

Theory Reference Center

Alto Clef (6)



Also called the C clef. A symbol placed at the beginning of the staff used to identify the names of the lines and spaces. Viola uses alto clef.

Bar Line (2)



A vertical line dividing the staff into measures.

Bass Clef (6)



Also called the F Clef. A symbol placed at the beginning of the staff used to identify the names of the lines and spaces. Cello and bass use bass clef.

Beat (2)

A steady, regular pulse in music.

Binary Form (14)

AB

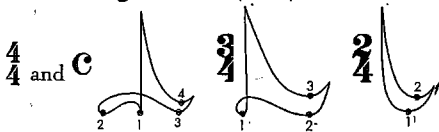
Music that has two different sections.

Common Time (12)



The same as $\frac{4}{4}$ time.

Conducting Patterns (2, 12)



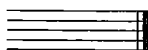
Using a pattern to beat time with a hand or baton.

Dotted Half Note (13)



Receives 3 beats of sound.

Double Bar Line (2)



A thin and thick line marking the end of the music.

Dynamics (27)

The level of sound or volume of music. Dynamic markings in this book are:

fff, ff, f, mf, mp, p, pp, ppp



Eighth Notes (17)



A group of two eighth notes equals one quarter note.

Half note (2)



Receives 2 beats of sound.

Half Rest (4)



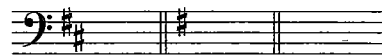
Receives 2 beats of silence.

Half Step (11)



The smallest distance between 2 notes. The distance from F# to G is a half step.

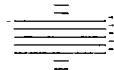
Key Signature (10, 15, 20)



D Major G Major C Major

Placed at the beginning of music, it tells us which notes should be played with sharps.

Ledger Lines (7)



Short lines used for notes written above and below the staff.

Legato (36)

Play smoothly and connected.

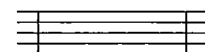
Major Scale (10, 11)

A series of notes with this pattern of whole steps and half steps:

W W H W W H

A major scale begins and ends with the note of the same letter name.

Measure (2)



Also called a bar, this is the space between two bar lines. A measure is filled with a specific number of beats/counts as determined by the time signature.

Quarter Note (2)



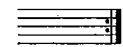
Receives 1 beat of sound.

Quarter Rest (4)



Receives 1 beat of silence.

Repeat Sign (13)



Go back and play again.

Sharp (7)



Raises a note a half step.

Skip (9)

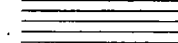
When the distance from one note to the next is greater than a step. One open string to the next open string is a skip.

Staccato (34)



Play with short, crisp bow strokes. Stop the bow between each note.

Staff (3)



5 lines and 4 spaces on which musical notes are written.

Step (9)

The distance from a letter name to the next letter in the alphabet. A to B is a step.

Tempo (27)

The speed of music. Tempo markings in this book are **Adagio, Andante, Moderato, Allegro, Presto, accelerando, ritardando.**

Ternary Form (14)

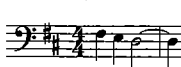
ABA

Music that has three sections. The A section is followed by the B section, then the A section is played again.

Theme and Variations (35)

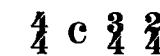
The main melody of a piece is followed by different versions of the melody. Versions are created by small changes in the rhythm or notes.

Tie (13)



A curved line connecting 2 of the same pitches. Tied notes are played as 1 note.

Time Signature (2, 12)



Placed at the beginning of music, it indicates the number of beats per measure and the type of note receiving one beat.

Treble Clef (6)



Also called the G Clef. A symbol placed at the beginning of the staff used to identify the names of the lines and spaces. Violin uses treble clef.

Whole Note (2)



Receives 4 beats of sound.

Whole Rest (4)

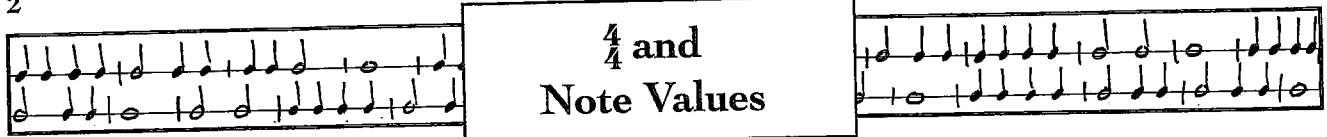


Receives 4 beats of silence.

Whole Step (11)



Two half steps equal one whole step. D to E is a whole step.



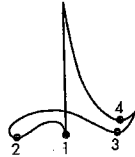
$\frac{4}{4}$ and Note Values

Music contains notes of different lengths. Each type of note looks different from the others. Whole notes are the longest held notes, followed by half notes, then quarter notes. These different notes fit into measures which are determined by a time signature.

Time Signature

$\frac{4}{4}$ = 4 beats per measure
 $\frac{4}{4}$ = quarter note receives 1 beat


4-Beat Conducting Pattern




Measure = the space between two bar lines where music is written. Music in a measure contains a certain number of beats that is determined by the time signature.

Bar Line = a vertical line separating measures.

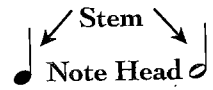
Note Values

Quarter Note =  = 1 beat

Half Note =  = 2 beats

Whole Note =  = 4 beats

Whole notes do not have stems.



Time Signature Bar Line Bar Line Double Bar

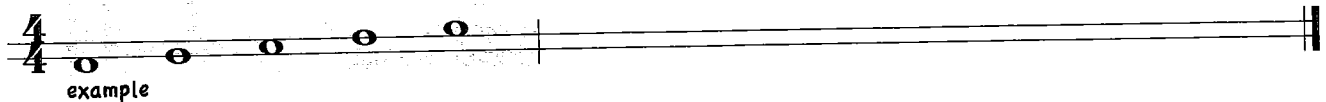
↓ Measure ↓ Measure ↓ Measure ↓

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

Double Bar = written at the end of a piece of music.

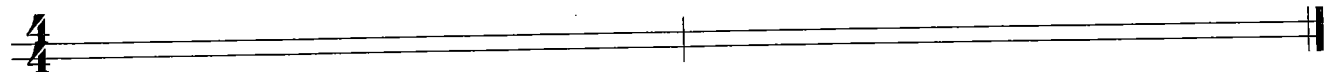
Practice!

1. Draw 9 whole notes below, on, and above the staff lines.

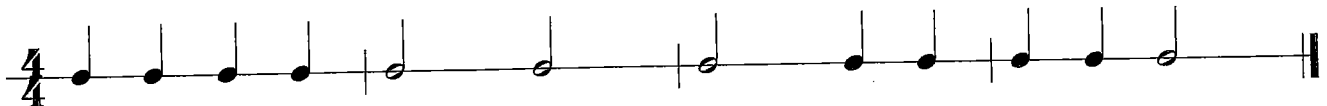


2. Draw 6 half notes below, on, and above the staff lines.

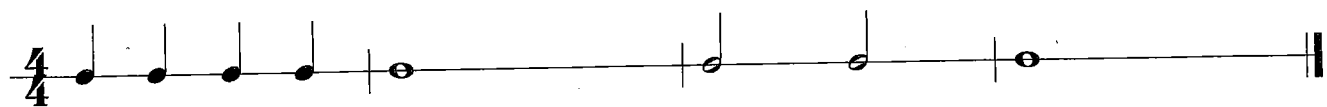
Draw 6 quarter notes below, on, and above the staff lines.



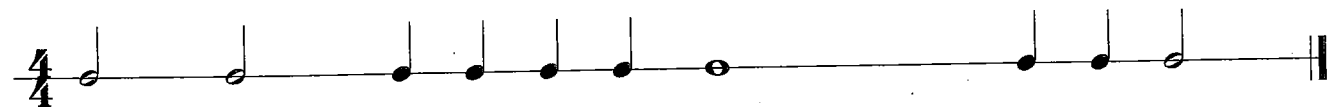
3. Write in the counting under the notes. Practice counting the line aloud.



4. Write in the counting under the notes. Practice counting the line aloud.

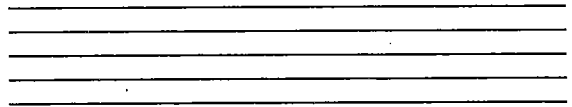


5. Write in the counting and draw the bar lines. Be sure each measure contains the correct number of beats.

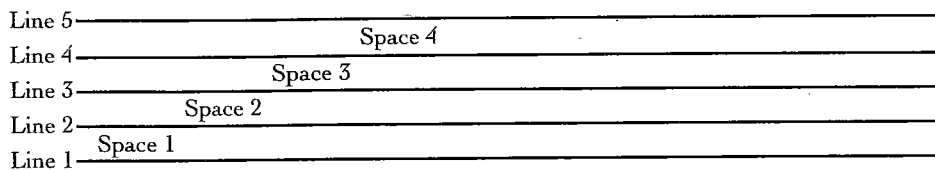




Music is written on a staff. A staff is a set of 5 lines and 4 spaces. Notice how the lines are equally spaced apart.



The lines and spaces are counted from bottom to top. The lower a note is on the staff, the lower it sounds.

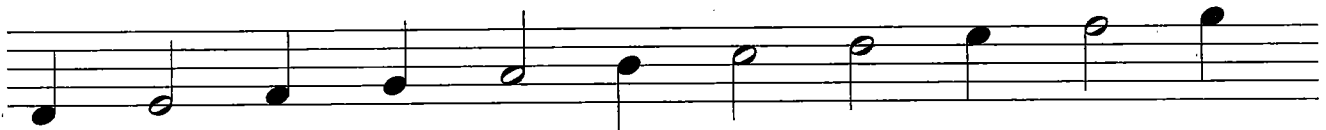


Notes on the Staff

All notes, except whole notes, have stems. Stems will go up or down, depending on where the note head is located on the staff. See below for the direction of the stems. Notice that notes from line 3 on up have down stems. Stems extending down are written from the left side of the note head.

Stems Up

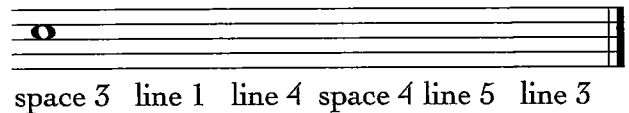
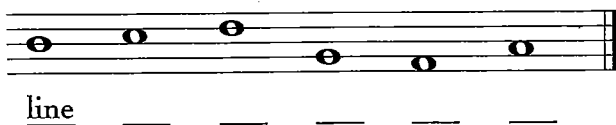
Stems Down



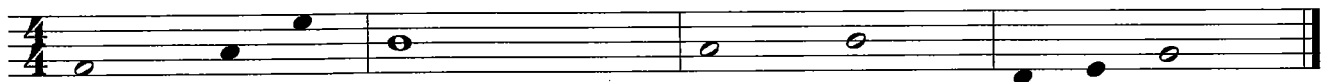
Practice!

1. Write "line" or "space" under each whole note.

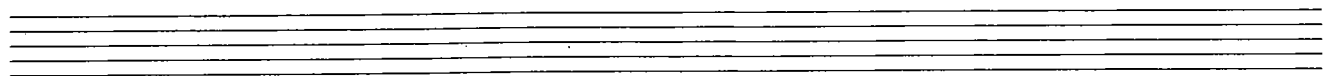
2. Draw a whole note on the given lines and spaces.

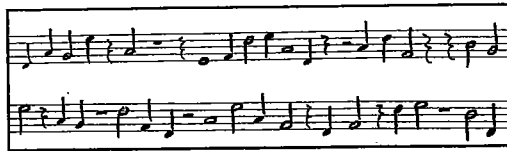


3. Add stems to the note heads to make complete measures in $\frac{4}{4}$. Write in the counting, then count the line aloud.



4. Draw any 4 quarter notes, 4 half notes, and 4 whole notes. Check your stems.





Note and Rest Values

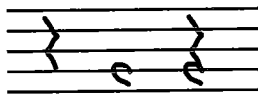


Not only are notes played to create music, but moments of silence are also included from time to time. In music notation, each moment of silence is called a rest. For each note value in music, there is an equal rest value.

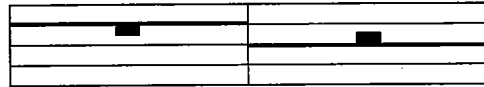
Quarter Notes	Half Notes	Whole Note
		
1 2 3 4	1 2 3 4	1 2 3 4
		
Quarter Rests	Half Rests	Whole Rest

Writing rests takes practice, especially quarter rests! Writing a quarter rest is like combining the letter Z with the letter C. See the two-part example below.

Z + C = Quarter Rest

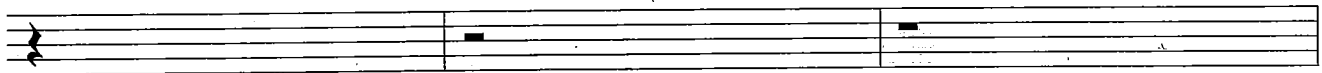


Whole rests hang down from the 4th line and half rests sit up on the 3rd line. On first glance they look similar, so it is important to count the lines before starting to write whole and half rests.



Practice!

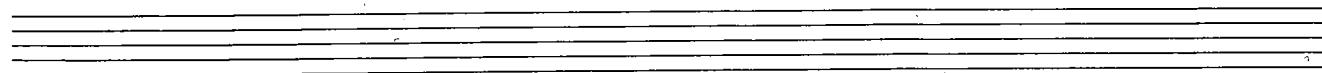
1. Draw four of each rest after the examples. Be able to describe how to draw each rest and what it represents.



2. Identify the rests. Write your answers on the lines below.



3. Write in the counting under the notes and rests. Then copy the measures on the blank staff below.



4. Describe where the whole rest is placed on the staff. _____



Every music staff begins with a clef. Clefs identify pitches (sounds of the notes) on the staff. Bassists use the **bass clef** (or the “F” clef). This book features the bass clef, however the other string instruments use different clefs. Violin players use the **treble clef** (or “G” clef). Viola players use the **alto clef** (or “C” clef). Cello players also use the **bass clef**.

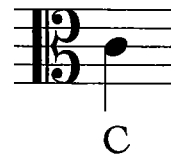
Bass Clef



Treble Clef



Alto Clef



Each line and space on the staff has a letter name that comes from the first seven letters of the alphabet:

A - B - C - D - E - F - G

The placement of letters on the staff is related to the clef. The bass clef is also called the “F” clef. Here’s why. The clef wraps around the line named “F” (the 4th line on the staff) and the clef has two dots placed on either side of the 4th line F. After learning to draw the bass clef, go to the next page to learn about note names and how much they match up with notes on your bass.

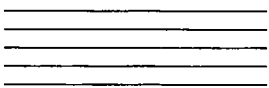
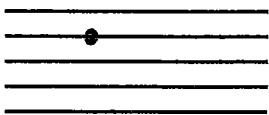


Practice!

1. Learn to draw a bass clef.

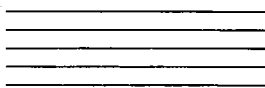
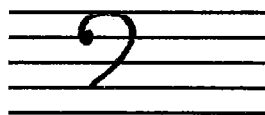
Step 1:

Draw a small dot on the fourth line of the music staff.



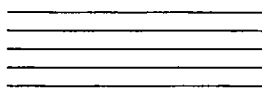
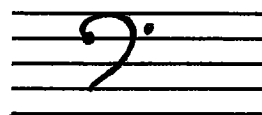
Step 2:

Draw a half heart shape. The top of the heart should touch the top line and the bottom should rest on line 2.



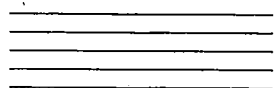
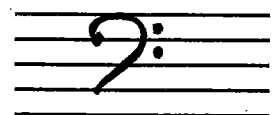
Step 3:

Add two dots. The first should be drawn above the 4th line.

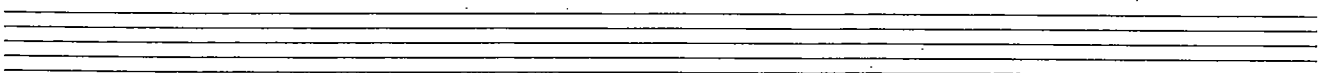


Step 4:

The second dot should be drawn below the 4th line.



2. Draw 5 bass clefs on the staff below.



Here are the note names on the music staff as they relate to the notes and strings on your bass. Some notes include a sharp (#). This shows a special treatment of the note. You will learn more about sharps soon.

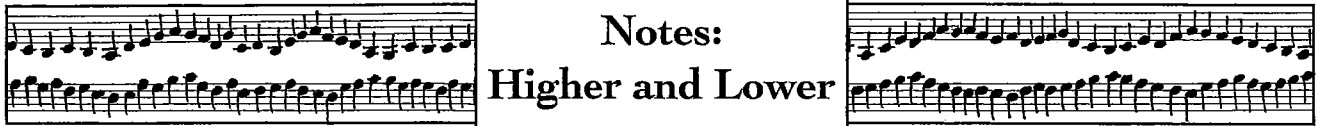
<p>E String</p>	<p>A String</p>	<p>D String</p>	<p>G String</p>
<p>E F# G</p>	<p>A B C#</p>	<p>D E F#</p>	<p>G A B</p>
<p>Ledger Lines = = short lines that are added above and below the staff to extend its range.</p>			

Practice!

1. Draw whole notes on the staff in each measure as indicated. Write the letter names under the notes.

Open String Notes	D String Notes	A String Notes

2. Write the letter names under the notes. Draw a square around each open string note. Work with a partner to say the finger number used to play each note on your instrument.

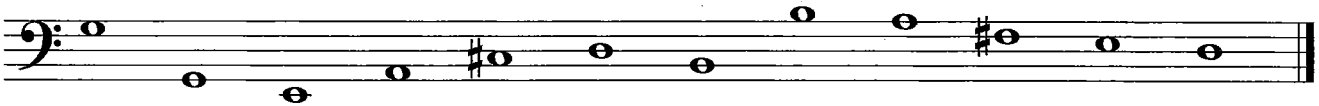


Notes: Higher and Lower

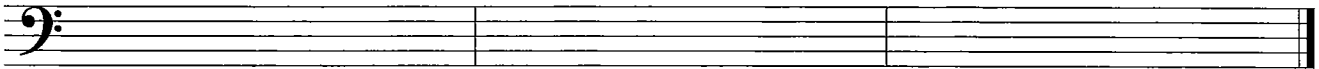
When looking at notes on the staff, the lower a note is on the staff, the lower it sounds. The higher a note is on the staff, the higher it sounds.

Practice!

1. Write the letter names under the notes. Draw a square around the lowest sounding E. Draw a circle around the highest sounding A.



2. Draw a whole note on the staff that is named by each letter. Draw a square around each open string note.

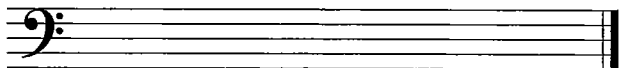


A B C# D G E F# A B E F# D

3. Draw a quarter note for each note on the G string, including the open string note.



4. Draw a half note for each note on the E string, including the open string note.



5. What does each pair of notes have in common?



Ear Training B

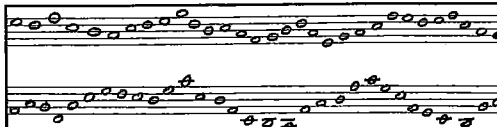


Go to **Ear Training B** and listen to exercises 6-8. In each, you will hear two notes. Is the 2nd note lower or higher than the 1st note? Circle the response that matches what you hear.


6. Lower Higher

7. Lower Higher

8. Lower Higher



**Notes:
Steps and Skips**



Music is created by moving from one note to the next with **steps** and **skips**. Some notes are repeated over and over, too. It is the combination of steps, skips, and repeated notes, along with different note values, that create a melody.

Step = the interval or distance from letter name to the next letter in the alphabet.
For example, the distance from A to B is a step.



Skip = the interval or distance from one note to the next that is greater than a step.
For example, the distance from one open string to the next open string is a skip.

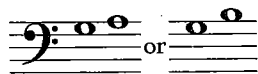
Open Strings

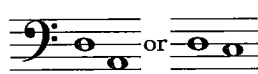
Some skips are small and some are quite wide.

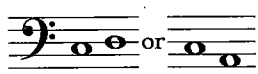


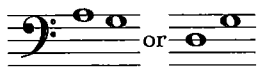
Practice!

1. Name the notes on the lines below the staff. Then, circle each pair of notes that represents a step:

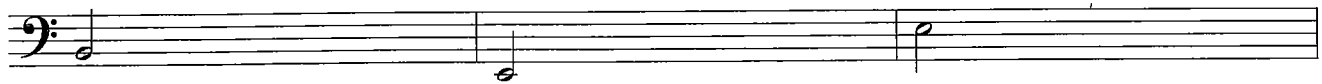




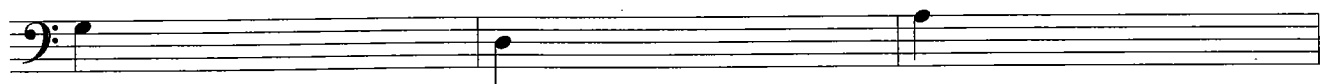




2. In each measure, add 3 more half notes that go up step by step. Write the letter name under each note.
Draw a square around each open string note.



3. In each measure, add 3 more quarter notes that go down by skips. Write the letter name under each note.



Ear Training C



Go to **Ear Training C** and listen to exercises 9-11. In each, you will hear two notes. Is the 2nd note a step or a skip from the 1st note? Circle the word that matches what you hear.

9. Step Skip

10. Step Skip

11. Step Skip



Half Steps & Whole Steps in D Major



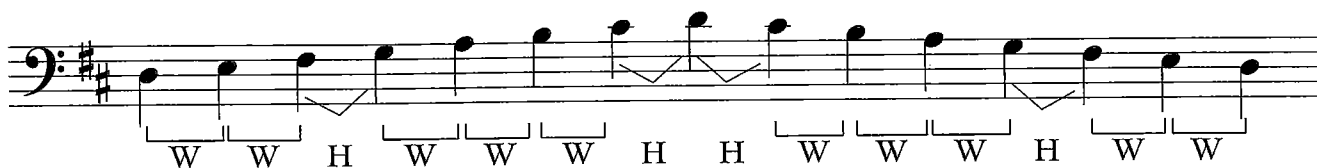
Half Step (H) = the smallest distance between two notes. F# to G and C# to D are examples of a half step.



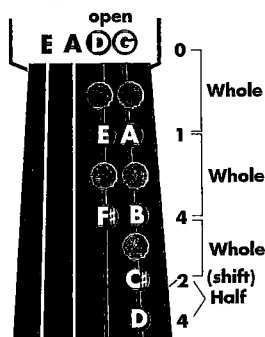
Whole Step (W) = two half steps equal a whole step. D to E and E to F# are examples of a whole step.



Here is the **D Major Scale**. It shows where the whole and half steps are located. This is the pattern you will find in all major scales.



The fingerboard diagram shows where the whole and half steps are for the D Major Scale. Since a whole step equals two half steps, there is another note in between notes such as D-E, E-F#, A-B, and B-C#. As you progress, you will learn what those notes are.



Practice!

1. Mark the half steps in the music below. Use the carrot and H symbols.



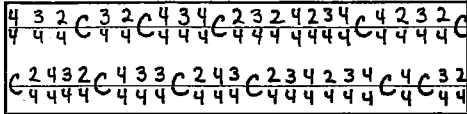
2. Mark the whole steps in the music below. Use the bracket and W symbols.



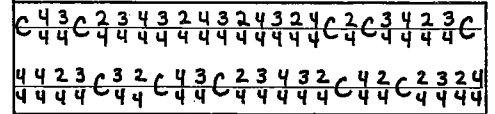
Ear Training D

Go to **Ear Training D** and listen to exercises 12-14. In each, you will hear either **Measure A** or **Measure B** performed. Circle the measure you hear.





2/4, 3/4, and C

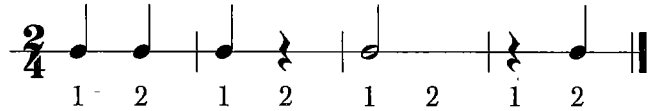


Up until now, $\frac{4}{4}$ has been the only time signature you have been working with. $\frac{4}{4}$ is also called **Common Time** and it has its own symbol: **C**

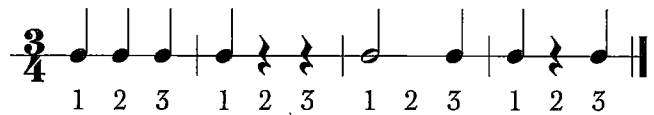
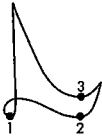
C = $\frac{4}{4}$ = 4 beats per measure
 = quarter note receives 1 beat

Here are two new time signatures frequently found in all types of music, along with each conducting pattern and some examples of counting:

$\frac{2}{4}$ = 2 beats per measure
 $\frac{4}{4}$ = quarter note receives 1 beat

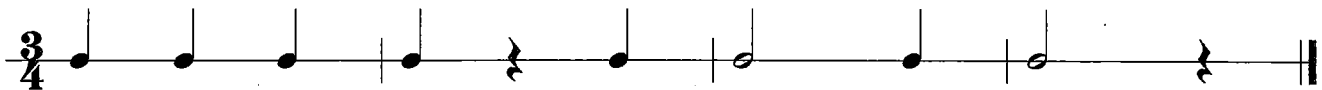
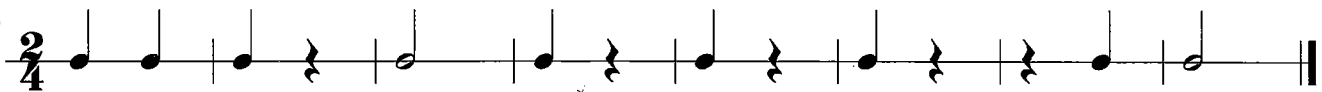


$\frac{3}{4}$ = 3 beats per measure
 $\frac{4}{4}$ = quarter note receives 1 beat

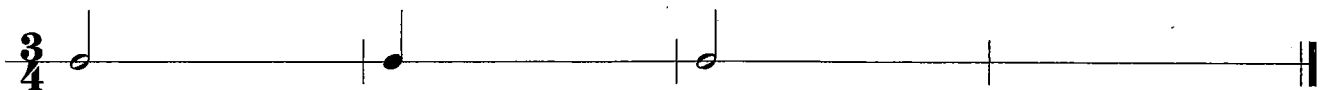
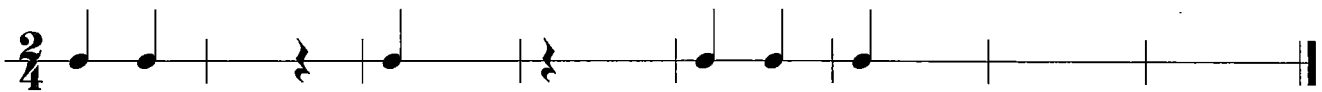


Practice!

- Check the time signature and write in the counting. Then, shadow bow each line using a thumb to tip bow stroke for every note.



- Complete each measure with the correct number of $\frac{1}{4}$ or $\frac{1}{2}$ and write in the counting.

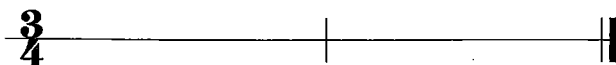


Ear Training E

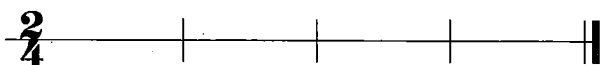
Go to **Ear Training E** and listen to exercises 15 and 16. Write what you hear using $\frac{1}{4}$ and $\frac{1}{2}$.

Be sure to check the time signature as you listen. Silently count the rhythm you wrote to check your work.

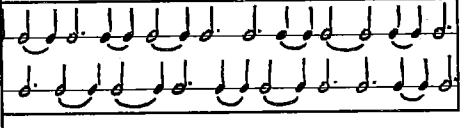
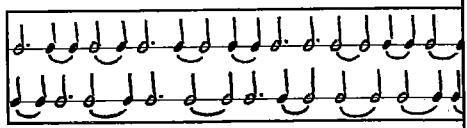
15.



16.

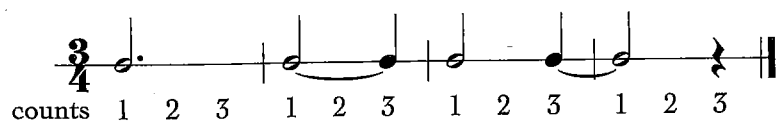


Ties and Dotted Half Notes




Tie = a curved line connecting 2 of the same pitches. Tied notes are played as 1 note.

Dotted Half Note = $\text{half note} + \text{dot} = \text{three eighth notes}$
 $2 + 1 = 3$



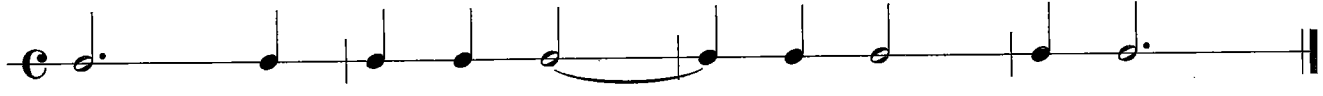
Repeat Sign



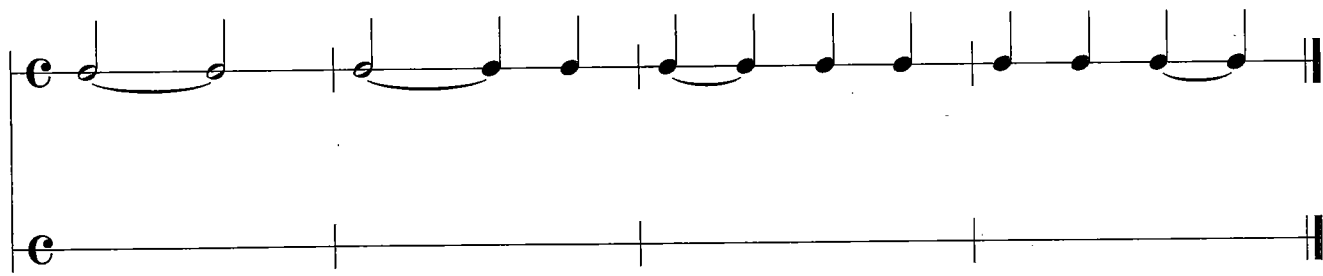
go back and play again

Practice!

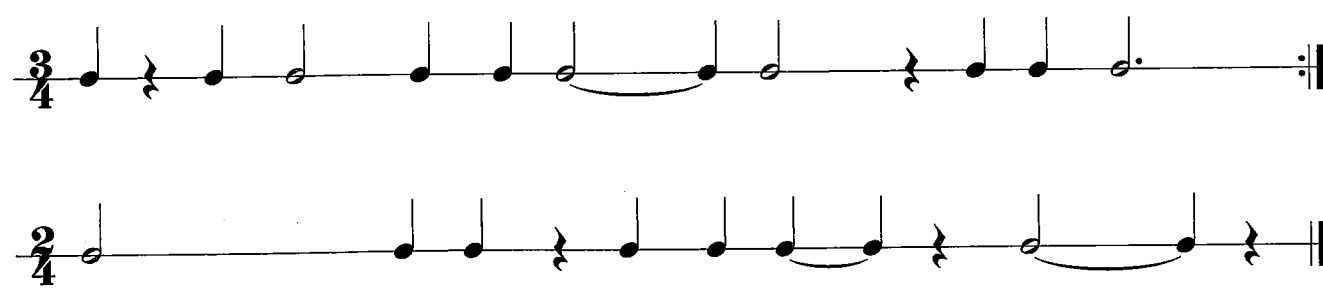
1. Check the time signature and write in the counting. Then, shadow bow each line using a thumb to tip bow stroke for every note.



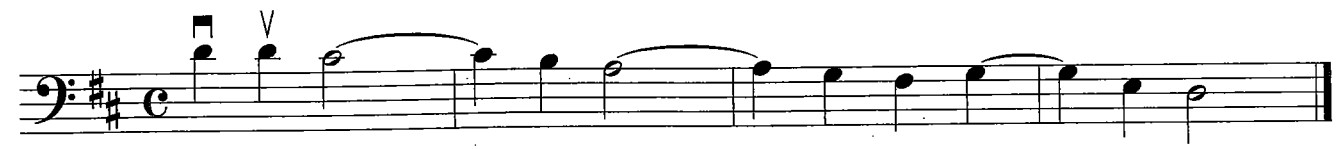
2. Write in the counting. Rewrite the line by replacing each tied note with just one note.



3. Write in the counting and draw the bar lines. Be sure to check the time signature.



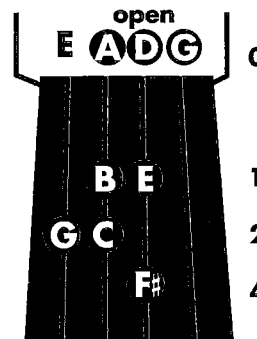
4. Will you end on a down bow or up bow? _____ Write in the bow marks above the notes to show how you reached your answer. Write the letter names below the notes.



Key Signature
G Major = = 1 sharp. Play all Fs as F-sharp.

Here is the G Major Scale. It is built identically to the D Major Scale, except that it begins and ends on the note G.

The first note of this G Major Scale begins with your 2nd finger on the E string and goes up to your open G string. The fingerboard diagram shows the notes of the G Major Scale.



Practice!

1. Write the letter names under the notes. Then, color in the corresponding place of each note on the fingerboard. Silently practice the fingerings to check your work.

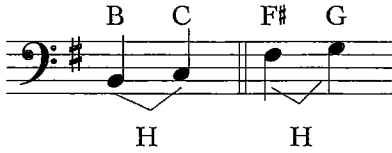
2. Draw a square around the notes that can be found on the A string.

3. Draw a square around the notes that can be found on the D string.

Half Steps & Whole Steps in G Major



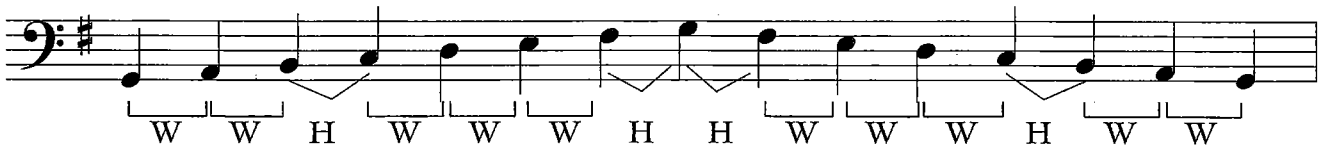
Half Steps found in G Major



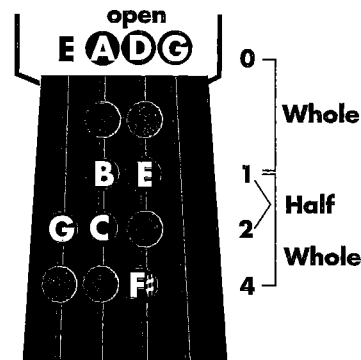
Examples of Whole Steps found in G Major



Here is the **G Major Scale**. It shows where the whole and half steps are located. This is the pattern you will find in all major scales.



The fingerboard diagram shows where the whole and half steps are for the G Major Scale. Since a whole step equals two half steps, there is another note in between notes such as D-E, E-F#, G-A, and A-B. As you progress, you will learn what those notes are.



Practice!

1. Mark the half steps in the music below. Use the carrot and H symbols. H



2. Mark the whole steps in the music below. Use the bracket and W symbols. W



Ear Training F

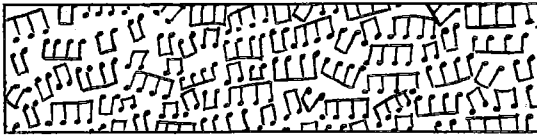
Go to **Ear Training F** and listen to exercises 17-19. In each, you will hear either Measure A or Measure B. Circle the measure you hear performed.



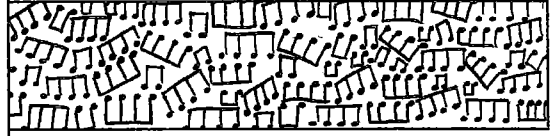
17. A B

18. A B

19. A B

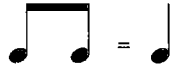


Eighth Notes

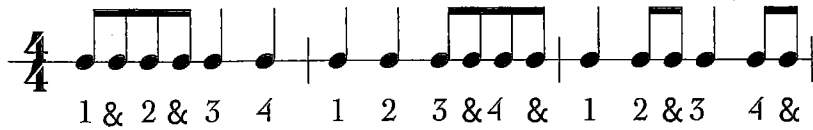


Eighth notes can be counted by dividing a single beat into two halves. When writing in the counts, use "&" as shown below. When counting aloud, the symbol "&" is spoken "and."

2 Eighth Notes = 1 Quarter Note

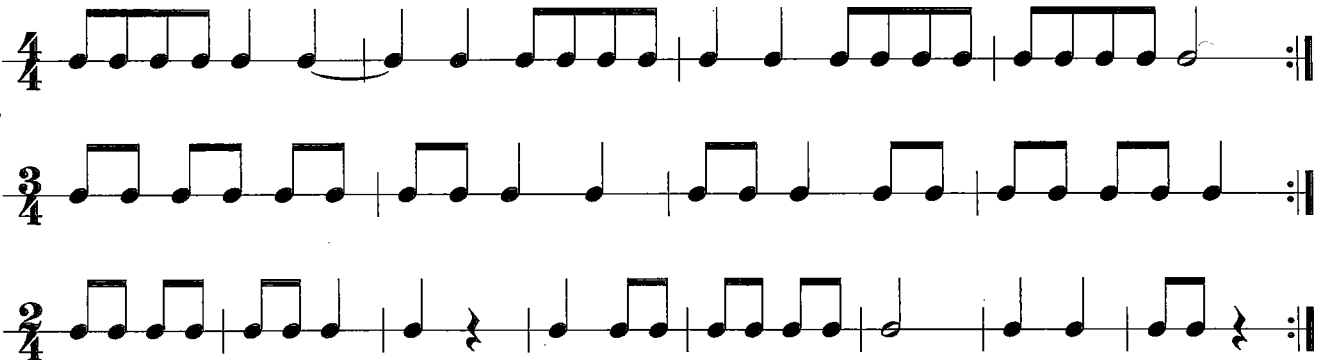


Two or more eighth notes are connected by a beam.

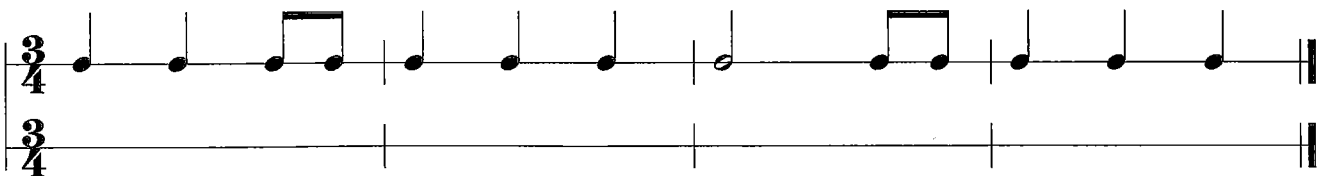


Practice!

1. Write in the counting and practice counting each line aloud. Create a rhythm accompaniment by clapping on beat one and patting your legs on the other beats.



2. Write in the counting. Rewrite the line by substituting eighth notes for one ♩ or ♪ in each measure.



Ear Training G

Go to **Ear Training G** and listen to exercises 20-23. In each you will hear either Rhythm A or Rhythm B. Circle what you hear performed.



20. A B

21. A B

22. A B

23. A B

Practice!

1. Write the letter name under each note. Draw a square around each open string note. Work with a partner to say the finger number used to play each note on your instrument.



2. Write the letter name under each note. Draw a square around each open string note.

Key of _____



Key of _____



Mystery Notes!

1. Write the letter name of the note that is above the "1" in each measure.



2. Draw a note that is a skip up from note 1, and name it.



3. Draw a note that is a step down from note 2, and name it.

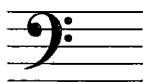
4. Draw a note that is a step down from note 3, and name it.



BONUS! What do all the number 1 notes have in common?

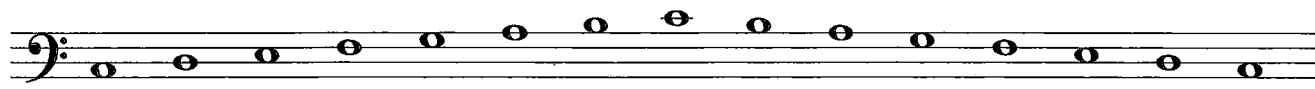


Key Signature
C Major



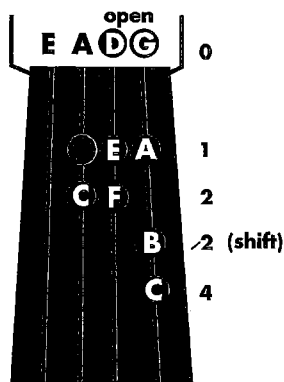
= no sharps in the key signature. All notes in C Major are natural meaning that they do not have any sharps.

Here is the C Major Scale. It is built identically to the D and G Major Scales, except that it begins and ends on C.



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

The first note of the C Major Scale begins with your 2nd finger on the A string. The scale goes up to the note C on the G string. A shift with the left hand is required to play B and C (on the G string). The fingerboard diagram shows notes of the C Major Scale.



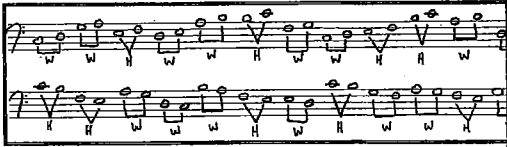
Practice!

1. Write the letter names under the notes. Then, color in the corresponding place of each note on the fingerboard. Silently practice the fingerings to check your work.

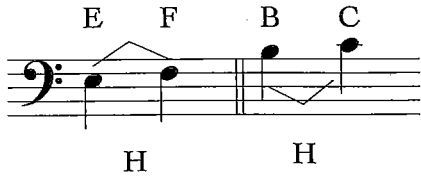
2. Draw a square around the notes that can be found on the D string.

3. Draw a square around the notes that can be found on the G string.

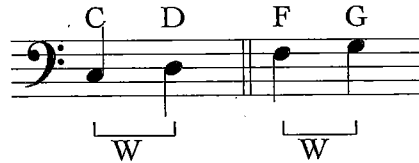
Half Steps & Whole Steps in C Major



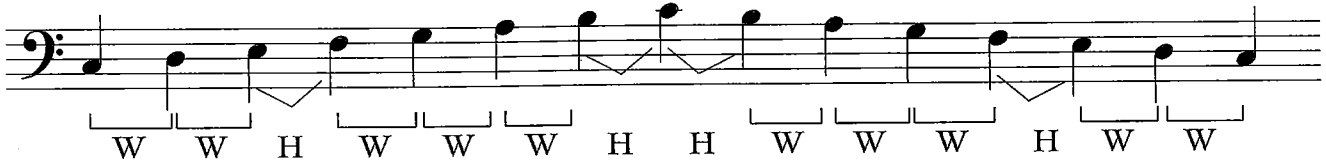
Half Steps found in C Major



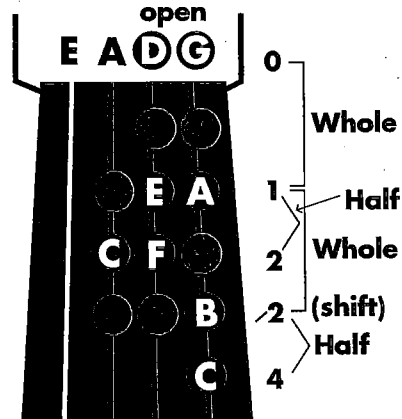
Examples of Whole Steps found in C Major



Here is the **C Major Scale**. It shows where the whole and half steps are located. This is the pattern you will find in all major scales.



The fingerboard diagram shows where the whole and half steps are located for the C Major Scale. Since a whole step equals two half steps, there is another note in between notes such as D-E, F-G, and A-B.



Practice!

1. Mark the half steps in the music below. Use the carrot and the H symbols. \frown H



2. Mark the whole steps in the music below. Use the bracket and the W symbols. \ulcorner W



Ear Training I

Go to **Ear Training I** and listen to Exercises 28-30. In each, you will hear either Measure A or Measure B performed. Circle the measure you hear.

