



Student Resource Book



70%

—

OF ADMISSIONS OFFICERS OF THE NATION'S MAJOR UNIVERSITIES SAY HIGH SCHOOL CREDIT AND ACHIEVEMENT IN THE ARTS ARE SIGNIFICANT CONSIDERATIONS FOR ADMISSION



107

—

POINTS SCORED HIGHER ON THE SAT FOR STUDENTS INVOLVED IN PUBLIC SCHOOL MUSIC PROGRAMS ACCORDING TO THE COLLEGE ENTRANCE EXAMINATION BOARD.



66%

—

LEWIS THOMAS, PHYSICIAN AND BIOLOGIST, FOUND THAT MUSIC MAJORS COMPRISE THE HIGHEST PERCENTAGE OF ACCEPTED MEDICAL STUDENTS.



94%

—

OF RESPONDENTS (GALLUP POLL), BELIEVE MUSIC IS PART OF A WELL-ROUNDED EDUCATION AND SHOULD BE OFFERED AS PART OF THE REGULAR CURRICULUM IN SCHOOLS.

Musical Facts and Figures

Yay Band!

Schools that have music programs have significantly higher graduation rates than those without music programs (90.2 percent compared to 72.9 percent).

U.S. DEPARTMENT OF EDUCATION
NELLS88 Database



Facts and Figures
about Participating
in Band starting in
Middle School and
remaining
throughout
High School

Students taking courses in music performance and music appreciation scored higher in the SAT than students with no arts participation.

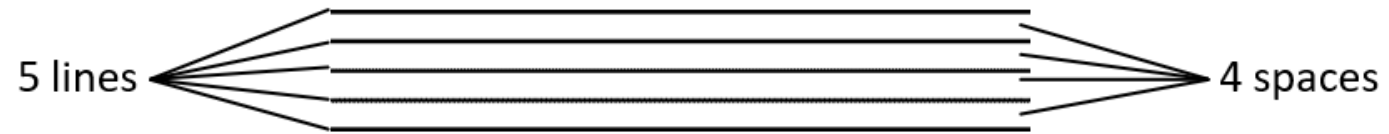
COLLEGE ENTRANCE EXAMINATION BOARD
College-Bound Seniors National Report



Students who participate in music have the lowest levels of current and lifelong use of alcohol, tobacco, and illicit drugs among any group in our society.

H. CON. RES 266
United States Senate, June 2000



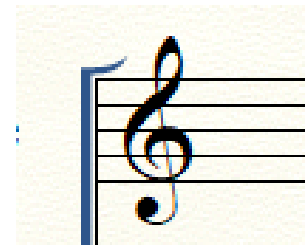


- The staff is a set of 5 lines and 4 spaces where the notes and rests are placed.
- This is where our musical alphabet is placed.

The Staff

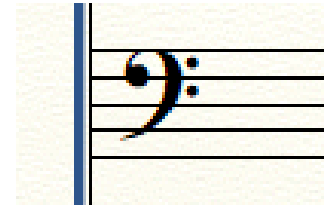
Treble Clef

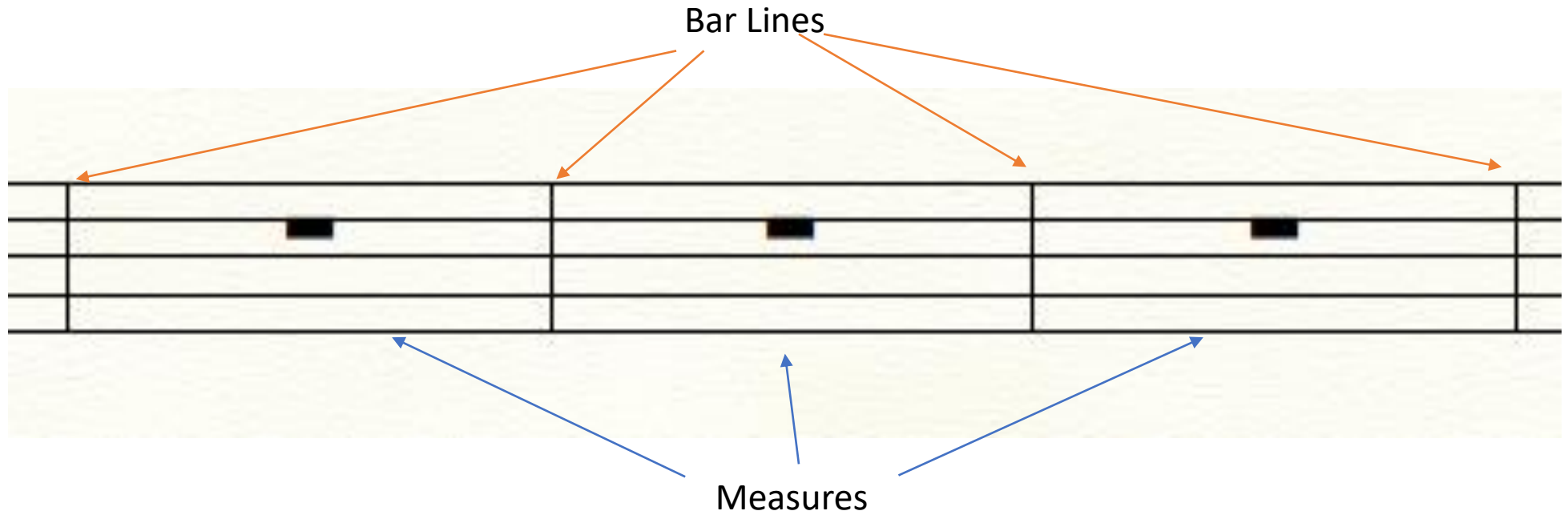
- A **clef** is a symbol that is placed on the staff.
- It tells us what notes are on the lines and spaces
- The notes are in slightly different locations for each staff
- **Treble Clef**, also known as the G clef, due to the location it centers around on the staff.
 - Instruments that are in treble clef include:
 - Flute, Clarinet, Oboe, Saxophones, Trumpets, Horns, and Percussion



Bass Clef

- A **clef** is a symbol that is placed on the staff.
- It tells us what notes are on the lines and spaces
- The notes are in slightly different locations for each staff
- **Bass Clef**, also known as the F clef, due to the location it centers around on the staff.
 - Instruments that are in bass clef include:
 - Bassoons, Trombones, Baritones/Euphoniums, and Percussion

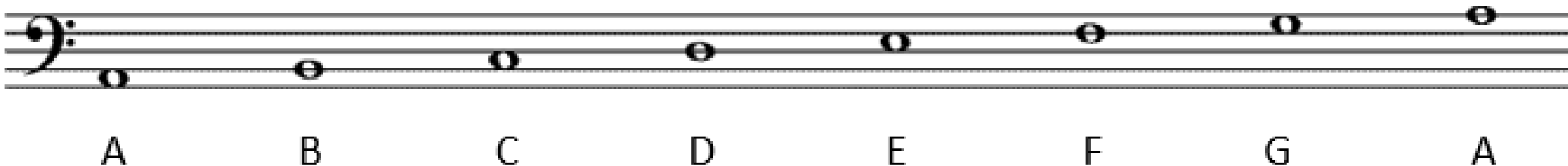
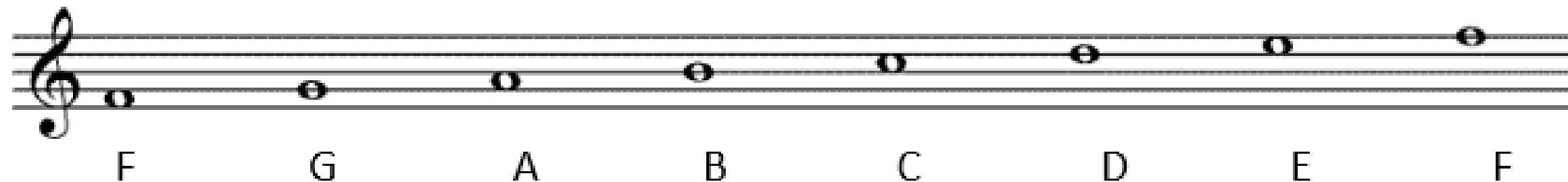




Bar Lines and Measures

- A **Bar line** is a vertical line that separates music into smaller sections
- A **Measure** is a smaller section of music that is divided into equal amount of time/notes in a piece of music
- A **Double bar** indicates the end of a piece of music





Note Placement on the Staff

- There are 7 letters used in music (A,B,C,D,E,F, & G).
- When going higher on the staff, we go forward in the alphabet.
- When going lower in the staff, we go backwards in the alphabet.
- When going higher we reach G, we start back over with A and continue on.
- When going lower and we reach A, we start back with G and continue on.

Ledger Lines

- **Ledger Lines** are additional lines added above or below the staff to extend the staff.
- Our note names continue to for alphabetical up or down with the ledger lines.



Steady Beat



ALWAYS STAYS THE SAME



REPETITIVE PULSE THAT
OCCURS IN MUSIC



EXAMPLE: A CLOCK KEEP
STEADY TIME AND DOES NOT
SPEED UP OR SLOW DOWN



NOTE: THE BEAT CAN BE FAST
OR SLOW. IT DEPENDS ON THE
PIECE OF MUSIC

Rhythm



RHYTHM IN MUSIC IS THE
PLACEMENT OF SOUNDS IN TIME.



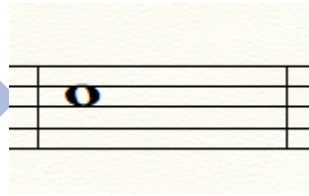
IT IS A VISUAL REPRESENTATION OF
SOUNDS IN VARIOUS PATTERNS



RHYTHMS CAN BE BOTH SOUND
AND SILENCE.

Basic Types of Rhythms

Whole
Note – 4
beats each



Quarter
Note – 1
beat each



Eighth
Note – ½
of a beat
each



Half Note
– 2 beats
each



Sixteenth
Note – ¼
of a beat
each



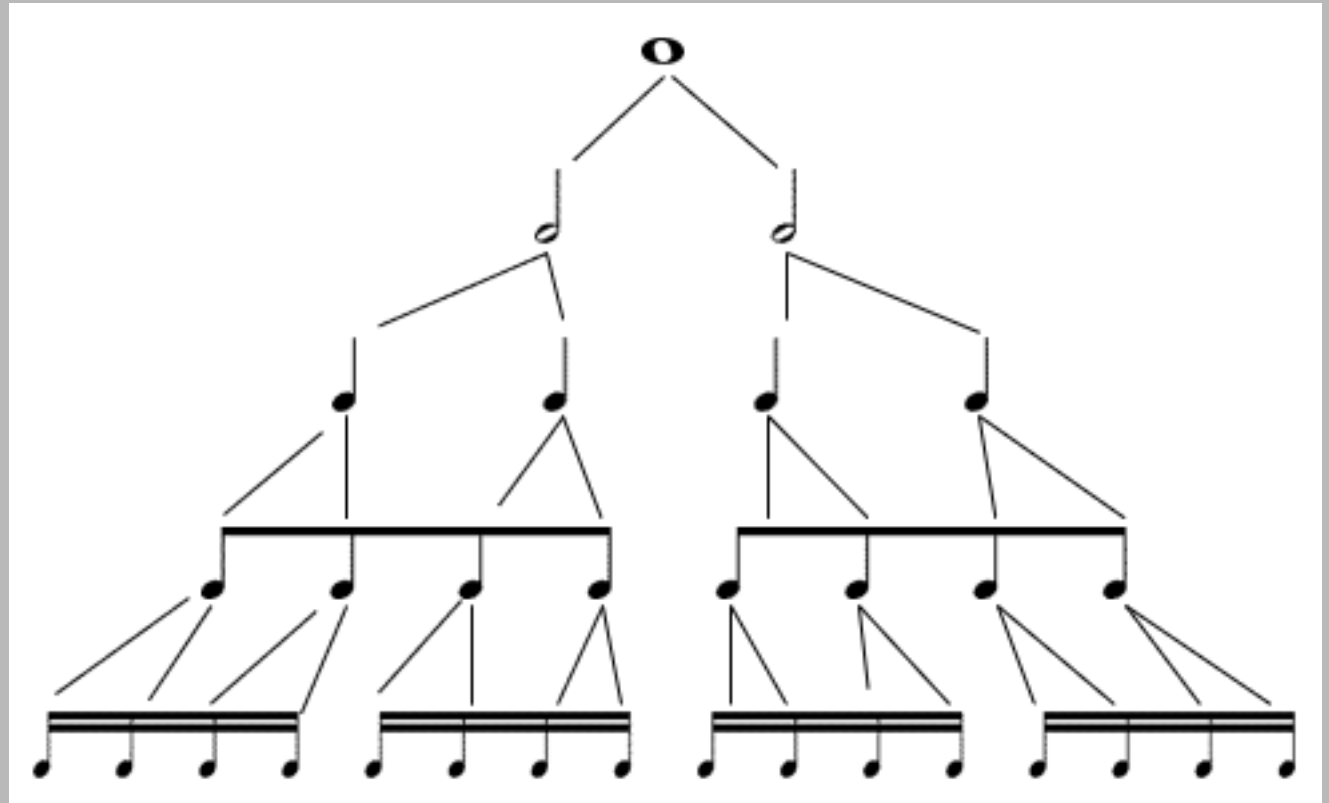


The Parts of a Note

- Notes have separate parts which tell us how long or short they are. Each of these have a name.
- **Stems:** may go up or down
- **Body:** oval part of the note
- **Flag:** one flag for an eighth note or two flags for a sixteenth
- **Beam:** connects two flags together

Note Relationships

- The following chart shows the break down of note values
- Example: two half notes equal one whole note; two quarter notes equal a half note; two eighth notes equal a quarter note; two sixteenth notes equal an eighth note

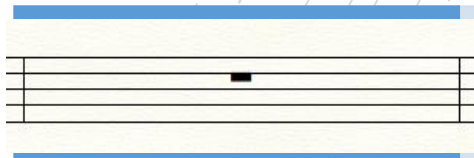


The Rest

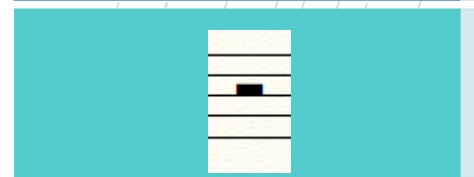
Rest: silent moments in music

Each rest has a value or number of beats of silence

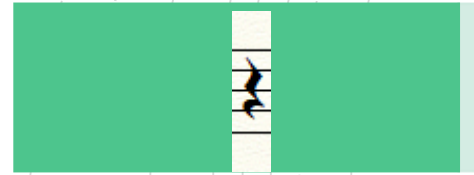
Types of Rests



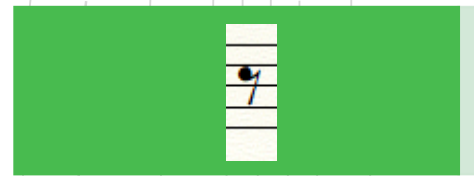
Whole Rest = 4 beats of silence



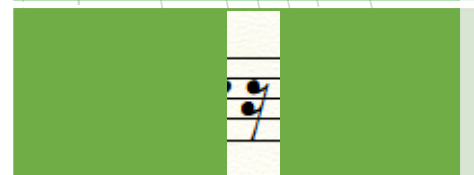
Half Rest = two beats of silence



Quarter Rest = one beat of silence

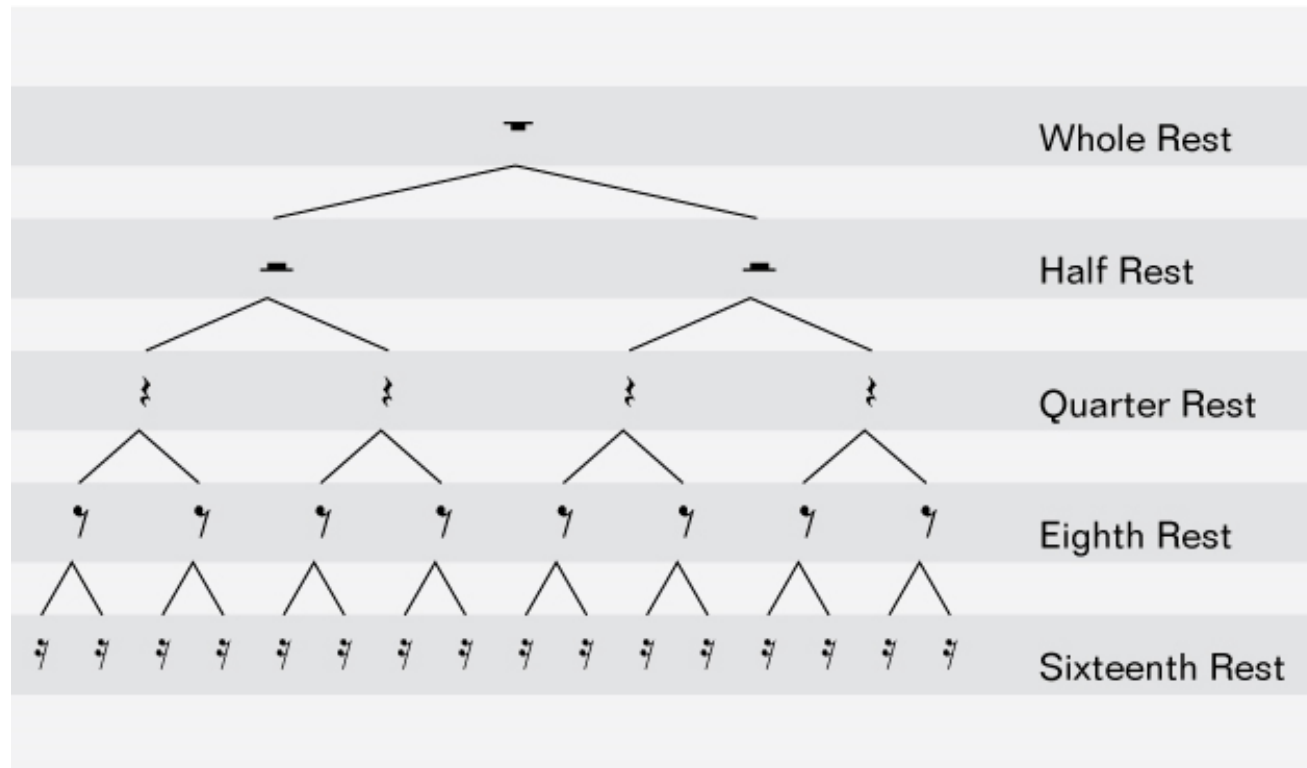


Eighth Rest = $\frac{1}{2}$ a beat of silence












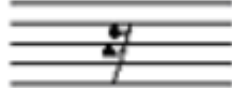
Sixteenth Rest = $\frac{1}{4}$ a beat of silence

Note Relationships of Rests



- The following chart shows the break down of rest values
- Example: two half rests equal one whole rest; two quarter rests equal a half rest; two eighth rests equal a quarter rest; two sixteenth rests equal an eighth rest.

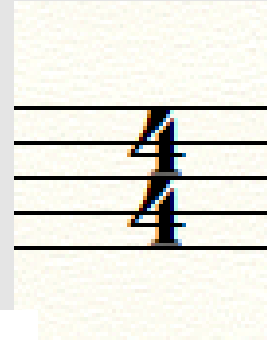
- Please reference the chart to the left for a quick comparison of rhythms and rest.
- Pay close attention to the location of the whole and half rest on the staff as this can easily be confused.

Name	Note	Rest
Whole Note		
Half Note		
Quarter Note		
Eighth Note		
Sixteenth Note		

Quick Reference Chart for Comparing Rhythms and Rests

Time Signatures

- For Example: The given time signature tells us that we have 4 beats in a measure (top number) and that the quarter note gets the beat (bottom number).



4 ← The top number tells us the number of beats in each measure.
4 ← The bottom number tells us how many counts the whole note gets.

Bottom Number	Note Value of the rhythm
Whole Note = 1 is the bottom number	4 beats each
Half Note = 2 is the bottom number	2 beats each
Quarter Note = 4 is the bottom number	1 beat each
Eighth Note = 8 is the bottom number	1/2 a beat each
Sixteenth Note = 16 is the bottom number	1/4 a beat each


How to count Basic Rhythms

A Couple of Rules for Counting Rhythms

- Always start the beginning of the measure with beat 1
- You cannot have the same number twice in a measure (ex: beat 1 only happens once)
- Rhythms must maintain a steady beat ALWAYS.
- Sometimes larger rhythms like Half and whole notes will have more than one beat included within them.

Rhythm Counting Examples 1

- When counting in 4/4 time we will always have 4 beats
- Each quarter note gets one beat of time
- They will be labeled beats 1-4 as seen on the example



A musical staff with five lines. Four quarter notes are placed on the staff, each with a stem pointing downwards. Above each note is a red number: 1, 2, 3, and 4. The staff is enclosed in a blue border.

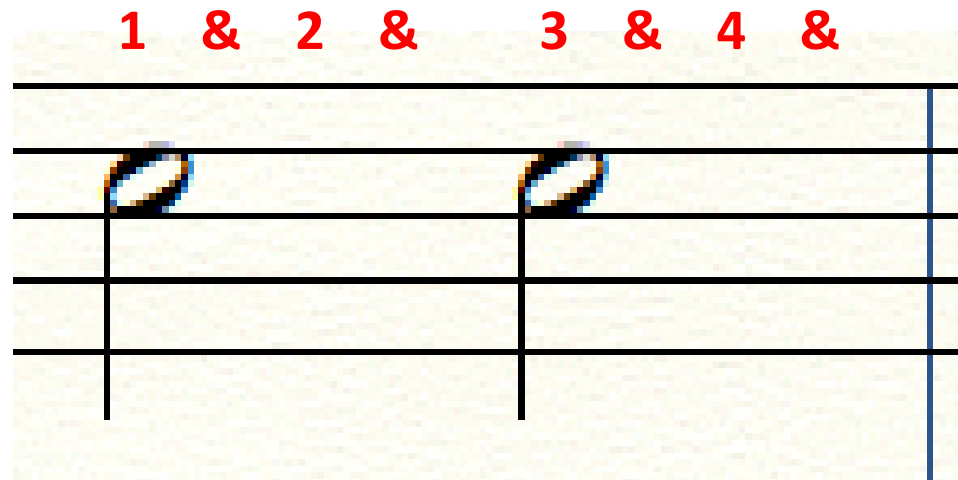
Rhythm Counting Examples 2

- When counting in 4/4 time we will always have 4 beats
- Each eighth note gets $\frac{1}{2}$ beat of time
- Since we are now dividing a beat (quarter note) into two equal parts we have to use a different syllable for the second part of the beat.
- This syllable is &

A musical staff with a treble clef and a 4/4 time signature. The staff contains a sequence of eight eighth notes, all on the same pitch. Above the staff, the counting syllables are written in red: 1, &, 2, &, 3, &, 4, &. The notes are grouped into four pairs, each pair corresponding to one of the four beats. The first pair is on the first beat, the second pair on the second beat, the third pair on the third beat, and the fourth pair on the fourth beat.

Rhythm Counting Examples 3

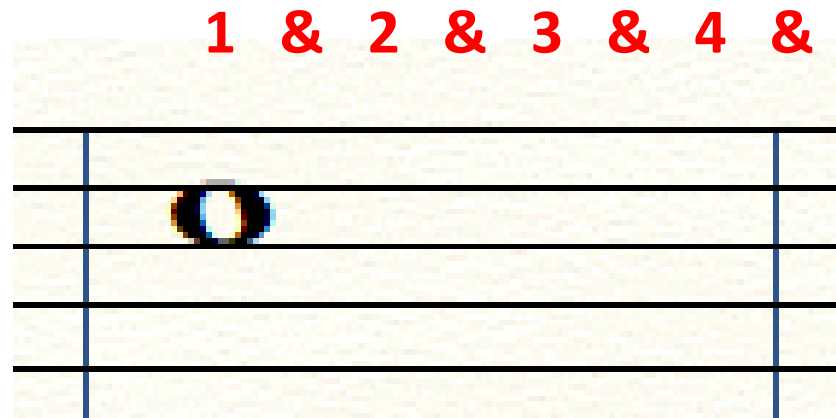
- When counting in 4/4 time we will always have 4 beats
- Each half note gets 2 beats of time
- This means that it will have two quarter notes (beats) with the one half note.
- Because the half note is a larger rhythm that lasts longer you can only have two of them in a measure of 4/4 time.



-You will notice that we use 1&2& for one half note.
-This means that there are 2 full beats in a half note.

Rhythm Counting Examples 4

- When counting in 4/4 time we will always have 4 beats
- Each whole note gets 4 beats of time
- This means that it will have four quarter notes (beats) with the one whole note.
- Because the whole note is a larger rhythm that lasts longer you can only have one of them in a measure of 4/4 time.



**You will notice 1&2&3&4&
above the note as all of the
beats are within a measure.**

Rhythm Counting Examples 5

- When counting in 4/4 time we will always have 4 beats
- Each sixteenth note gets 1/4 of a beat of time (think of fractions 1/16 of a whole)
- This means that you will have four sixteenth notes with the one quarter note.
- When we count 16th notes we must use extra syllables. We use “e” and “a” as the extra syllables to go along with the number and &.



Rhythm Counting Examples 6 -mixed rhythms

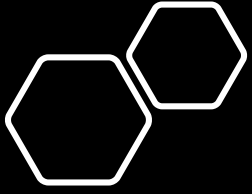
- When counting in 4/4 time we will always have 4 beats
- Each quarter note gets one beat of time
- Each eighth note gets $\frac{1}{2}$ a beat of time (this means that 2 eighth notes can fit inside 1 quarter note)
- Remember we will use the & symbol for an eighth note that does not fall on the beat.

The image shows two measures of music on a five-line staff. The first measure contains four quarter notes, each aligned with a red number above it: 1, 2, 3, and 4. The second measure contains eight eighth notes, with red numbers and ampersands above them: 1, &, 2, &, 3, &, 4, and &. The notes in the second measure are grouped as four pairs of eighth notes, each pair corresponding to one of the numbers 1, 2, 3, and 4.

Rhythm Counting Examples 7 -mixed rhythms

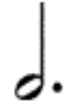
- When counting in 4/4 time we will always have 4 beats
- Each quarter note gets one beat of time
- Each half note gets 2 beats of time (this means that 2 quarter notes can fit inside 1 half note)
- Remember that in a half note the second beat will be inside the note.

The image shows three measures of music on a five-line staff. Above the staff, red numbers indicate the counting for each measure. The first measure contains three quarter notes and is counted '1 2&3& 4'. The second measure contains two quarter notes and two eighth notes, and is counted '1 2 3&4&'. The third measure contains three quarter notes and is counted '1&2& 3 4'. The notes are placed on the staff to illustrate the timing: in the first measure, the first note is on the first space (F), the second on the second line (G), and the third on the second space (A); in the second measure, the first note is on the first space (F), the second on the second line (G), and the eighth notes are on the second space (A); in the third measure, the first note is on the first space (F), the second on the second line (G), and the third on the second space (A).



Dotted Notes

- A dot added after a note changes the note's value.
- A dot always ADDS HALF OF WHAT IS BEFORE IT.
- Multiple examples are given (each example is treated as being in a time signature with a 4 on the bottom)



The half note receives 2 beats.
The dot ADDS half of 2 to the note. Half of 2 = 1
2 beats for the half note + 1 beat for the dot = 3 beats for the dotted half note.



The quarter note receives 1 beat.
The dot ADDS half of 1 to the note. Half of 1 = $\frac{1}{2}$
1 beat for the quarter note + $\frac{1}{2}$ a beat for the dot = $1\frac{1}{2}$ beats for the dotted quarter note.



The eighth note receives $\frac{1}{2}$ a beat.
The dot ADDS half of $\frac{1}{2}$ to the note. Half of $\frac{1}{2}$ = $\frac{1}{4}$
 $\frac{1}{2}$ a beat for the eighth note + $\frac{1}{4}$ of a beat for the dot = $\frac{3}{4}$ of a beat for the dotted eighth note.

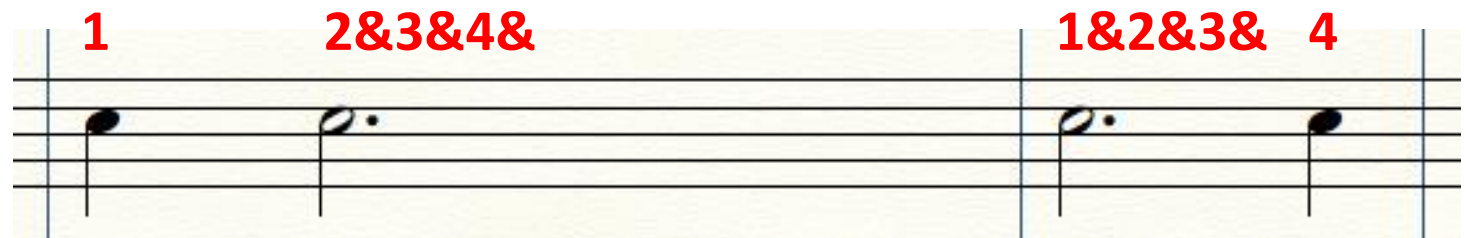
Dotted Rhythm Examples

- A dot added after a note changes the note's value.
- A dot always ADDS HALF OF WHAT IS BEFORE IT.
- Multiple examples are given (each example is treated as being in a time signature with a 4 on the bottom)

The image shows three measures of music on a single staff, illustrating dotted rhythms. Above the staff, red numbers and symbols indicate the beat counts for each note. The first measure contains four notes: a dotted quarter note (beats 1&2), an eighth note (beat &), a quarter note (beat 3), and another quarter note (beat 4). The second measure contains four notes: a quarter note (beat 1), a dotted quarter note (beats 2&3), an eighth note (beat &), and a quarter note (beat 4). The third measure contains four notes: a quarter note (beat 1), a quarter note (beat 2), a dotted quarter note (beats 3&4), and an eighth note (beat &).

Dotted Rhythm Examples 2

- A dot added after a note changes the note's value.
- A dot always ADDS HALF OF WHAT IS BEFORE IT.
- Multiple examples are given (each example is treated as being in a time signature with a 4 on the bottom)



Double Dotted Notes

- What happens if we have a note followed by 2 dots?
- The first dot ADDS half of the note value and the second dot ADDS half of the value of the first dot.



The half note receives 2 beats.

The first dot ADDS half of 2 to the note. Half of 2 = 1

The second dot ADDS half of the first dot. Half of 1 = $\frac{1}{2}$

2 beats for the half note + 1 beat for the first dot + $\frac{1}{2}$ a beat for the second dot =
3 $\frac{1}{2}$ beats for the double dotted half note.

Counting Rhythms

- The following gives an example of how to count common rhythm patterns in time signatures with a 4 on the bottom

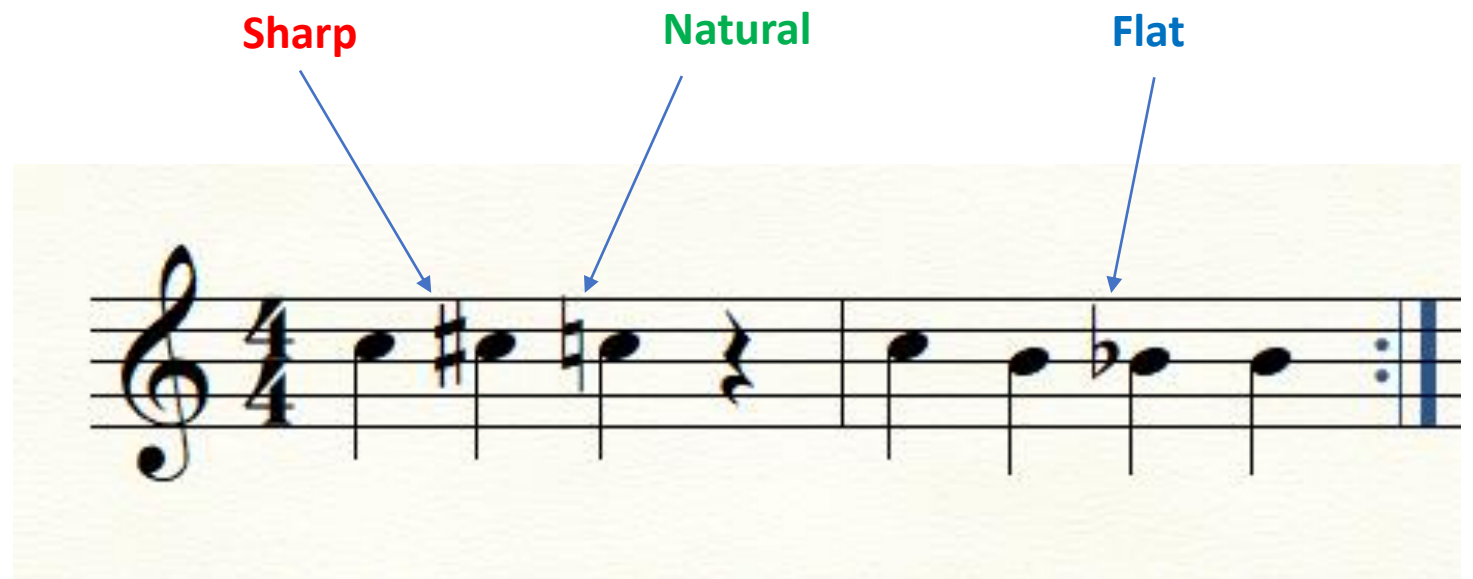
Time Signatures with a 4 on the bottom:

The image displays 18 musical rhythm patterns arranged in three rows, each with a corresponding counting syllable below it. The patterns are as follows:

- Row 1: A whole note (count: 1²³⁴), a half note (count: 1²), a quarter note (count: 1), a pair of eighth notes (count: 1 +), and a group of four sixteenth notes (count: 1 e + a).
- Row 2: A pair of eighth notes (count: 1 + a), a pair of eighth notes with a dotted eighth note (count: 1 e +), a pair of eighth notes with a dotted quarter note (count: 1 e a), a dotted quarter note (count: 1²), a quarter note with a dotted eighth note (count: +), and a pair of eighth notes with a dotted quarter note (count: 1 a).
- Row 3: A quarter note with a dotted eighth note (count: 1 +), a pair of eighth notes with a dotted quarter note (count: 1 e), and a dotted quarter note (count: 1²³).

Sharps, Flats, and Naturals

- **Flat**: symbol used to show that a note is lowered by a half step
- **Sharp**: symbol used to show that a note is raised by a half step
- **Natural**: cancels out a sharp or flat



Rule of Carrying Through the Measure

- **Any** time you see a sharp flat or natural sign in a measure of music the notes that are the same are effected as well even if they are not marked.
 - Note: This is called an **Accidental**
 - Example: In measure two of this example a Flat symbol is on beat 3 which makes that note a B-Flat. The note of beat 4 is also a B-Flat even though there is not a flat sign next to it.

Flat continues to beat 4

The image shows a musical staff in 4/4 time. The first measure contains four quarter notes: G4, A4, B4, and C5. The second measure contains four quarter notes: G4, A4, Bb4, and C5. A flat sign is placed on the B note in the second measure. An orange arrow points from the flat sign to the B note in the fourth beat of the second measure, illustrating that the flat sign carries through the measure.

Rule of Canceling an Accidental

- When you have an Accidental (Sharp, Flat, or Natural) that appears in a measure you can use another to cancel it out or remove its effect.
- Example: If you add a Sharp sign to a note then to remove it in the same measure you would use a natural.
- In the example below the C# on beat 2 is changed back to a C Natural on beat 3.

C changed to C# w/ Accidental

C# changed back to C Natural
w/ Accidental on Beat 3



Ties

- A **tie** is a curved line that attaches 2 or more notes of the SAME pitch.
- Ties add note values together and are to be played as one unbroken note.
- Each example given is treated as being in a time signature with 4 on the bottom.



The quarter note receives 1 beat.
The eighth note receives $\frac{1}{2}$ a beat.

1 beat for the quarter note + $\frac{1}{2}$ a beat for the eighth note = $1\frac{1}{2}$ beats for the tied notes.

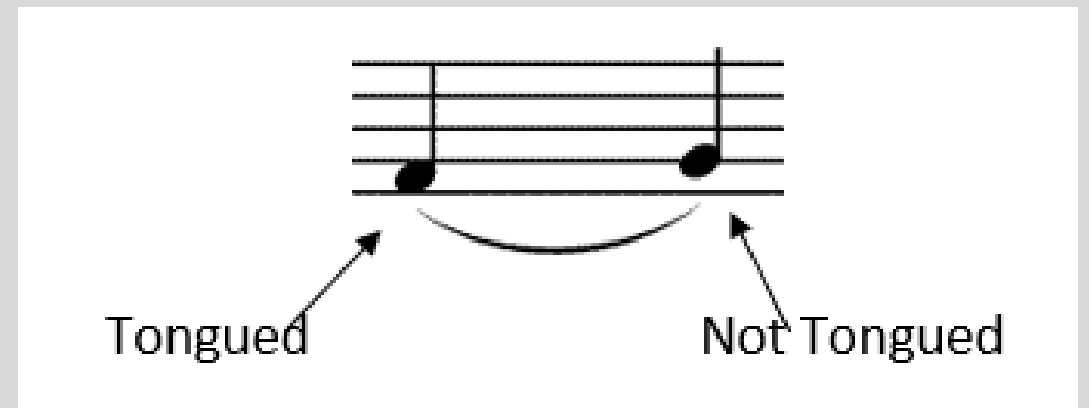
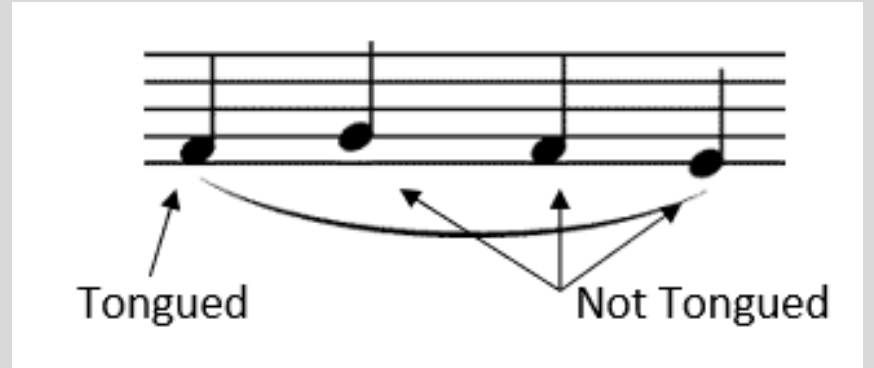


The half note receives 2 beats.
The quarter note receives 1 beat.

2 beats for the half note + 1 beat for the quarter note = 3 beats for the tied notes.

Slurs

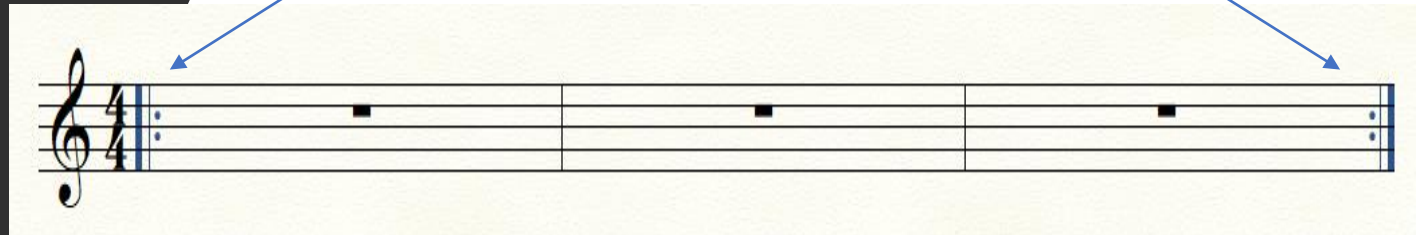
- A **slur** is a curved line that attaches 2 or more notes of DIFFERENT pitch.
- Important: The first note under a slur marking is to be tongued and all remaining notes should not be tongued.



Repeat Signs and First and Second Endings

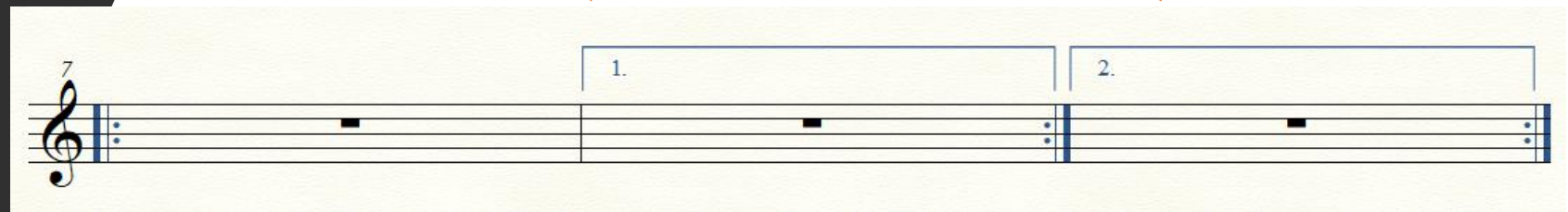
- A **repeat sign** consists of two dots placed before or after a double bar.
- The music in between the repeat signs must be played again
- **First and Second endings:** The music inside the ends are only played once. The first ending occurs on the first playing of the music and the second occurs after the repeat of a part of the music.
- You do not play the first ending the second time through the music.

Repeat Signs



1st Ending

2nd Ending



Key Signatures

- A **Key Signature** is a set of sharps or flats at the beginning of a piece of music that tells us to play certain notes as sharp or flat all the way through the piece.
- The key signature is derived from the sharps or flats present in the major scales.
- *Key signatures will **never** contain both sharps and flats at the same time!*

Key Signatures Continued

- The first set of examples show the Bb major scale written **without** a key signature. There are two notes in the scales that are flat Bb and Eb.
- The second set of examples show the scales written using a key signature. The flat notes in the scales have now been moved over to the key signature. Every time there is a Bb or Eb it is flat.
- IT DOES NOT MATTER IF IT IS HIGH OR LOW IN THE STAFF.

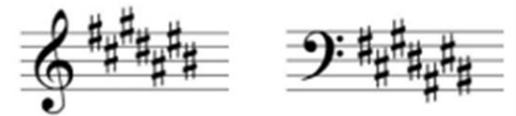
The image displays four musical staves in 4/4 time, illustrating the Bb major scale in two different ways. The left column shows the scale in treble clef. The top staff is written without a key signature, with flat symbols (b) placed above the notes Bb and Eb. The bottom staff includes a key signature of one flat (Bb) at the beginning, and the flat symbols are no longer present on the notes. The right column shows the scale in bass clef. The top staff is written without a key signature, with flat symbols (b) placed below the notes Bb and Eb. The bottom staff includes a key signature of one flat (Bb) at the beginning, and the flat symbols are no longer present on the notes. Arrows in both columns point from the flat symbols in the top staves to the corresponding flat in the key signature of the bottom staves.

Key Signatures Continued

The Order of Flats is: B E A D G C F

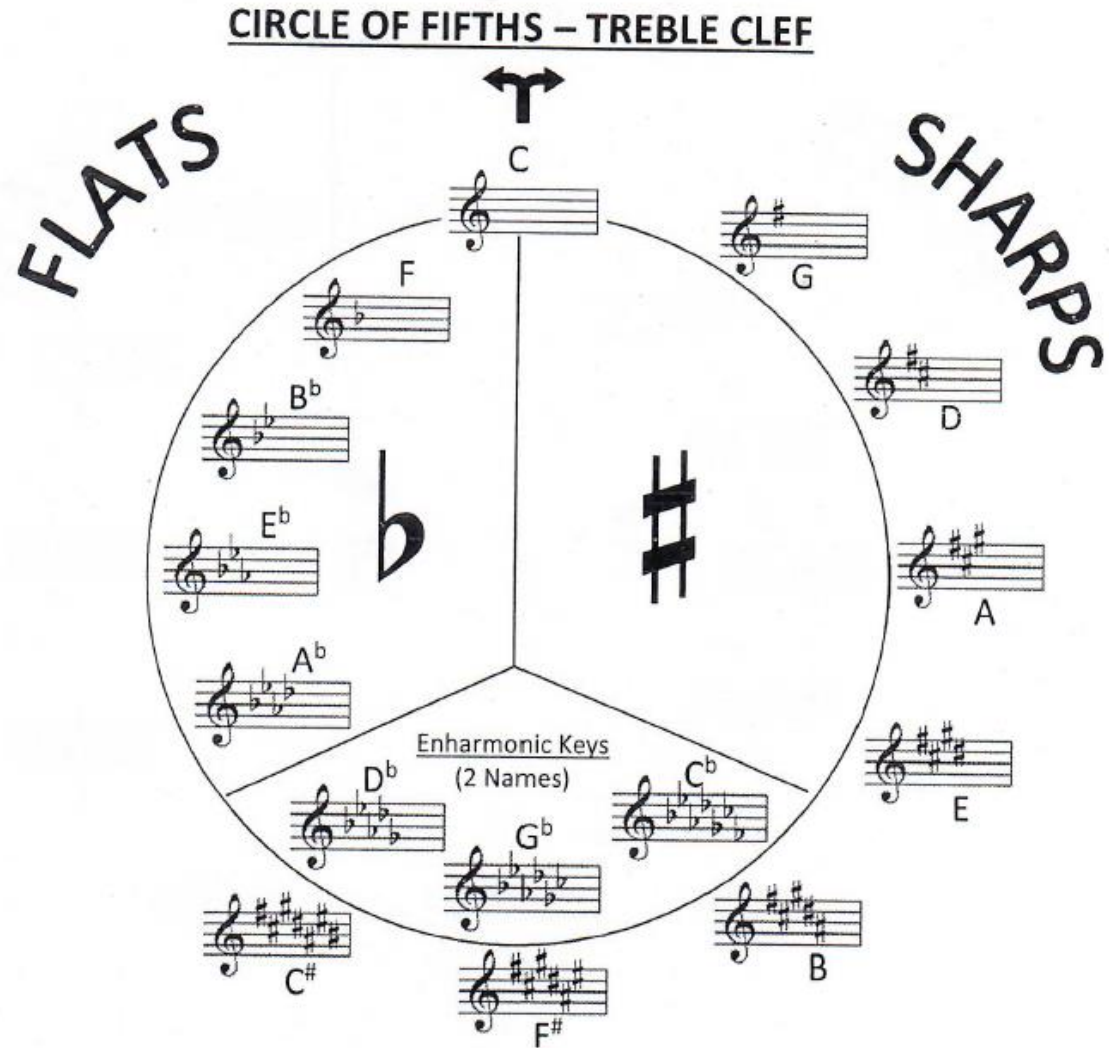


The Order of Sharps is: F C G D A E B



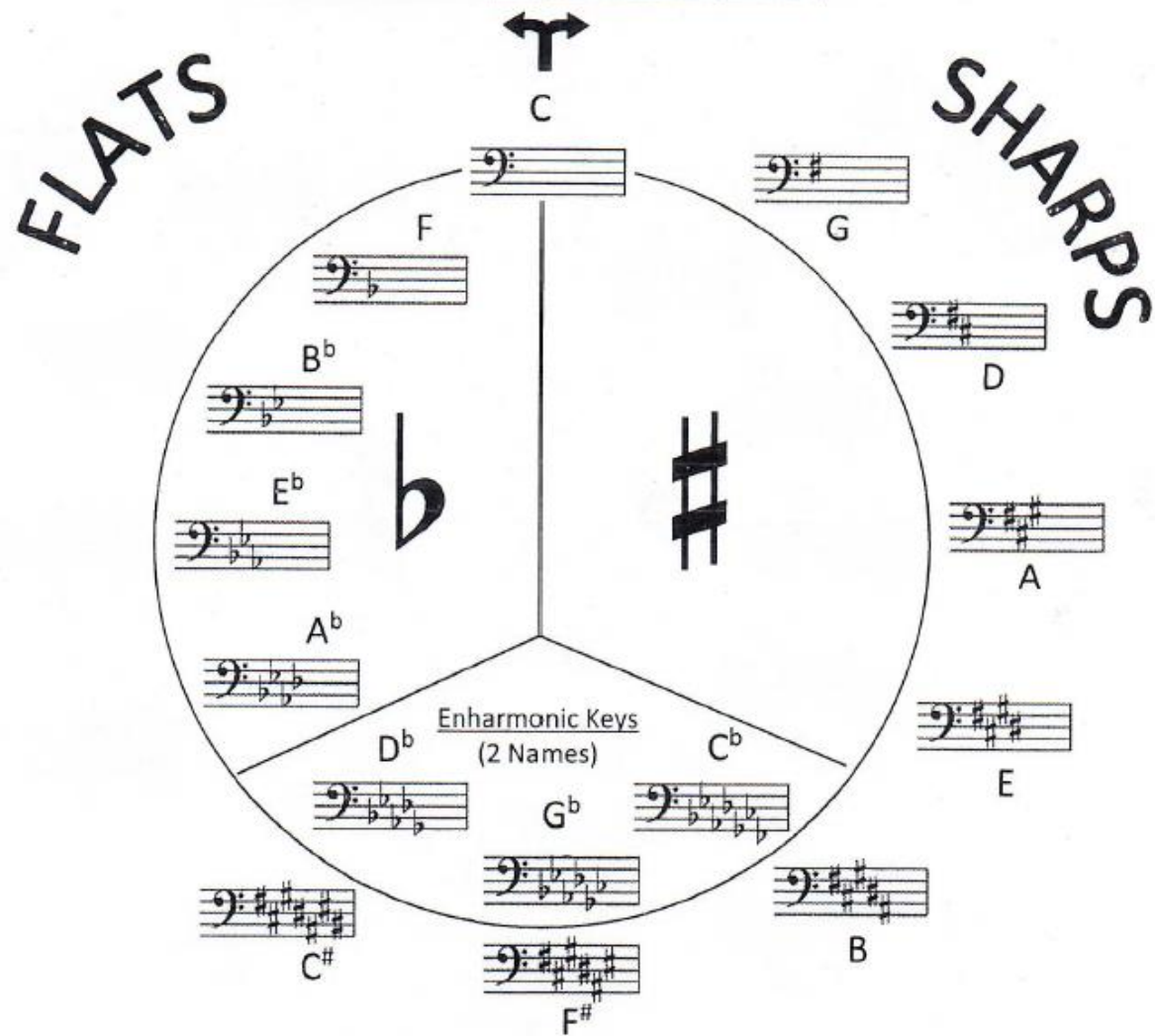
- Key signatures are read from the left to right
- The sharps and flats ALWAYS put in the same order

Notice that the order of flats and sharps is opposite.



**Circle of Fifths
Treble Clef**
-notice that the
order of sharps and
flats are opposite on
the circle

CIRCLE OF FIFTHS – BASS CLEF



Circle of Fifths Bass Clef

-notice that the
order of sharps and
flats are opposite on
the circle

Enharmonics



Enharmonic notes sound the same and are played the same on your instrument but are written differently in music based upon music theory.

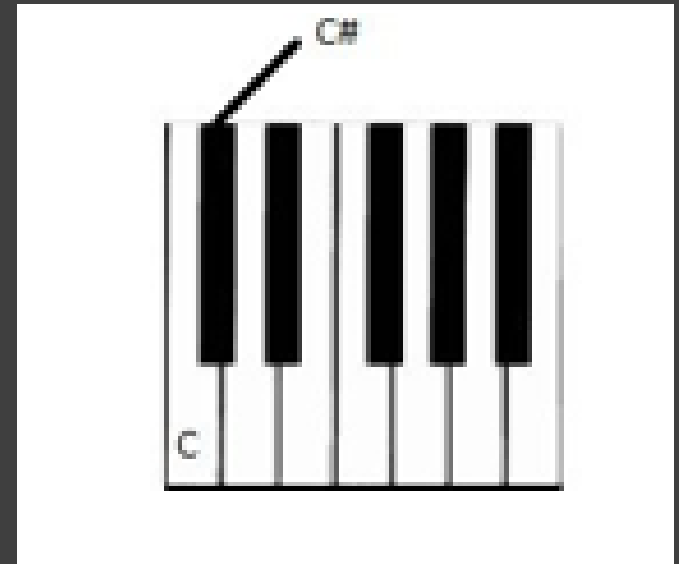
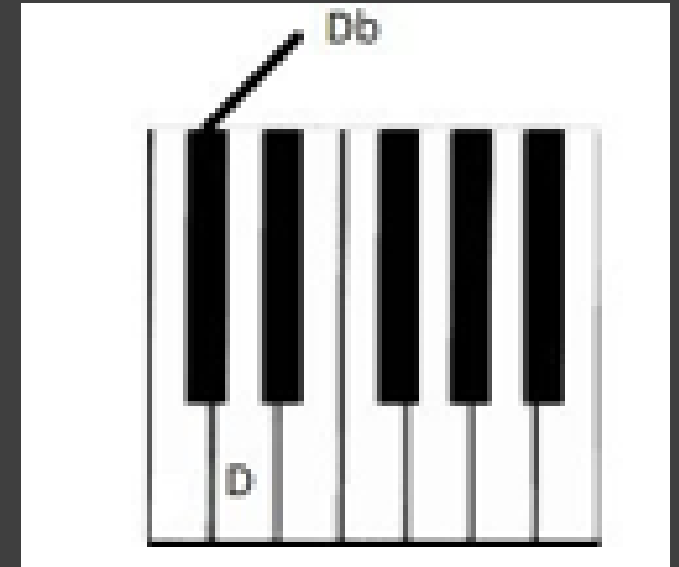


You can compare this to language with this example.

The words “to, two, and too” sound the same but are spelled differently and have different meanings within a sentence.

Enharmonics Continued

- When we see a sharp (#) symbol we go higher on the keyboard (example C leads to C#)
- When we see a flat (b) symbol we go lower on the keyboard (example D leads to Db)
- Note: Db and C# sound the same but are spelled differently





Enharmonics
Continued

The enharmonic notes are as follows:

C#/Db

E#/F

A#/Bb

D#/Eb

F#/Gb

B/Cb

E/Fb

G#/Ab

B#/C

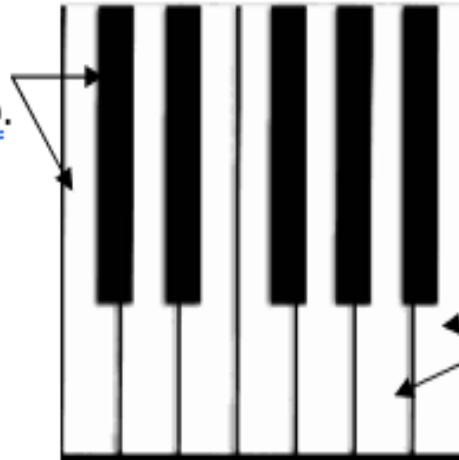
- There are several common enharmonic that we will see regularly in music.
- You need to be familiar and understand enharmonic notes to be a proficient musician

Major Scales

- In music, a scales is a series of ascending (going up) and descending (going down) notes.
- A major scales is based on a specific series of whole steps (W) and half steps (h).
 - Note: A whole step (W) consists of two half steps.
 - Note: A half step is the distance between two adjacent keys on a keyboard.

Example:

The distance between these two keys is a half step.



The distance between these two keys is a whole step.

The following is an example of a major scale starting on C. The placement of whole steps (W) and half steps (h) are marked.

The image shows two staves of musical notation. The top staff is in treble clef and the bottom staff is in bass clef. Both staves show the C major scale: C4, D4, E4, F4, G4, A4, B4, C5. Below the treble staff, interval markings are placed between the notes: 'W' between C and D, 'W' between D and E, 'h' between E and F, 'W' between F and G, 'W' between G and A, 'W' between A and B, and 'h' between B and C. The 'W' markings between G and A, and between A and B, are underlined in red.

Major Scale Example

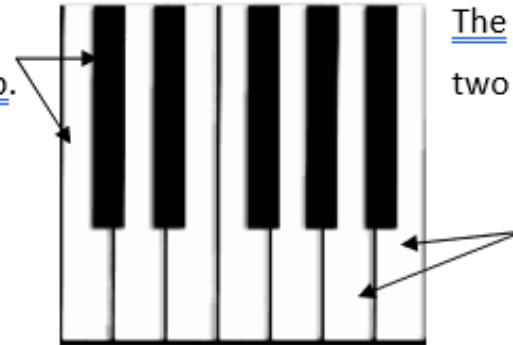
- The following is an example of a major scales starting on C.
- The placement of whole step (W) and half steps (h) are marked.

Chromatic Scales

- A chromatic scale is made up entirely of half steps (h).
- In music, a scales is a series of ascending (going up) and descending (going down) notes.

Example:

The distance between these two keys is a half step.



The distance between these two keys is a whole step.

The following is an example of a chromatic scale starting on C. The scale contains only half steps.

The image displays a chromatic scale starting on C, consisting of 12 notes: C, C#, D, D#, E, E#, F, F#, G, G#, A, A#. The scale is written on two staves: a treble clef staff for the first eight notes and a bass clef staff for the last four notes. Below the treble clef staff, seven 'h' characters are placed between the notes, indicating half steps. The 'h' characters are positioned between C and C#, C# and D, D and D#, D# and E, E and E#, E# and F, and F and F#. The 'h' characters between D# and E, E# and F, and F and F# are underlined in red.

Chromatic Scale Example

- The following is an example of a chromatic scales starting on C.
- The scale contains only half steps

Intervals

In music, the term **interval** refers to the distance between two notes.

Each interval has a specific name

In order to find an interval name, we must count all letter names involved between and including the letter names of the notes shown

Note: The name of the interval is a clue as to how many note names apart the notes are.

Interval Examples

- We can go higher by just continuing to count the letter names involved in each interval
- Example: An octave and a second is called a 9th

Unison

Involves 1 note name



(both pitches are C)

Second (2nd)

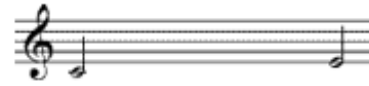
Involves 2 note names



(2 letter names – C, D)

Third (3rd)

Involves 3 note names



(3 letter names – C, D, E)

Fourth (4th)

Involves 4 note names



(4 letter names – C, D, E, F)

Fifth (5th)

Involves 5 note names



(5 letter names – C, D, E, F, G)

Sixth (6th)

Involves 6 note names



(6 letter names – C, D, E, F, G, A)

Seventh (7th)

Involves 7 note names



(7 letter names – C, D, E, F, G, A, B)

Octave (8th)


Involves 8 note names



(8 letter names – C, D, E, F, G, A, B, C)

Articulations


A clear understanding of articulations and how they are played is very important to create a good, uniformed ensemble sound



You can compare articulation to speaking to various groups of people

You would speak differently to your friends in friendly conversation than you would to a teacher

You would also speak differently to your parents than you would speak to your boss or future boss at a job interview.



When you articulate for music you must be very clear and understandable.

Articulation Chart
















✓ The chart shows articulations types

“” Written representations of the note

↶ Interrupted values of the note

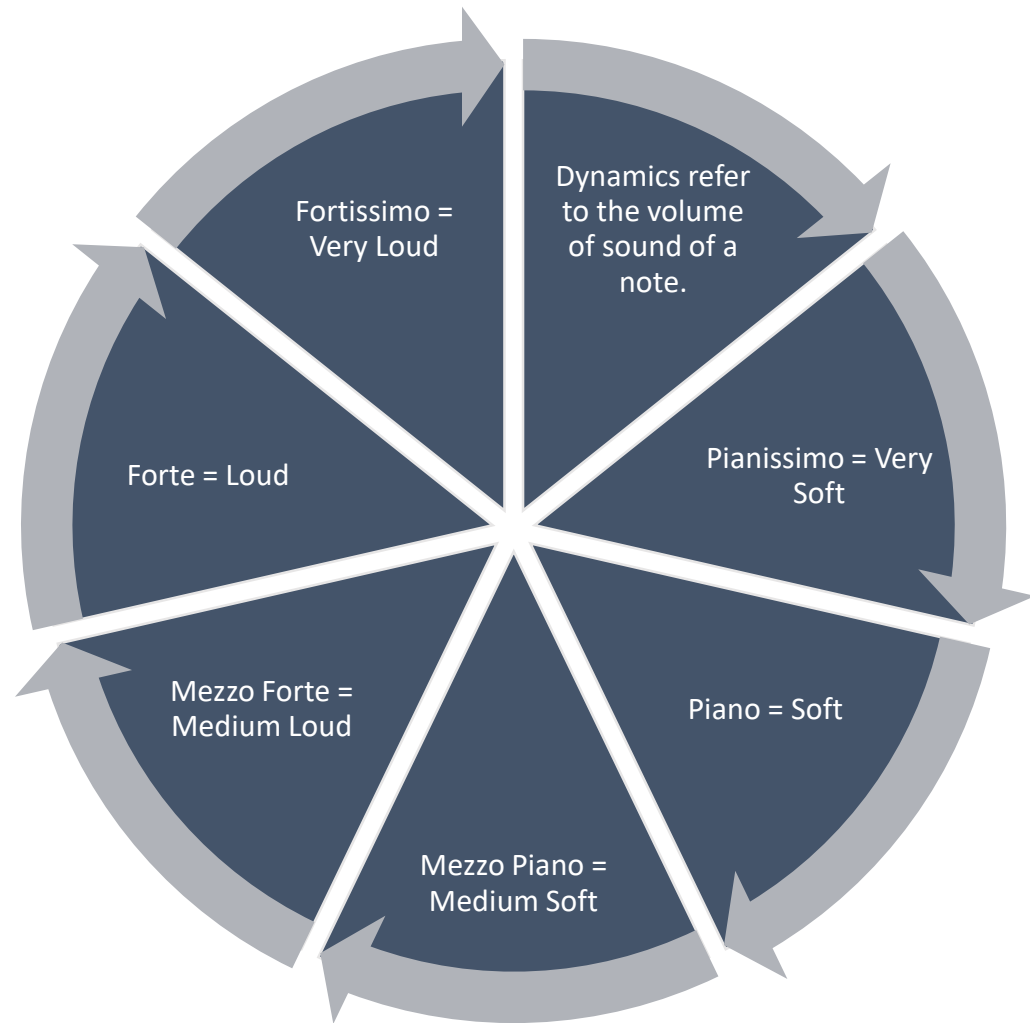
👁 Visual representations of the note length

🎵 Description of how each should be played

Name	Written	Interpreted Value	Visual Length of Note	Description
				Slightly Separated
Staccato				Lightly Separated (1/2 value of written note)
Accent				Heavy, Detached (3/4 value of written note)
Tenuto				Full length note (Full value of written note)
Marcato				Short, Intense (Accented hard, 1/2 value)

In the column for visual length of the note, each box is representative of 1 beat and the shaded area is the length the note should be played within that beat.

Dynamics



Dynamic Chart

- Think of dynamics are a volume control on a device.
- The lowest volume is 1
 - This would be 10% of maximum
- The highest volume is 10
 - This would be 100% of maximum

Common volumes:

- Level 3 (mp) 30%
- Level 5 (mf) 50%
- Level 7 (f) 70%

Symbol	Level of Sound
<i>FFF</i>	10
<i>FF</i>	9
<i>F+ (with an <)</i>	8
<i>F</i>	7
<i>MF+ (with an <)</i>	6
<i>MF</i>	5
<i>MP+ (with an <)</i>	4
<i>MP</i>	3
<i>P</i>	2
<i>PP</i>	1

Phrasing

A Phrase, in music, is a complete musical thought.

You can compare a phrase to a complete sentence with proper grammar and punctuation.

Multiple phrases could also be compared to a well written paragraph

Phrases are typically 4 to 8 measures long.

There are multiple phrases in a piece of music

In order for phrasing to be correct and to produce a complete musical thought we must **ONLY** breathe at the end of the phrase or at breath marks (‘) provided by the composer.

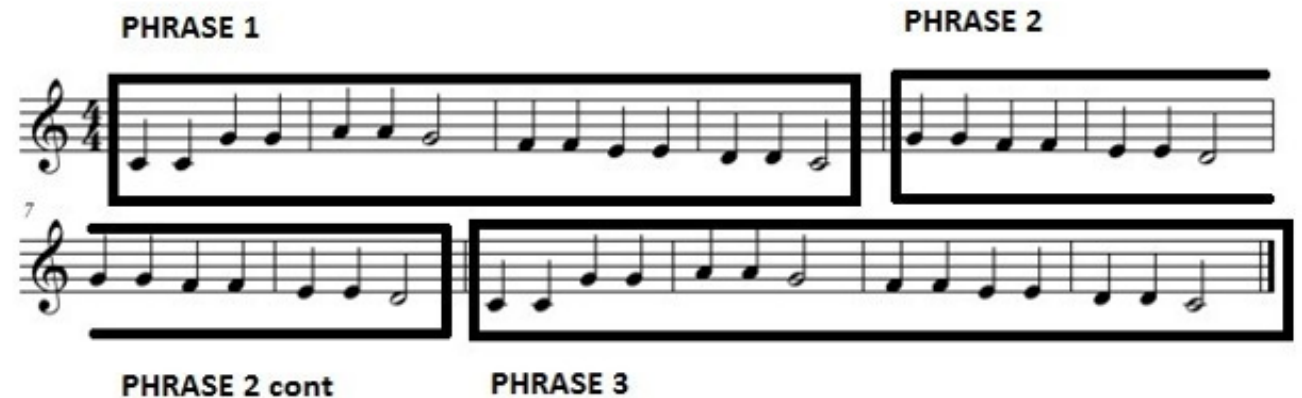
Phrasing Continued

- If we breathe in inappropriate places, our performance becomes segmented and choppy and does not make sense to the audience.
- To understand this concept, try singing Twinkle Twinkle Little Star at random spots that do not make sense to you normally and then compare that to the graphic you see on the next slide.

Look at the following musical selection (Twinkle, Twinkle Little Star):



This selection can be broken into 3 phrases, each 4 measures long.



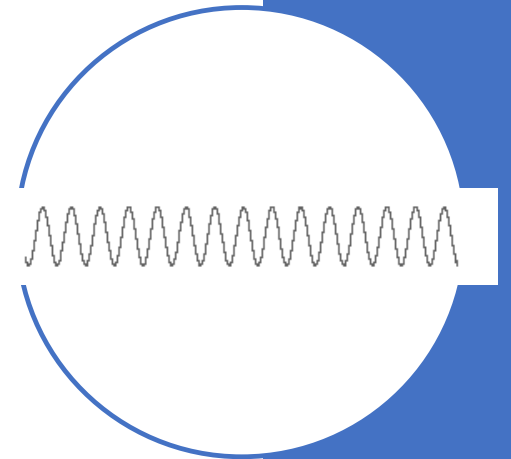


Practice Technique for Technical Patterns

- Quick Tips:
 - Always slow things down to a manageable tempo to practice
 - Take small chunks of music to work on (ex: 1-4 measure sections)
 - Don't be afraid to use a pencil and mark reminders for yourself in the music

Sound Waves

- Every **Pitch (note/sound)** we play produces a sound wave
- Each high and low point on the wave is a single variation.
- The number of vibrations per second depends on the pitch that we play and in what octave we play that pitch in.



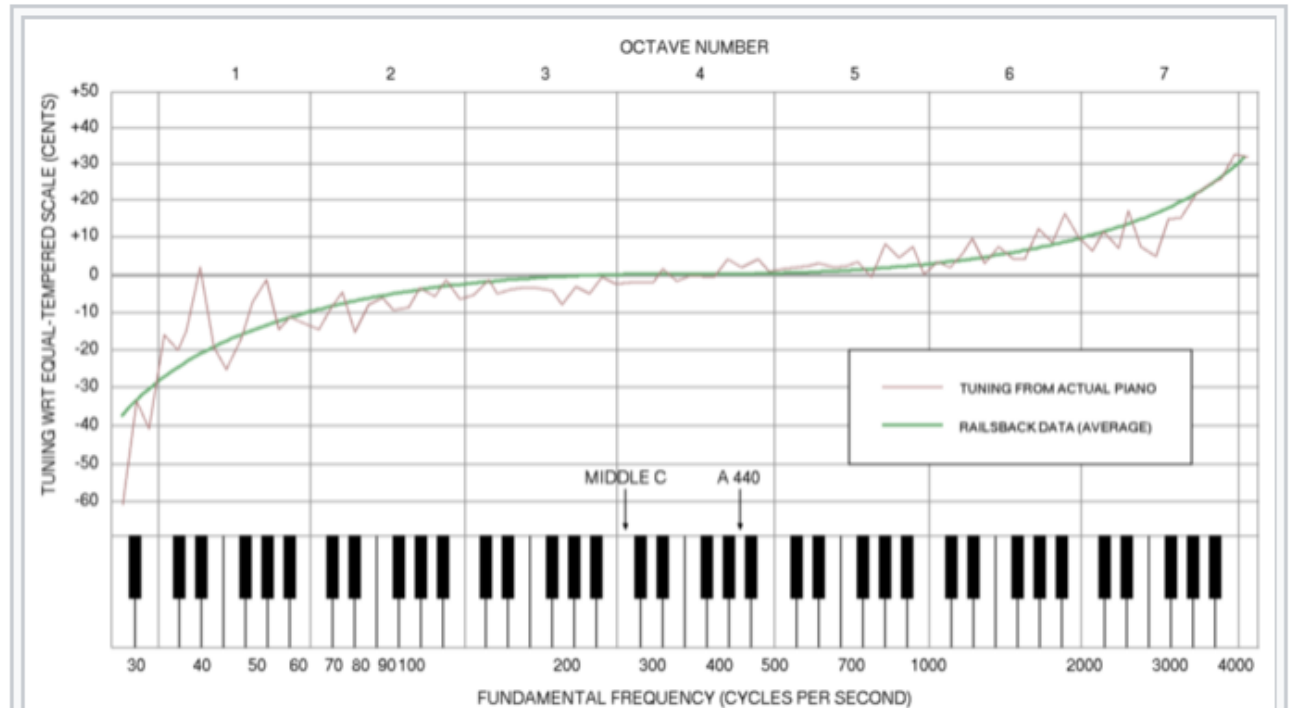
Sound Wave Examples

- If we play a second space A natural it creates 440 vibrations per second
- As the pitch gets higher, the vibrations increase.
- The same pitch an octave (8 notes) higher vibrates at 880 vibrations per second.
- As the pitch gets lower, the vibrations decrease.
- The same pitch one octave (8 notes) lower than the original example vibrates at 220 vibrations per second.



Tuning

- When we are playing “out of tune”, you will hear beats (pulsing) in the sound between the instruments.
 - The “zig zag” waves are the out of tune pitches.
- We must make adjustments to our instruments to lengthen or shorten it so that the vibrations will be begin to line up and we can play “in tune”



Ensemble Balance



In order for a band to sound its best, we must play with proper balance.

Note: instrument playing the melody are ALWAYS the most important and should be prominent.



There is a basic rule of listening and adjusting that all people should follow:

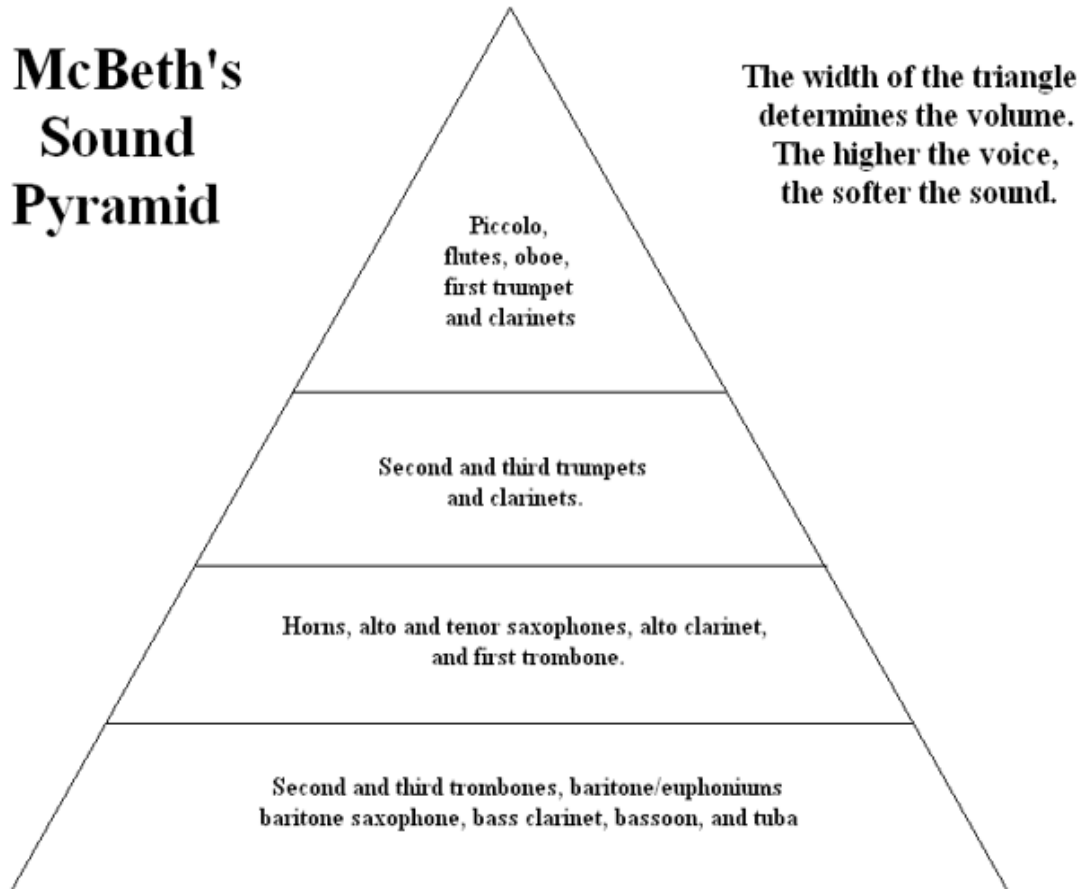
Self

Trio (the people immediately beside you)

Section (instrument section)

Ensemble (whole group)

McBeth's Sound Pyramid



- As you see the higher the pitch instruments have to make sure they play softer than the lower pitch instruments
- We always need more low instrument sounds than high

Pyramid of Balance

Intonation

If you hear yourself playing slightly off from another student in your section and all of the notes and rhythms are correct you may be “Out of Tune”



Quick Reference:

If you hear yourself as too high or your sound is above other instruments in your section you are playing sharp

- How to fix: Make the instrument tube longer by pulling out on a slide, barrel, etc

If you hear yourself as too low or your sound is below other instruments in your section you are playing flat

- How to fix: Make the instrument tube shorter by pushing in on a slide, barrel, etc

Pointers to adjust your instrument



As you play a Concert Bb with the band, listen to for beats/waves in the sound.

Make an adjustment (push in/pull out).
Listen to see if the beats speed up or slow down.



If the beats/waves are faster then you made the adjustment in the wrong direction



If the beats/waves are slower then you made the adjustment in the correct direction

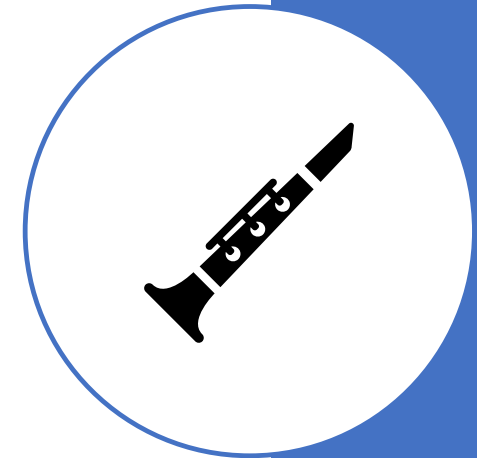
Pointers to adjust your embouchure

- When adjusting your sound to make sure it is in tune with the band there are a couple of things that you can do with your embouchure and tube length of your instrument
 - When playing your instrument: If you find yourself pinching/tightening your embouchure to eliminate the beats then your instrument is too long
 - You must shorten the length of the tube by pushing in the slide, barrel, mouthpiece, etc



Pointers to adjust your embouchure

- When adjusting your sound to make sure it is in tune with the band there are a couple of things that you can do with your embouchure and tube length of your instrument
 - When playing your instrument: If you find yourself relaxing/loosening your embouchure to eliminate the beats then your instrument is too short.
 - You must lengthen the tube by pulling out the slide, barrel, mouthpiece, etc



Common Music Terms

- **1st and 2nd Ending** – Play through the 1st ending bracket then play the repeated section of music, skipping the 1st ending bracket and playing the 2nd ending.
- **Accent** – Articulation that means to emphasize the note and play $\frac{3}{4}$ of the written value
- **Accelerando** – Gradually quicken the tempo
- **Accidental** – Any sharp, flat, or natural sign which appears in the music without being in the key signature
- **Allegro** – lively tempo
- **Andante** – Slow, walking tempo
- **Articulation** – How we tongue or not tongue a note
- **A Tempo** – Return to the original tempo from another current tempo
- **Bar Lines** – vertical lines that divide the staff into segments or smaller sections
- **Beat** – the pulse of the music
- **Breath Mark** – a symbol that tells you when to breath in a piece of music signified by a symbol that looks like a comma (‘)

Common Music Terms Continued

- **Clef** – indicates the position of the note names on a music staff (Treble Bass, etc)
- **Coda** – closing section of a piece of music
- **Consonance** – harmonious, pleasing to the ear
- **Crescendo** – Gradually get louder
- **Da Capo (D.C.)** - to the beginning
- **Dal Segno (D.S.)** - to the sign
- **Decrescendo** – Gradually get softer
- **Diminuendo** - Gradually get softer
- **Dissonance** – harsh, lack of harmony. Not pleasing to the ear
- **Dot** – Adds half the value of the note to itself
- **Double Bar** – indicates the end of a piece of music



Common Music Terms Continued

Duet – A composition (piece of music) with two different parts being played or sung at the same time

Dynamics – Tells us how loud or soft to play

Fermata – Hold the note or rest longer than normal

Fine – pronounced (fee-nay) – the end

Flat – makes the note sound lower and remains in effect for the entire measure

Forte – play loud

Fortissimo – play very loud

Harmony – two or more notes played together. Each Combination forms a chord.

Key Signature – tells us which notes to play as sharp or flat throughout a piece of music.

Ledger Lines – short lines above and below the staff. These lines extend the staff so that more notes can be played than just the notes on the staff.

Legato – play smoothly

Common Music Terms Continued

- **Marcato** – Articulation that means to emphasize the note and play for $\frac{1}{2}$ the written value
- **Measure** – the space between two bar lines
- **Melody** – the main theme or idea of the piece of music
- **Mezzo Forte** – play medium loud
- **Mezzo Piano** – play medium soft
- **Moderato** – Moderate tempo
- **Natural** – cancels a flat or sharp and remains in effect for the entire measure
- **Pianissimo** – play very soft
- **Piano** – play soft
- **Pick Up Notes** – One or more notes that come before the first full measure. The beats of Pick UP Notes are subtracted from the last measure. May also be called an anacrusis.
- **Rallentando** – Greatly slow the tempo

Common Music Terms Continued

- **Ritardando** – Gradually slow the tempo
- **Sharp** – makes the note sound higher and remains in effect for the entire measure
- **Slur** – Curved line connecting notes of different pitches. Indicates to the performer to not tongue the notes
- **Soli** – entire section or group plays
- **Solo** – one person plays
- **Staccato** – play a note for $\frac{1}{2}$ the written value
- **Staff** – a set of 5 lines and 4 spaces where notes and rests are placed
- **Tempo** – the speed of music
- **Tenuto** – Articulation that means to perform the note lightly and for full written value
- **Tie** – A curved line connecting notes of the same pitch and indicates to the performer to add the connected note values together and play as one unbroken note
- **Time Signature** – indicates how many beats per measure (top number) and how many beats the whole note receives (bottom note)

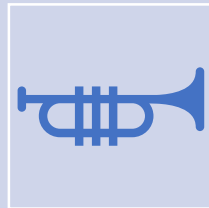
Common Music Terms Continued

- Tuning – the act of raising and lowering a pitch of an instrument to produce the correct tone of a note
- Tutti – everyone play

Common Band Instruments



The link below has information about several types of musical instruments



[Instrument Characteristics -
Beginning Band EPMS
Version.pptx](#)

Tuning & Pitch Tendency Charts

Click the link to see the
information about each
instrument and tendency
charts

[Pitch Tendency Charts](#)

Listening Lists

FLUTE	OBOE
James Galway	Heinz Holliger
Emmanuel Pahud	Nicholas Daniel
Jasmine Choi	
Matt Molloy	Andrés Orozco-Estrada
Dieter Flury	Eugene Isotov
Marina Piccinini	Alex Klein
Andrea Griminelli	Albrecht Mayer
Flute Quartet	Richard Woodhams
Fife & Drum Corps	Tingstad and Rumbel
Bass Flute	Beethoven Oboe Trio
Woodwind Quintet	Celine Moinet
Bach Brandenburg Concertos	Woodwind Quintet
Marine corps president's own	Bach Brandenburg Concertos
Stars and Stripes Forever	marine corps president's own
	Oboe Concerto (any)

- Source: YouTube

Listening Lists

<i>BASSOON</i>	<i>CLARINET</i>
Michelle Bowen Albrecht Holder Klaus Thunemann Milan Turkovic Per Hannevold peter schickele bassoon Stefan Schweigert Cameleon Bassoons Palm Tree Bassoon Quartet Contrabassoon Bassoon Ensemble The Breaking Winds Bassoon Quartet Woodwind Quintet Bach Brandenburg Concertos	Eddie Daniels Richard Stolzman Charles Neidich Sharon Kam Julian Bliss Martin Frost Daniel Ottensamer Ricardo Morales Klezmer Clarinet Rhapsody in Blue Sabine Meyer David Shifrin Woodwind Quintet Bach Brandenburg Concertos

- Source: YouTube

Listening Lists

<i>TRUMPET</i>	<i>HORN</i>	<i>TROMBONE</i>
Alison Balsom	Lin Yiang	Christian Lindberg
Tine Thing Helseth	Annamia Eriksson	Joseph Alessi
Wynton Marsalis	Canadian Brass	Szeged Trombone Ens.
Tony Glaussi	Empire Brass	Twilight Trombone Quartet
The Carnival of Venice	Horn Quartet	Canadian Brass
Bugler's Holiday	Steve Park	Empire Brass
Canadian Brass	Lars Michael Stransky	Bones Apart Trombone Ens
Empire Brass	Dennis Brain	Bonerama
Ryan Anthony	Frank Lloyd	Christopher Bill
Allen Vizzutti	Sarah Willis	Bill Watrous
Maurice Andre	Brass Quintet	Happy: Trombone loop
Brass Quintet	Bach Brandenburg	Lionel Fumeaux
Drum and Bugle Corps	Concertos	Brass Quintet
president's own band	brass of the royal	president's own band
Stars and Stripes Forever	concertgebouw	Stars and Stripes Forever
brass of the royal	American Overture for Band	brass of the royal
concertgebouw	Crown Imperial March	concertgebouw
Crown Imperial March		Dixieland

- Source: YouTube

Listening Lists

<i>EUPHONIUM</i>	<i>TUBA</i>	<i>PERCUSSION</i>
Anthony Caillait David Childs David Thornton Adam Frey Lynden Baglin Stephen Mead Brian Bowman Summit Brass Tuba/Euphonium Ensemble Down to the River to Pray tuba/Euph Carnival of Venice on Euphonium president's own band Stars and Stripes Forever brass of the royal concertgebouw Canadian Brass "Canon"	Oystein Baadsvik Richard White Tom McCaslin Benjamin Pierce Carol Jantsch Arnold Jacobs Gene Pokorny Canadian Brass Empire Brass Tuba/Euphonium Ensemble Sousaphone lightsaber battle Brass Quintet president's own band brass of the royal concertgebouw Down to the River	Evelyn Glennie Julie Spencer Jennifer Higdon Pete Lockett Doug Perkins Marimba Xylophone Timpani Drumline Battle Top Secret Drum Corps Percussion Ensemble president's own band Crown Imperial March Fife & Drum Corps Drum and Bugle Corps Scottish Pipe Band DCI Ginny Armstrong, Marimba

• Source: YouTube



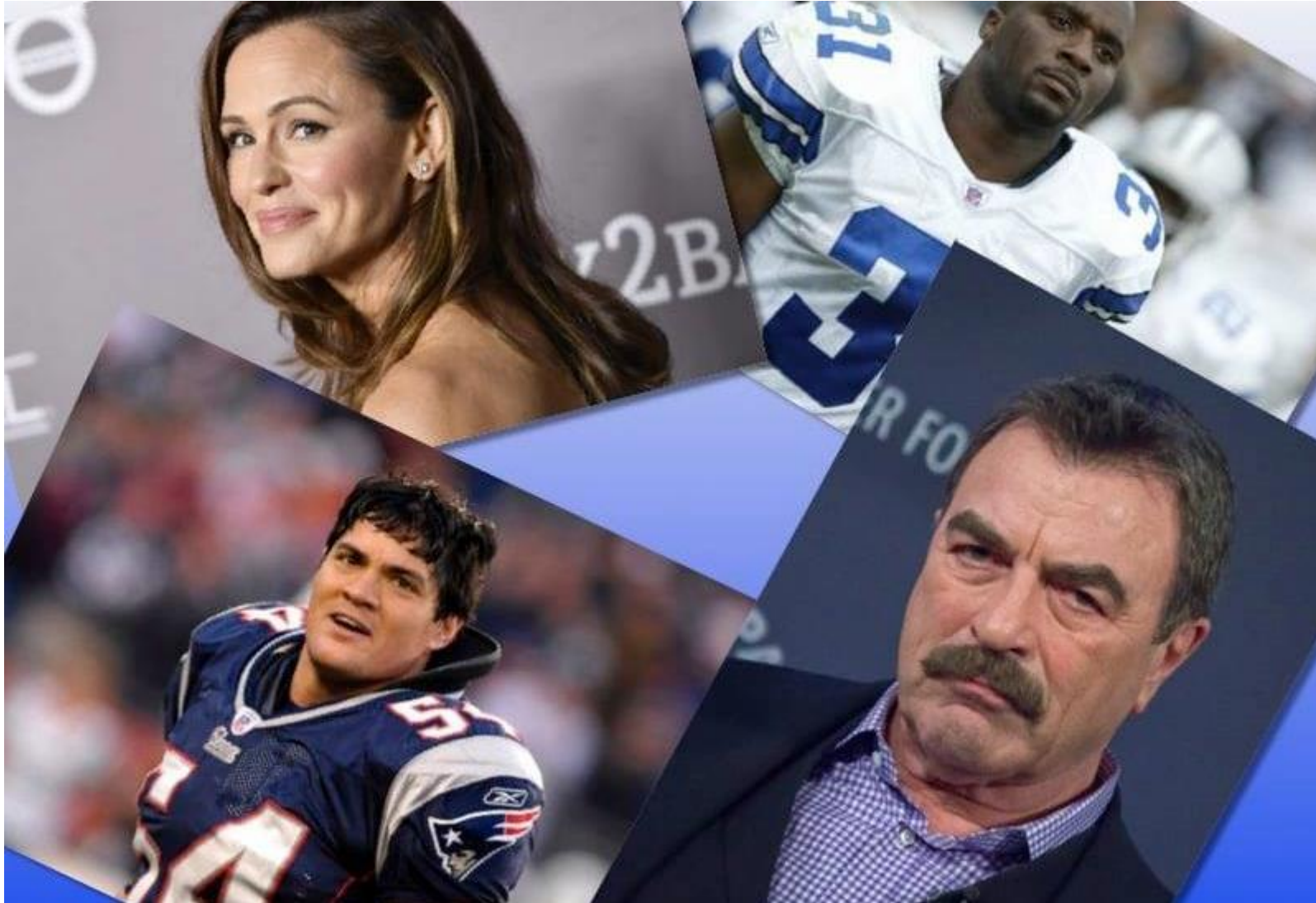
Famous
People
Who Play
an
Instrument

Flute



Famous
People
Who Play
an
Instrument

Clarinet



Famous
People Who
Play an
Instrument

Saxophone



Famous
People Who
Play an
Instrument

Bassoon



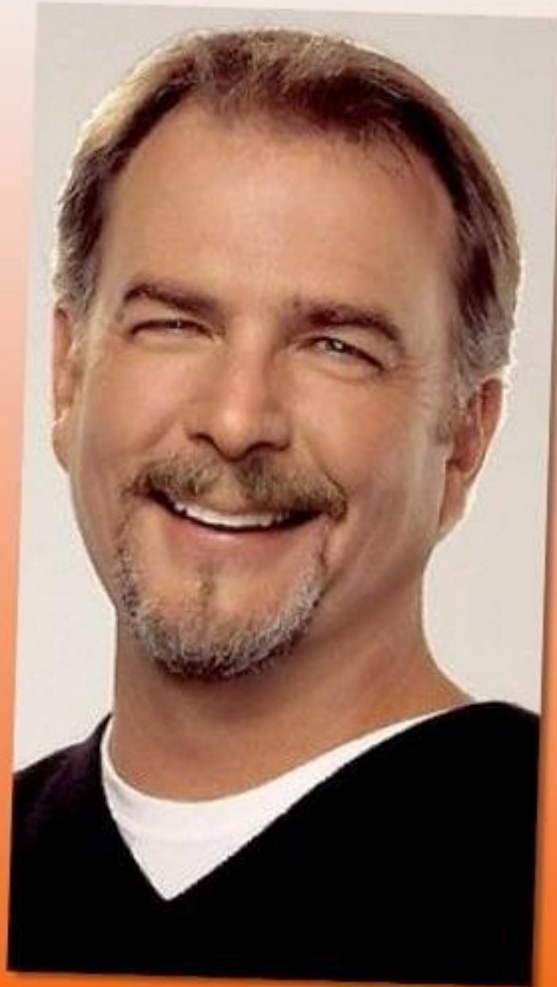
Famous
People Who
Play an
Instrument

Trumpet



Famous
People Who
Play an
Instrument

French Horn



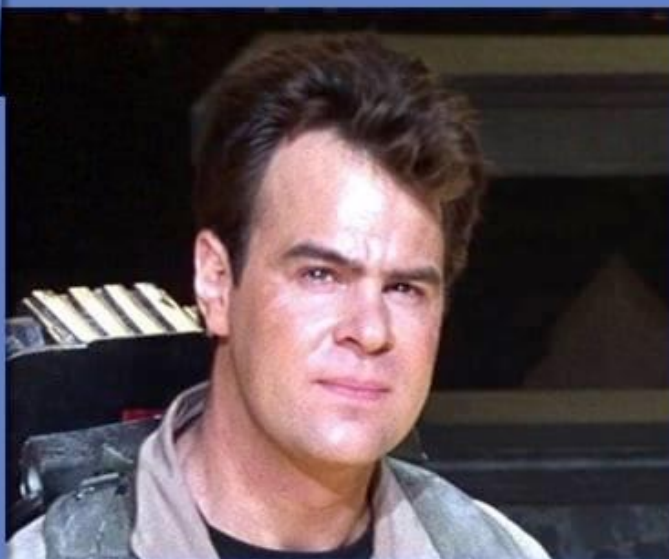
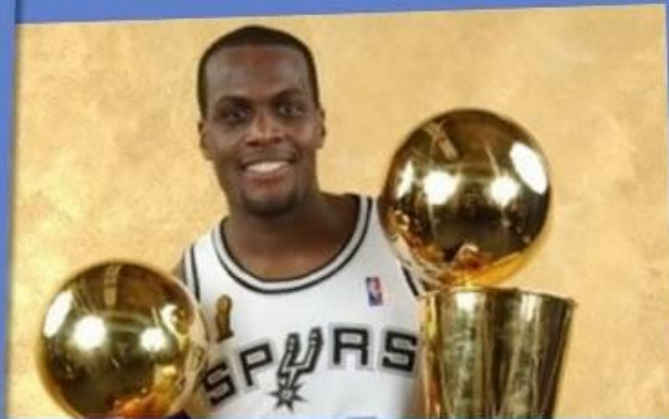
Famous
People Who
Play an
Instrument

Trombone



Famous
People Who
Play an
Instrument

Euphonium



Famous
People Who
Play an
Instrument

Tuba



Tommy Lee – Rock Drummer

Famous People Who Play an Instrument - Percussion

