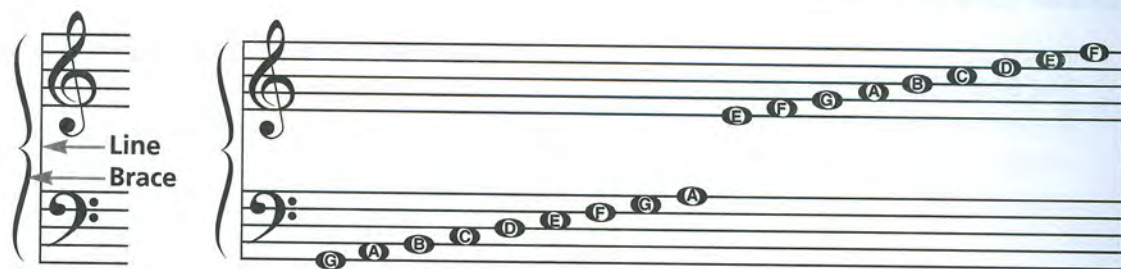


- Write the notes on the staff indicated by the letters. If the notes can be written in two places, write one above the other.



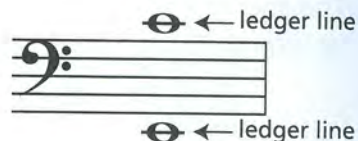
The Grand Staff

When the bass and treble staves are connected by a brace and a line, they combine to form the GRAND STAFF.

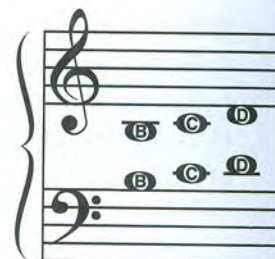
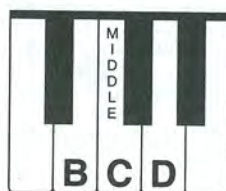
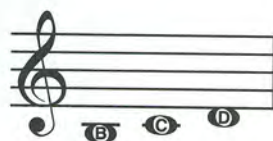
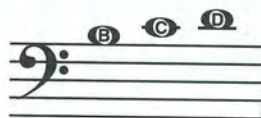


Ledger Lines — The Middle Notes

LEDGER LINES are short lines which are added to extend the range of the staff when the notes are too low or too high to be written on the staff.



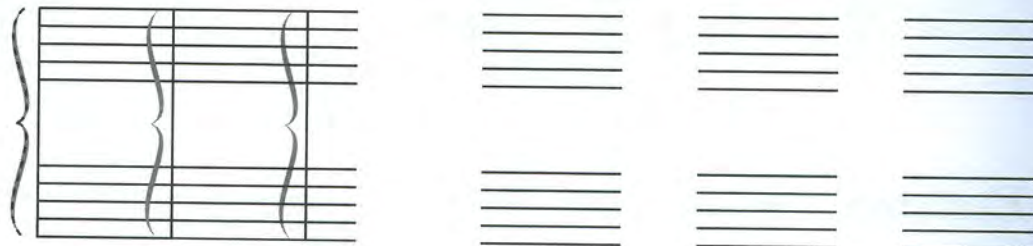
The notes in the middle range of the grand staff are B, C and D. They can be written on ledger lines in both the bass and treble staves.



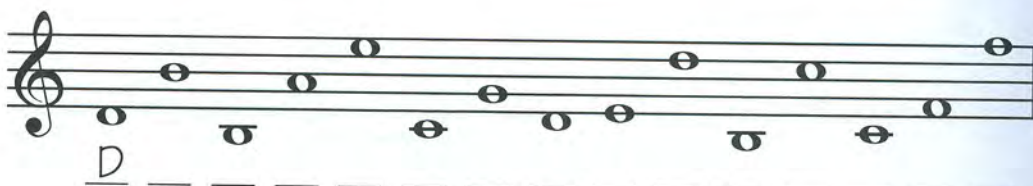
These notes are written differently but sound the same.

Exercises

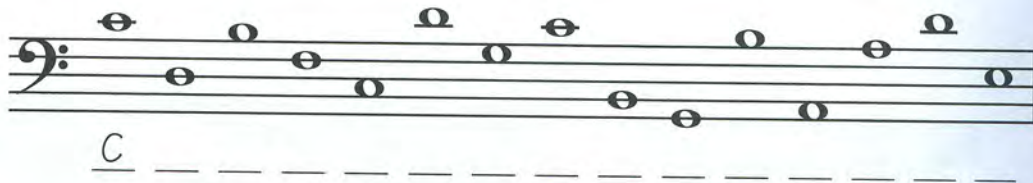
- 1** Trace these three braces. Then, using the staves provided, draw the grand staff three times. Include the brace, line and both clef signs.



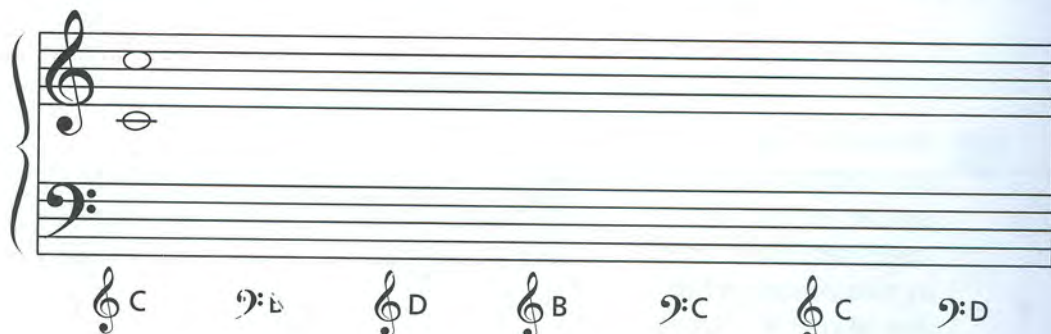
- 2** Write the letter names of the notes from the treble staff.



- 3** Write the letter names of the notes from the bass staff.



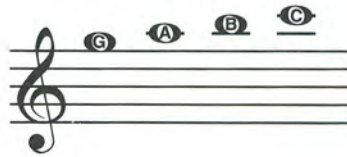
- 4** Write the notes indicated by the clefs and letter names in two places on the grand staff. Add ledger lines where necessary.



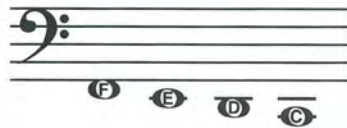
Ledger Lines

Low and High Notes

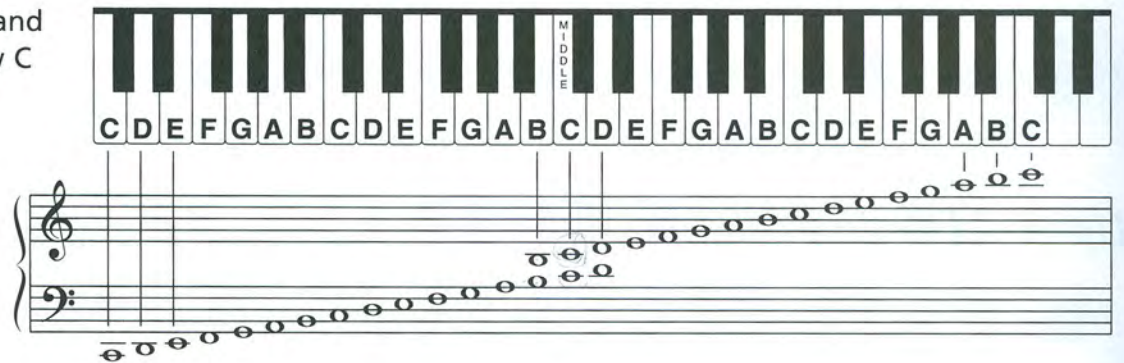
More than one ledger line may be added to extend the lower and upper ranges of the grand staff. The next higher notes of the treble staff are G, A, B and C.



The next lower notes of the bass staff are F, E, D and C.

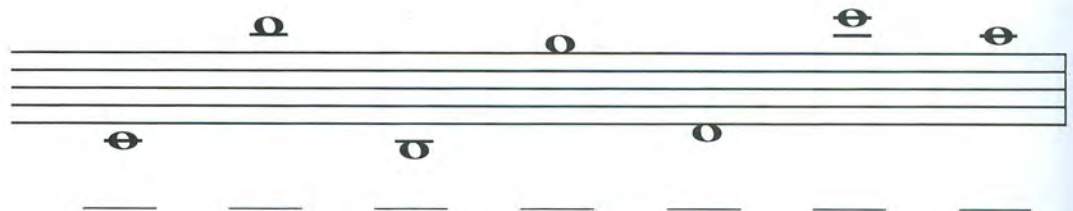


All the notes on the grand staff from bass clef Low C to treble clef High C:



Exercises

1 Draw a treble clef and name the notes.



2 Draw a bass clef and name the notes.



3 Write each of the indicated notes in four places on the grand staff.



Low and High

Track 1*

- 1** You will hear low and high sounds.
Circle low if you hear low sounds; circle high if you hear high sounds.

a.	Low High	b.	Low High	c.	Low High
d.	Low High	e.	Low High	f.	Low High

Track 2

- 2** Listen to the examples and indicate whether the second note is lower (L) or higher (H).

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

Up and Down

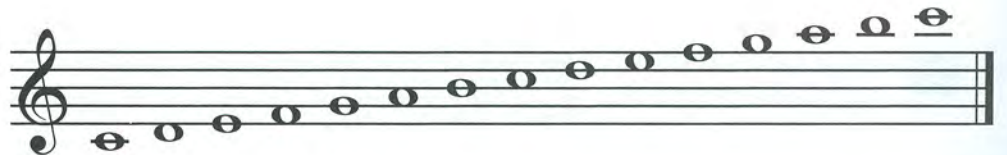
Track 3

- 3** You will hear three sounds that go up or down. Circle the arrow pointing up if the sounds go up or circle the arrow pointing down if the sounds go down.

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

Track 4

- 4** Listen to the notes in the treble clef. The notes will be played from low to high in ascending order.



Track 5

- 5** Listen to the notes in the bass clef. The notes will be played from low to high in ascending order.



Track 6

- 6** Listen to the following notes and indicate whether they sound like they should be notated in the bass clef or treble clef (mark with a B or T).

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

*Track 1 refers to the track number on Ear Training CD 1.

1 How many lines are on a single staff? _____

2 How many spaces are on a single staff? _____

3 Is the 5th line at the bottom or top of the staff?

4 Which clef is also known as the G clef? _____

5 The note names of the five lines in the treble clef from bottom to top are:

6 The note names of the four spaces in the treble clef from bottom to top are:

7 The line through middle C is called a _____ line.

8 Which clef is also known as the F clef? _____

9 The note names of the five lines in the bass clef from bottom to top are:

10 The note names of the four spaces in the bass clef from bottom to top are:

11 Write the letter names of the notes.

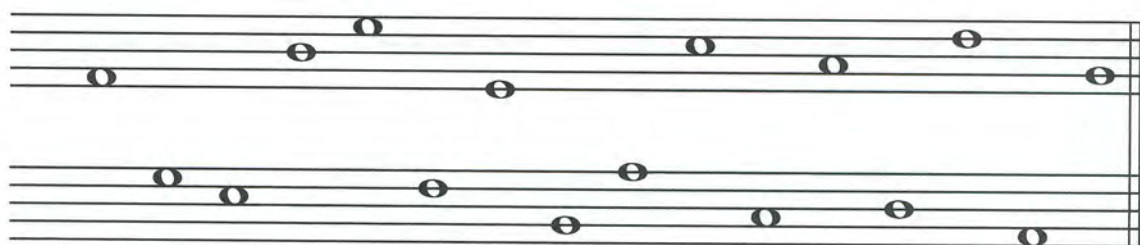


a. _____ b. _____ c. _____ d. _____ e. _____ f. _____

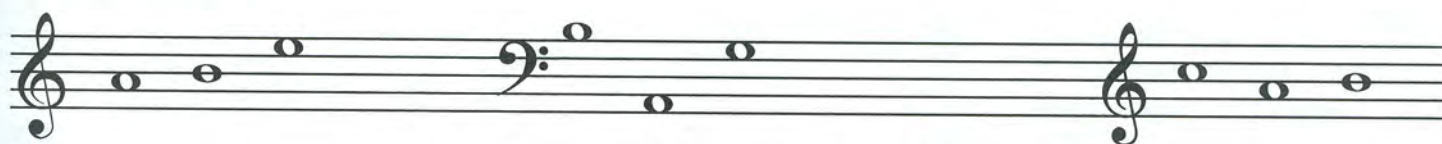
12 Write the letter names of the notes.



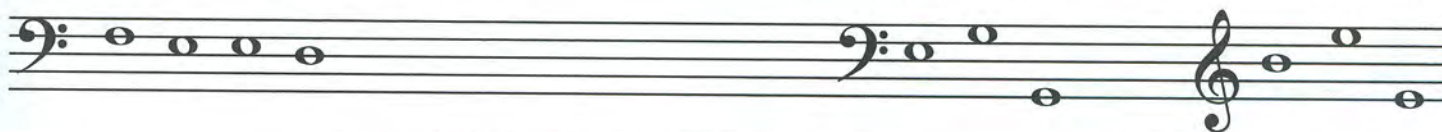
13 Draw the grand staff and name the notes.



14 Spell the words to complete the sentences below.



_____ took his lunch _____ and went downtown in a _____ to



_____ the pigeons in the park. While eating his _____ sandwich, a _____

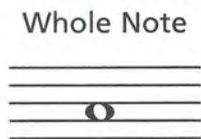


flew by and barely missed his _____ decided to go home.

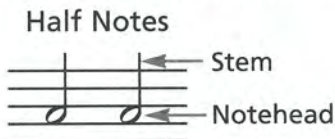
Note Values

While the placement of notes on the staff indicates the pitch, the duration of the note (how long the note is held) is determined by the note value.

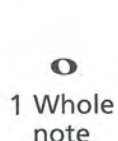
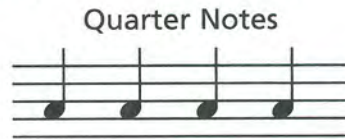
A **WHOLE NOTE** is drawn as an open oval.



Two **HALF NOTES** equal the duration of one whole note.



Four **QUARTER NOTES** equal the duration of one whole note.



Stems extend *downward* on the left side when the note appears *on or above* the 3rd line of the staff.



Stems extend *upward* on the right side when the note appears *below* the 3rd line of the staff.



The stem length should continue to the space or line with the same letter name, above or below.

Stem extends to F above.

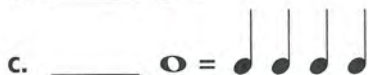


Stem extends to F below.

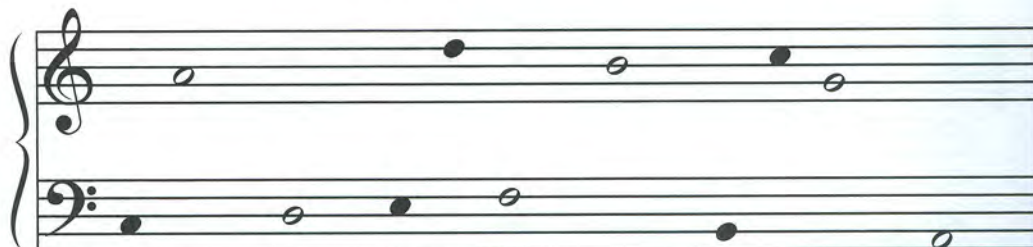


Exercises

1 Fill in the blanks with the correct number:



2 Draw the stems in the correct direction with the correct length. Write the names of the notes between the staff.

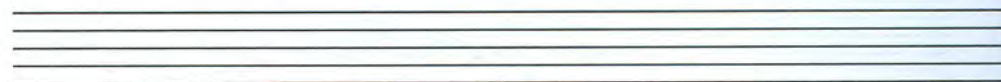


3 Draw the treble clef and write the indicated notes. Use only notes within the staff.



C whole A quarter E half F whole B quarter D quarter G half

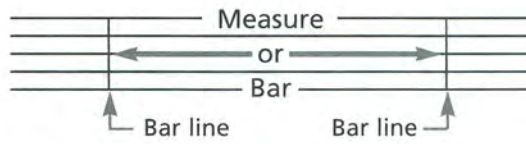
4 Draw the bass clef and write the indicated notes. Use only notes within the staff.



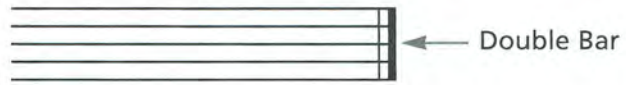
E half D quarter A whole C quarter F half B whole G half

Measure, Bar Line and Double Bar

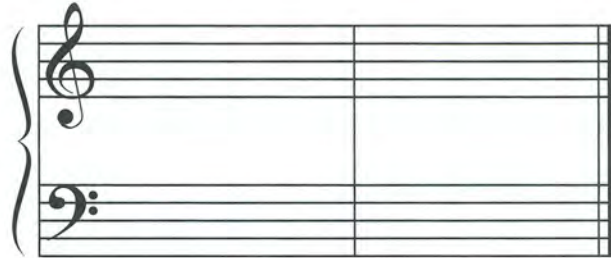
Music is divided into equal parts by BAR LINES. The area between the two bar lines is called a MEASURE or BAR.



A DOUBLE BAR is written at the end of a piece of music. It is made up of one thin and one thick line, with the thick line always on the outside.

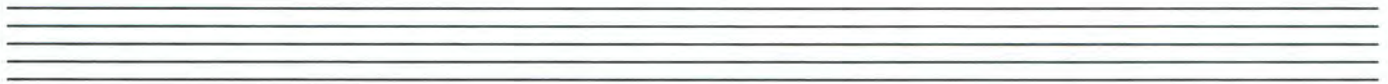


On a grand staff, the bar lines and double bar pass through the entire staff.

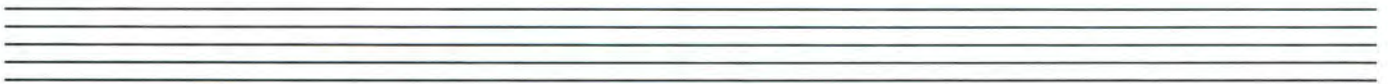


Exercises

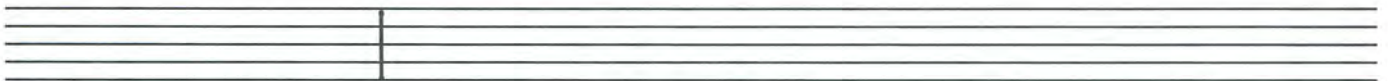
- 1 Divide the staff below into 4 measures with a double bar at the end. A single staff does not begin with a bar line.



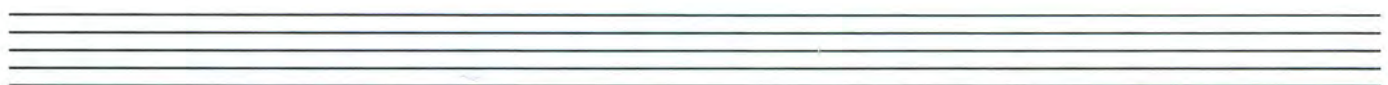
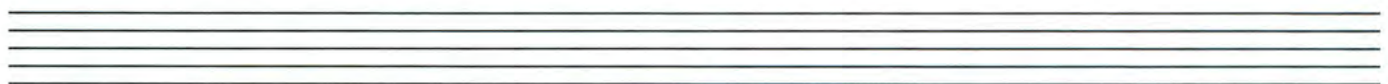
- 2 Draw a treble clef. Divide the staff below into 4 measures with a double bar at the end. Write any whole note in each measure. Name the notes on the lines below the staff.



- 3 Draw a bass clef. Divide the staff below into 4 measures with a double bar at the end. Write any 4 quarter notes (alternate stem direction) in each measure. Name the notes on the lines below the staff.



- 4 Draw a grand staff. Divide the staff below into 4 measures with a double bar at the end. Write any two half notes in each measure (alternate stem direction and staves). Name the notes on the lines below the staff. Begin with a bar line (before the clef signs) when there is a grand staff.



$\frac{4}{4}$ Time Signature and Note Values

The TIME SIGNATURE appears at the beginning of the music after the clef sign. It contains two numbers, one above the other.



$\frac{4}{4}$ The upper number tells how many beats (or counts) are in each measure. In this case, 4.

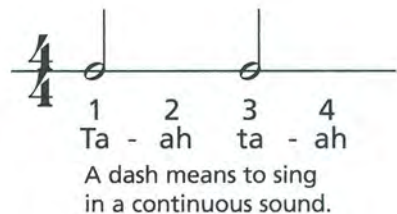
$\frac{4}{4}$ The lower number indicates what type of note receives 1 beat. In this case, a quarter note .

In $\frac{4}{4}$ time:

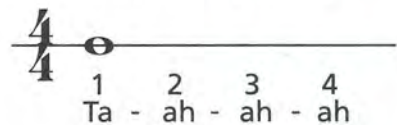
A quarter note () is equal to one count (or beat). Count (1, 2, 3, 4) and clap the rhythm evenly (once per beat). The beat numbers are written under the notes. Also, say "ta" and clap.



A half note () is equal to two counts (or beats). Count and clap the rhythm evenly (holding your hands together for 2 beats). The beat numbers are written under the notes. Also, say "ta-ah" (in a continuous sound) and clap.

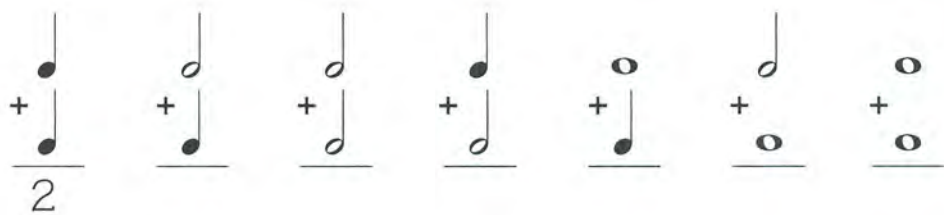


A whole note () is equal to four counts (or beats). Count and clap the rhythm evenly (hands together for 4 beats). The beat numbers are written under the notes. Also, say "ta-ah-ah-ah" (in a continuous sound) and clap.



Exercises

- 1** Add the following notes to get the total number of beats:



- 2** Draw bar lines, a double bar at the end, and stems on the appropriate notes in the following example so that there are 4 beats in each measure. Count and clap; say (using "ta", etc.) and clap.



- 3** Write the $\frac{4}{4}$ time signature and fill in the missing beats (if any) by adding only one note per measure. Count and clap; say and clap.



Whole, Half and Quarter Rests

Music is not only made up of sounds, but also the silence between sounds. The duration of musical silence is determined by the value of the REST.

A **WHOLE REST** means to rest for a whole measure.



It hangs down from the 4th line.

A **HALF REST** is equal to half of a whole rest.



It sits on the 3rd line.

A **QUARTER REST** is equal to one quarter of a whole rest.



1 Whole rest = 2 Half rests = 4 Quarter rests

1 Half rest = 2 Quarter rests

Notes	=	Rests
	=	
	=	
	=	

In $\frac{4}{4}$ time:

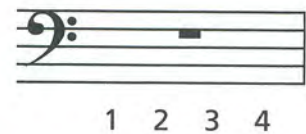
Quarter rests are equal to 1 beat.



Half rests are equal to 2 beats.



Whole rests are equal to 4 beats.



Exercises

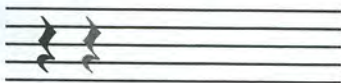
1 Fill in the correct number:

- 2 =
- =
- =
- =

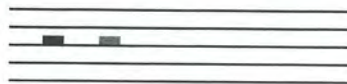
2 Fill in the correct number:

- =
- =
- =
- =

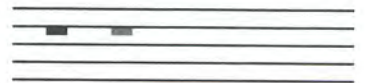
3 Trace the 2nd quarter rest, then draw 4 more.



4 Fill in the 2nd half rest, then draw 4 more.



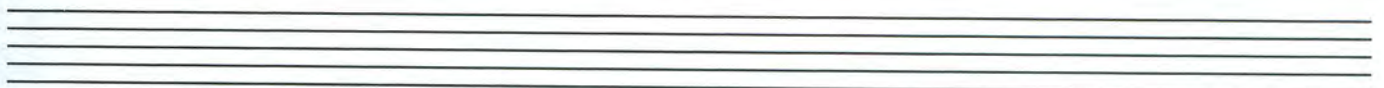
5 Fill in the 2nd whole rest, then draw 4 more.



6 a. Divide the staff below into 4 measures with a double bar at the end.

b. Add a $\frac{4}{4}$ time signature.

c. Fill in the 1st bar with a whole rest, the 2nd bar with 2 half rests, the 3rd bar with 4 quarter rests, the 4th bar with 1 half rest and 2 quarter rests.





Fill in the correct number:

1 

2 

3 

4 The duration of a  is (circle one) longer or shorter than a .

5 When the notes are written on or above the 3rd line of the staff, stems extend (circle one) upward or downward on the left side of the notehead.

6 Music is divided into equal parts by _____.

7 A _____ is written at the end of a piece of music.

8 The upper number of the time signature indicates how many _____ are in each measure.

The bottom number of the time signature indicates what type of note receives _____ beat.

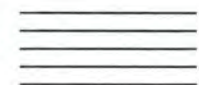
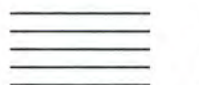

9 When a time signature contains a 4 as the top number, it means _____ beats in each measure.

When a time signature contains a 4 as the bottom number, it means a _____ note receives _____ beat.

10  is called a _____. In $\frac{4}{4}$ time, rest for _____ beats.

 is called a _____. In $\frac{4}{4}$ time, rest for _____ beats.

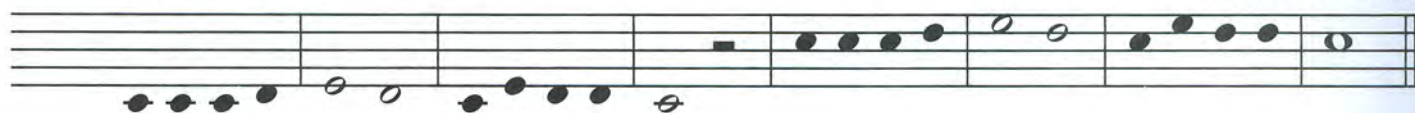
 is called a _____. In $\frac{4}{4}$ time, rest for _____ beat.

11 Draw 4 quarter rests  on the staff: Draw 2 half rests  on the staff: Draw 1 whole rest  on the staff:

12 In the example below, draw a treble clef and $\frac{4}{4}$ time signature. Add the stems where necessary and write the beats under the notes.

Au Claire de la Lune

French Folk Song



13 Add bar lines and a double bar to the example below. Count and clap; say and clap. Write the names of the notes below the staff.

Hatikvah

Israeli National Anthem



14 Fill in the missing beats with notes in the 2nd space by adding only one note in each measure.

a. 

Fill in the missing beats with rests by adding only one rest in each measure.

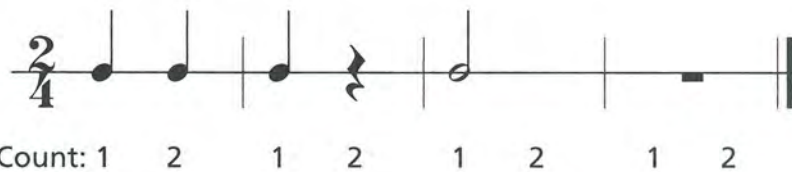
b. 

$\frac{2}{4}$ Time Signature

In $\frac{2}{4}$ time: $\frac{2}{4}$ means there are 2 beats per measure.
 $\frac{4}{4}$ means the quarter note \bullet receives 1 beat.

$\frac{2}{4}$ and $\frac{4}{4}$ both have 4 as the bottom number, meaning a quarter note \bullet receives 1 beat.
 The difference is that $\frac{2}{4}$ has 2 beats per measure while $\frac{4}{4}$ has 4.

In $\frac{2}{4}$ time: \bullet or $\}$ = 1 beat
 \circ or — = 2 beats*



Count: 1 2 1 2 1 2 1 2 1 2

*A whole rest — is used for a full measure of rest, even if there are only 2 beats in each measure.
 In writing music, a half rest and a whole note are never used in $\frac{2}{4}$ time.

Exercises

- 1** Complete the measures using notes and rests.
 Count and clap.



1 2 1 2 1 2 1 2 1 2 1 2

- 2** Circle the measures with the incorrect number of beats.



- 3** Draw bar lines and a double bar in the correct places. Count and clap.



- 4** Rewrite the $\frac{4}{4}$ music line in $\frac{2}{4}$ on the staff below.
 Write the names of the notes below the staff.




Dotted Half Note

A dot after a note increases its duration by half the original value:

Count: 1 2 1 2 3

 Say: Ta-ah ta-ah-ah

In $\frac{3}{4}$ and $\frac{4}{4}$, a half note receives two beats.

Because a dot following a half note increases its duration by 1 beat, a dotted half note has a value of 3 beats.

$\text{Dotted Half Note} = \text{Half Note} + \text{Quarter Note}$

 3 2 1

Count and clap the rhythm:
Say and clap the rhythm:

$\frac{3}{4}$ 1 2 3 1 2 3 1 2 3 1 2 3

 $\frac{4}{4}$ 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

Exercises

1 Write one note equal in value to the sum of the notes or rests.

- a. =
- b. =
- c. =
- d. =

2 Write the number of beats remaining for each example.

- a. =
- b. =
- c. =
- d. =

3 Complete the measures using one note or rest. Count and clap.

a.

 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4

b.

 1 2 3 1 2 3 1 2 3 1 2 3

4 In the example below:

- a. Draw the grand staff.
- b. Add the note stems, bar lines and a double bar.
- c. Write the names of the notes below the grand staff.

Ties and Slurs

A TIE joins two notes of the same pitch by a curved line over or under the notes. Each note joined by a tie is held for its full value but only the first note is played or sung. The tied note's value is added to the value of the first note.



The TIE should always be written on the opposite side from the note stems.

A SLUR smoothly connects two or more notes of different pitches by a curved line over or under the notes. There is no break in sound between pitches. This is also referred to as LEGATO playing or singing.

Aura Lee

American Folk Song



On wind instruments, only the first note of a group of slurred notes should be tongued.

On string instruments, a slur indicates a group of notes to be played in one bow.

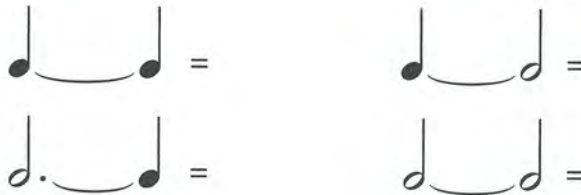
On keyboard instruments, slurs indicate when to lift the hands.



When all of the stems are in the same direction, the slur is written on the side opposite from that of the stems. When stem direction is mixed, the slur is written above the notes.

Exercises

- 1 Write the note that equals the tied notes.



- 2 Write the number of beats in each example.



- 3 In each example, mark an "S" or "T" to indicate whether the musical passage is made up of tied or slurred notes.



- 4 Write a slur or tie in each example and mark an "S" or "T" below.



Track 12

1 Listen to the following examples in $\frac{2}{4}$ time. You will hear a one measure count-off.

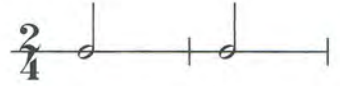
a. Quarter notes sound like this:



b. Quarter notes followed by quarter rests sound like this:



c. Half notes sound like this:



Track 13

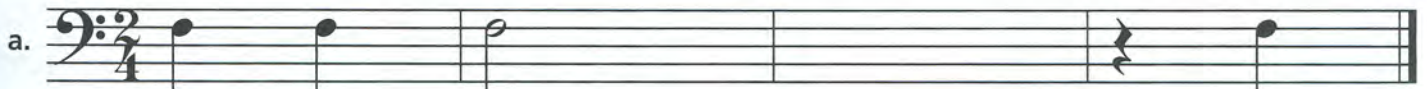
2 Listen and follow the rhythm of the example below.



What is the curved line in measures 1 and 2 called? _____ In measures 4-5, 5-6, 6-7? _____

Track 14

3 In the measures below, listen to the rhythm pattern. Write the missing rhythm in the 3rd measure using the note F. Each example will be played twice.



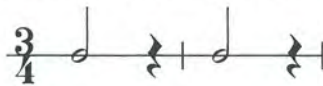
Track 15

4 Listen to the examples in $\frac{3}{4}$ time. You will hear a one measure count-off.

a. Quarter notes sound like this:



b. Half notes followed by quarter rests sound like this:



c. Dotted half notes sound like this:



Track 16

5 Listen and follow the rhythm of the example below.

Take Me Out to the Ball Game

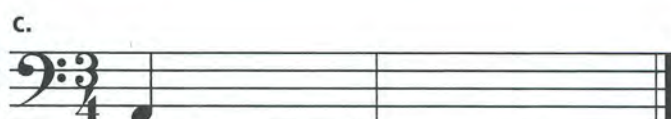
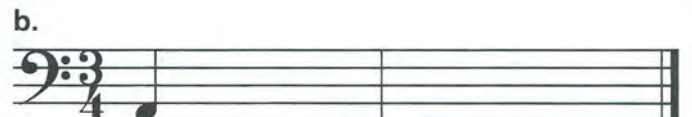
Albert von Tilzer (1873-1956)



What is the curved line in measures 3-4 called? _____ In measures 7-8? _____

Track 17

6 Write the rhythm of the following two bar examples using the note A. Each example will be played twice.



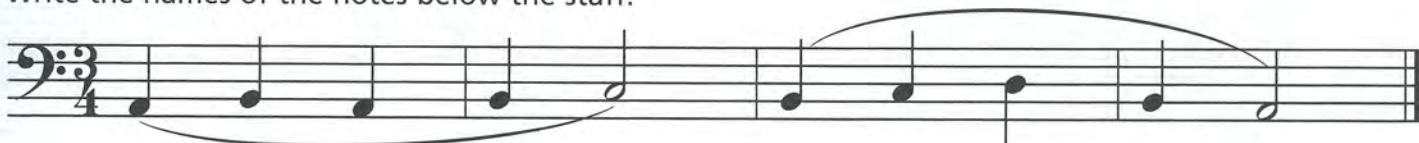
Fill in the blanks:

- 1 In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time, the _____ note receives one beat.
- 2 In $\frac{2}{4}$ time, there are _____ beats per measure.
- 3 In $\frac{3}{4}$ time, there are _____ beats per measure.
- 4 In $\frac{3}{4}$ time, a dotted half note receives _____ beats.
- 5 In $\frac{4}{4}$ time, a dotted half note receives _____ beats.
- 6 In $\frac{2}{4}$ time, a whole rest receives _____ beats.
- 7 In $\frac{3}{4}$ time, a whole rest receives _____ beats.
- 8 In $\frac{4}{4}$ time, a whole rest receives _____ beats.
- 9 Legato singing or playing means to play the music _____ .
- 10 On wind instruments, only the first note of a group of _____ notes should be tongued.
- 11 A slur occurs when 2 or more notes of (circle one) **the same** or **different** pitch(es) are joined by a curved line.
- 12 A tie occurs when 2 notes of (circle one) **the same** or **different** pitch(es) are joined by a curved line.

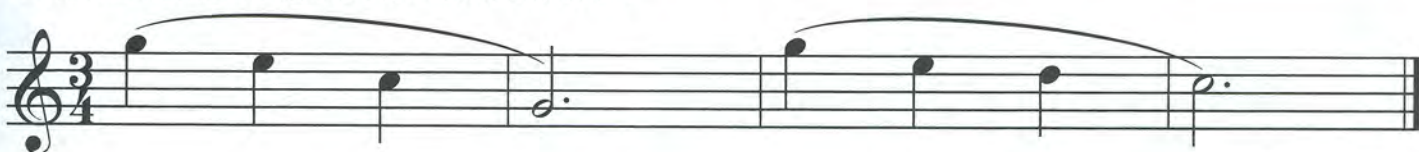
- 13 Draw an X above the note where you would change direction of the bow on a string instrument. Write the names of the notes below the staff.



- 14 Draw an X above the notes where you would tongue on a wind instrument. Write the names of the notes below the staff.



- 15 Draw an X before the notes where you would lift the hand on a keyboard instrument. Write the names of the notes below the staff.



- 16 Write the number of beats in each example on the line.



- 17 Write the correct time signature in the appropriate place and the beats below the staff.



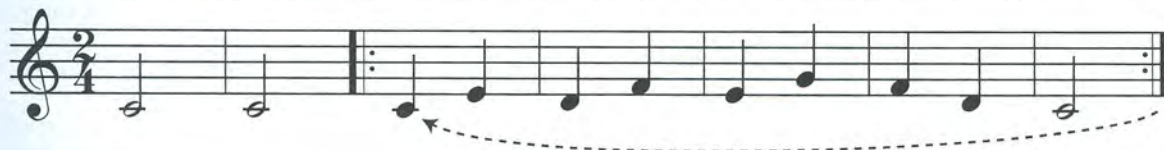
Repeat Sign, 1st and 2nd Endings

Two dots placed *before* the double bar || indicates a REPEAT SIGN. It means to go back to the beginning and play or sing the music again.



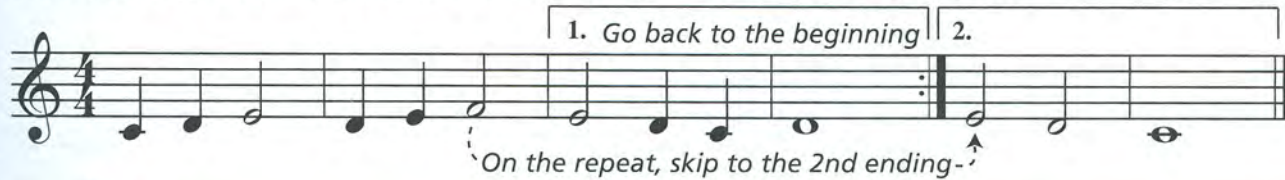
Go back to the beginning and repeat.

Repeat signs sometimes appear in pairs *within* a piece of music. ||: :||
The first repeat sign will then have the two dots placed *after* the double bar. When this occurs, return to the first repeat sign at the beginning of the section.



Go back to ||: and repeat.

Another way of indicating a repeat is with 1st and 2nd endings. Play or sing through the 1st ending to the repeat sign, then go back to the beginning. When repeating, skip the 1st ending and play the 2nd.



Exercises

- 1 Rewrite the following example using a repeat sign.



- 2 Rewrite the following example using a pair of repeat signs.




- 3 Rewrite the following example using 1st and 2nd endings.




Stephen Foster (1826–1864)

Camptown Races

Eighth Notes

When you add a flag to the stem of a quarter note, it becomes an EIGHTH NOTE 

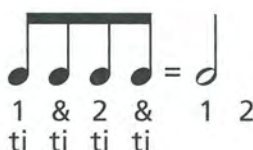
Two or more 8th notes are connected by a beam 

In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time: 8th notes are equal to one-half count. For two 8th notes, count "1 &" or say "ti ti."

Two 8th notes equal 1 quarter note.



Four 8th notes equal 1 half note.

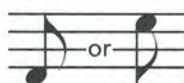


Eight 8th notes equal 1 whole note.

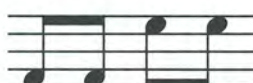


Eighth notes can be drawn:

1. As a single quarter note with a flag attached to the stem,



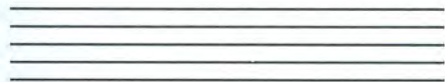
2. or with a beam, in pairs



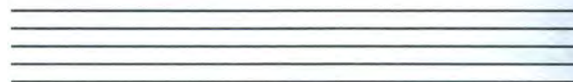
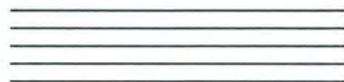
or in fours.



Write eight single 8th notes (4 with stems up, 4 with stems down).



Write two sets of beamed 8th notes (1 with stems up, 1 with stems down), and in fours.








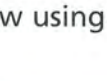


Exercises













1 Add stems with flags or beams to make 8th notes as indicated.



2 Fill in the correct number:

- a.  = 
- b.  = 
- c.  = 
- d.  = 

3 Write one note equal to the value of the notes preceding it.

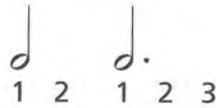
- a.  +  = 
- b.  +  = 
- c.  +  = 
- d.  +  = 

4 Complete the measures below using beamed 8th notes.



Dotted Quarter Note

Remember: a dot after a note increases its duration by half the original value.



In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$, a quarter note receives one beat. Because a dot following a quarter note increases its duration by $\frac{1}{2}$ beat, a dotted quarter note has a value of $1\frac{1}{2}$ beats.



A $\text{quarter note with a dot}$ is usually followed by an eighth note

Clap and count the rhythm.

Exercises

1 Write the beats under the following example. Count and clap.

Alouette

French-Canadian Folk Song

2 Fill in the blanks with the correct number:

a. $\text{blank} \cdot \text{quarter note} = \text{quarter note} + \text{quarter note} + \text{quarter note}$ b. $\text{blank} \cdot \text{quarter note} = \text{quarter note} + \text{quarter note}$ c. $\text{blank} \cdot \text{quarter note} = \text{quarter note} + \text{eighth note}$

3 Add bar lines to the examples below.

a.

b.

4 Complete the measures using only one note or rest—alternate notes and rests.

Track 18

- 1 In each time signature, there are natural strong beats. In $\frac{2}{4}$ time, the strong beat is on beat one. Listen to the example below in $\frac{2}{4}$ time.

El Capitan

John Philip Sousa (1854-1932)



Track 19

- 2 In $\frac{3}{4}$ time, the strong beat is on beat one. Listen to the example below in $\frac{3}{4}$ time.

Symphony No. 8, Op. 93

Ludwig van Beethoven (1770-1827)



Track 20

- 3 In $\frac{4}{4}$ time, the strong beat is on beat one, with a secondary emphasis on beat three. Listen to the example below in $\frac{4}{4}$ time.

Trumpet Voluntary

Jeremiah Clarke (c. 1673-1707)



Track 21

- 4 In the two examples below, listen for the ♩ ♪ rhythm.

Hallelujah Chorus (from "Messiah")

George Frideric Handel (1685-1759)



All Through the Night

Welsh Folk Song



Track 22

- 5 Listen to the 2 measure example and write the rhythm. The example will be played twice.



Track 23

- 6 Listen to the 4 measure example and write the rhythm. The example will be played twice.



1 Repeat signs are two dots before or after a _____ .

2 How many total measures would a musician play in the following example? _____

Anvil Chorus (from "Il Trovatore")

Giuseppe Verdi (1813-1901)

Musical notation for the first ending of the Anvil Chorus. It consists of a single staff in 4/4 time. The melody starts with a half note G4, followed by quarter notes A4, B4, and C5. This is followed by a repeat sign with two endings. The first ending leads back to the beginning, and the second ending leads to the final cadence.

3 Fill in the correct number: a. = b. = c. = d. =

4 Complete the notes by adding stems to the first measure and beamed notes (in pairs) to the second measure. Be sure the stems are pointing in the correct direction.

Musical notation for exercise 4 in bass clef, 3/4 time. The first measure contains a half note G2 and a quarter note A2. The second measure contains a quarter note B2, a quarter note C3, and a quarter note D3. The student is to add stems to the notes in the first measure and beams to the notes in the second measure.

5 Fill in the correct number: a. = b. = c. = d. = (4/4)

6 Complete the measures by adding one rest above each arrow.

Hallelujah Chorus (from "Messiah")

George Frideric Handel (1685-1759)

Musical notation for the Hallelujah Chorus in 4/4 time. The first measure is a half note G4. The second measure contains a quarter note A4, a quarter note B4, and a quarter note C5. The third measure contains a quarter note D5, a quarter note E5, and a quarter note F5. The fourth measure contains a quarter note G5, a quarter note A5, and a quarter note B5. The fifth measure contains a quarter note C6, a quarter note B5, and a quarter note A5. The sixth measure contains a quarter note G5, a quarter note F5, and a quarter note E5. The seventh measure contains a quarter note D5, a quarter note C5, and a quarter note B4. The eighth measure contains a quarter note A4, a quarter note G4, and a quarter note F4. The ninth measure contains a quarter note E4, a quarter note D4, and a quarter note C4. The tenth measure contains a quarter note B3, a quarter note A3, and a quarter note G3. There are arrows pointing to the first measure and the second, third, fourth, sixth, eighth, and tenth measures, indicating where to add rests.

7 = _____ beats in $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time.

8 Rewrite the example using 1st and 2nd endings in the staff below.

Minuet

Johann Sebastian Bach (1685-1750)

Musical notation for the Minuet in 3/4 time. The melody starts with a quarter note G4, followed by quarter notes A4, B4, and C5. This is followed by a repeat sign with two endings. The first ending leads back to the beginning, and the second ending leads to the final cadence.

Musical notation for the first ending of the Minuet. It consists of a single staff in 3/4 time. The melody starts with a quarter note G4, followed by quarter notes A4, B4, and C5. This is followed by a repeat sign with two endings. The first ending leads back to the beginning, and the second ending leads to the final cadence.

Musical notation for the second ending of the Minuet. It consists of a single staff in 3/4 time. The melody starts with a quarter note G4, followed by quarter notes A4, B4, and C5. This is followed by a repeat sign with two endings. The first ending leads back to the beginning, and the second ending leads to the final cadence.

An empty musical staff in treble clef, 3/4 time, intended for the student to rewrite the Minuet using first and second endings.

An empty musical staff in treble clef, 3/4 time, with first and second endings indicated by brackets and repeat signs, intended for the student to rewrite the Minuet using first and second endings.

Dynamic Signs

DYNAMIC SIGNS indicate the volume, or how *soft* or *loud* the music should be played. Most musical terms are written in Italian since Italian composers were among the first to write such instructions in their manuscripts.

The word *piano* in Italian means soft; the word *forte* means loud.

The most commonly used dynamic signs are:

ITALIAN	SIGN	ENGLISH
<i>piano</i>	<i>p</i>	soft
<i>forte</i>	<i>f</i>	loud
<i>mezzo piano</i>	<i>mp</i>	moderately soft
<i>mezzo forte</i>	<i>mf</i>	moderately loud
<i>pianissimo</i>	<i>pp</i>	very soft
<i>fortissimo</i>	<i>ff</i>	very loud

Mezzo means moderately; *issimo* means very.

Dynamic signs arranged in order from very soft to very loud, are: *pp, p, mp, mf, f, ff*

A Gradual Change in Dynamics

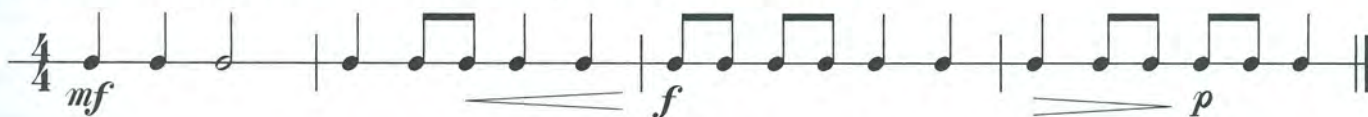
Terms used to indicate a gradual change in volume, from *soft* to *loud* or *loud* to *soft* are:

ITALIAN	SIGN	ENGLISH
<i>crescendo</i> or <i>cresc.</i>		gradually louder
<i>diminuendo</i> or <i>dim.</i> or <i>decrescendo</i> or <i>decresc.</i>		gradually softer

Exercises

- 1 Write the Italian word for the following dynamic signs:
- | | |
|-----------------|-----------------|
| <i>f</i> _____ | <i>pp</i> _____ |
| <i>mp</i> _____ | <i>ff</i> _____ |
| _____ | <i>mf</i> _____ |
| <i>p</i> _____ | _____ |

- 2 Clap the following line, observing the dynamic signs indicated.



- 3 Use every dynamic sign learned above at least once to mark the appropriate dynamic signs on the lines beneath the following story.

"Wake up!" whispered Ron to his brother Steven. The boys walked softly out the door. They heard
 a. _____ b. _____
 the moderately soft sound of a distant airplane, which became gradually louder and roared very loudly as it
 c. _____ d. _____ e. _____
 flew over head, then faded away gradually. Steven said, "Let's play basketball," in a
 f. _____
 moderately loud voice. They shouted a loud "Yes!" as they ran to the park.
 g. _____ h. _____

Tempo Marks

TEMPO is an Italian word meaning "rate of speed." Tempo marks tell how *fast* or *slow* the music should be played. Tempo marks are also written in Italian.

ITALIAN	ENGLISH
<i>Largo</i>	Very slow
<i>Adagio</i>	Slow
<i>Andante</i>	Moving along (walking speed)
<i>Moderato</i>	Moderately
<i>Allegro</i>	Quickly, cheerfully
<i>Vivace</i>	Lively and fast

Moderato may be combined with other words:

Allegro moderato = slightly slower than *Allegro* but quicker than *Moderato*

A Gradual Change of Tempo

Terms used to indicate a gradual change in tempo are:

ITALIAN	TERM	ENGLISH
<i>ritardando</i>	<i>ritard.</i> or <i>rit.</i>	gradually slower
<i>accelerando</i>	<i>accel.</i>	gradually faster



Exercises

- In writing music, tempo marks tell the _____.
- A very slow tempo marking is _____.
- A lively and fast tempo marking is _____.
- Match the Italian term to its English meaning by writing the correct letter in each blank.

_____ Quickly, cheerfully	a. <i>Moderato</i>
_____ Gradually slower	b. <i>Vivace</i>
_____ Lively and fast	c. <i>Adagio</i>
_____ Moderately	d. <i>Ritardando</i>
_____ Moving along (walking speed)	e. <i>Accelerando</i>
_____ Very slow	f. <i>Largo</i>
_____ Gradually faster	g. <i>Andante</i>
_____ Slow	h. <i>Allegro</i>

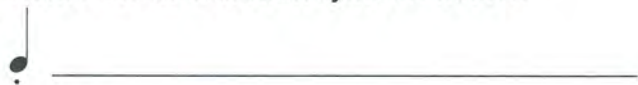
Articulation

Pages 28 and 29 introduced the words and signs that indicate what speed (slow to fast) and volume (soft to loud) a musical selection is to be played. In addition, notes may be performed in different ways. The manner in which a note is performed is called ARTICULATION. Legato (see page 19) is one form of articulation.

ITALIAN	SYMBOL	ENGLISH
<i>staccato</i>		Play the note short and detached. The Italian word means "detached."
<i>accent</i> (English)		Play the note louder, with a special emphasis.
<i>sforzando</i>	<i>sf</i> or <i>sfz</i>	A sudden, strong accent. The Italian word means "forcing."
<i>tenuto</i>	 (or <i>ten.</i>)	Hold the note for its full value. The Italian word means "held."
<i>fermata</i>		Hold the note longer than its normal value (approximately twice the normal duration).

Exercises

- 1 Name the articulation symbols below:

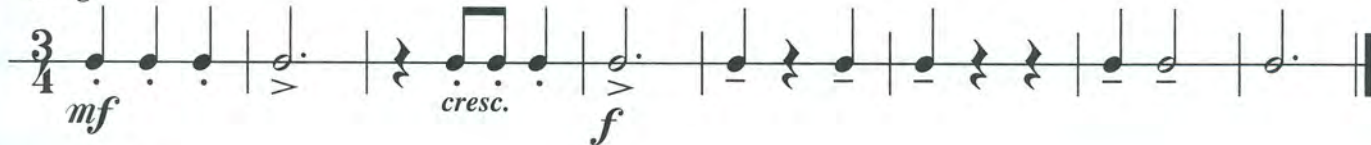


- 2 Say the following examples using the syllables "ti" for 8th notes, "ta" for quarter notes, "ta-ah" for half notes, "ta-ah-ah" for dotted half notes and "ta-ah-ah-ah" for whole notes. Observe all tempo markings, dynamics and other musical symbols.

Allegro



Largo



Moderato



D.C., D.S., Coda and Fine

To reduce the amount of music needed to notate a piece, several additional Italian words and symbols are used by composers to indicate repeats.

ITALIAN	SIGN	ENGLISH
<i>Da Capo</i>	<i>D.C.</i>	Repeat from the beginning
<i>Dal Segno</i>	<i>D.S.</i>	Repeat from the sign S
<i>Fine</i>	<i>Fine</i>	The end
<i>Coda*</i>	\oplus	An added ending

*When the Coda sign appears in the music, it means to skip directly to the Coda, which is an added ending usually marked with the same sign.

The Italian words and symbols for repeating are frequently combined.

SIGN **ENGLISH**

D.C. al Fine Repeat from the beginning and play to the end (Fine).

1. Play through to the end 2. Return to the beginning 3. Play to Fine

D.S. al Fine Repeat from the sign S and play to the end (Fine).

1. Play through to the end 2. Return to S 3. Play to Fine

D.C. al Coda Repeat from the beginning and play to \oplus , then skip to the \oplus Coda.

1. Play to *D.C. al Coda* 2. Return to the beginning 3. Play to \oplus 4. Skip to \oplus Coda and play to the end.

D.S. al Coda Repeat from S and play to \oplus , then skip to the \oplus Coda

1. Play to *D.S. al Coda* 2. Return to S 3. Play to \oplus 4. Skip to \oplus Coda and play to the end.

1 Arrange the following dynamics in order from softest to loudest to softest: *mf, pp, f, mp, p, ff*.
pp _____ *pp*

2 *Mezzo (m)* means _____ . 3 *issimo* means _____ .

4 *Crescendo (cresc.)* means _____ .

5 *Diminuendo (dim.)* or *decrescendo (decresc.)* means _____ .

6 Arrange the following tempo marks in order from slowest to fastest:
Andante, Vivace, Adagio, Allegro, Moderato, Largo.

Slowest Fastest

7 *Allegro moderato* means slightly slower than _____ but quicker than _____ .



8 *Ritardando (ritard. or rit.)* means _____ .

9 *Accelerando (accel.)* means _____ .


10 *Staccato* means _____ . 11 *Tenuto* means to _____ .

12 The sign that means to hold a note for longer than its normal value is _____ .

13 Write the word for each symbol:

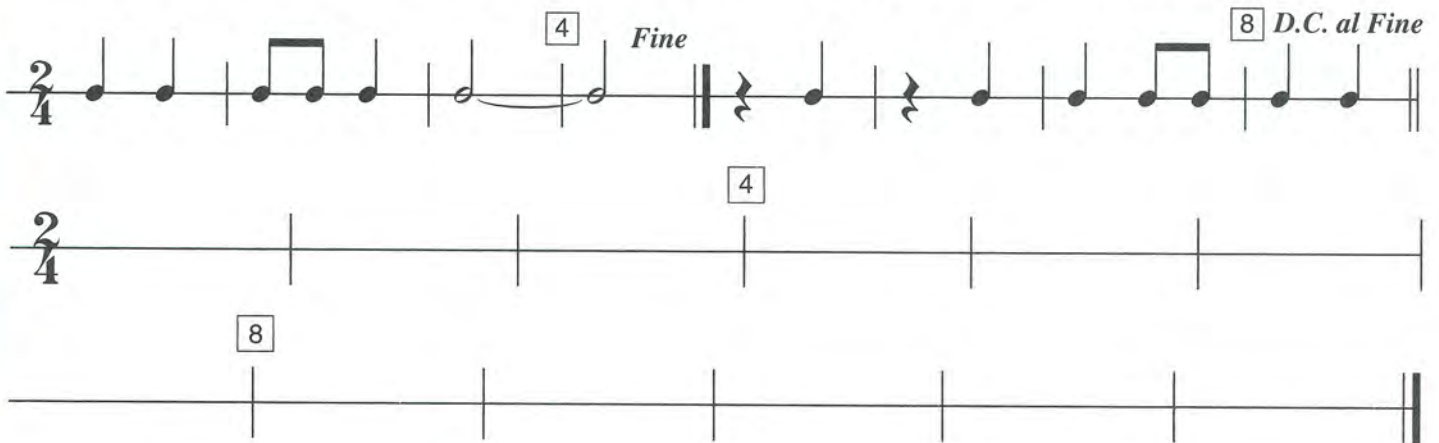
- a.  _____
- b. > _____
- c. *sfz* _____
- d.  _____

14 The sign that indicates to repeat from the beginning and play to the end is _____ .

15 The sign that indicates to repeat from the  and play to the end is _____ .

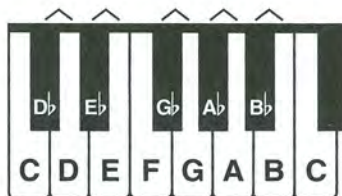
16 What is the term used to identify a separate section that ends a piece of music? _____ .

17 Write the following musical example as it would actually be played without the *D.C. al Fine* or *Fine*.

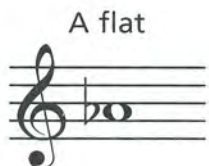


Flats

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.



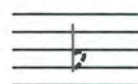
When speaking of flatted notes, the word "flat" comes after the letter name, as in **A flat**. However, in written music, the flat sign comes before the note.



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.



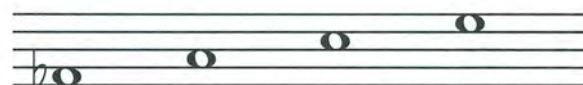
Add flat signs to the line notes below.



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

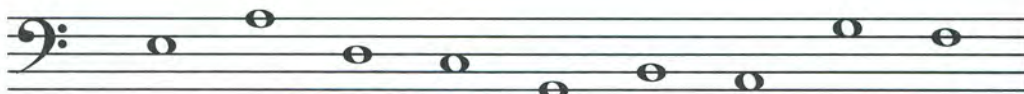


Add flat signs to the space notes below.

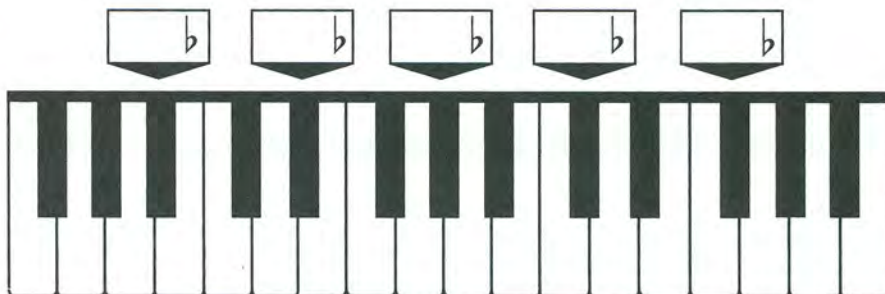


Exercises

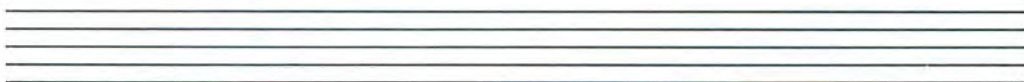
- In the example, write flat signs before each note, then name the notes.



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

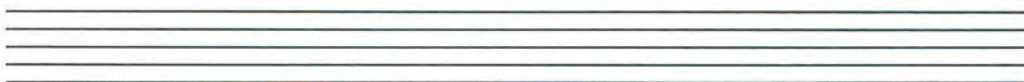


- Write a treble clef and the notes indicated on the staff using half notes.



G♭ D♭ C♭ A♭ E♭ B♭ F♭

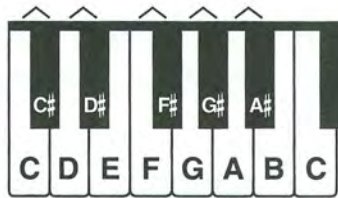
- Write a bass clef and the notes indicated on the staff using quarter notes.



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.



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



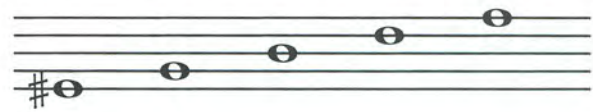
then add the heavier slanting lines:



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



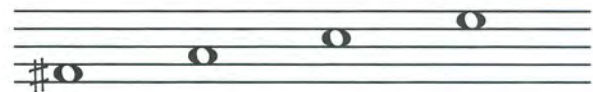
Add sharp signs to the line notes below.



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.

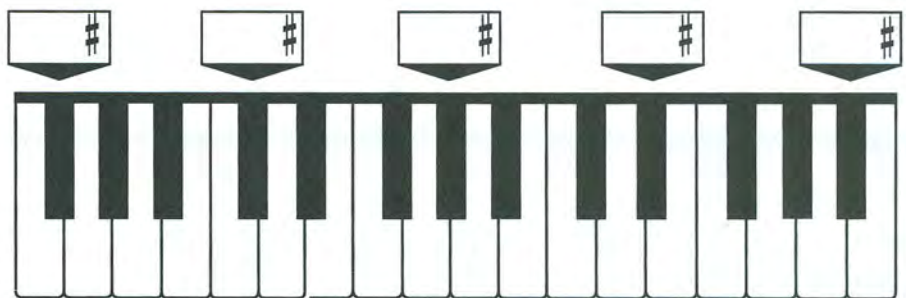


Exercises

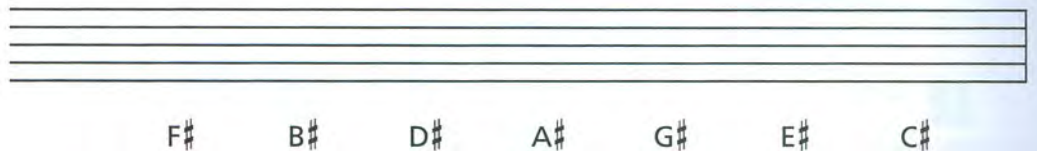
1 In the example, write sharp signs before each note, then name the notes.



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.



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



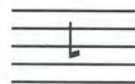
Naturals

The NATURAL sign (\natural) 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.



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.



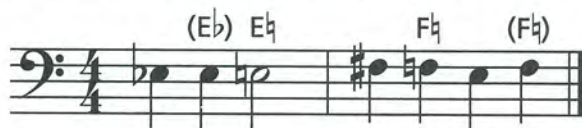
When a natural sign is attached to a space note, the natural is centered in the space.



Add natural signs to the space notes below.



When \flat , \sharp or \natural 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*.

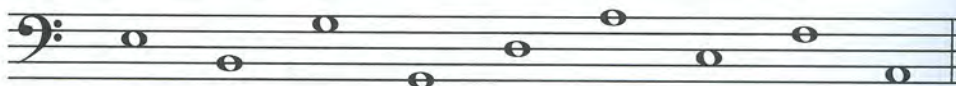


A bar line cancels all accidentals in the previous measure, except if a note is tied across the bar line.



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 Fučík (1872–1916)



Track 30

1 In each example, you will hear two notes. If the 2nd note is a half step below, draw a flat (\flat) in front of it.

Track 31

2 In each example, you will hear a short musical phrase. Circle the phrase that you hear.

Track 32

3 In each example, you will hear two notes. If the 2nd note is a half step above, draw a sharp (\sharp) in front of it.

Track 33

4 You will hear a half step that moves up or down. If the 2nd note moves up a half step, draw a sharp (\sharp) in front of it. If the 2nd note moves down a half step, draw a flat (\flat) in front of it.

Track 34

5 You will hear a whole step that moves up or down. Draw the 2nd note on the staff using a half note.

Track 35

6 In the following example, draw the missing notes in the boxes.

March Slav
Moderato
Peter Ilyich Tchaikovsky (1840-1893)

- 1 Circle one: The flat sign (\flat) raises or lowers the pitch.
- 2 Circle one: The sharp sign (\sharp) 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 \flat G \sharp C \sharp B \flat A \flat F \sharp D \flat

- 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 \sharp is _____.
 B \sharp is _____.
 F \flat is _____.
 C \flat is _____.

Music Crossword

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

1.		2.		3.					
		4.				5.		6.	
						7.			
				8.		9.			
10.									11.
		12.							
		13.				14.			

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 staves 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

GLOSSARY & INDEX OF TERMS & SYMBOLS

Includes all the terms and symbols used in Book 1 and the page on which they are first introduced.

ACCELERANDO (accel.) Gradually faster (p. 29).

ACCENT > Play the note louder, with a special emphasis (p. 30).


ACCIDENTAL ♭ # ♮ A flat, sharp or natural sign that appears within a piece of music. An accidental sign affects the notes written on the same line or space following it for that measure only (p. 36).


ADAGIO Slow (p. 29).

ALLEGRO Quickly, cheerfully (p. 29).

ANDANTE Moving along (walking speed) (p. 29).


ARTICULATION The manner in which a note is performed (p. 30).

BAR LINE The lines which cross the  staff and divide it into measures or bars (p. 11).

BASS (or F) CLEF  The clef used for notes in the lower pitch ranges (p. 5).

BASS STAFF The staff on which the bass clef is placed. The two dots of the clef surround the line on which the note F is placed (p. 5).



CLEF A sign that helps organize the staff so notes can be easily read (p. 4).

CODA  An added ending (p. 31).


COUNT-OFF The introduction given before a piece of music is performed to indicate the tempo of the beat (p. 14).

CRESCENDO (cresc.)  Gradually louder (p. 28).


D.C. (DA CAPO) Repeat from the beginning (p. 31).

D.C. al CODA Repeat from the beginning and play to , then skip to the  Coda (p. 31).


D.C. al FINE Repeat from the beginning and play to the end (Fine) (p. 31).


DECRESCENDO (decresc.)  Gradually softer (p. 28).


DIMINUENDO (dim.)  Gradually softer (p. 28).




DOT AFTER A NOTE  Increases the note's duration by half the original value (p. 18).


DOTTED HALF NOTE  In $\frac{3}{4}$ and $\frac{4}{4}$ time signatures, it receives 3 beats (p. 18).

DOTTED QUARTER NOTE  In time signatures with 4 as the bottom number, it receives $1\frac{1}{2}$ beats (p. 25).


DOUBLE BAR  Is written at the end of a piece of music (p. 11).


D.S. (DAL SEGNO) Repeat from the sign  (p. 31).

D.S. al CODA Repeat from the sign  and play to , then skip to the  Coda (p. 31).


D.S. al FINE Repeat from the sign  and play to the end (Fine) (p. 31).

DYNAMIC SIGNS Indicate the volume, or how soft or loud the music should be played (p. 28).

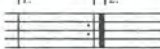
EIGHTH NOTE  In time signatures with 4 as the bottom number, it receives $\frac{1}{2}$ beat (p. 23).

EIGHTH REST  In time signatures with 4 as the bottom number, it receives $\frac{1}{2}$ beat of silence (p. 24).

ENHARMONIC NOTES Two notes that sound the same but are written differently (p. 37).

FERMATA  Hold the note for longer than its normal value (p. 30).

FINE The end (p. 31).


1st and 2nd ENDINGS  Play or sing through the 1st ending to the repeat sign, then go back to the beginning. When repeating, skip the 1st ending and play the 2nd (p. 22).


FLAT ♭ Lowers the pitch by one half step (p. 34).

FORTE *f* Loud (p. 28).

FORTISSIMO *ff* Very loud (p. 28).

GRAND STAFF The bass staff and treble staff connected by a brace and a line (p. 6).

HALF NOTE  In time signatures with 4 as the bottom number, it receives 2 beats (p. 10).

HALF REST  In time signatures with 4 as the bottom number, it receives 2 beats of silence (p. 13).

HALF STEP The distance from any key on the keyboard to the very next key above or below, whether black or white (p. 37).

LARGO Very slow (p. 29).

LEDGER LINE Short lines which are added to extend the range of the staff when the notes are too low or too high to be written on the staff (p. 6).

LEGATO To play or sing 2 or more notes smoothly connected (p. 19).

MEASURE (or BAR) The area between two bar lines (p. 11).

MEZZO moderately (p. 28).


MEZZO FORTE *mf* Moderately loud (p. 28).

MEZZO PIANO *mp* Moderately soft (p. 28).

MIDDLE C The note in the middle of the grand staff and the C nearest the middle of the keyboard (p. 4).

MODERATO Moderately (p. 29).


NATURAL SIGN ♮ The natural sign before a note cancels a previous flat or sharp (p. 36).


NOTES  The oval-shaped symbols that are placed on the lines and in the spaces of the staff. They represent musical sounds called pitches (p. 3).



PIANISSIMO *pp* Very soft (p. 28).

PIANO *p* Soft (p. 28).

PITCH A musical sound (p. 3).

QUARTER NOTE  In time signatures with 4 as the bottom number, it receives 1 beat (p. 10).


QUARTER REST  In time signatures with 4 as the bottom number, it receives 1 beat of silence (p. 13).


REPEAT SIGN  Return to the beginning or previous repeat sign  at the beginning of the section (p. 22).

RITARDANDO (*ritard.* or *rit.*) Gradually slower (p. 29).

SFORZANDO *sf* or *sfz* A sudden, strong accent (p. 30).

SHARP # Raises the pitch by one half step (p. 35).


SLUR  Smoothly connects two or more notes of different pitches by a curved line over or under the notes (p. 19).

STACCATO  Play the note short and detached (p. 30).

STAFF The five lines and the four spaces between them on which music notes and other symbols are written (p. 3).

TEMPO A word meaning "rate of speed". It tells how fast or slow to play the music (p. 29).

TENUTO  Hold the note for its full value (p. 30).


TIE  Two notes of the same pitch joined by a curved line over or under the note. Each note joined by a tie is held for its full value but only the first note is played or sung (p. 19).


TIME SIGNATURE $\frac{4}{4}$ $\frac{3}{4}$ $\frac{2}{4}$ Appears at the beginning of the music after the clef sign. It contains two numbers. The upper number tells how many beats are in each measure; the lower number indicates what type of note receives 1 beat (p. 12).

TREBLE (or G) CLEF The clef used for notes in the higher pitch ranges (p. 4).

TREBLE STAFF The staff on which the treble clef is placed. The curl of the clef circles the line on which the note G is placed (p. 4).

VIVACE Lively and fast (p. 29).

WHOLE NOTE  In time signatures with 4 as the bottom number, it receives 4 beats (p. 10).

WHOLE REST  Means to rest for a whole measure. In $\frac{3}{4}$ it receives 3 beats; in $\frac{4}{4}$ it receives 4 beats; in $\frac{2}{4}$ it receives 2 beats (p. 13).

WHOLE STEP The distance from any key on the keyboard to two keys above or below (p. 37).

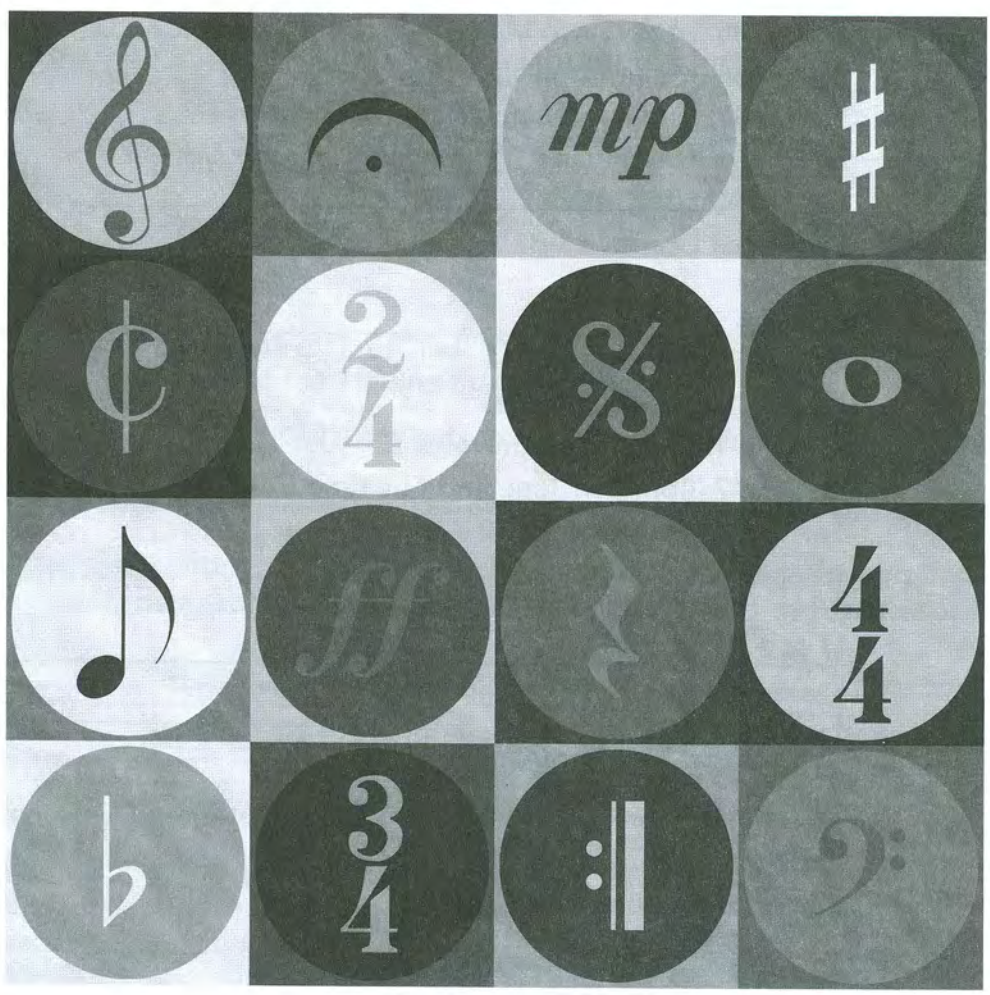
Alfred's

Essentials of MUSIC THEORY

LESSONS • EAR TRAINING • WORKBOOK

Book 2

Pages 41-80 Lessons 26-50

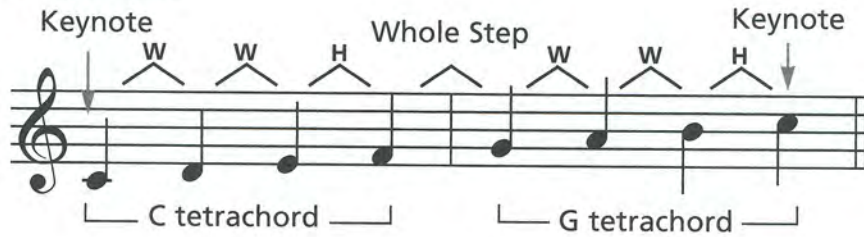


Tetrachords and Major Scales

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.

*Whole: (Tone)
Half: (Semi-Tone)*

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

There are eight degrees in a major scale:

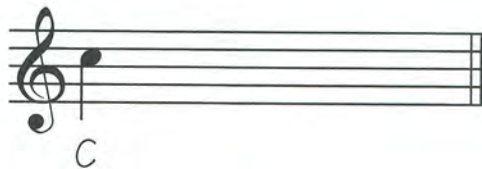
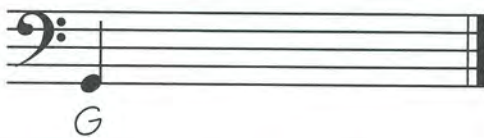


In all major scales, half steps occur between the 3rd and 4th and the 7th and 8th scale degrees.

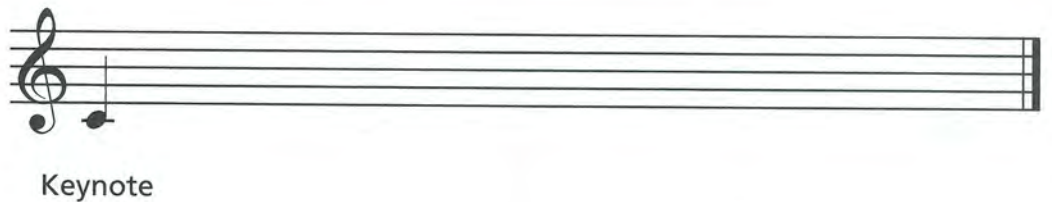
The distances between all other scale degrees are whole steps.

Exercises

- 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.



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



- 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 \sharp to create a whole step.
An F \sharp is used instead of G \flat 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.

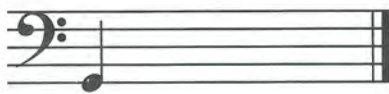
The C must be raised to C \sharp to create a whole step.
A C \sharp is used instead of D \flat to stay in alphabetical order.

Important!

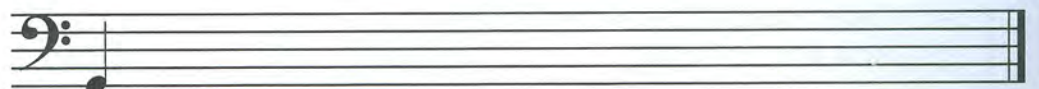
- The 2nd tetrachord of the C major scale is the 1st tetrachord of the G major scale.
 - The 2nd tetrachord of the G major scale is the 1st tetrachord of the D major scale.
- Starting with the C major scale, the 2nd tetrachord is always the 1st tetrachord of the following sharp scale. This overlapping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

Exercises

- 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.



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



Keynote

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



Keynote

The Flat Scales — F and B \flat 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.

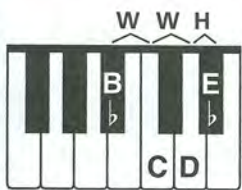


F Major Scale



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

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



B \flat Major Scale



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

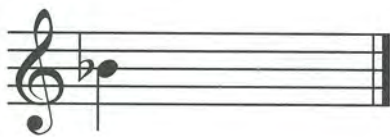
Important!

- 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 \flat) is the 1st scale degree of the B \flat 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.



Keynote

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



Keynote

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.



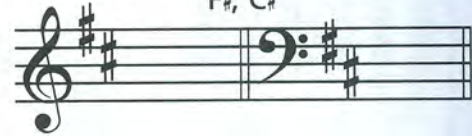
In this case, any F will always be played sharp (unless there is a natural sign before the F).

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 \flat 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 flattened 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 \flat — 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 \flat and E \flat would be the key of B \flat major.

Exercises

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

2 If B \flat 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 \flat major c. B \flat major d. F major

Track 36*

- 1 Listen to the following succession of two notes each. Indicate whether the distance between the two notes is a whole step (W) or half step (H). Each example will be played twice.

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

Track 37

- 2 Listen to the four-note tetrachord patterns. Draw the missing notes in the boxes.



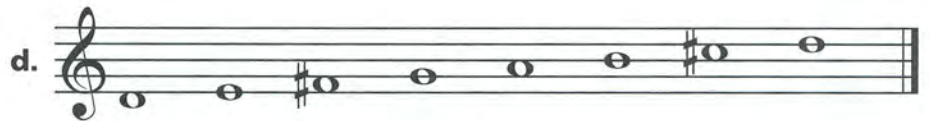
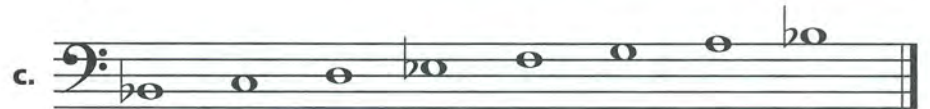
Track 38

- 3 Listen to the four-note tetrachord patterns. One note in each tetrachord will be played incorrectly. Circle the incorrect note.



Track 39

- 4 Listen to a C major scale. In each of the following scales, one note will be played incorrectly. Circle the incorrect note.



Track 40

- 5 Listen to the G major scale. Circle the rhythm pattern that you hear for each example.

a.

b.

*Track 36 refers to the track number on Ear Training CD 1.

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:

- D major
- G major
- C major

Is the 1st tetrachord of:

- D major
- G 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 (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. _____

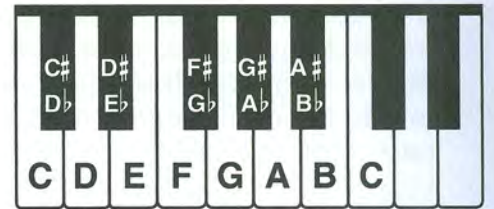
- 2** Write the following key signatures.



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

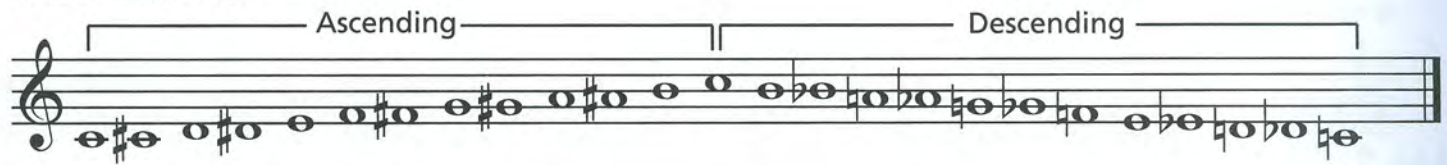
Chromatic Scale

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.

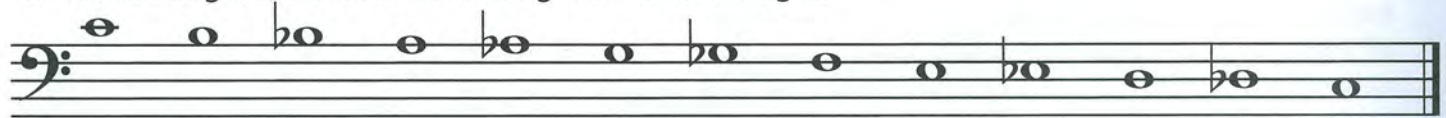
C Chromatic Scale



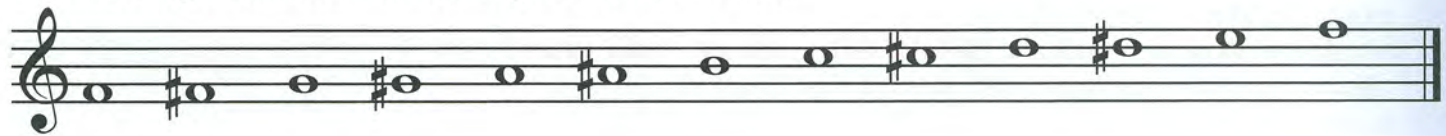
The ascending chromatic scale starting on C uses sharp signs.



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.

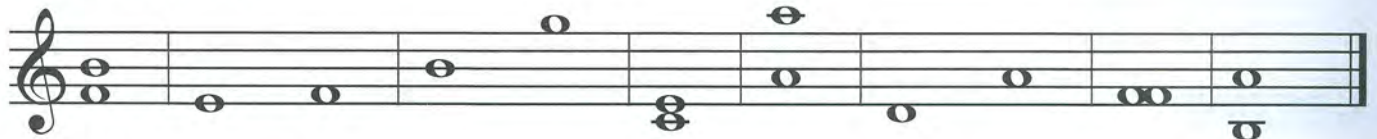


ODD NUMBERED INTERVALS of unisons, 3rds, 5ths and 7ths are written from line to line or space to space.



Exercises

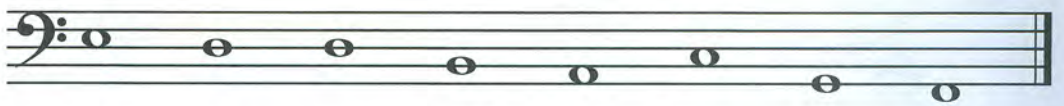
1 Name the intervals.



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



3 Write the harmonic interval indicated above the following notes.



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

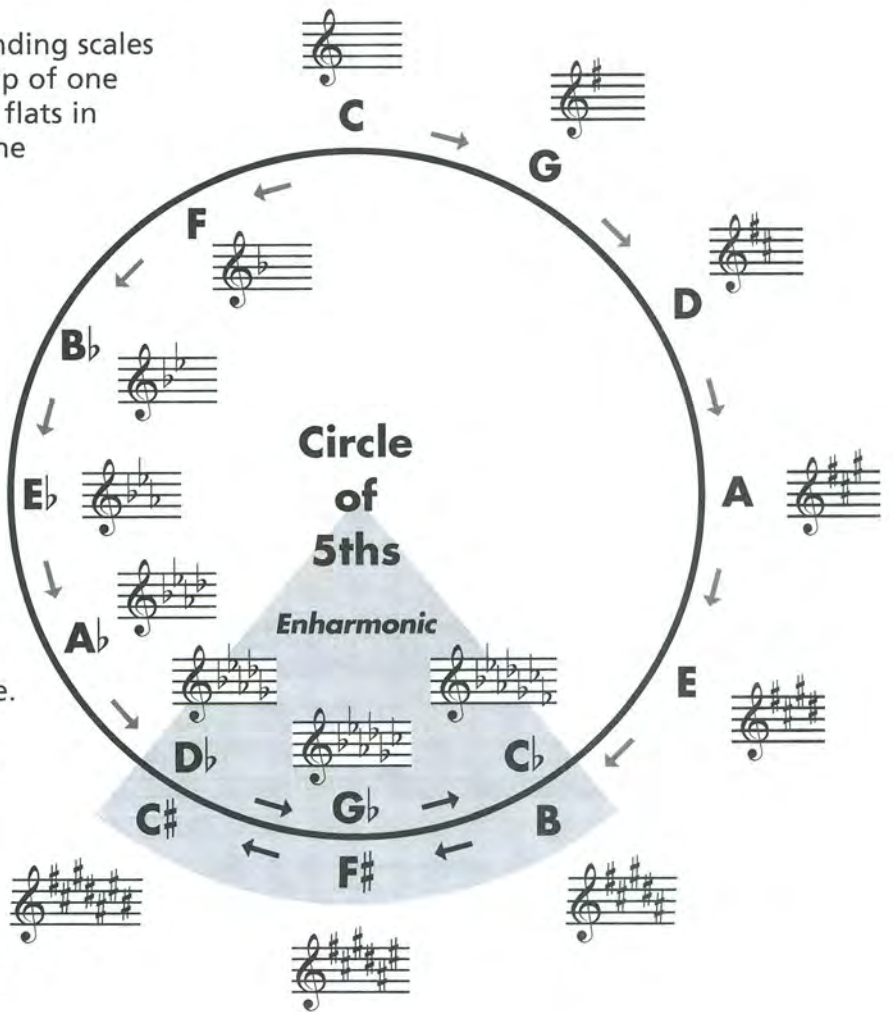
Starting with C, the 2nd tetrachord of the ascending major scale becomes the 1st tetrachord of the following ascending scale. The scale's name is derived from the 1st note of that tetrachord, and one sharp is added to the key signature.

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 \flat , B \flat to E \flat , etc.

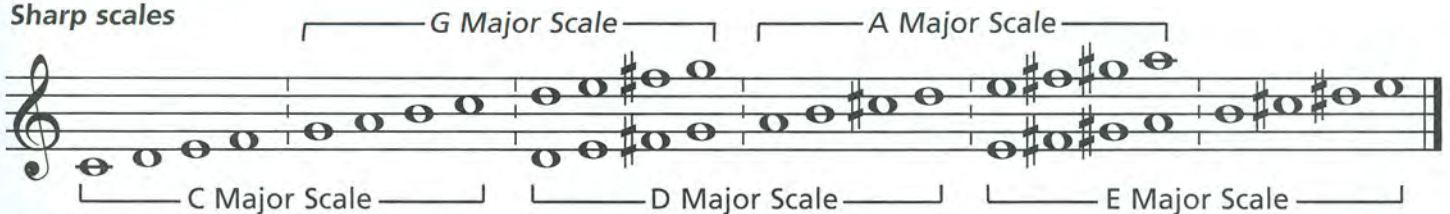


The order of sharps in the key signature:
F C G D A E B.

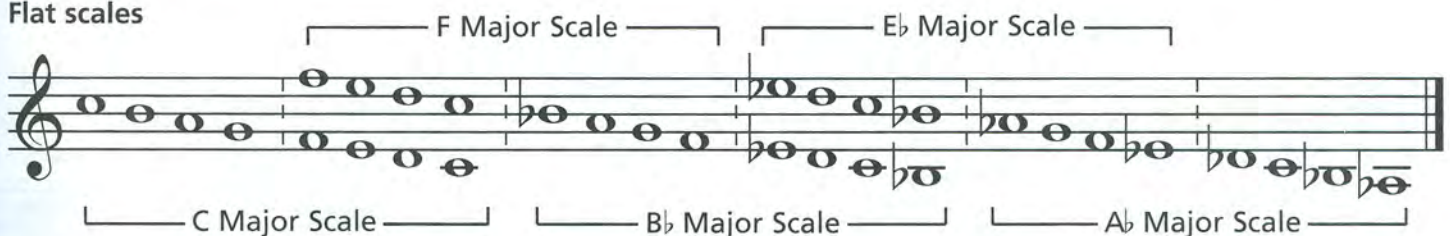
The order of flats in the key signature:
B E A D G C F.

OVERLAPPING TETRACHORD PATTERNS

Sharp scales



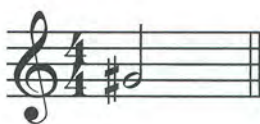
Flat scales



*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. _____

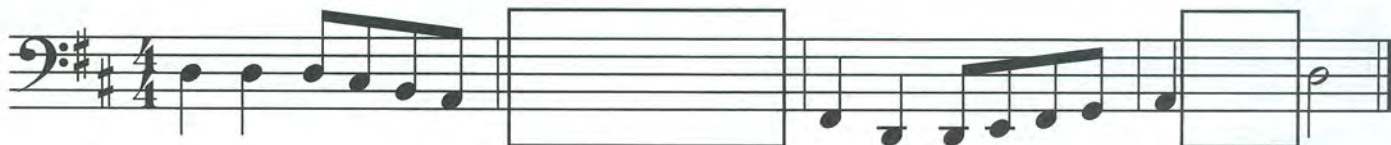
Track 48

- 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. _____

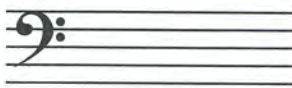


c. _____

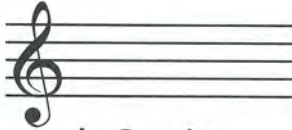


d. _____

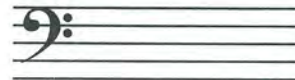
3 Write the following key signatures.



a. A major



b. G major



c. E major



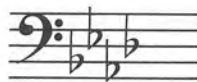
d. D major

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

5 Name the following major key signatures.



a. _____



b. _____

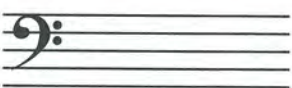


c. _____

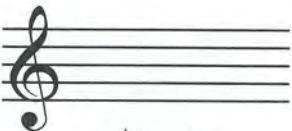


d. _____

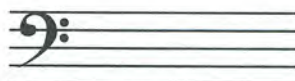
6 Write the following key signatures.



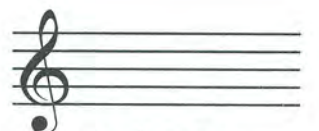
a. E \flat major



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.

Perfect and Major Intervals

The interval between the keynote of a major scale and the unison, 4th, 5th or octave of that scale is called a PERFECT INTERVAL.

Perfect Unison Perfect 4th Perfect 5th Perfect Octave

The interval between the keynote of a major scale and the 2nd, 3rd, 6th or 7th of that scale is called a MAJOR INTERVAL.

Major 2nd Major 3rd Major 6th Major 7th

THE DIATONIC INTERVALS OF THE MAJOR SCALE

When the keynote and the upper note of an interval are from the same major scale, it is called a DIATONIC INTERVAL. All diatonic intervals in the major scale are either perfect (P) or major (M). The perfect intervals are the unison, 4th, 5th and octave; the major intervals are the 2nd, 3rd, 6th and 7th. This is true for all major scales. P1 indicates a perfect unison; P8 indicates a perfect octave.

P1 Unison M2 M3 P4 P5 M6 M7 P8 Octave

Exercises

- 1** Name the harmonic intervals and indicate whether they are perfect or major.

M3 _____ _____ _____ _____

- 2** Write the note above the given note to complete the harmonic interval.

P5 P8 M3 M7 M6 P4 M2 P1

Minor Intervals

When the interval between the two notes of a major interval (2nd, 3rd, 6th or 7th) is decreased by a *half step* they become MINOR INTERVALS. For example, a major 3rd (M3) becomes a minor 3rd (m3) when decreased by a half step. A small letter "m" is used to signify a minor interval. Only major intervals may be made into minor intervals—perfect intervals may not.

How major intervals may be changed to minor intervals:

The diagram illustrates the conversion of major intervals to minor intervals in three keys: C major, F major, and C# major. Each interval is shown on a staff with a bracket indicating the interval name.

- 2nds:** C-D (M2) to C-B (m2); F-G (M2) to F-E (m2); C#-D# (M2) to C#-D (m2).
- 3rds:** C-E (M3) to C-Eb (m3); F-A (M3) to F-Ab (m3); C#-E# (M3) to C#-E (m3).
- 6ths:** C-A (M6) to C-Ab (m6); F-D (M6) to F-Db (m6); C#-B# (M6) to C#-B (m6).
- 7ths:** C-B (M7) to C-Bb (m7); F-E (M7) to F-Eb (m7); C#-B# (M7) to C#-B (m7).

Exercises

1 Name the intervals.

m6 _____

2 Write the note above the given note to complete the harmonic interval.

m3 m6 m2 m7 m2 m6 m3 m7

3 Name the intervals, indicating whether they are perfect (P), major (M) or minor (m).

P5 _____

Augmented and Diminished Intervals

The word *augmented* means "made larger." When a perfect or major interval is made larger by a *half step*, it becomes an AUGMENTED INTERVAL. For example, a perfect 5th (P5) becomes an augmented 5th (aug 5). To raise a sharp note by a half step, use a DOUBLE SHARP \times .

A musical staff in G major (one sharp) showing augmented intervals. The notes are: G-A (aug 1), G-B (aug 2), G-B \sharp (aug 3), G-C \sharp (aug 4), G-D \sharp (aug 5), G-E \sharp (aug 6), G-F \times (aug 7), and G-G \sharp (aug 8).

The word *diminished* means "made smaller." With the exception of the perfect unison, any perfect or minor interval that is made smaller by a *half step* becomes a DIMINISHED INTERVAL. For example, a perfect 4th (P4) becomes a diminished 4th (dim 4). To lower a flat note by a half step, use a DOUBLE FLAT $\flat\flat$.

A musical staff in G major showing diminished intervals. The notes are: G-A \flat (dim 2), G-B \flat (dim 3), G-B $\flat\flat$ (dim 4), G-C \flat (dim 5), G-C $\flat\flat$ (dim 6), G-D \flat (dim 7), and G-D $\flat\flat$ (dim 8).

Since lowering either note of a perfect unison would actually *increase* its size, the perfect unison cannot be diminished, only augmented.

When the keynote and the upper note of an interval are *not* from the same major scale, it is called a CHROMATIC INTERVAL. Minor, diminished, and augmented intervals are always chromatic intervals in major keys.

Exercises

- 1 Name the augmented intervals.

A musical staff in G major showing augmented intervals: G-A \sharp , G-B \sharp , G-C \sharp , G-D \sharp , G-E \sharp , G-F \times , and G-G \sharp . Below the staff are seven dashed lines for labeling.

- 2 Write the note above the given note to complete the augmented harmonic interval.

A musical staff in G major showing augmented intervals: G-A \sharp , G-B \sharp , G-C \sharp , G-D \sharp , G-E \sharp , G-F \times , and G-G \sharp . Below the staff are seven dashed lines for labeling.

- 3 Name the diminished intervals.

A musical staff in G major showing diminished intervals: G-A \flat , G-B \flat , G-B $\flat\flat$, G-C \flat , G-C $\flat\flat$, G-D \flat , and G-D $\flat\flat$. Below the staff are seven dashed lines for labeling.

- 4 Write the note above the given note to complete the diminished harmonic interval.

A musical staff in G major showing diminished intervals: G-A \flat , G-B \flat , G-B $\flat\flat$, G-C \flat , G-C $\flat\flat$, G-D \flat , and G-D $\flat\flat$. Below the staff are seven dashed lines for labeling.

Solfège and Transposition

SOLFÈGE is a system of reading notes by assigning a different syllable to each note. The following syllables are used for all major scales as they relate to the scale degrees:

1 2 3 4 5 6 7 8
Do Re Mi Fa Sol La Ti Do

MOVEABLE DO means that the syllables apply to the same scale degrees, regardless of what key you are in. For example, in the key of C, the keynote C is called "Do". In the key of F, the keynote F is also called "Do".

1 2 3 4 5 6 7 8
Do Re Mi Fa Sol La Ti Do

1 2 3 4 5 6 7 8
Do Re Mi Fa Sol La Ti Do

When a melody is rewritten with the exact same sequence of notes and intervals into another key, it is called TRANSPOSITION. This raises or lowers the notes to make a melody easier to sing or play, or so it can be played by an instrument in another key.

The easiest way to transpose is by interval. For example, if a melody is in the key of C and you want to transpose it to the key of D, then you would rewrite all notes a major 2nd higher.

1 2 3 1 5 5 5 5 4 3 2 1
Do Re Mi Do Sol Sol Sol Sol Fa Mi Re Do

1 2 3 1 5 5 5 5 4 3 2 1
Do Re Mi Do Sol Sol Sol Sol Fa Mi Re Do

Exercises

1 Write the syllable names under the notes of the following melody.

2 Add solfège syllables, then transpose the following melody up a major 2nd adding solfège syllables. Add the new key signature.

3 Add solfège syllables, then transpose the following melody down a major 2nd adding solfège syllables. Add the new key signature.

In the exercises below, you will hear notes *above* or *below* the given notes. For each example, write the note as a melodic half note in the first measure and a harmonic whole note in the second measure. No accidentals are required.

Track 50

1 Major 2nds:

a.

b.

Track 51

2 Major 3rds:

a.

b.

Track 52

3 Perfect 4ths:

a.

b.

Track 53

4 Perfect 5ths:

a.

b.

Track 54

5 Major 6ths:

a.

b.

Track 55

6 Major 7ths:

a.

b.

Track 56

7 Perfect Unison or Octaves:

a.

b.

Track 57

8 Minor 2nds:

a.

b.

Track 58

9 Minor 3rds:

a.

b.

Track 59

10 Minor 6ths:

a.

b.

Track 60

11 Minor 7ths:

a.

b.

1 A perfect interval is the distance between the root of a major scale and the _____, _____, _____ or _____.

2 A major interval is the distance between the root of a major scale and the _____, _____, _____ or _____.

3 The two types of diatonic intervals are _____ and _____.

4 Name the intervals below and indicate whether they are major (M), perfect (P) or minor (m).

m3 _____

5 Write the notes above the given notes to complete the harmonic interval.

P4 m6 M3 P1 M6 m7 P8 M2 P5 M7 m2 m3

6 A diminished interval occurs when a perfect or minor interval is made: (circle one) **larger** **smaller**

7 An augmented interval occurs when a major or perfect interval is made: (circle one) **larger** **smaller**

8 Minor, diminished, and augmented intervals are called _____ intervals.

9 Write the solfège syllable names under the notes of the following melody.

Joy to the World

George Frideric Handel (1685-1759)



10 Transposition is when a melody is rewritten in another _____.



11 Transpose the following melody up a major 2nd and write the new key signature.



Symphony in G, No. 94 ("The Surprise"), 2nd movement



Franz Joseph Haydn (1732-1809)

Sixteenth Notes


Add a flag to the stem of a quarter note  and it becomes an 8th note 

Add a flag to the stem of an 8th note  and it becomes a 16th NOTE 

In $\frac{4}{4}$ time: Two 16th notes equal the duration of one 8th note.  = 

Four 16th notes equal the duration of one quarter note.  = 

In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time:

a 16th note  is equal to one-quarter count.

For four 16th notes, count "1 e & a" or "ti-ri ti-ri."



1 e & a 2 (e & a) 3 e & a 4 (e & a)
Ti-ri ti-ri Ta Ti-ri ti-ri Ta

16th notes can be drawn:

• with flags attached to the stems for one 16th note.



• or with 2 beams for two or more 16th notes.

Write four 16th notes.



Write two 16th notes.

Write four 16th notes.

16th notes can also be combined with 8th notes:



1 (e) & a 2 (e) & a 3 (e) & a 4 (e) & a 1 e & (a) 2 e & (a) 3 e & (a) 4 e & (a)
ti ti-ri ti ti-ri ti ti-ri ti ti-ri ti-ri ti ti-ri ti ti-ri ti ti-ri ti

Exercises

- 1** Add stems with flags or beams to make 16th notes as indicated.





a. Flags



b. Beams
(two sets)



c. Flags



d. Beam
(one set)

- 2** Fill in the correct number:



a.  = 



b.  = 




c.  = 



d.  = 

- 3** Write one note equal to the value of the notes preceding it.



a.  +  =




b.  +  =






c.  +  +  =


d.  +  =

Sixteenth Rests

Add another flag to the stem of an 8th rest  and it becomes a 16th REST .

In $\frac{4}{4}$ time: Two 16th rests equal the duration of one eighth rest.   = 

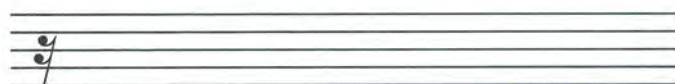
Four 16th rests equal the duration of one quarter rest.     = 

In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time:
a 16th rest  is equal
to one-quarter count.



1 e & a 2 e & a 3 e & a 4 e & a

A 16th rest is drawn like this . Write six 16th rests.



Exercises

1 Write the counts under the following example. Clap the rhythm.



1 & 2 e & a 3 & 4 &

2 Fill in the correct number:

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

3 Change these 8th notes to 16th notes, then add 16th rests between them.



4 Write the counts under the notes below the staff.



1 e & a 2 &

5 Complete the measures below with the appropriate rests.
Write the counts under the notes and then clap the rhythm.



1 & 2 & 3 & 4 &

Dotted Eighth Notes

Remember: A dot after a note increases its length by one half of its original value.

An 8th note is equal to two 16th notes.



Adding a dot to an 8th note increases its value by half— $\frac{1}{2}$ beat or a 16th note.

A DOTTED 8TH NOTE is equal to three 16th notes.



In $\frac{2}{4}$, $\frac{3}{4}$ and $\frac{4}{4}$ time: a dotted 8th note equals $\frac{3}{4}$ of a beat.



A $\frac{1}{8}$ note is usually followed by a $\frac{1}{8}$ note

Here are three ways of writing the same rhythm:



Exercises

- 1** Write the counts under the following example. Clap the rhythm.

Theme from Farandole

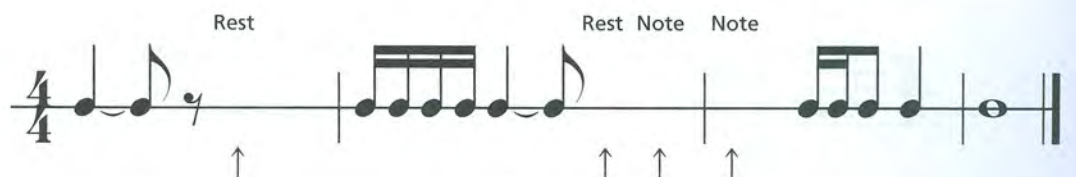
Georges Bizet (1838–1875)



- 2** Add bar lines to the examples.



- 3** Complete the measures by adding a note or rest above each arrow.



Common Time and Cut Time (Alla Breve)

The time signature $\frac{4}{4}$ may also be written as **C**, called COMMON TIME.




When a vertical line passes through **C**, it is known as CUT TIME **C** (or ALLA BREVE).
The top and bottom numbers of $\frac{4}{4}$ are cut in half to $\frac{2}{2}$.






In the time signatures of  or  $\frac{2}{2}$ means there are 2 beats per measure.
 $\frac{2}{2}$ means the half note  receives 1 beat.



In $\frac{2}{2}$ time:


Notes Rests



 or  = 2 beats

 or  = 1 beat

 or  = $\frac{1}{2}$ beat


 or  = $1\frac{1}{2}$ beats

 or  = $\frac{1}{2}$ beat

 or  = $\frac{1}{4}$ beat

Exercises

- 1** C is known as _____ time.
- 2** C with a vertical line through it is known as _____ time or _____.
- 3** C with a vertical line through it has _____ beats per measure and the _____ note receives one beat.

4 Complete the measures below. Use  or  notes and  or  rests. Clap the rhythm.

5 In the example below, circle the measures with the incorrect number of beats.

6 In the example below, draw bar lines and a double bar. Count and clap the rhythms.

Track 61

- 1 Listen to the 16th notes in the following example.

American Patrol

Frank W. Meacham (1856-1909)

Track 62

- 2 Listen to a rhythm pattern and write it below. There will be a one measure count-off. Write the rhythm using the note F. The example will be played twice.

Track 63

- 3 Listen to the $\text{♩} \cdot \text{♩}$ pattern in the following example.

Trumpet Tune

Jeremiah Clarke (c. 1673-1707)

Track 64

- 4 Listen to a rhythm pattern and write it below. There will be a one measure count-off. Write the rhythm using the note D. The example will be played twice.

Track 65

- 5 Listen to the following example in cut time.

Symphony No. 1 in D Major, 4th movement

Gustav Mahler (1860-1911)

Track 66

- 6 Listen to a rhythm pattern and write it below. There will be a one measure count-off. Write the rhythm using the note C. The example will be played twice.

1 Fill in the correct number:

a. = b. = c. = d. =

2 Add bar lines and a double bar to complete the example below. Clap the rhythm.

Los elefantes

Argentinian Folk Song

3 Fill in the correct number:

a. = b. = c. = d. =

4 Complete the measures by adding one rest above each arrow. Clap the rhythm.

5 Add bar lines to complete the example below. Clap the rhythm.

6 Draw the stems and add dots where needed to equal 4 beats per measure.

7 Add bar lines, write the beats under the notes and clap the rhythm.


1 & 2 e & a 3 e & 4 &

8 Write one note equal in value to the sum of the notes.



a. + = _____ b. + + = _____ c. + = _____


$\frac{3}{8}$ and $\frac{6}{8}$ Time Signatures

In $\frac{3}{8}$ time:

$\frac{3}{8}$ means there are 3 beats per measure.
 $\frac{8}{8}$ means the 8th note  receives 1 beat.



In $\frac{3}{8}$ time:


 or  = 1 beat




 or  = 2 beats







 or  = 3 beats






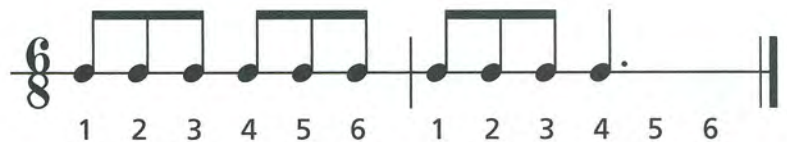
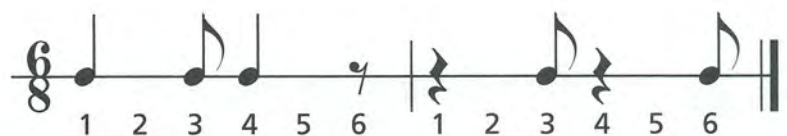
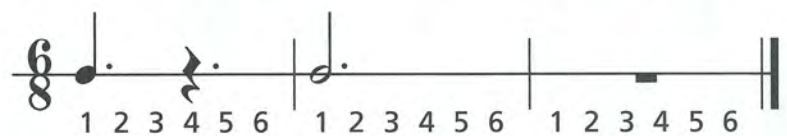
In $\frac{6}{8}$ time:

$\frac{6}{8}$ means there are 6 beats per measure.
 $\frac{8}{8}$ means the 8th note  receives 1 beat.

In $\frac{6}{8}$ time:

,   and  receive the same number of beats as in $\frac{3}{8}$ time.

In addition,  = 3 beats,  or  = 6 beats

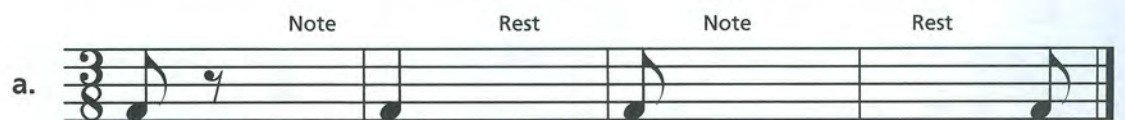
Exercises

- 1** In the examples, circle the measures with the incorrect number of beats.

a. 

b. 

- 2** Complete the measures, using one note or rest. Write the beats, then count and clap the rhythm.

a. 

Note Rest Note Rest

b. 

Note Note Note Rest

Incomplete Measures (Pick-up Notes)

Some pieces begin with an incomplete measure. This note (or notes) is known as a PICK-UP NOTE. The following piece has only 1 beat in the first measure. The missing 2 beats are found in the last measure.

Carnival of Venice

Moderato

Italian Folk Song

1. 2.

(1 2) 3 1 2

Syncopation

When the accent in a musical passage falls on the weak beat (&) rather than the strong beat (1, 2, etc.), it is called SYNCOPATION.

1 & 2 & 1 & 2 & 3 & 1 & 2 & 3 & 4 &

Exercises

1 Fill in the last measure of each example with the correct note value for the given note name.

We Wish You A Merry Christmas

Traditional Carol

a.

C

Auld Lang Syne

Scottish Folk Song

b.

C

2 Add bar lines and write the beats under each measure. Count and clap the rhythm.

a.

b.

c.

1 When the first measure is incomplete, the beginning notes are called _____ notes.

2 Complete the last measure with the correct note value for the given note name.

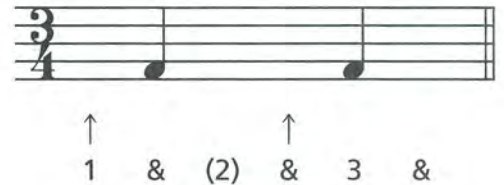
Star Song


Austrian Folk Song



3 When the accent falls on the weak beat, it is called _____.

4 Fill in note values to create syncopation and complete the measure.



5 What type of note receives 1 beat in $\frac{3}{8}$ and $\frac{6}{8}$ time signatures? (Circle one) 


6 For $\frac{6}{8}$ time, write the total number of beats.

a.  +  = _____

b.  +  = _____

c.  +  = _____

7 At fast tempos, $\frac{3}{8}$ is counted in _____, and $\frac{6}{8}$ is counted in _____.

8 At fast tempos, the note that is counted in 1 count in $\frac{3}{8}$ and $\frac{6}{8}$ time is: (circle one) 

9 Add bar lines and beats below the notes for the following examples at slow tempos.

Take Me Out to the Ball Game

Albert von Tilzer (1873–1956)



The Flower

Puerto Rican Game Song



10 Three notes grouped together, which are played in the time of two notes of the same value, are called a _____.

11 Complete the incomplete measures below with 8th note triplets. Add beats below the notes.

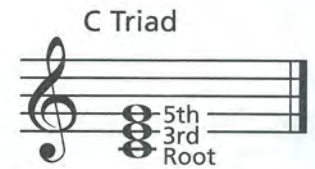
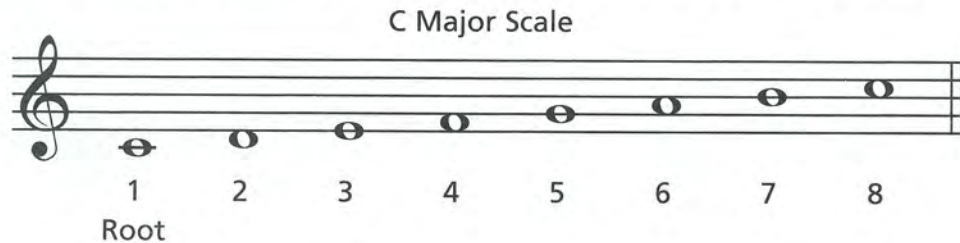


Triads

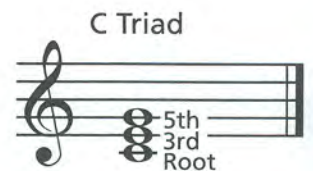
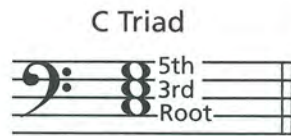
When three or more notes are sounded together, the combination is called a CHORD. When a 3-note chord consists of a ROOT, a 3rd and a 5th, it is called a TRIAD.



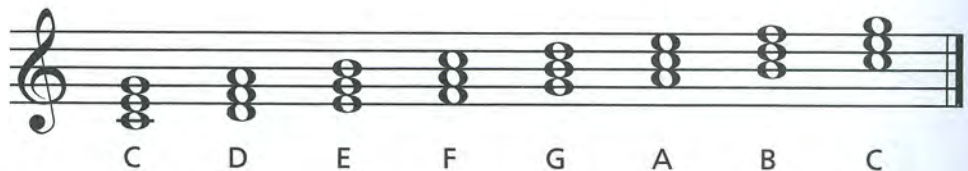
The root is the note from which the triad gets its name.
To build a triad, measure the 3rd and the 5th upward from the root.



The root of a C triad is C. When a triad is in ROOT POSITION, it will include every other note (C-E-G, D-F-A, E-G-B, etc.). All the notes will be on lines or all the notes will be in spaces.



Triads may be built on any note of the scale.
In the C major scale, the root position triads are:

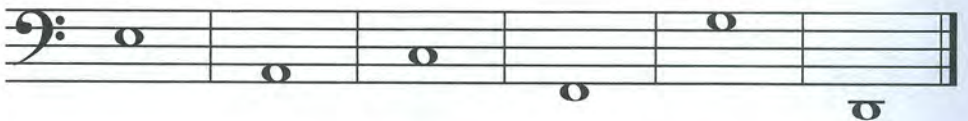


Exercises

- 1** Build triads using each of the following *line* notes as the root. Name the root note.



- 2** Build triads using each of the following *space* notes as the root. Name the root note.



- 3** Add two notes (above or below) to create a triad in root position from the given 3rd or 5th. Name the root note.



Primary and Major Triads

The most important triads of a key are built on the 1st, 4th and 5th scale degrees of the major scale. They are called the PRIMARY TRIADS or PRIMARY CHORDS of the key and are identified by the ROMAN NUMERALS I (1), IV (4) and V (5). These three triads contain every tone in the major scale.

The primary triads are MAJOR TRIADS because they consist of the root, a major 3rd and a perfect 5th (see page 56).

Major 3rd + Perfect 5th = Major Triad

- There are two other ways of forming a major triad:
1. select the 1st, 3rd and 5th notes of a major scale.
 2. add the interval of a minor 3rd (see page 57) on top of a major 3rd.

In the key of C major, the
 I triad (or chord) is the C triad (C-E-G).
 IV triad (or chord) is the F triad (F-A-C).
 V triad (or chord) is the G triad (G-B-D).

The primary triads in the key of C major:

Exercises

- 1** Build the primary triads in root position for each scale by adding two notes to the 1st, 4th and 5th notes of each scale to complete the triad. Name each triad.

a.

b.

c.

d.

- 2** Write the primary triads in root position for each key. Name each triad.

a.

b.

c.

d.

Scale Degree Names

Each tone of a scale can be identified by a name as well as by a **numbered** scale degree (see page 43). The most important scale degrees are the same as those on which the primary chords are built: 1, 4 and 5. The three most important scale degree names are the **Tonic (I)**, **Subdominant (IV)** and **Dominant (V)**.

TONIC (I)

The keynote of a scale is called the TONIC. It is the lowest *and* highest tone of the scale. Since the tonic is the **1st** scale degree, it is given the Roman numeral I. In C major, C is the tonic note or chord.

DOMINANT (V) and SUBDOMINANT (IV)

The tone a 5th **above** the tonic is called the DOMINANT. Since the dominant is the **5th** scale degree, it is given the Roman numeral V. In C major, G is the dominant note or chord.

The tone a 5th **below** the tonic is called the SUBDOMINANT. Since the subdominant is the **4th** scale degree, it is given the Roman numeral IV. In C major, F is the subdominant note or chord. The prefix "sub" means under or below.

Important!

The names of scale degrees were derived from an arrangement in which the tonic was the central tone. The subdominant was given its name because it is the same distance **below** the tonic as the dominant is **above** the tonic. It is not called subdominant because it is just below the dominant. See bottom staff.

MEDIANT (iii) and SUBMEDIANT (vi)*

The tone a 3rd degree **above** the tonic (midway between the tonic and the dominant) is called the MEDIANT (a Latin word meaning "in the middle"). Since the mediant is the **3rd** scale degree, it is given the Roman numeral iii. In C major, E is the mediant note or chord.

The tone a 3rd degree **below** the tonic (midway between the tonic and the subdominant) is called the SUBMEDIANT. Since the submediant is the **6th** scale degree, it is given the Roman numeral vi. In C major, A is the submediant note or chord.

SUPERTONIC (ii) and LEADING TONE (vii)

The tone a 2nd degree **above** the tonic is called the SUPERTONIC. Since the supertonic is the **2nd** scale degree, it is given the Roman numeral ii. In C major, D is the supertonic note or chord. The prefix "super" means over or above.

The tone a 2nd degree **below** the tonic is called the LEADING TONE - sometimes called the SUBTONIC. Leading tone is most often used since the note has a strong tendency to "lead" to the tonic, as it does in an ascending scale. Since the leading tone is the **7th** scale degree, it is given the Roman numeral vii. In C major, B is the leading tone or chord.

In **scale degree** order, the name and Roman numeral of each scale tone is:

A musical staff in treble clef showing the notes of a C major scale: C, D, E, F, G, A, B, C. Above the staff, labels in boxes point to each note: TONIC (C), SUPERTONIC (D), MEDIANT (E), SUBDOMINANT (F), DOMINANT (G), SUBMEDIANT (A), LEADING TONE (B), and TONIC (C). Below the staff, Roman numerals are written: I, ii, iii, IV, V, vi, vii, I.

With the tonic being the central tone, the name and Roman numeral of each scale tone is:

A musical staff in treble clef showing the notes of a C major scale: C, F, A, C, D, E, G, C. Above the staff, labels in boxes point to each note: SUBDOMINANT (F), SUBMEDIANT (A), LEADING TONE (B), TONIC (C), SUPERTONIC (D), MEDIANT (E), and DOMINANT (G). Below the staff, Roman numerals are written: IV, vi, vii, I, ii, iii, V.

*The reason for upper and lower case Roman numerals is explained in Unit 14, Lesson 58.

The V7 (Dominant 7th) Chord

In many pieces, a V⁷ (dominant 7th) chord is used instead of a V (dominant) triad. To build a V⁷ chord, add a minor 7th above the root of the V triad (or a minor 3rd above the 5th). The V⁷ is a chord and not a triad because it has 4 notes rather than 3.

Dominant + minor 7th = Dominant 7th

Dominant + minor 3rd = Dominant 7th

Often, the 5th of the V⁷ chord is omitted. The V⁷ chord then would have the same number of tones as the I and IV chords while still retaining the quality of a 7th chord. This also allows the music to be sung or performed by as few as three singers or instrumentalists.

The three primary chords are now I, IV and V⁷.

Exercises

- 1** Write the V⁷ chord for each key. Write the key name and letter name of each chord.

Key of: C Major _____

- 2** Fill in the missing notes in the following V⁷ chords. Which interval did you add? _____

- 3** Write the following V⁷ chords with the 5th omitted—include the accidentals.

Track 74

- 1** Listen to a C major triad. It will first be played one note at a time, and then as a chord (all notes together).

Write whether each example is played one note at a time (1), or as a chord (C).



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

Track 75

- 2** Listen to the two intervals that make up a major triad: the major 3rd and perfect 5th.

Write whether each example is a major 3rd (M3) or perfect 5th (P5). Each example will be played twice.



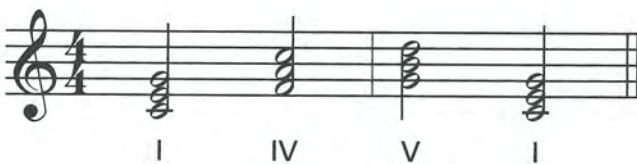
Major 3rd + perfect 5th = C major chord

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

Track 76

- 3** Listen to the C major primary triads in root position.

Write whether each chord is a I, IV or V chord. Each example will be played twice.



a. I _____ b. _____ c. _____ d. _____ e. _____

Track 77

- 4** Listen to the V and the V⁷ chords (with the 5th omitted), played one note at a time and as a chord.

Write whether each chord is a V or V⁷ chord. Each example will be played twice.



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

Track 78

- 5** Listen to the three intervals that make up a V⁷ chord: the major 3rd, perfect 5th and minor 7th.

Write whether each example is a major 3rd (M3), perfect 5th (P5) or minor 7th (m7). Each example will be played twice.



Major 3rd + perfect 5th + minor 7th = G⁷ Chord

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

1 A chord consists of _____ or more notes sounded together.

2 A triad consists of a root, a _____ and a _____.

3 If the root of a triad is D, the 5th is the note _____.

4 If the 3rd of a triad is B, the root is the note _____.

5 Primary triads are built on the following notes of the scale: (circle one)
 a. I, II, V b. I, IV, VI
 c. I, IV, V d. II, IV, VI

6 A major 3rd + a _____ = a major triad.

7 In a major key, primary triads are always _____ triads.

8 Another way to form a major triad is by adding the interval of a _____ on top of the interval of a _____.

9 Write the primary triads in the keys of C and G major.

10 Write the primary triads in the keys of F and D major.

11 A I chord is also called the _____ chord.

12 A V chord is also called the _____ chord.

13 A IV chord is also called the _____ chord.

14 A II chord is also called the _____ chord.

15 A III chord is also called the _____ chord.

16 A VI chord is also called the _____ chord.

17 A VII chord is also called the _____ chord.

18 Write the following V⁷ chords. Include the accidentals.

Alfred's

Essentials of MUSIC THEORY

LESSONS • EAR TRAINING • WORKBOOK

Book 3

Pages 81-120 Lessons 51-75



Triads — 1st Inversion

Any root position triad may be changed by moving the root (bottom note) of the chord to another position. This is called an **INVERSION**—it means the notes are rearranged and a tone other than the root is the bottom note of the chord.

The first inversion can be made from a C triad by moving the root (C) to the top of the chord.

All letter names are the same, but the 3rd (E) is now on the bottom, and the root (C) is now on top. This is called **1st INVERSION**.

1st Inversion Triads in C major (3rd is on the bottom).

In 1st inversion, the **3rd** is *a/ways* the bottom note.

OPEN and CLOSE POSITIONS

When the notes of a chord are spaced within an octave, it is in **CLOSE POSITION**.

When the notes of a chord are spaced larger than an octave, it is in **OPEN POSITION**.

Close Position

Root Position

Open Position

Root Position

Close Position

1st Inversion

Open Position

1st Inversion

Exercises

- 1** Rewrite the following root position triads in open position.

- 2** Using the given notes as the root, add the 3rd and 5th *below* each note to make 1st inversion triads in the key of C.

- 3** Using the given notes as the 3rd, add the 5th and root *above* each note to make 1st inversion triads in the key of C (close position).

V7 Chord—1st, 2nd and 3rd Inversions

The V7 chord can also be inverted. Since the V7 chord is a 4-note chord, it can be written in four different positions: root, 1st inversion, 2nd inversion and 3rd inversion (7th at the bottom).

Close Position

Root Position (root on bottom) 1st Inversion (3rd on bottom) 2nd Inversion (5th on bottom) 3rd Inversion (7th on bottom)

In 1st, 2nd and 3rd inversions in close position, the root is always the upper note of the interval of a 2nd.

Exercises

1 Write the 1st, 2nd and 3rd inversions for the following V7 chords in close position.

a.
 D7

b.
 A7

c.
 C7

d.
 F7

2 Indicate the inversion of the following V7 chords.

1st — — — — — —

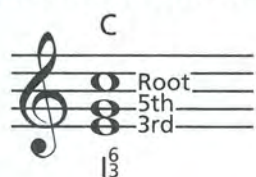
3 Write the following V7 chords in the given inversions. The bottom note is given. Add accidentals where needed

F7 3rd C7 1st A7 2nd D7 1st C7 3rd F7 2nd D7 3rd

Figured Bass

To indicate what inversion of a chord to use, numbers are added to the Roman numeral of that chord. This system originated during the BAROQUE PERIOD (1600–1750) and is called FIGURED BASS.

1st Inversion Triads (3rd is the lowest note)



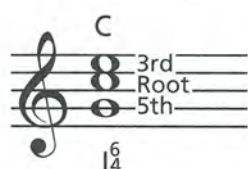
In the key of C, the 1st inversion of the I chord was originally written $I\bar{3}^6$.

The numbers $\bar{3}^6$ indicate the intervals of the chord from the bass (lowest) note. The middle note G is up a 3rd from the bass note E, and the top note C is up a 6th. Over time, the bottom 3 was dropped and shortened to I^6 .

Another way to indicate a 1st inversion C chord is by using the chord symbol C followed by the bass note, written C/E.

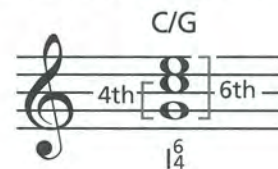


2nd Inversion Triads (5th is the lowest note)



In the key of C, the 2nd inversion of the I chord is written $I\bar{4}^6$. The middle note C is up a 4th from the bass note G, and the top note E is up a 6th.

Another way to indicate a 2nd inversion C chord is C/G.



V7 Chords The V7 chord has four different positions.

	C7*	C7/E	C7/G	C7/B \flat
	Root Position	1st Inversion	2nd Inversion	3rd Inversion
Figured Bass:	$V\bar{7}_3$	$V\bar{6}_3$	$V\bar{4}_3$	$V\bar{2}_2$
Shortened to:	V^7	V^6_5	V^4_3	V^2_4

Letter name chord symbols (C/G) are usually written above the staff. Roman numeral chord symbols (V^7) are usually written below the staff.

*The C7 chord is the V7 chord in the key of F.

Exercises

- 1 Write the chord symbol above the staff and the Roman numeral below the staff, using figured bass where applicable, for each chord in the key of C.

a.

b.

Major Chord Progressions

Chords that move (or progress) from one to another are called a CHORD PROGRESSION. Because the I, IV and V chords contain all the notes of the major scale, they can be used to ACCOMPANY (play along with) most simple melodies. In many chord progressions, a V⁷ chord is used in place of the V chord.

C I F IV C I G V G⁷ V⁷ C I

When the IV and V (or V⁷) chords are in root position, the progression sounds choppy. To make it easier to play and sound smoother, the IV chord often is moved to the 2nd inversion, and the V (or V⁷) chord often is moved to the 1st inversion.

In the IV chord, the 5th (C) is moved down an octave.

In the V chord, the 3rd (B) and 5th (D) are moved down an octave.

In the V⁷ chord, the 3rd (B), 5th (D) and 7th (F) are moved down an octave.

2nd inversion
1 octave lower

IV IV^{6/4}

1st inversion
1 octave lower

V V⁶

1st inversion
1 octave lower

V⁷ V^{6/5}

The following positions are often used for smooth progressions. Notice there is a common tone between each chord.

Root Position 2nd Inversion Root Position 1st Inversion Root Position

I IV^{6/4} I V⁶ or V^{6/5} I

Exercises

- Write the chords in root position in the key of G major. Write the chord symbol for each above the staff.

I IV I V and V⁷ I

- Rewrite the above chord progression to make it sound smoother. Add chord symbols.

I IV^{6/4} I V⁶ and V^{6/5} I

- Write the chords in root position in the key of F major. Write the chord symbol for each above the staff.

I IV I V and V⁷ I

- Rewrite the above chord progression to make it sound smoother. Add chord symbols.

I IV^{6/4} I V⁶ and V^{6/5} I

Track 1*

- 1** Listen to the C major chord in root position and then in 1st inversion.

Write whether the chord in each example is in root position (R) or 1st inversion (1st). Each example will be played twice.

Musical notation for Track 1: C major chord in root position and 1st inversion. The notation is in bass clef, 4/4 time. The first measure shows the C major chord in root position (C) with notes C2, E2, G2. The second measure shows the C major chord in 1st inversion (C/E) with notes E2, G2, C3. The label 'C/E' is written above the second measure.

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

Track 2

- 2** Listen to the C major chord in root position and then in 2nd inversion.

Write whether the chord in each example is in root position (R) or 2nd inversion (2nd). Each example will be played twice.

Musical notation for Track 2: C major chord in root position and 2nd inversion. The notation is in treble clef, 4/4 time. The first measure shows the C major chord in root position (C) with notes C4, E4, G4. The second measure shows the C major chord in 2nd inversion (C/G) with notes G4, C5, E5. The label 'C/G' is written above the second measure.

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

Track 3

- 3** Listen to the V7 chord in root, 1st, 2nd and 3rd inversions.

Musical notation for Track 3: G7 chord in root position and three inversions. The notation is in bass clef, 4/4 time. The first measure shows the G7 chord in root position (G7) with notes G2, B2, D3, F3. The second measure shows the G7 chord in 1st inversion (G7/B) with notes B2, D3, F3, G2. The third measure shows the G7 chord in 2nd inversion (G7/D) with notes D3, F3, G2, B2. The fourth measure shows the G7 chord in 3rd inversion (G7/F) with notes F3, G2, B2, D3. Labels 'G7', 'G7/B', 'G7/D', and 'G7/F' are written above each measure. Below each measure, the Roman numeral and inversion are labeled: 'V7 Root Position', 'V5 1st Inversion', 'V3 2nd Inversion', and 'V2 3rd Inversion'.

Write whether the V7 chord in each example is in root position (R) or 3rd inversion (3rd). Each example will be played twice.

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

Track 4

- 4** Listen to the chord progression in C major with all chords in root position.

Musical notation for Track 4: Chord progression in C major with all chords in root position. The notation is in treble clef, 4/4 time. The first measure shows the C major chord (C) with notes C4, E4, G4. The second measure shows the F major chord (F) with notes F4, A4, C5. The third measure shows the C major chord (C) with notes C4, E4, G4. The fourth measure shows the G7 chord (G7) with notes G4, B4, D5, F5. The fifth measure shows the C major chord (C) with notes C4, E4, G4. Labels 'C', 'F', 'C', 'G7', and 'C' are written above each measure. Below each measure, the Roman numeral is labeled: 'I', 'IV', 'I', 'V7', and 'I'.

Track 5

- 5** Listen to the same chord progression with inversions.

Musical notation for Track 5: Chord progression in C major with inversions. The notation is in treble clef, 4/4 time. The first measure shows the C major chord (C) with notes C4, E4, G4. The second measure shows the F major chord in 4th inversion (F/C) with notes C4, F4, A4. The third measure shows the C major chord (C) with notes C4, E4, G4. The fourth measure shows the G7 chord in 5th inversion (G7/B) with notes B4, D5, F5, G4. The fifth measure shows the C major chord (C) with notes C4, E4, G4. Labels 'C', 'F/C', 'C', 'G7/B', and 'C' are written above each measure. Below each measure, the Roman numeral and inversion are labeled: 'I', 'IV6 4', 'I', 'V5 6', and 'I'.

Track 6

- 6** You will hear I, IV and V7 root position chords in the key of C major. Write the Roman numerals for the missing chords on the lines. Each example will be played twice.

a. | _____ | _____ | _____ | _____ | _____ |

b. | _____ | _____ | _____ | _____ | _____ |

- 1** An inversion of a chord means the root is no longer on the _____.
- 2** In 1st inversion, the 3rd of a triad is always on the _____.
- 3** In close position, the notes of the chord are spaced _____ an octave.

- 4** Rewrite the following triads in the 1st inversion. Add the chord symbol and the Roman numeral for each chord.

Close Position



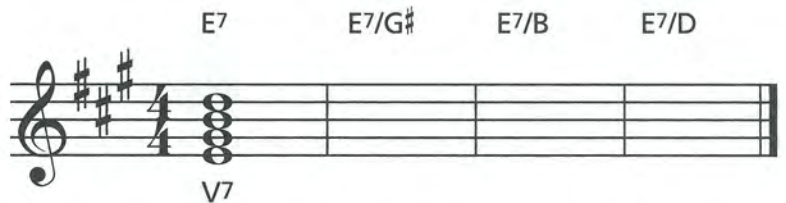
- 5** In 2nd inversion, the 5th of a triad is always on the _____.
- 6** In open position, the notes of the chord are spaced _____ than an octave.
- 7** Rewrite the following root position triads in 2nd inversion. Add the chord symbol and the Roman numeral for each chord.

Close Position



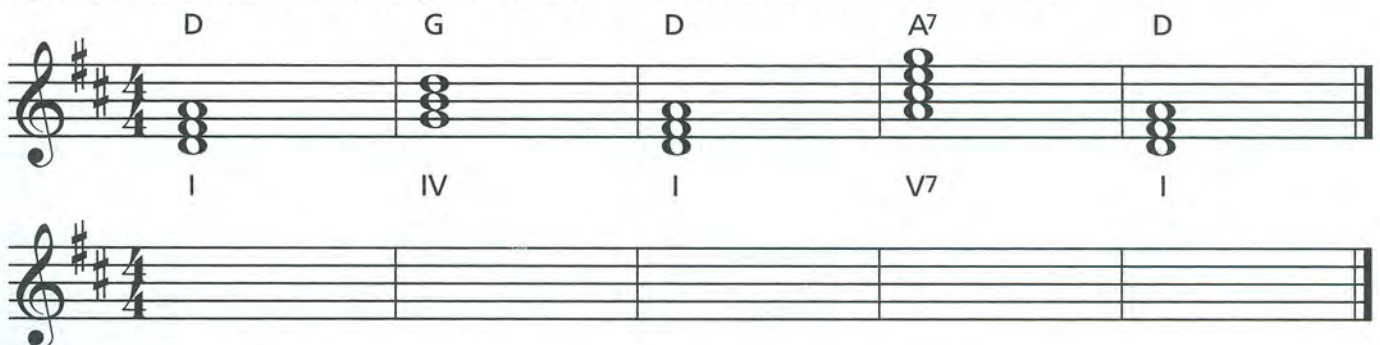
- 8** If the root is on the bottom of a triad, it is in _____; if the 3rd is on the bottom, it is in _____ inversion; if the 5th is on the bottom, it is in _____ inversion.
- 9** In close position, the root in 1st and 2nd inversions is the upper note of the interval of a _____.
- 10** How many inversions are there of the V⁷ chord? _____.

- 11** Write the 1st, 2nd and 3rd inversions for the following V⁷ chord. Use figured bass.



- 12** Chords that move from one to another, are called a _____.
- 13** The three chords that contain all the notes of the major scale are the _____, _____ and _____ chords.

- 14** On the lower staff, rewrite the following chord progression using inversions so there is a common tone between each chord. Indicate what position each chord is in, using chord symbols and figured bass. Add the chord symbol and the Roman numeral for each chord.



Minor Scales

Remember, there are 15 major scales with unique key signatures—see Book 2, page 50. For every major key, there is a RELATIVE MINOR KEY that has the same key signature.

Each relative minor scale begins on the 6th note of the RELATIVE MAJOR SCALE. The 6th note is the keynote of the minor scale and the note from which the scale gets its name.

C Major Scale

A Minor Scale

The keynote of a relative minor scale may also be found by *descending* a minor 3rd from the keynote of the major scale.

Conversely, the keynote of the relative major scale may be found by *ascending* a minor 3rd from the keynote of the minor scale.

C Major A Minor A Minor C Major

Minor 3rd Down Minor 3rd Up

The keys of C major and A minor are relatives because they have the same key signature (no #s, no b's).

Exercises

1 Write the relative minor key name and the key signature for each major key.

G major: _____ minor		F major: _____ minor	
D major: _____ minor		B \flat major: _____ minor	
A major: _____ minor		E \flat major: _____ minor	
E major: _____ minor		A \flat major: _____ minor	

2 Write the following minor key signatures and scales.

E minor

D minor

Natural, Harmonic and Melodic Minor Scales

There are three types of minor scales: the NATURAL, HARMONIC and MELODIC.

The NATURAL MINOR SCALE uses *only* the tones of the relative major scale.

The HARMONIC MINOR SCALE raises the 7th tone (G) by a half step *ascending* and *descending*.

The MELODIC MINOR SCALE raises the 6th (F) and 7th (G) tones by a half step *ascending*. It *descends* like the natural minor scale.

The Harmonic Minor Scale is the most frequently used of the three minor scales.

THE DIATONIC INTERVALS OF THE HARMONIC MINOR SCALE

All diatonic intervals in the harmonic minor scale are either perfect (P), major (M) or minor (m). The perfect intervals are the unison, 4th, 5th and octave; the major intervals are the 2nd and 7th; the minor intervals are the 3rd and 6th. This is true for all harmonic minor scales. Compare with the major scale intervals in Book 2, page 56.

Exercises

1 Write the following harmonic minor scales with key signatures using quarter notes.

E Harmonic Minor

Ascending

Descending

D Harmonic Minor

Ascending

Descending

Minor Triads

Just as a major triad can be built from the 1st, 3rd and 5th scale degrees of a major scale, a MINOR TRIAD can be built from the 1st, 3rd and 5th scale degrees of a minor scale.

Major triads consist of a root, major 3rd and a perfect 5th.

C Major Triad

Minor triads consist of a root, minor 3rd and a perfect 5th.

C Minor Triad

Build a major triad by adding a minor 3rd on top of a major 3rd.

Build a minor triad by adding a major 3rd on top of a minor 3rd.

Any major triad may be changed to a minor triad by lowering the 3rd by 1/2 step.

MAJOR and MINOR TRIADS IN THE MAJOR SCALE

In a major scale, only triads with the root on the 1st, 4th and 5th scale degrees are *major triads*. Triads with the root on the 2nd, 3rd and 6th scale degrees are *minor triads*.

*Major triads are numbered with upper case Roman numerals (I), minor triads with lower case Roman numerals (ii).

Exercises

- Build minor triads (adding accidentals where necessary) using each of the following notes as the root. Name the triad.

- Label each triad in the keys of F and G major using upper and lower case Roman numerals.

Augmented and Diminished Triads

Major and minor triads can each be altered. Major triads may be made *larger* (augmented) and minor triads may be made *smaller* (diminished).

An AUGMENTED TRIAD is a major triad that has been made larger by *raising* the 5th by ½ step.

A DIMINISHED TRIAD is a minor triad that has been made smaller by *lowering* the 5th by ½ step.

Major Triad

Aug. Triad

Minor Triad

Dim. Triad

Build an augmented triad by adding a major 3rd on top of a major 3rd.

Aug. Triad

Build a diminished triad by adding a minor 3rd on top of a minor 3rd.

Dim. Triad

SUMMARY OF MAJOR, MINOR, AUGMENTED AND DIMINISHED TRIADS

- Major = major 3rd + minor 3rd
- Minor = minor 3rd + major 3rd
- Augmented = both 3rds are major
- Diminished = both 3rds are minor

Triads and chords may be indicated by letters and symbols:
Chord letter only = major, m = minor, + = augmented, ° = diminished

MAJOR TRIAD SCALE

In the major scale, triads built on the:

- 1st, 4th, and 5th scale degrees are major triads,
- 2nd, 3rd and 6th scale degrees are minor triads,
- 7th scale degree is a diminished triad.

Exercises

- 1 Write the name of each triad and indicate whether it is major (chord letter), minor (m), augmented (+) or diminished (°).

Track 7

1 Listen to a C major scale followed by an A natural minor scale, the relative minor of C major.

C Major

A Minor



Write whether each example is a major (M) or natural minor (m) scale. a. _____ b. _____ c. _____ d. _____ e. _____

Track 8

2 Listen to the A natural, harmonic (raised 7th) and melodic minor (raised 6th and 7th ascending and natural minor descending) scales.

A Natural Minor Scale



A Harmonic Minor Scale



A Melodic Minor Scale



Track 9

3 Write whether each example is a natural (N), harmonic (H) or melodic (M) minor scale.

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

All examples in Exercises 4-8 will be played twice.

Track 10

4 Listen to the two intervals that make up a minor triad: a minor 3rd and a perfect 5th. Write whether each example is a minor 3rd (m3) or a perfect 5th (P5).



Minor 3rd Perfect 5th

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

Track 11

5 Listen to a C major triad and then a C minor triad. Write whether each example is a major (M) or minor (m) triad.

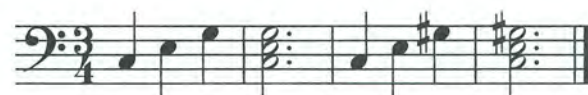


C Major C Minor

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

Track 12

6 Listen to a C major triad and then a C augmented triad. Write whether each example is a major (M) or augmented (+) triad.



C Major C Augmented

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

Track 13

7 Listen to a C minor triad and then a C diminished triad. Write whether each example is a minor (m) or diminished (°) triad.



C Minor C Diminished

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

- 1** Write the relative harmonic minor scale (adding accidentals where necessary) for each major scale using whole notes.

G Major

_____ Harmonic Minor

a.

F Major

_____ Harmonic Minor

b.

D Major

_____ Harmonic Minor

c.

- 2** Indicate the relative major scale for each minor scale.

A minor: _____ major E minor: _____ major D minor: _____ major

- 3** The Harmonic Minor Scale: (circle one) **raises** / **lowers**

the 7th tone by one (circle one) **half** / **whole** step *ascending* and *descending*.

- 4** When *ascending*, the Melodic Minor Scale (circle one) **raises** / **lowers**

the 6th and 7th tones by one (circle one) **half** / **whole** step.

- 5** The Melodic Minor Scale *descends* the same as the _____ minor scale.

- 6** A major triad consists of a root, _____ and _____.

A major triad may also be built by adding a _____ on top of a _____.

- 7** A minor triad consists of a root, _____ and _____.

A minor triad may also be built by adding a _____ on top of a _____.

- 8** An augmented triad is a major triad with the _____ raised a half step.

An augmented triad may also be built by adding a _____ on top of a _____.

- 9** A diminished triad is a minor triad with the _____ lowered a half step.

A diminished triad may also be built by adding a _____ on top of a _____.

- 10** Label each triad major (chord symbol), minor (m), augmented (+) or diminished (°).

The Primary Triads in Minor Keys

As in the major keys (see Book 2, page 75), the most important triads of a minor key are built on the 1st, 4th and 5th scale degrees of the minor scale. They are called the PRIMARY TRIADS or primary chords of the key and are identified by the Roman numerals i, iv and V. These three triads contain every note of the minor scale.

A Harmonic Minor

i 2 3 iv V 6 7 8
A minor D minor E Major (raised)

- Notice that the i and iv chords are minor chords because they consist of the root, a minor 3rd and a perfect 5th (see page 92).
- The V chord is a major triad, as in the major scale, because it consists of a root, major 3rd and perfect 5th. The G is sharpened because the A harmonic minor scale has the 7th raised a half step.

HARMONIC MINOR TRIAD SCALE

In the harmonic minor scale, triads built on the:

- 1st and 4th scale degrees are minor triads,
- 5th and 6th scale degrees are major triads,
- 2nd and 7th scale degrees are diminished triads (see page 93),
- 3rd scale degree is an augmented triad (see page 93).

Am B° C+ Dm E F G° Am
i ii° III+ iv V VI vii° i
Am B° C+ Dm E F G° Am
i ii° III+ iv V VI vii° i

Exercises

- 1 Build the primary triads for each minor scale by adding two notes to the 1st, 4th, and 5th notes of each scale to complete the triad. Use the harmonic minor scale (raised 7th). Name each triad.

E minor

Em Am B
i iv V

E minor

i iv V

D minor

i iv V

D minor

i iv V

Minor Chord Progressions

Because the i, iv and V triads contain all the notes of the harmonic minor scale, they can be used to accompany most simple melodies in minor keys. In many chord progressions, the V7 chord is used instead of the V triad.

Am Dm Am E E7 Am

i iv i V or V7 i

To make this minor chord progression sound smoother, the iv chord is moved to the 2nd inversion, and the V (or V7) chord is moved to the 1st inversion.

In the iv chord, the 5th (A) is moved down an octave.

2nd inversion
1 octave lower

iv iv⁶₄

In the V chord, the 3rd (G#) and 5th (B) are moved down an octave.

1st inversion
1 octave lower

V V⁶

In the V7 chord, the 3rd (G#), 5th (E) and 7th (D) are moved down an octave.

1st inversion
1 octave lower

V7 V⁶₅

The following positions are often used for smooth progressions. Notice there is a common tone between each chord.

Root Position 2nd Inversion Root Position 1st Inversion Root Position

i iv⁶₄ i V⁶ or V⁶₅ i

Remember, when a triad is not in root position (close position), the root is always the upper note of the interval of a 4th. When a V7 chord is not in root position (close position), the root is always the upper note of the interval of a 2nd.

Exercises

- Write the chords in root position in the key of E minor. Write the chord symbols for each above the staff.

Em

i iv i V and V7 i

- Rewrite the above chord progression to make it sound smoother. Add chord symbols.

i iv⁶₄ i V⁶ and V⁶₅ i

- Write the chords in root position in the key of D minor. Write the chord symbols for each above the staff.

Dm

i iv i V and V7 i

- Rewrite the above chord progression to make it sound smoother. Add chord symbols.

i iv⁶₄ i V⁶ and V⁶₅ i

Modes Related to the Major Scale: Ionian, Mixolydian and Lydian

Just like a major or minor scale, a MODE is a scale of eight notes in alphabetical order. A mode can begin on any scale degree of a major scale using the key signature of the parent scale.

In the key of C, for example, a mode can begin and end on C (i), on D (ii), on E (iii), etc.—no sharps or flats would be used. There are seven modes altogether and each has a Greek name. In the key of C, the modes are:

Beginning on	C	—	Ionian mode (major scale)
	D	—	Dorian mode
	E	—	Phrygian mode
	F	—	Lydian mode
	G	—	Mixolydian mode
	A	—	Aeolian mode (natural minor scale)
	B	—	Locrian mode

To easily learn how to build any mode on a keynote, it is helpful to relate the keynote to a major or natural minor scale with slight alterations.

The following three modes relate to the major scale. (H = half step.)

IONIAN MODE—
a major scale.

C Ionian

1 2 3 4 5 6 7 8

MIXOLYDIAN MODE—
a major scale with the
7th lowered a half step.

C Mixolydian

1 2 3 4 5 6 (b)7 8

LYDIAN MODE—
a major scale with the
4th raised a half step.

C Lydian

1 2 3 (#)4 5 6 7 8

Exercises

1 Fill in the missing notes in the following Ionian modes.

G Ionian

a.

F Ionian

b.

2 Fill in the missing notes in the following Mixolydian modes.

G Mixolydian

a.

F Mixolydian

b.

3 Fill in the missing notes in the following Lydian modes.

G Lydian

a.

F Lydian

b.

Modes Related to the Minor Scale: Aeolian, Dorian, Phrygian and Locrian

The following four modes relate to the natural minor scale.

AEOLIAN MODE—
a natural minor scale.

A Aeolian

1 2 3 4 5 6 7 8

DORIAN MODE—
a natural minor scale with
the 6th raised a half step.

A Dorian

1 2 3 4 5 (#)6 7 8

PHRYGIAN MODE—
a natural minor scale with
the 2nd lowered a half step.

A Phrygian

1 (b)2 3 4 5 6 7 8

LOCRIAN MODE—
a natural minor scale with
the 2nd and 5th lowered a
half step. This mode was
not used in ancient times
and is only occasionally
used in modern music.

A Locrian

1 (b)2 3 4 (b)5 6 7 8

Exercises

- 1** Fill in the missing notes in the following aeolian modes.
E Aeolian

a.

D Aeolian

b.

- 2** Fill in the missing notes in the following dorian modes.
E Dorian

a.

D Dorian

b.

- 3** Fill in the missing notes in the following phrygian modes.
E Phrygian

a.

D Phrygian

b.

Track 14

1 Listen to the chord progression in A minor with all the chords in root position.

Am Dm Am E7 Am

i iv i V7 i

Track 15

2 You will hear i, iv and V7 root position chords in the key of A minor. Write the Roman numerals for the missing chords on the lines. The example will be played twice.

i iv V7 _____

Track 16

3 Listen to a major (or ionian) scale followed by a mixolydian scale. Listen for the lowered 7th in the mixolydian scale.

C Major (Ionian)

C Mixolydian

b7

The 1st scale in each example is major. Write whether the 2nd scale is major (M) or mixolydian (b7).

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

Track 17

4 Listen to a major scale followed by a lydian scale. Listen for the raised 4th in the lydian scale.

C Major (Ionian)

C Lydian

#4

The 1st scale in each example is major. Write whether the 2nd scale is major (M) or lydian (#4).

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

Track 18

5 Listen to a natural minor (or aeolian) scale followed by a dorian scale. Listen for the raised 6th in the dorian scale.

A Minor (Aeolian)

A Dorian

#6

The 1st scale in each example is minor. Write whether the 2nd scale is natural minor (m) or dorian (#6).

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

Track 19

6 Listen to a natural minor scale followed by a phrygian scale. Listen for the lowered 2nd in the phrygian scale.

A Minor (Aeolian)

A Phrygian

b2

The 1st scale in each example is minor. Write whether the 2nd scale is natural minor (m) or phrygian (b2).

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

1 Write the primary chords in the keys of B and G harmonic minor in root position.

B minor



i iv V7

G minor



i iv V7

2 Write a D mixolydian mode.



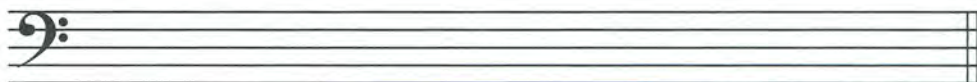
3 Write a Bb lydian mode.



4 Write a B dorian mode.



5 Write a G phrygian mode.



6 Word Search: Solve the clues, then circle the words which may appear across, down, diagonally or backwards in the puzzle. Words may overlap.

- a. Mode that is a natural minor scale.
- b. Numbers to the right of chord symbols—i6.
- c. Three note chord consisting of a root, 3rd, 5th.
- d. I IV I V7 I = a chord _____.
- e. Major triad with the 5th raised a half step.
- f. Mode that is a major scale.
- g. Three or more notes sounded together.
- h. I, IV and V are the _____ triads in any key.
- i. A G7 chord with the F in the bass = _____ inversion.
- j. Mode that is a major scale with the 7th lowered a half step.
- k. A _____ triad: root, minor 3rd, perfect 5th
- l. Mode that is a natural minor scale with the 6th raised a half step.
- m. Minor triad with the 5th lowered a half step.
- n. Minor scale with the 7th raised a half step.
- o. Mode that is a natural minor scale with the 2nd lowered a half step.
- p. When the root of a chord is not the bottom note.
- q. Mode that is a major scale with the 4th raised a half step.

F	N	O	I	S	S	E	R	G	O	R	P
I	U	D	U	Y	C	R	O	N	I	M	R
G	N	A	E	O	L	I	A	N	Z	I	I
U	W	D	D	T	F	I	G	F	J	X	M
R	H	R	I	O	N	I	A	N	R	O	A
E	N	O	I	S	R	E	V	N	I	L	R
D	E	H	S	I	N	I	M	I	D	Y	Y
B	I	C	O	Q	T	K	A	G	W	D	D
A	M	E	G	E	H	M	H	N	U	I	F
S	P	D	I	C	I	N	O	M	R	A	H
S	B	X	P	H	R	Y	G	I	A	N	T
I	F	E	O	J	D	A	I	R	T	M	X

Harmonizing a Melody in a Major Key

To HARMONIZE a melody means to create a chord accompaniment for it. Since the I, IV and V (or V⁷) chords contain all the notes of the major scale, many melodies in a major key can be harmonized with just these three chords.

To determine the chords to be used, analyze the melody notes. Consult the following chart to see which chord is generally used with each melody note of a major scale. When more than one chord can be chosen, your ear should always be the final guide.

Scale Degree	Chord
1, 3, 5	I chord
2, 4, 5, 7	V (or V ⁷) chord
1, 4, 6	IV chord

Here is a C major scale that is harmonized using only the I, IV and V (or V⁷) chords. When harmonizing with the V⁷ chord, the 5th is often omitted.

C G or G⁷ C F C F G or G⁷ C

I V or V⁷ I IV I IV V or V⁷ I

Most harmonizations usually begin and end with a I chord.
A V (or V⁷) chord usually precedes the last chord.

Exercises

- 1** Harmonize the G and F major scales with the I, IV, V (and V⁷) chords using inversions, where necessary, to achieve a smooth progression between chords (see page 87). Write the chord symbols above the staff and the Roman numerals below the staff for each chord.

a.

G D/F[#] or D⁷/F[#]

I V⁶ V⁵

b.

Broken Chords and Arpeggiated Accompaniments

BROKEN CHORDS

Another way to harmonize a melody is to break the chord notes so they are not played simultaneously. When the notes of a chord are played together, it is called a BLOCK CHORD.

When they are not played together, it is called a BROKEN CHORD.

Block Chords



Broken Chords



ARPEGGIOS

When the notes of a chord are played sequentially, one after the other, it is called an ARPEGGIO. The word arpeggio comes from the Italian *arpeggiare*, which means "to play upon a harp." An arpeggio may be extended to an octave or more. Notice that the arpeggios below outline each note of the indicated chords in root position. When a chord is repeated in the following measures, it is not necessary to repeat the chord symbol.

Schlaf in Guter Ruh

German Lullaby

Exercises

- 1 Add an arpeggiated accompaniment to the melody below. Use quarter notes on each beat based on the indicated chords in root position.

It Rained A Mist

American Folk Song

Passing and Neighboring Tones

Most melodies include tones that are not part of the chord used for the harmony. These non-chord tones are called NON-HARMONIC TONES. When a melody passes from one chord tone to a *different* chord tone with a non-harmonic tone (a half or whole step) between, the non-harmonic tone is called a PASSING TONE.

A musical score in 4/4 time showing a progression of four chords: C (I), F (IV), G7 (V7), and C (I). The melody in the treble clef consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Arrows point to the notes D4, F4, and A4, which are labeled "Passing tone". The bass clef shows the chord voicings for each measure.

When a melody passes from one chord tone back to the *same* chord tone with a non-harmonic tone (a half or whole step) between, the non-harmonic tone is called a NEIGHBORING TONE. It is an UPPER NEIGHBORING TONE when it is *above* the chord tone, and a LOWER NEIGHBORING TONE when it is *below* the chord tone.

Passing and neighboring tones are non-harmonic and usually occur on a weak beat. These tones should not be a factor in your choice of a chord to harmonize a melody.

A musical score in 4/4 time showing a progression of four chords: C (I), F (IV), G7 (V7), and C (I). The melody in the treble clef consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. Arrows point to the notes D4 and F4, which are labeled "Upper neighboring tone" and "Lower neighboring tone" respectively. The bass clef shows the chord voicings for each measure.

Exercises

- 1** Circle the upper neighboring tones and passing tones in the following melody. Identify each with U for the upper neighboring tones, or P for the passing tones.

London Bridge

English Folk Song

A musical score in 4/4 time for the melody of "London Bridge". The melody is written in the treble clef and consists of quarter notes: C4, D4, E4, F4, G4, A4, B4, C5. The chords are indicated above the staff: C (I), G7 (V7), C (I), G7 (V7), C (I). The bass clef shows the chord voicings for each measure.

- 2** Circle the lower neighboring tones and passing tones in the following melody. Identify each with L for the lower neighboring tones, or P for the passing tones.

A musical score in 4/4 time for a bass line melody. The melody is written in the bass clef and consists of quarter notes: C3, D3, E3, F3, G3, A3, B3, C4. The chords are indicated above the staff: C (I), F (IV), C (I), F (IV), G7 (V7), C (I). The bass clef shows the chord voicings for each measure.

Composing a Melody in a Major Key

Just as you added harmony to a previously written melody, you can also COMPOSE (create or write) a melody to a previously written chord progression.

Begin by analyzing the chord progression and writing the Roman numerals under the chords—then add the chord symbols above the staff. By using chord tones and adding non-harmonic tones (passing and neighboring) to make the melody more interesting, you can compose your own unique melody.

Remember that the first and last note of a melody tends to be the root of the I chord, and a V (or V7) usually precedes the last chord. The numbers between the staves refer to the melody notes. They are the intervals of the chords used in the bass accompaniment.*

Obwisana

Ghanaian Folk Song

*R=Root 3=3rd 5=5th P=Passing Tone

Exercises

- 1 Analyze the harmony provided. Write the Roman numerals below the staff, then add the chord symbols above the staff. Write a melody (without rests) and circle any non-harmonic tones used.

(5th omitted)

- 2 Analyze the harmony provided. Write the Roman numerals below the staff, then add the chord symbols above the staff. Write a melody (without rests) and circle any non-harmonic tones used.

(5th omitted)

Track 20

- 1 Listen to the harmonization of a C major scale with a smooth chord progression.

C G/B C F C F/C G7/B C

I V⁶ I IV₄⁶ I IV₄⁶ V₅⁶ I

5th omitted

Track 21

- 2 Listen to the melody and chords. Write the missing chords in the bass clef, the Roman numerals (I or V₅⁶) below the staff and the chord symbols above the staff. Omit the 5th in the V⁷ chord. The example will be played twice.

Schubert Melody

Franz Schubert (1797-1828)

F B \flat /F C⁷/E

I IV₄⁶ V₅⁶

Track 22

- 3 Listen to the melody and chords. Circle the non-harmonic tones and write a P above the note if it is a passing tone, a U if it is an upper neighboring tone, and an L if it is a lower neighboring tone.

Shall We Gather At the River?

Robert Lowry (1826-1899)

D G A

D A⁷ D

I IV V

Track 23

- 4 Listen to the musical selection with an arpeggiated accompaniment. Write the arpeggiated accompaniment in the bass clef. Omit the 5th in the V⁷ chord. The example will be played twice.

G C D⁷ G

I IV V⁷ I

- 1** Fill in the blanks with the chord or chords that are generally used to harmonize a melody when a measure consists primarily of the following scale tones:
- 1, 3, 5 _____
 2, 4, 5, 7 _____
 1, 4, 6 _____

- 2** Harmonize the following melody with one chord in each measure except for measure 7 (there are chords on beats 1 and 4). Using I, IV and V⁷ chords only, write the chord symbol above the staff and the Roman numeral below the staff for each chord. Use a smooth chord progression—omit the 5th in the V⁷ chord.

Michael, Row the Boat Ashore

African-American Folk Song

5

- 3** Most harmonies begin and end on a _____ chord, which is usually preceded by a _____ chord.
- 4** When a melody passes from one chord tone to a different chord tone with a non-harmonic tone (a half or whole step) between, the non-harmonic tone is called a _____.
- 5** When a melody tone returns to the same melody tone, the non-harmonic tone between is called a _____.

- 6** In the following melody, circle the non-harmonic tones and write a P above the note if it is a passing tone, a U if it is an upper neighboring tone, and an L if it is a lower neighboring tone.

Simple Gifts

Shaker Hymn

- 7** Add an arpeggiated accompaniment to the melody. Omit the 5th in the V⁷ chord.

Dona Nobis Pacem

Anonymous

F C⁷ F C⁷ B^b F C⁷ F

Harmonizing a Melody in a Minor Key

Harmonizing a melody in a minor key is similar to harmonizing a melody in a major key. Since the *i*, *iv*, and *V* (or *V7*) chords contain all the notes of the harmonic minor scale, many melodies in a minor key can be harmonized with just these three chords.

To determine the chords to be used, analyze the melody notes. Consult the following chart to see which chord is generally used with each melody note. When more than one chord can be chosen, your ear should always be the final guide.

Scale Degree	Chord
1, 3, 5	<i>i</i> chord
2, 4, 5, 7	<i>V</i> (or <i>V7</i>) chord
1, 4, 6	<i>iv</i> chord

Here is an A harmonic minor scale (raised 7th) that is harmonized using only the *i*, *iv* and *V* (or *V7*) chords.

A minor: *i* *V* or *V7* *i* *iv* *i* *iv* *V* or *V7* *i*

Most harmonizations usually begin and end with a *i* chord.
A *V* (or *V7*) chord usually precedes the last chord.

Exercises

- 1 Harmonize the E and D harmonic minor scales with the *i*, *iv*, *V* (and *V7*) chords using inversions, where necessary, to achieve a smooth progression between chords (see page 97). Write the chord symbols above the staff and the Roman numerals below the staff for each chord.

a.

i *V*⁶ *V*⁶

b.

Composing a Melody in a Minor Key

Composing a melody in a minor key for an existing harmony is similar to composing a melody in a major key. The melody is created based on the tones in the chord accompaniment.

Begin by analyzing the chord progression and writing the Roman numerals under the chords—then add the chord symbols above the staff. By using chord tones and adding non-harmonic tones (passing and neighboring) to make the melody more interesting, you can compose your own unique melody.

Remember that the first and last note of a melody tends to be the root of the i chord, and a V (or V7) usually precedes the last chord. The numbers between the staves refer to the melody notes. They are the intervals of the chords used in the bass accompaniment.*

Pat-A-Pan

French Carol

Chord progression: Dm, A7, Dm, A7, Dm, A7, Dm, Gm, A7, Dm

Melodic intervals: *R R, 5 5 L 5, 3 L 3 7 5, 5 3, 5 5 U, 5 #3 P 5, 3 R P 3 P, 5 L 5 P 3, 5 5 U, 5 #3 P 5, 3 L 3 R R, R 5, R

*R=Root U=Upper Neighboring Tone L=Lower Neighboring Tone P=Passing Tone 3=3rd 5=5th

Exercises

- Analyze the harmony provided. Write the Roman numeral below the staff, then add the chord symbols above the staff. Write a melody (without rests) and circle any non-harmonic tones used.

(5th omitted)

- Analyze the harmony provided. Write the Roman numeral below the staff, then add the chord symbols above the staff. Write a melody (without rests) and circle any non-harmonic tones used.

(5th omitted)

12-Bar Blues Chord Progression

In addition to the major and minor chord progressions introduced on pages 87 and 97, another chord progression that is widely used is the BLUES progression. The music known as "the blues" has its roots in America's south where musicians combined west African rhythms and gospel singing with European harmonies. The blues can often be found in jazz, rock and pop music.

A BLUES CHORD PROGRESSION is usually 12 measures (or "bars") long, and while there are many variations, a traditional blues progression generally consists of the I chord (4 measures), the IV chord (2 measures), the I chord (2 measures), the V or V⁷ chord (1 measure), the IV chord (1 measure), and the I chord (2 measures).

The C Major 12-Bar Blues Progression

The C Major 12-Bar Blues Progression is shown in two staves of music. The first staff contains measures 1 through 5. Measure 1 is labeled with a boxed '1' and a 'C' chord symbol above the staff. Measures 2, 3, and 4 are also labeled with 'C' above the staff. Measure 5 is labeled with a boxed '5' and an 'F' chord symbol above the staff. The second staff contains measures 7 through 11. Measure 7 is labeled with a boxed '7' and a 'C' chord symbol above the staff. Measure 9 is labeled with a boxed '9' and 'G' and 'G7' chord symbols above the staff. Measure 10 is labeled with a boxed '10' and an 'F' chord symbol above the staff. Measure 11 is labeled with a boxed '11' and a 'C' chord symbol above the staff. Roman numerals are written below the staff: 'I' for measures 1-4, 'V or V⁷' for measure 9, 'IV' for measure 10, and 'I' for measure 11.

Exercises

- 1 Write the Roman numerals and the chord symbols for the chords in the following B^b blues progression.

Exercise 1 shows a 12-bar blues progression in B^b major. The first staff contains measures 1 through 5. Measure 1 is labeled with a boxed '1' and a 'B^b' chord symbol above the staff. Measures 2, 3, and 4 are also labeled with 'B^b' above the staff. Measure 5 is labeled with a boxed '5' and an 'E^b' chord symbol above the staff. The second staff contains measures 7 through 11. Measure 7 is labeled with a boxed '7' and a 'B^b' chord symbol above the staff. Measure 9 is labeled with a boxed '9' and 'B^b7' and 'B^b' chord symbols above the staff. Measure 10 is labeled with a boxed '10' and an 'E^b' chord symbol above the staff. Measure 11 is labeled with a boxed '11' and a 'B^b' chord symbol above the staff. Roman numerals are written below the staff: 'I' for measures 1-4, 'V or V⁷' for measure 9, 'IV' for measure 10, and 'I' for measure 11.

- 2 Write a 12-bar F blues progression using the I, IV and V⁷ chords. Write Roman numerals below the staff and chord symbols above the staff.

Exercise 2 shows a 12-bar blues progression in F major. The first staff contains measures 1 through 4. Measure 1 is labeled with a boxed '1' and an 'F' chord symbol above the staff. Measures 2, 3, and 4 are blank. The second staff contains measures 7 through 11. Measure 7 is labeled with a boxed '7' and an 'F' chord symbol above the staff. Measures 8, 9, 10, and 11 are blank.

- 3 Write a 12-bar G blues progression using the I, IV and V⁷ chords. Write Roman numerals below the staff and chord symbols above the staff. Use a smooth chord progression and omit the 5th of the V⁷ chord.

Exercise 3 shows a 12-bar blues progression in G major. The first staff contains measures 1 through 4. Measure 1 is labeled with a boxed '1' and a 'G' chord symbol above the staff. Measures 2, 3, and 4 are blank. The second staff contains measures 7 through 11. Measure 7 is labeled with a boxed '7' and a 'G' chord symbol above the staff. Measures 8, 9, 10, and 11 are blank.

The Blues Scale

The special sound of the blues style is not only derived from the chord progression, but also from its unique scale. As compared to the major scale, the BLUES SCALE has only 7 notes and includes a flatted 3rd, 5th and 7th. The flatted notes are often called BLUE NOTES.

C Major Scale

- To change a major scale into a blues scale:
1. Remove the 2nd and 6th scale degrees
 2. Flat the 3rd and 7th scale degrees
 3. Add a flatted 5th

C Blues Scale

By writing or IMPROVISING (to spontaneously create a unique solo) the notes of a blues scale over a blues chord progression, the special sound of the blues is created.

Exercises

- 1 Fill in the missing notes in the following G blues scale.

- 2 Write an F blues scale.

Track 24

1 Listen to the harmonization of an A harmonic minor scale with a smooth chord progression.

Am E/G# Am Dm/A Am Dm/A E7/G# Am

i V⁶ i iv⁶ i iv⁶ V⁵ i

Track 25

2 Listen to the melody and chords. Write the missing chords in the bass clef (i or V⁶ chords only), the Roman numerals below the staff and the chord symbols above the staff. Circle the non-harmonic tones and write a P above the note if it is a passing tone and an L if it is a lower neighboring tone. The example will be played twice.

Joshua Fought the Battle of Jericho

African-American Spiritual

Em B7/D#

i V⁶

Track 26

3 Listen to a 12-bar blues chord progression. A common practice in writing music is to use a / on each beat with the chord symbols written above. The rhythm section keeps time throughout the chord progression. The soloist can use the chord symbols as a guide to improvise.

C F

C G7 F C

Track 27

4 Listen to a C major scale followed by a C blues scale.

C Major Scale

C Blues Scale

1 2 3 4 5 6 7 8

1 b3 4 b5 5 b7 8

Write whether each example is a major (M) or blues scale (B).

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

- 1 Which type of minor scale is usually used to harmonize melodies in a minor key? _____
- 2 Fill in the blanks with the chord or chords that are generally used to harmonize a minor melody when a measure consists primarily of the following scale tones:
 1, 3, 5 _____. 2, 4, 5, 7 _____. 1, 4, 6 _____.

- 3 Harmonize the following minor melody with one chord in each measure except for measure 3 (there are chords on beats 1 and 2). Using *i*, *iv* and *V*⁷ chords only with inversions, write the chord symbols above the staff and the Roman numerals below the staff for each chord.

Ala Delona **Arabic Folk Song**

i *V*⁶₅

- 4 The 12-bar blues chord progression consists of the following chords (Roman numerals):
 4 bars of _____, 2 bars of _____, 2 bars of _____, 1 bar of _____, 1 bar of _____, and 2 bars of _____.
- 5 Write a 12-bar D blues progression. Write the chord symbols above the staff and the Roman numerals below the staff for each chord.

- 6 The blues scale has only _____ notes and includes a flatted _____, _____ and _____.

- 7 Write a G blues scale.

- 8 Write a 12-bar solo above the C blues progression. Use only notes in the C blues scale (C, E^b, F, G^b, G, B^b). Begin and end on C.

I I I I IV⁶₄ IV⁶₄

I I V⁶₅ (5th omitted) IV⁶₄ I I

AB (Binary) Form

In music, several phrases can be combined to form a complete section (or part). In TWO-PART FORMS, called AB (or BINARY FORM), the musical material of the first (or A) section contrasts with the second (or B) section. Sometimes the two sections may share a motive or end similarly, but each section is musically distinct from the other.

Variety and contrast is achieved in each section through differences in many *elements* such as melody, rhythm, harmony, time signature and tempo. For instance, in "Go, Tell It On the Mountain," the first measure of the A section features an ascending melody with quarter notes, as compared with measure 1 of the B section which has a descending melody and a rhythm of a half note, dotted 8ths and 16th notes.

The melodic and rhythmic contrasts continue throughout each section. The time signature remains the same for the two sections and the harmony is similar, differing primarily in the final chord of each section.

"Go, Tell It On the Mountain" is an example of AB form.

Go, Tell It On the Mountain

African-American Spiritual

A Verse

1. When I was a seek - er, I sought both night and day.
 2. He made me a watch - man, up - on the cit - y wall.

I asked the Lord to help me, And He showed me the way.____
 And if I serve Him tru - ly, I am the least of all.____

B Refrain

Go, tell it on the moun - tain, O - ver the hills and ev' - ry - where..

Go, tell it on the moun - tain, that Je - sus Christ - is born.

A VERSE is a section of a song that tells a story and changes with each repetition, which is followed by the REFRAIN (or CHORUS), a section of a song that is repeated after each verse. The song format of verse and refrain is typical of AB form.

Exercises

- 1 Circle the letter of the refrain section of "Go, Tell It On the Mountain." A B
- 2 Circle the letter of the verse section of "Go, Tell It On the Mountain" that ends on a V⁷ chord. A B
- 3 Name two elements that make the music of the A section different from the B section:

_____ .

ABA (Ternary) Form

THREE-PART FORMS, called ABA (or TERNARY FORM), consist of two musically distinct sections as does AB form. In this form, however, there is **A**, a statement; **B**, a contrasting statement of new material; and **A**, a restatement of the A section. This is one of the most common forms found in all types of music, from folk songs to symphonies.

Swing Low, Sweet Chariot

African-American Spiritual

Swing low, sweet char - i - ot, — Com - ing for to car - ry me home,

Swing - low, sweet char - i - ot, — Com - ing for to car - ry me home.

B

I looked o - ver Jor - dan and what did I see, —

Com - ing for to car - ry me home, A band — of an - gels

com - ing af - ter me, — Com - ing for to car - ry me home.

A

Swing low, sweet char - i - ot, — Com - ing for to car - ry me home,

Swing - low, sweet char - i - ot, — Com - ing for to car - ry me home.

Exercises

- 1 Which section of "Swing Low, Sweet Chariot" is the verse? _____
- 2 Which section of "Swing Low, Sweet Chariot" is the refrain? _____
- 3 How many phrases are in: the A section? _____ the B section? _____

Rondo Form

A RONDO is a form that consists of an A section alternating with other contrasting sections of musical material. A is the recurring section. The most common types of rondo form are:

A B A B A — A B A C A — A B A C A B A.

“La Raspa” is an example of a rondo.

La Raspa

Mexican Folk Song

Exercises

- 1 What is the form of “La Raspa”? (Circle one) **A B A B A** **A B A C A** **A B A C A B A**
- 2 Which section prominently features eighth and quarter note rests in its motive? _____
- 3 Which section differs harmonically from the others? _____

Symphony No. 5 in C Minor, Op. 67

Ludwig van Beethoven (1770-1827)

Track 28

1 Listen to a musical motive.



Track 29

2 Listen to an excerpt that includes the above motive. How many times does the motive appear? **9 11 13** (Circle correct answer)

Track 30

3 Listen to the melody. How many phrases are there? _____

Track 31

4 Listen to the melody of the following musical selection. Mark the phrases using curved lines over the entire phrase.

Scarborough Fair

Phrase Mark

English Folk Song

Track 32

5 Listen to a song in AB form.

Track 33

6 Listen to a song in ABA form.

Track 34

7 What is the form of the following song? (Circle one)

AB ABA

Track 35

8 What is the form of the following song? (Circle one) **AB ABA**
Write the letters above the music at the starting point of each section.

Shoo, Fly

American Folk Song

Track 36

9 In what rondo form is Beethoven's *Für Elise*? Listen to sections A, B and C.

Write the letter for each section as you hear it. _____

1 Mark the phrases, using curved lines over the entire phrase.

How many phrases are there? _____

Mistletoe Gifts

French Canadian Folk Song



Luck to the mas-ter and the mis-tress, Luck to the peo-ple dwell-ing here, Wheth-er a
cot - tage or a cast - le, Luck to you all and good New Year!

2 Two-part forms are also called _____ or _____.

3 What is the form of the following song? (Circle one) **AB** **ABA**

a. Write the letters above the music at the starting point of each section.

b. How many phrases are in the B section? _____

Trampin'

African-American Spiritual



I'm tramp - in', — tramp - in' — Tryin' to make Heav-en my home,
I'm tramp - in', — tramp - in' — Tryin' to make Heav-en my home, *Fine*
I've nev - er been to Heav - en but I've been told,
Tryin' to make Heav - en my home, The streets up there are
paved with gold, *D.C. al Fine* Tryin' to make Heav - en my home.

4 The part of a song that tells a story is called the _____.

5 Another name for the chorus section of a song is _____.

6 Three-part forms are also called _____ or _____.

7 The most common forms of a rondo are:

a. _____ b. _____

c. _____

GLOSSARY & INDEX OF TERMS & SYMBOLS

Includes all the terms and symbols used in Book 3 and the page on which they are first introduced.

AB (BINARY) FORM Two-part form where the musical material of the first (or A) section contrasts with the second (or B) section, i.e., verse and refrain song format (p. 115).

ABA (TERNARY) FORM A three-part form consisting of an A, a statement; B, a contrasting statement of new material; and A, a restatement of the A section (Ternary Form) (p. 116).

ACCOMPANY To play along with. A chord progression is used to accompany a melody (p. 87).

AEOLIAN MODE A natural minor scale, or A to A on the white keys of the piano (p. 99).

ARPEGGIO The notes of a chord played sequentially, one after the other (p. 103).



AUGMENTED TRIAD

A major triad that has been made larger by raising the 5th by 1/2 step (p. 93).



BAROQUE PERIOD The period of music from 1600–1750 (p. 86).

BINARY FORM AB or two-part form (p. 115).

BLOCK CHORD

The notes of a chord are played together (p. 103).



BLUE NOTES The flattened 3rd, 5th and 7th scale degrees of the blues scale (p. 111).

BLUES Music with roots in America's south where musicians combined west African rhythms and gospel singing with European harmonies (p. 110).

BLUES CHORD PROGRESSION

Usually 12 measures (or "bars") long, traditionally consisting of the I chord (4 measures), the IV chord (2 measures), the I chord (2 measures), the V or V7 chord (1 measure), the IV chord (1 measure), and the I chord (2 measures) (p. 110).

BLUES SCALE An altered major scale containing only 7 notes and including flattened 3rd, 5th and 7th scale degrees (p. 111).

BROKEN CHORD The notes of a chord played one at a time in any order (p. 103).



CHORD PROGRESSION When chords move from one to another, i.e., I IV V7 I (p. 87, 97).

CHORUS See Refrain (p. 115).

CLOSE POSITION Notes of a chord are spaced within an octave (p. 83).

COMPOSE To create or write a melody or chord progression (p. 105).

DIMINISHED TRIAD

A minor triad that has been made smaller by lowering the 5th by 1/2 step (p. 93).



DORIAN MODE A natural minor scale with the 6th raised a half step, or D to D on the white keys of the piano (p. 98).

FIGURED BASS

Numbers added to the Roman numeral of a chord to indicate the inversion of the chord to use (p. 86).



HARMONIC MINOR SCALE Raises the 7th tone of the natural minor scale by 1/2 step ascending and descending. Most frequently used type of minor scale (p. 91).

HARMONIZE To create a chord accompaniment for a melody (pp. 102, 108).

IMPROVISE To spontaneously create a unique solo (p. 111).

INVERSION The notes of a triad are rearranged and a tone other than the root is the bottom note of the chord (p. 83).

1st INVERSION

The notes of a triad are rearranged so the 3rd is the bottom note of the chord (p. 83).



2nd INVERSION

The notes of a triad are rearranged so the 5th is the bottom note of the chord (p. 84).



3rd INVERSION

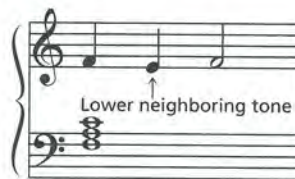
The notes of a V7 chord are rearranged so the 7th is the bottom note of the chord (p. 85).



IONIAN MODE A major scale, or C to C on the white keys of the piano (p. 98).

LOCRIAN MODE A natural minor scale with the 2nd and 5th lowered a half step, or B to B on the white keys of the piano (p. 98).

LOWER NEIGHBORING TONE Non-harmonic tone a half or whole step below and between two of the same chord tones. It usually occurs on a weak beat (p. 104).



LYDIAN MODE A major scale with the 4th raised a half step, or F to F on the white keys of the piano (p. 98).

MELODIC MINOR SCALE Raises the 6th and 7th scale tones of a natural minor scale by 1/2 step when ascending. It descends the same as the natural minor scale (p. 91).

MINOR TRIAD Triad consisting of a root, minor 3rd & a perfect 5th. In major keys, triads with the root on the 2nd, 3rd or 6th scale degrees (p. 92). In minor keys using the harmonic minor scale, triads with the root on the 1st or 4th scale degrees (p. 96).

MIXOLYDIAN MODE A major scale with the 7th lowered a half step, or G to G on the white keys of the piano (p. 98).

MODE A system of scales that began in ancient Greece. It consists of eight notes in alphabetical order (p. 98).

MOTIVE A short melodic, rhythmic or harmonic element used repeatedly throughout a piece (p. 114).

NATURAL MINOR SCALE Scale using only the tones of the relative major scale and beginning on the 6th tone (p. 91).

NEIGHBORING TONE Non-harmonic tone a half or whole step above or below and between two of the same chord tones. It usually occurs on a weak beat (p. 104).

NON-HARMONIC TONES Non-chord notes or tones which are not part of the existing chord (p. 104).

OPEN POSITION Notes of a chord are spaced greater than an octave (p. 83).

PASSING TONE Non-harmonic tone melodically placed a half or whole step between one chord tone and a different chord tone, usually occurring on a weak beat (p. 104).

PHRASE A short section of music which may be either a complete or incomplete musical idea (p. 114).

PHRYGIAN MODE A natural minor scale with the 2nd lowered a half step, or E to E on the white keys of the piano (p. 98).

PRIMARY TRIADS I, IV and V chords in a major key. For a minor key, the harmonic minor scale is usually used to determine the i, iv and V chords (p. 96).

REFRAIN A section of a song that is repeated after each verse (chorus) (p. 115).

RELATIVE MAJOR SCALE Made up of notes beginning on the 3rd tone of the relative minor scale (p. 90).

RELATIVE MINOR KEY Key signature that is the same as that of the relative major key (p. 90).



C Major/A Minor

RELATIVE MINOR SCALE Scale made up of notes beginning on the 6th tone of the relative major scale (p. 90).

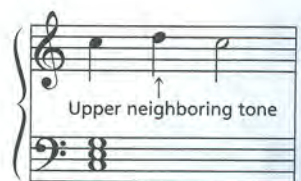
RONDO FORM Contrasting sections of musical material followed by repeated A sections. Commonly A B A B A, A B A C A or A B A C A B A (p. 117).

TWO-PART FORM AB or BINARY FORM (p. 115).

TERNARY FORM ABA form (p. 116).

THREE-PART FORM ABA or Ternary form (p. 116).

UPPER NEIGHBORING TONE Non-harmonic tone a half or whole step above and between two of the same chord tones. It usually occurs on a weak beat (p. 104).



VERSE Section of a song that tells a story and changes with each repetition, followed by the refrain (p. 115).