Try it #1

Find each letter name requested.

A. Remember to count the given note as 1.

(1) 7 above G: **F**
(2) 6 above F: _____
(3) 2 above D: _____
(4) 4 below B: _____
(5) 3 below C: _____
(6) 5 below A: _____
(7) 3 above E: _____
(8) 2 below C: _____
(9) 3 above G: _____
(10) 2 above B: _____
(11) 2 above F: _____
(12) 4 above C: _____
(13) 6 below A: _____
(14) 7 below E: _____
(15) 5 above G: _____

B. Count in thirds above the pitch given. Write one letter name in each blank.

(1) G: **B** - **D** - _____ - _____
(2) D: _____ - _____ - _____ - _____
(3) A: _____ - _____ - _____ - _____
(4) B: _____ - _____ - _____ - _____
(5) C: _____ - _____ - _____ - _____

Pitches and Pitch Classes

In this seven-name system, each letter name reappears every eighth position: eight below C is another C. Notes eight letter names apart make an **octave**. They sound similar, a principle known as **octave equivalence**.

KEY CONCEPT Octave-related notes belong to the same **pitch class** and have the same letter name. The pitch-class D, for example, represents every D in every octave. A **pitch**, on the other hand, is one that sounds in one particular octave.

Listen again to the beginning of Example 1.1 to hear pitch-class C played in two octaves simultaneously: these two different pitches belong to the same pitch class.

The Piano Keyboard

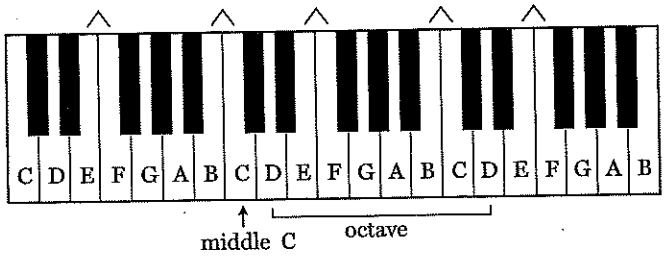
White Keys

As a musician, you will find keyboard skills are essential, whatever your primary instrument. Keyboard skills allow you to play simple accompaniments, demonstrate musical ideas, and harmonize melodies.

The white keys of the keyboard correspond to the seven letters of the musical alphabet, as shown in Example 1.3. Immediately to the left of any group of two black keys is pitch-class C; immediately to the left of any three black keys is pitch-class F. **Middle C** is often used as a reference point; it is the C closest to the middle of the piano keyboard.

KEY CONCEPT No black key appears between white keys E and F or between B and C as marked in Example 1.3.

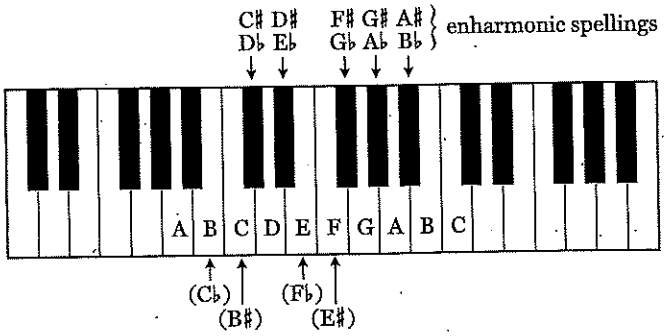
EXAMPLE 1.3: Piano keyboard with letter names



Black Keys: Flats and Sharps

The black-key pitches are named in relation to the white-key pitches. The black key immediately above (to the right of) any white key gets the white note's name plus a **sharp** (♯). As Example 1.4 shows, each group of two black keys is called C♯ (C-sharp) and D♯, and each group of three black keys is F♯, G♯, and A♯. At the same time, the black key immediately below (to the left of) any white key gets the white note's name plus a **flat** (♭). That means the group of two black keys can also be called D♭ (D-flat) and E♭, and the three black keys G♭, A♭, and B♭. Every black key has two possible names: one with a sharp and one with a flat. The two names are **enharmonic spellings**; this property is called **enharmonic equivalence**.

EXAMPLE 1.4: Keyboard with enharmonic pitches marked



The sharp and flat symbols are called **accidentals** (although there is nothing "accidental" about them). A third common accidental, a **natural** (♮), cancels a sharp or flat. It returns the pitch to its "natural" state and white-key location on the keyboard.

Enharmonic Equivalents

Enharmonic pitches, with the same sound but different names (B♭ = A♯), belong to the same pitch class. Not all sharped or flatted pitches are black keys, however: if you raise an E or B to the closest possible key on the keyboard, you get a white key, not a black one. E♯ is a white key enharmonic with F, just as B♯ is white and enharmonic with C. On the flat side, C♭ is enharmonic with B, and F♭ is enharmonic with E. These note names are labeled below the staff in Example 1.4.

Try it #2

Name the enharmonic equivalent.

(1) G♭: F♯
(2) B♯: _____
(3) A♯: _____
(4) D♭: _____
(5) B: _____
(6) A♭: _____
(7) E♯: _____
(8) B♭: _____
(9) D♯: _____
(10) E: _____
(11) F♯: _____
(12) F: _____

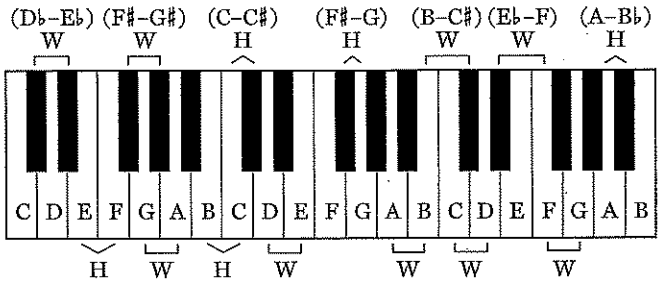
Intervals: Half Steps and Whole Steps

The distance between any two pitches is called an **interval**. Two intervals that serve as basic building blocks of music are half steps and whole steps.

KEY CONCEPT **A half step (or semitone) is the interval between any pitch and the next closest pitch on the keyboard. The combination of two half steps forms a whole step (or whole tone); a whole step always has one pitch in between its two pitches.**

On a keyboard, a half step spans a white key to a black key (or black to white)—except in the case of B to C and E to F, as shown in Example 1.5. Whole steps span two keys the same color—again except in the case of B–C and E–F. A whole step above E is not F, but F♯; a whole step below C is not B, but B♭.

EXAMPLE 1.5: Examples of half and whole steps at the keyboard



SUMMARY

1. The distance between any two pitches is an interval. Two important intervals are half and whole steps.
2. Half steps span keys of different colors: white to black or black to white.
   - Exceptions are E–F and B–C, the white-key half steps.
3. Whole steps span keys the same color: white to white or black to black.
   - Exceptions are E♭–F, E–F♯, B♭–C, and B–C♯.
4. Double-check the spelling of any half or whole step that includes E, F, B, or C.

Try it #3

A. Name the pitch a half step above or below the given pitch, and give an enharmonic equivalent where possible.

(1) Above G: G♯ or A♭
(2) Below C♯: _____ or _____
(3) Above E: _____ or _____
(4) Below B♭: _____ or _____
(5) Above D: _____ or _____
(6) Below F: _____ or _____
(7) Below G♯: _____ or _____
(8) Below A♭: _____ or _____

B. Identify the interval spanned by writing W (whole step), H (half step), or N (neither).

(1) F♯ to E: W
(2) C♯ to D: _____
(3) B♭ to A♭: _____
(4) C to B♭: _____
(5) E to F: _____
(6) F to G: _____
(7) B♯ to C: _____
(8) D♭ to E♭ _____

Try it #4

A. Write the letter names in the blanks below.

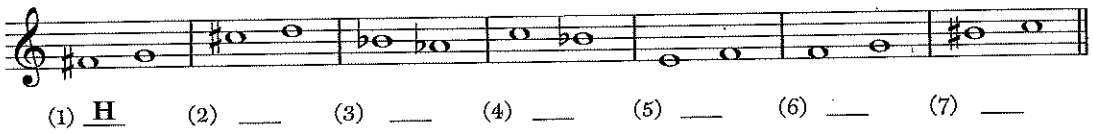
(1) F♯ (2)___ (3)___ (4)___ (5)___ (6)___ (7)___ (8)___ (9)___ (10)___

B. Write the letter name in every blank below (including when the note is repeated).

Dorothy Fields and Jerome Kern, "A Fine Romance," from *Swing Time*, mm. 17–19

A ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

C. Identify whether each pair of pitches spans a whole step (W), half step (H), or neither (N).



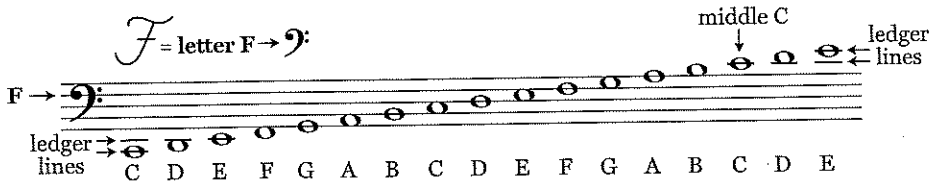
(1) H (2)___ (3)___ (4)___ (5)___ (6)___ (7)___

(8)___ (9)___ (10)___ (11)___ (12)___ (13)___ (14)___

Bass Clef

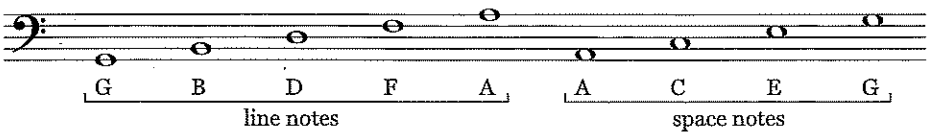
Lower notes (for a pianist's left hand or lower instruments like the cello) are designated with a **bass clef**, which is an F clef. This clef resembles a cursive uppercase F, and its two dots surround the line that represents F (Example 1.12). Count other pitches from F or memorize their position on the staff.

EXAMPLE 1.12: Bass clef (F clef)



Example 1.13 shows the bass-clef lines and spaces. One way to remember the lines (G–B–D–F–A) is "Great Big Doves Fly Away." The spaces (A–C–E–G) could be "All Cows Eat Grass" or "All Cars Eat Gas."

Example 1.13: Bass-clef lines and spaces



Try it #5

A. Write the letter names in the blanks below.

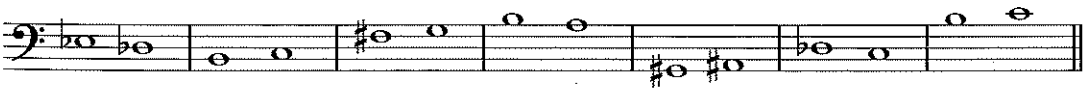
(1) F♯ (2)___ (3)___ (4)___ (5)___ (6)___ (7)___ (8)___ (9)___ (10)___

B. Write the letter name in each blank below.

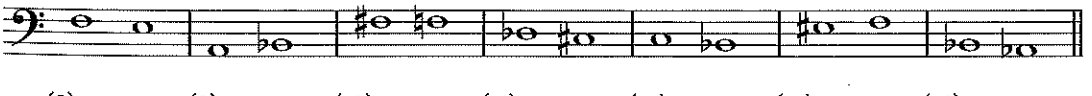
Elisabeth-Claude Jacquet de la Guerre, Gigue, from Suite No. 3 in A Minor, mm. 4–6 (bass-clef part)

E ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

C. Identify whether each pair of pitches spans a whole step (W), half step (H), or neither (N).



(1) W (2) ___ (3) ___ (4) ___ (5) ___ (6) ___ (7) ___



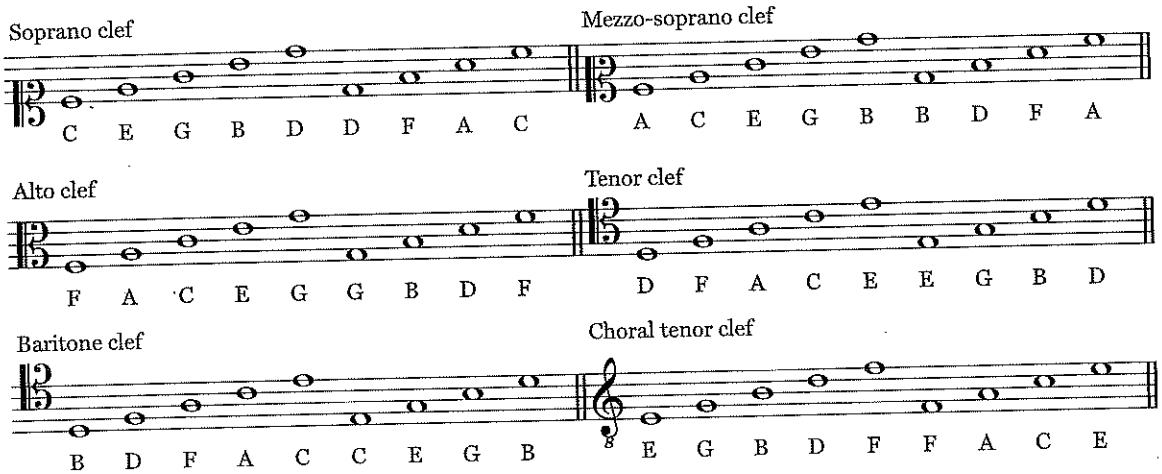
(8) ___ (9) ___ (10) ___ (11) ___ (12)___ (13) ___ (14) ___

C Clefs and Other Clefs

Although music reading starts with knowledge of the treble and bass clefs, you should learn how to read the other clefs as well, since they are standard in orchestral, choral, and chamber music scores. A **C clef** is a "movable" clef: its distinctive shape—𝄡— identifies middle C by the point on the staff at which the two curved lines join together in the middle, as illustrated in Example 1.14. Depending on its position, the clef may be called a soprano, mezzo-soprano, alto, tenor, or baritone clef. In modern scores, the **alto** and **tenor clefs** (shaded in the example) are most common, but you may come across the others in older editions. In choral scores, the tenor's voice part is often notated using a treble clef with a small "8" beneath

it, known as the **choral tenor clef**. These pitches are read down an octave. To read these clefs well, practice counting the lines and spaces in thirds (as in the example), then memorize them.

EXAMPLE 1.14: Reading pitches in C clefs



Try it #6

A. First identify the clef, then write each letter name in the blanks below.

(1) A (2) ___ (3) ___ (4) ___ (5) ___ (6) ___ (7) ___ (8) ___ (9) ___ (10) ___

B. Write each letter name in the blanks below.

W. A. Mozart, String Quartet in D Minor, K. 421, mvt. 3, mm. 13–18 (viola part)

E ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___ ___

C. Identify whether each pair of pitches spans a whole step (W), half step (H), or neither (N).

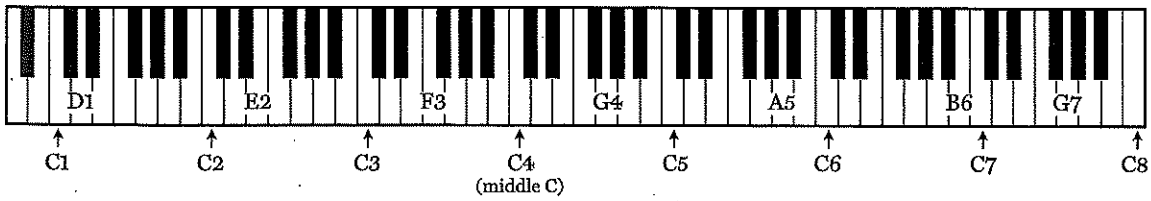
(1) W (2) ___ (3) ___ (4) ___ (5) ___ (6) ___

Musicians read different clefs because each one corresponds to the range of pitches needed for a particular instrument or voice type. The higher instruments, like the flute and violin, read treble clef. Lower instruments, like the timpani and double bass, generally read bass clef, while violas use the alto clef. (Look ahead to Example 1.25 to see these clefs in a full orchestral score.) Pianists read both bass and treble clefs, and bassoonists and cellists read both bass and tenor clefs.

Naming Registers

Pitch names specify a precise octave placement, while pitch-class names are the same for all octave-related notes. To indicate the octave we will use the system shown in Example 1.15. The lowest C on the piano is C1 and the highest is C8; middle C is C4. The number for a particular octave includes all the pitches from C up to the following B, so the B above C4 is B4, and the B below C4 is B3. The three notes below the C1 on the piano are A0, B♭0, and B0. The G indicated by the treble clef is G4; the two dots of the bass clef surround F3.

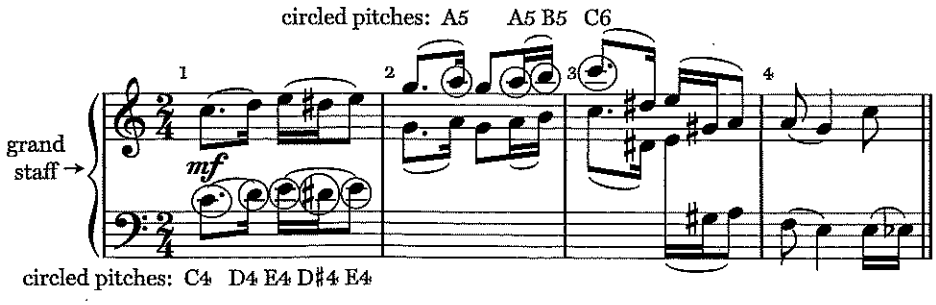
EXAMPLE 1.15: Piano keyboard with octave designations



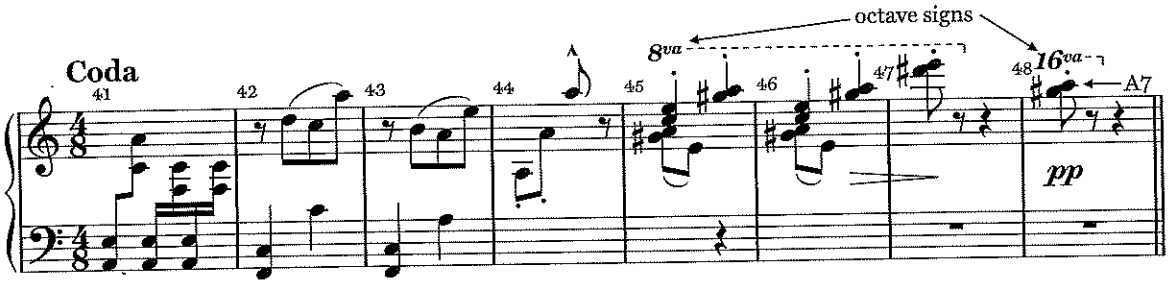
Ledger Lines

Listen to Example 1.16, the beginning of Joplin's rag "Solace" (Anthology 53). Like most piano music, this work is notated on a **grand staff**—two staves, one with a treble clef and one with a bass clef, connected by a curly brace. The circled pitches are written with ledger lines. Ledger lines may be written above, below, or between staves. Read ledger lines like other staff lines, by counting forward or backward from pitches on the staff.

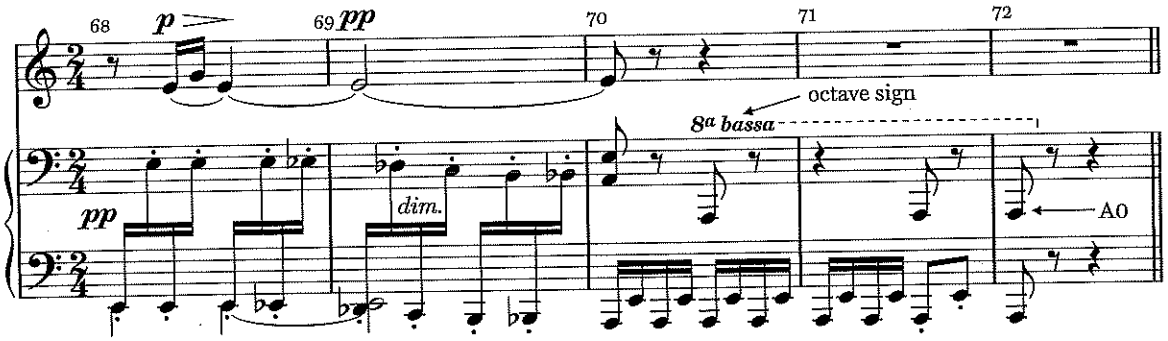
EXAMPLE 1.16: Scott Joplin, "Solace," mm. 1–4



EXAMPLE 1.21: Florence Price, "The Goblin and the Mosquito," mm. 41–48



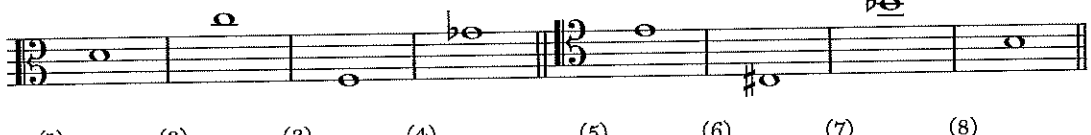
EXAMPLE 1.22: Claude Debussy, "Fantoches," mm. 68–72



Try it #7

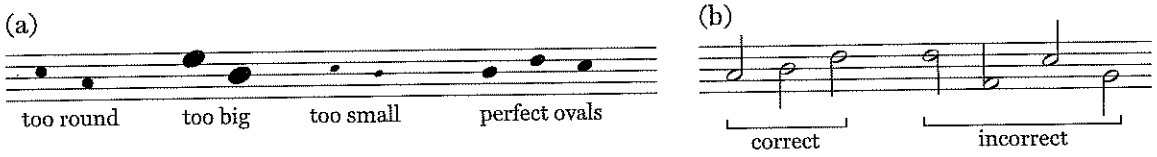
A. Write the name and octave number of each pitch in the blank.

(1) G♯4 (2)____ (3)____ (4)____ (5)____ (6)____ (7)____ (8)____



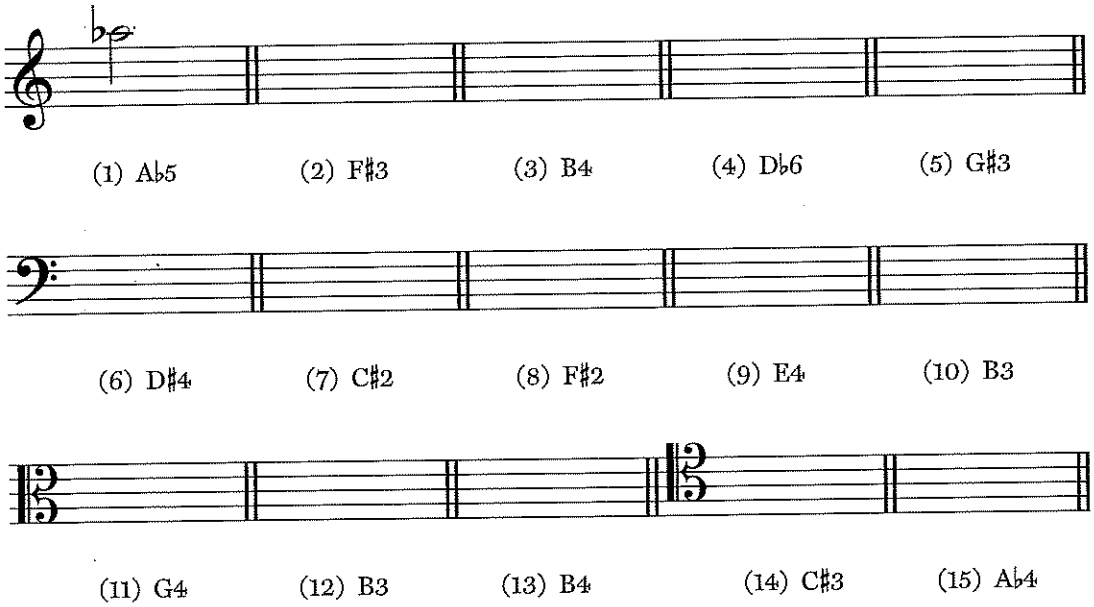
(1)____ (2)____ (3)____ (4)____ (5)____ (6)____ (7)____ (8)____

EXAMPLE 1.24: Notation guidelines



Try it #8

Write each of the specified notes in the correct octave, using hollow note heads and correctly notated stems and ledger lines. Place accidentals before (to the left of) the note head.



Dynamic Markings

Example 1.25 shows the beginning an orchestral work by Georges Bizet. Every pitch in this short excerpt is a C, E, or G, notated in treble, bass, or alto clef. Selected pitches are circled and labeled with octave indications.

This passage begins with a full sound, marked with a large ***ff*** in the score. This indication is a **dynamic marking**, which tells performers how soft or loud to play. Such markings also help musicians make decisions about the character or mood of a piece.

$\frac{2}{4}$, $\frac{3}{4}$, & $\frac{4}{4}$

Remember what you have learned about time signature:

The upper number of a time signature indicates how many beats are allowed in each measure.

The lower number of a time signature indicates what type of note receives one beat.

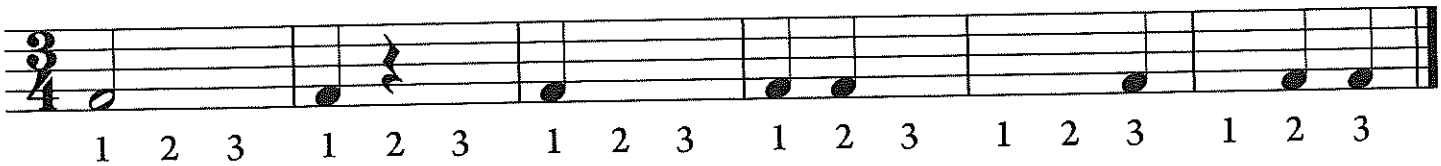
2 — beats per measure
4 — ♩ gets 1 beat

3 — beats per measure
4 — ♩ gets 1 beat

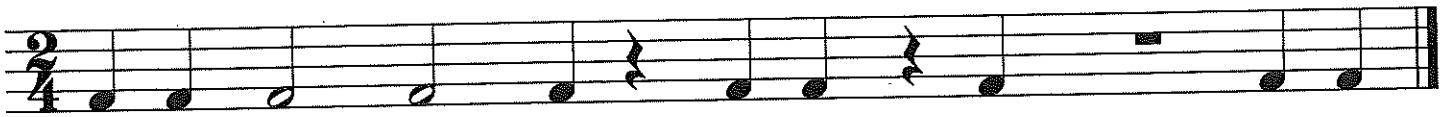
4 — beats per measure
4 — ♩ gets 1 beat

STUDENT ASSIGNMENT

1. There is only one note missing from each measure below. Draw the note on the appropriate beat to complete the measure. Clap the rhythm.



2. Draw bar lines in the following music. Write in the counting below the staff. Place the counting of rests in parentheses. For notes longer than one beat, place brackets around the first and last beats in that note. Clap the rhythm.



3. There is only one rest missing from each measure below. Draw the rest on the appropriate beat to complete the measure. Clap the rhythm.

Dotted Half Note

A **Dot** placed to the right of a note indicates that the note should have half its value added to it.

When $\mathbf{\mathit{𝅗𝅥}}$ = 2 beats (as in $\frac{2}{4}$, $\frac{3}{4}$, and $\frac{4}{4}$):

$\mathbf{\mathit{𝅗𝅥}}\cdot$ = 2 ($\mathbf{\mathit{𝅗𝅥}}$) + 1($\mathbf{\mathit{𝅘𝅥}}$) = 3 beats

(half of 2)

Note: One **Dotted Half Note** is equal in length to three quarter notes.

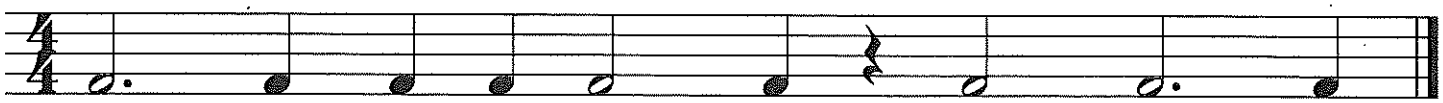
$\mathbf{\mathit{𝅗𝅥}}\cdot$ = $\mathbf{\mathit{𝅘𝅥}}\,\mathbf{\mathit{𝅘𝅥}}\,\mathbf{\mathit{𝅘𝅥}}$

Count and clap the following rhythms.

STUDENT ASSIGNMENT

1. Draw bar lines in the following music. Write in the counting below the staff. Place the counting of rests in parentheses. Place the counting of long notes in brackets. Clap the rhythm.

a)



b)

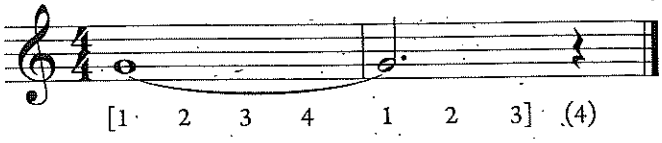
2. Knowing what you have learned about the dot, and assuming the quarter note gets one beat, how many beats are in each indicated note?

$\mathbf{\mathit{𝅗𝅥}}\cdot$ = _____ $\mathbf{\mathit{𝅝}}\cdot$ = _____ $\mathbf{\mathit{𝅘𝅥}}\cdot$ = _____

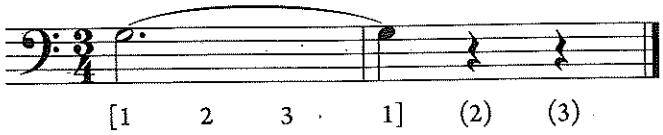
3. In your own words: Why is it impossible to have a dotted half note ($\mathbf{\mathit{𝅗𝅥}}\cdot$) in $\frac{2}{4}$ time?

Ties vs. Slurs

A **Tie** is a curved line connecting two or more notes of the same pitch. A tie extends a note's value. Ties are drawn below notes with stems facing up, and above notes with stems facing down.



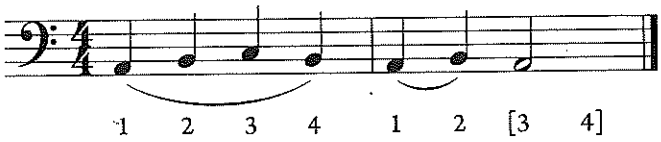
This pitch, G, is sustained for a total of 7 (4+3) beats.
Note: stem is up, tie is below.



This pitch, G, is sustained for a total of 4 (3+1) beats.
Note: stems are down, tie is above.

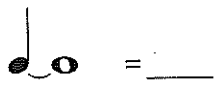
This pitch, F, is sustained for a total of 5 (2+2+1) beats.
Note: stems are up, tie is below.

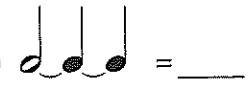
A **Slur** is a curved line connecting two or more notes of different pitches. A slur is a performance instruction indicating that the notes connected should be played or sung very smoothly without a break in sound. Like ties, slurs are drawn below notes with stems facing up, and above notes with stems facing down.



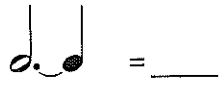
STUDENT ASSIGNMENT

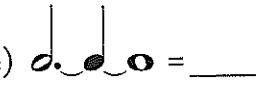
1. Write the total number of beats each set of tied notes will receive. (The quarter note gets one beat.)

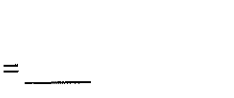
a)  =____

b)  =____

c)  =____

d)  =____

e)  =____

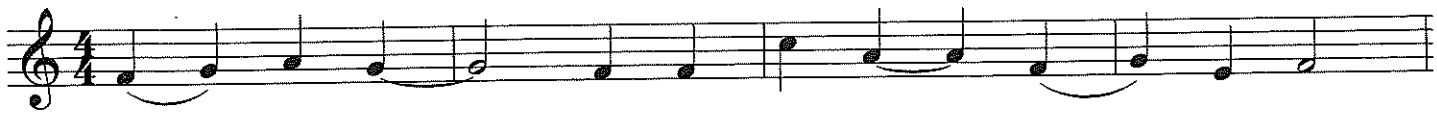
f)  =____

g)  =____

h)  =____

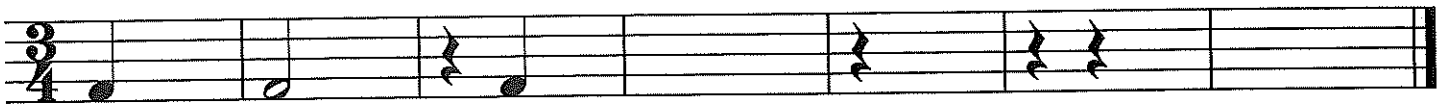
i)  =____

2. Circle only the ties in the following music. Write in the counting. Place the counting of long notes in brackets. Clap the rhythm.



$\frac{2}{4}$, $\frac{3}{4}$, $\frac{4}{4}$, Dotted Half Note, & Tie Review

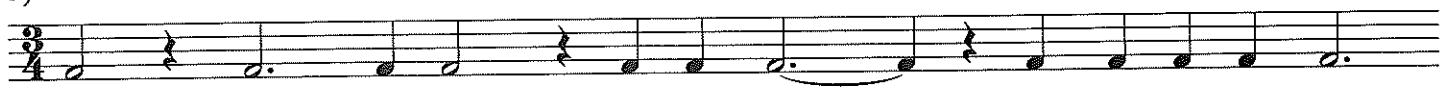
1. There is only <u>one</u> note missing from each measure below. Draw the <u>note</u> on the appropriate beat to complete the measure.



2. Draw in the missing bar lines. Draw in final bar lines at the ends.

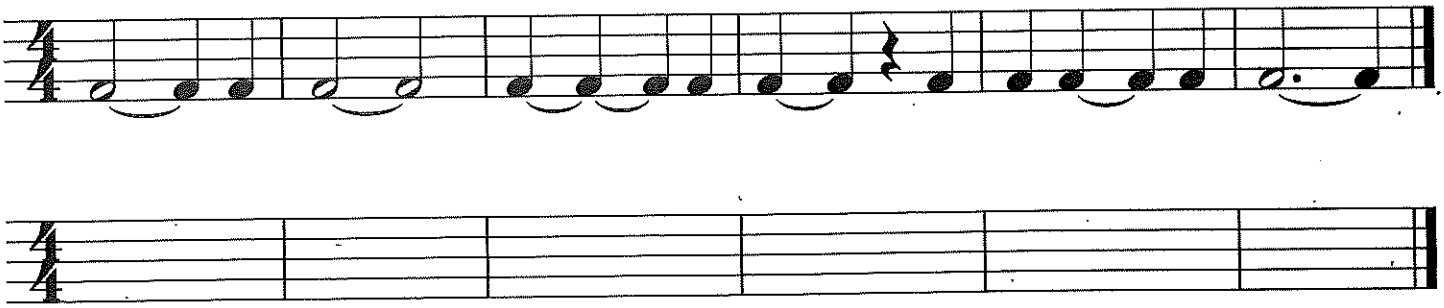
a)

b)



c)

3. Rewrite the following music replacing the tied notes with single notes of the same duration.

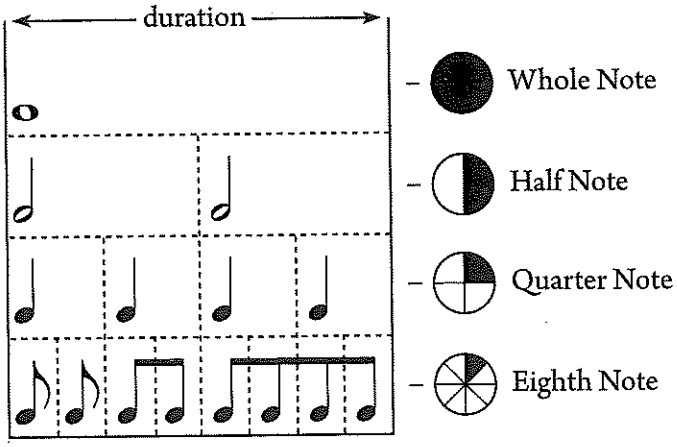


4. Draw in the missing bar lines. Draw in final bar lines at the ends. Write the note names in the blanks provided.

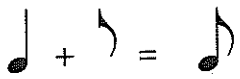
a)

b)

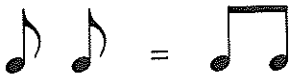
Eighth Note



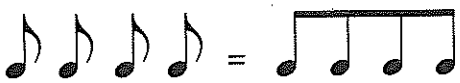
Adding a **Flag** to a quarter note creates an **Eighth Note**. The flag flies to the right of the stem.



Two eighth notes can be connected with a **Beam**.

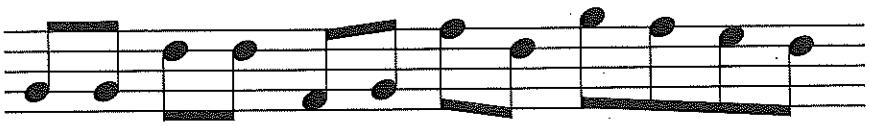


Four eighth notes can also be connected with a **Beam**.



While the stem of the eighth note follows the same rules as quarter notes, the flag always flies to the right of the stem.

With successive eighth notes, the beam joins the stems. Notice with notes of the same pitch, the beam is straight. With ascending or descending notes, the beam follows the shape of the music.

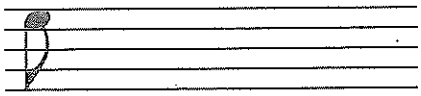


STUDENT ASSIGNMENT

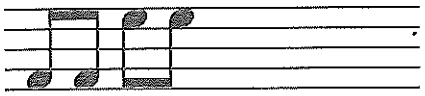
1. Complete the following exercises in drawing eighth notes.

a) Trace the single eighth note and draw four more.

b) Trace the single eighth note and draw four more.

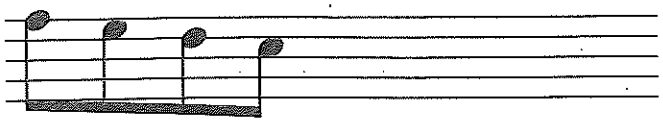


c) Trace both pairs of eighth notes and draw two more pairs.

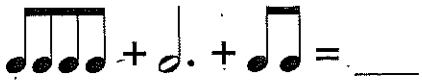


d) Trace the set of four ascending eighth notes and draw another set.

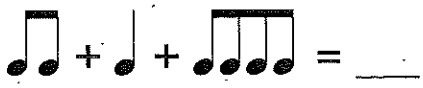
e) Trace the set of four descending eighth notes and draw another set.

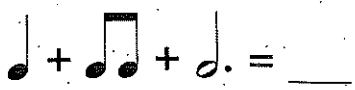


2. Add each set of note values to calculate the total number of beats. (The quarter note gets one beat.)

a)  = ____

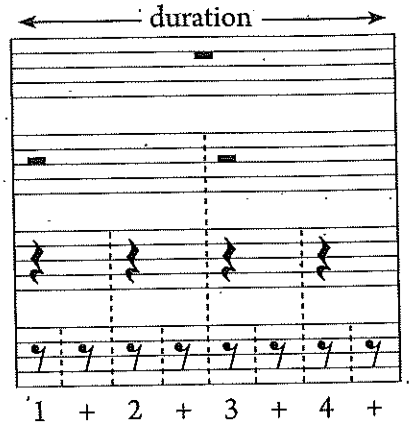
b)  = ____

c)  = ____

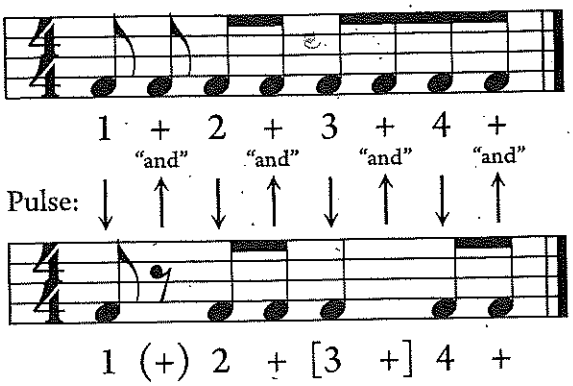
d)  = ____

Eighth Rest

The rest equivalent of the eighth note is the **Eighth Rest.**  = 𝄾



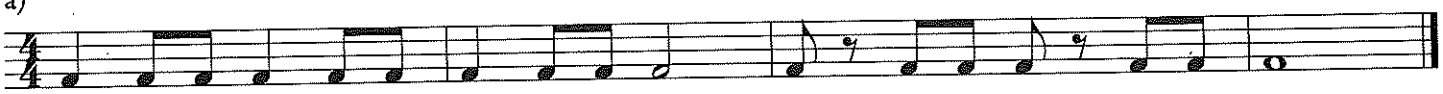
Counting eighth notes/rests



STUDENT ASSIGNMENT

1. Write in the counting and clap the following exercise. Place the counting of the rests in parentheses. Place the counting of long notes (including quarter notes) in brackets.

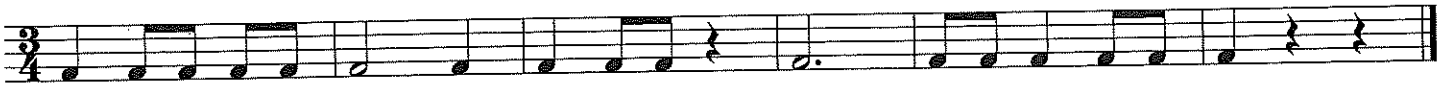
a)



b)

2. Draw in the missing bar lines. Write in the counting and clap. Place the counting of the rests in parentheses. Place the counting of long notes (including quarter notes) in brackets.

3. Write in the counting and clap the following exercise. Place the counting of the rests in parentheses. Place the counting of long notes (including quarter notes) in brackets.



4. Draw in the missing bar lines. Write in the counting and clap. Place the counting of the rests in parentheses. Place the counting of long notes (including quarter notes) in brackets.

Dotted Quarter Note

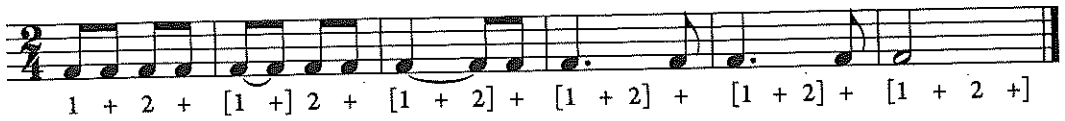
Remember what you have learned about dotted notes:

A **Dot** placed to the right of a note indicates that the note should have half its value added to it.

When ♩ = 1 beat (as in $\frac{2}{4}$, $\frac{3}{4}$, and $\frac{4}{4}$):

♩. = 1 (♩) + $\frac{1}{2}$ (♪) = 1$\frac{1}{2}$ beats

(half of 1)

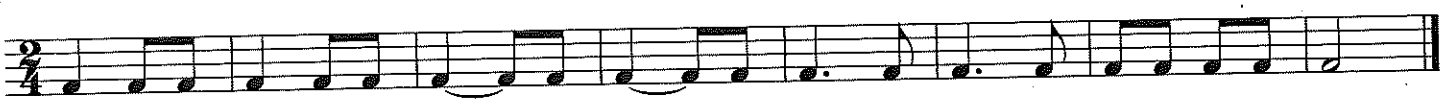


Note: One **Dotted Quarter Note** is equal in length to three eighth notes. ♩. = ♫

A dotted quarter note (♩.) is often followed by an eighth note (♪).

STUDENT ASSIGNMENT

1. Write in the counting and clap the following exercise. Place the counting of long notes in brackets.



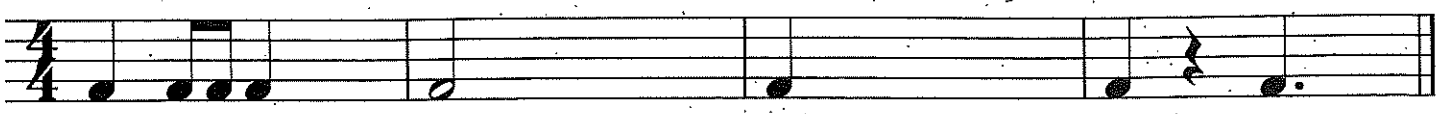
2. Write in the counting and clap the following exercise. Place the counting of the rests in parentheses. Place the counting of long notes in brackets.

3. Draw in the missing bar lines. Write in the counting and clap. Place the counting of the rests in parentheses. Place the counting of long notes in brackets.

4. Write the music using the information provided above and below the staff. The first measure has been done for you.

Eighth Note, Eighth Rest, & Dotted Quarter Review

1. Complete the following measures with the appropriate number of <u>eighth notes</u>.



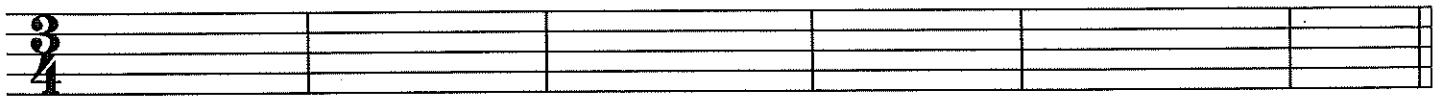
2. There is only <u>one</u> rest missing from each measure below. Draw the rest on the appropriate beat.

3. How many eighth notes equal the value of each of the following?

a) ♩ = ___ b) 𝅗𝅥. = ___ c) ♩. = ___

d) 𝅗𝅥 = ___ e) 𝅝 = ___ f) ♩ ♩. = ___

4. Rewrite the following music replacing tied notes with single notes of the same value.



5. Rewrite the following music in $\frac{2}{4}$ time. Note: you will have to use ties.

6. Write the music using the information above and below the staff. The first measure has been done for you.