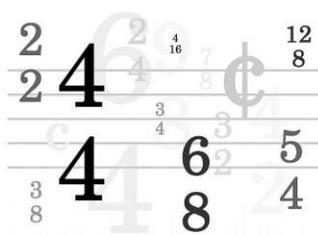


## Spring 2018 AHS Bands Exam Study Guide

### ➤ TIME SIGNATURE



**Top number** = represents the number of beats per measure  
**Bottom number** = represents what kind of note gets one beat

Example: 4 / 4 time; the top tells us there are 4-beats in each measure, the bottom number tells us that the “quarter note” (1 / 4) gets one beat

#### **SIMPLE** meter –vs- **COMPOUND** meter

If you are in Band you already “**DO**” both, the difference has to do with the “pulse of the count.”

**Simple meter:** any time signature that divides the beat into two equal parts.

Examples: 2 / 4, 2 / 2, 3 / 8, 3 / 4, 3 / 2, 4 / 8, 4 / 4, 4 / 2

- all of these time signatures have a beat divisible by 2

Simple meters will usually have a 2, 3, or 4 as the top number of the time signature

**Compound meter:** any time signature that divides the beat into three equal parts.

\***important:** Compound meters will have some kind of dotted note as its *primary pulse*; **the top number will ALWAYS be a 6, 9, or 12**, such as 6 / 8, 9 / 8, 12 / 8 (remember, a dotted quarter is divided into three 8<sup>th</sup> notes, etc.)

**Note:** Do not get 6 / 8 time confused as *simple* meter. While eighth note groupings could be 2+2+2, thus making it simple meter, that grouping is associated with the 3 / 4 time signature. 6 / 8 is traditionally grouped three 8ths plus three 8ths, or two dotted quarter notes, thus making it *compound* meter.

**Remember...** if there are no numbers and only the letter “C” appears as the time signature, it is an abbreviation for “common time”, which is the same as 4 / 4 time signature and is of course, simple meter.

### ➤ NOTE VALUES

Be able to “identify” basic notes / rests:



Assuming that the quarter note gets the beat (when 4 is the bottom number of the time signature):

1 whole-note = 4 beats, 1 half-note = 2 beats, 1 quarter-note = 1 beat, 1 eighth-note = ½ beat,

1 sixteenth-note = ¼ beat

**The “dot”** when placed next to a note gives adds ½ the value of the note it is next to, back to that note. An example would be dotted whole-note = 6 beats. Think about it; a regular whole-note gets 4 beats; the dot adds ½ the value of the whole note (2 beats) back to the whole note (2 + 4) - and you get 6 beats.

**Slur markings** connect several different pitches at the same time and indicate to NOT articulate.

**Ties** look like slurs except they connect same-pitched notes and alter the note value.

**EXAMPLE:**



## ➤ INTERVAL

An “*interval*” is the distance between two given notes. Music is measured in half-steps and whole-steps.

A *half-step* is the smallest interval, or the “shortest distance” between two notes. An example would be “C” to “C#”, or “E” to “Eb”, or “B” to “C.”

A *whole-step* is simply two half steps. An example would be “C” to “D” (C to C# is ½ step, C# to D is ½ step; two half-steps make one whole step).

**Sharp signs (#)** raise the pitch of a note by one-half step. This means a double sharp (.x.) raises a note 2 half-steps (or one whole-step); **Flat signs (b)** lower the pitch of a note by one-half-step. This means a double flat (bb) lowers a note two half-steps ( or one whole-step).

**Enharmonics** are two different notes with the SAME sound (in other words, *same sound different name*). For example: A#/Bb, D#/Eb, F#/Gb, etc

**Chromatic movement is by half-steps. The Chromatic Scale** “shows” all of the whole-step / half-steps in sequence. Of course you can begin the chromatic scale on any pitch. Notice that *enharmonics* are in ( ). ALSO notice that you have no extra note between B and C, and between E and F.

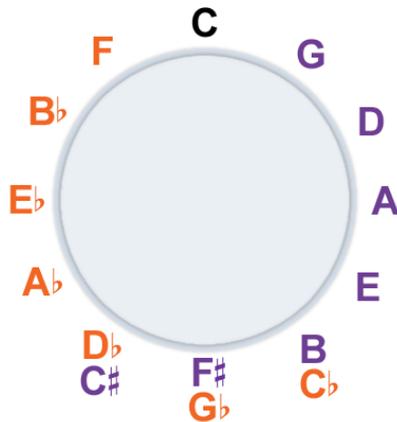
**EXAMPLE:**

C (C#,Db) D (D#,Eb) E F (F#/Gb) G (G#,Ab) A (A#,Bb) B C ....

## ➤ SCALES

Scales are 8 notes in stepwise order which begin and end on the same note. Scales are the foundation to all Western music as we know it. **Key signatures are created from major scales.**

The “**circle of 4ths**” (or **5ths**) is a great tool for learning scales and key signatures. In fact, all flats and sharps follow a simple pattern using the interval of 4ths (count your fingers in counter-clockwise order on the circle) or interval of 5ths (clockwise order on the circle). You can find plenty of examples of “the circle” on the internet. Try [www.circle-of-fifths.net](http://www.circle-of-fifths.net) This website includes step-by-step instructions on how this works - and even simple quizzes; a GREAT way to make sure you know this.



The order of the scales as well as the order of the flats and sharps are based on a simple intervallic relationship of 5ths (reading clockwise left to right) or 4ths (reading counter-clockwise right-to-left).

Here is a simple example:

(Remember, *USE YOUR HAND* and count, use the picture above)

Reading counter-clockwise (right-to-left) each letter represents the 4<sup>th</sup> note of the previous letter’s scale. “F” is the 4<sup>th</sup> note of the “C” scale; “Bb” is the 4<sup>th</sup> note of the “F” scale, etc. C-F-Bb-Eb-Ab-Db-Gb

To take this one step farther, let's begin where we left off with the note "Gb":

Continuing to read counter-clockwise, you'll notice that the pattern is the same; starting with "F#" (enharmonic for Gb) "B" is the 4<sup>th</sup> note of the "F#" scale, "E" is the 4<sup>th</sup> note of the "B" scale, etc. F#-B-E-A-D-G-C. We ended on the same note we started with, thus completing the "circle."

If we write this on one line it would look like this: C-F-Bb-Eb-Ab-Db-(Gb/F#)-B-E-A-D-G-C...

Note: the two notes in parenthesis (enharmonic) **REMEMBER - same sound, different name.**

C - F - Bb - Eb - Ab - Db - (Gb/F#) - B - E - A - D - G - C  
0 1 2 3 4 5 6 5 4 3 2 1 0

The numbers under each note tell us how many flats or sharps are in each scale.

### ➤ **KEY SIGNATURES**

The key signature tells the performer which major OR minor scale the music is based on. It determines what notes will be sharp or flat in the music. Key signatures come from the major scales. The KEY is determined by the number of flats or sharps listed in the key signature.

1. **The RULE for finding the name of the key when multiple flats are present** is to read the flats from left-to-right, then name the second-to-last flat. That flat is the name of the key.
  - For example, if you have Bb, Eb, and Ab in the key signature, the second to the last flat is Eb, so the name of the key is Eb

**NOTE: If there is only ONE flat in the key signature, it is always the key of "F."**  
**(No rule on this key, you must simply learn this one!)**

2. **The RULE for finding the name of the key when sharps are present** is to read the sharps from left-to-right, then go up one half-step from the last sharp, and name that note.
  - For example, if the key is F#, C#, and G#, the last sharp is G#. Now simply go one half-step higher than G#, which is "A" - and you have your answer - the key of "A"
3. **If there are no flats or sharps listed in the key signature, it is the key of "C"**  
(remember - all natural, "vitamin C" !!) **Learn it!**

**NOTE:** Likewise, the key of "C#" is ALL notes sharp (7 sharps), and the key of "Cb" is ALL notes flat (7 flats)

### ➤ **RELATIVE MINOR SCALE / KEY (need to know the "concept" for FALL exam)**

Finally, **minor scales** are directly "related" to major scales, hence the term "*relative* minor." What makes them related is that they "share" the key signature of the major key. To determine the relative minor scale of any major scale or key, simply count backwards **3 half-steps** from the major keynote (which is the first note of the major scale) - or if you know the scale, the 6<sup>th</sup> note of the scale is the name of the relative minor key.

An example would be: The relative minor scale for the F major scale is D minor: count backwards three half-steps from first note of the F scale: F to E, E to Eb, Eb to D - so "D" is the relative minor for F major.

The F major scale is spelled: F-G-A-Bb-C-D-E-F

The D minor scale "shares" the same key and is spelled: D-E-[F-G-A-Bb-C-D]

Put the [F major] and it's relative {D minor} together and it looks like this:

{D-E-[F-G-A-Bb-C-D]-E-F}      {Dm scale}      [F scale]

- **MUSIC HISTORICAL TIME PERIODS: (memorize name and years)**
- **Medieval: 1150-1400** – primitive instruments, vocal music, early beginnings of harmony; composers Machaut, Landini
- **Renaissance: 1400-1600** - music begins to develop through choral music; composers Frescobaldi, Palastrina
- **Baroque: 1600-1750**; organ and harpsichord (plucked instrument) common– instruments begin to develop; Bach, Vivaldi, Handel
- **Classical: 1750 – 1825**; piano forte (hammered instrument single strings); wind instruments developing – late Classical (1770) early beginnings of what we call bands, minimal use of percussion; Mozart, Beethoven, Haydn
- **Romantic: 1825 – 1900**; modern pianos (hammers, multiple strings on each pitch to compensate for just pitch), bands come of age, large orchestras, more percussion begins to be used with Orchestral works; Wagner, Brahms, Tchaikovsky; music begins to be accessible to the average class
- **20<sup>th</sup> Century / Modern / Contemporary: 1900 to present**; Bands and Full Orchestras become common (strings with winds and percussion); the Saxophone was invented; band composers such as Persichetti, Grainger, Hindemith, Bernstein Sousa, Fillmore, King... (long list); music accessible to all.

➤ **MUSICAL TERMS / DEFINITIONS YOU SHOULD KNOW**

- Accelerando – gradually faster
- Allegro - fast
- Animato – animated, with life
- Bass Clef –  sometimes called the “F” clef; the bassoon, trombone, euphonium, tuba, and some percussion read in this clef
- Cantabile – songlike, in singing style
- Chromatic – proceed or move in half-steps
- Con – with
- Con brio – with great energy
- Crescendo – gradually louder
- Da capo – to the top
- Dolce – sweetly
- Enharmonic – same sound, *different name*; example G# / Ab; C# / Db, etc...
- Fine’ – the end
- Forte - loud
- Fortissimo – very loud
- Largo – loud and slow
- Legato – smooth and connected
- L'istesso – same tempo as previous section
- Maestoso – majestic, with dignity
- Marcato – accented and separated
- Meno – less

- Mezzo Forte – medium or moderately loud
- Mode – a musical concept involving scale and melody type
- Modulation – move from one key to another
- Pesante – heavy or weighted
- Phrase – a musical sentence
- Presto – fast tempo
- Rallentando – to retard or gradually get slower
- Rubato – varied tempo; changing
- Senza – without
- Sforzando (sfz) – sudden emphasis or stressing of a note or chord
- Simile – in the same style
- Slur – connects two different notes
- Staccato – separated
- Syncopation – Generally off beat; disturbed rhythm; unpredictable beat pattern
- Tie – connects two of the same-pitch notes
- Treble Clef –  sometimes called the “G” clef; the flute, oboe, clarinet, saxophone, trumpet, and horn read in this clef (and some percussion)
- Tutti – ALL play
- Tonic – also referred to as the root or keynote; the first note of the scale
- Timbre – the tone or tone color

### **Tuning Terminology (“playing in tune 101”)**

- Intonation – in tune
- Sharp – pitch too high
- Flat – pitch too low
- Balance – related to low pitch vs. high pitch instruments; volume of one instrument *compared* to another. Remember McBeth’s “pyramid of sound” – the shape of the pyramid represents amount of volume required to create a balanced sound; lowest-sounding instruments are at the bottom of the pyramid (meaning they play with the most volume), and the highest-sounding instruments are at the top of the pyramid (meaning they play with the least-amount of volume).
- Blend – refers to “timbre” (color) of sound; the color created by *combining* different instrument groups is the blend; the “circle” represents volume of blend – no instrument sticks out over another, creating a specific “timbre”
- In “tone” – refers to playing with characteristic tone quality of a given instrument compared to a given standard (professional performers play with characteristic sound)
- “Equal” temperament – all notes tuned to A-440, no adjustment
- “Just” temperament – 3<sup>rd</sup> and 5<sup>th</sup> adjusted to the root according to major and minor keys to eliminate the rogue *sound waves* (wobbles) and sound “in tune”
- Major chord – comprised of the root, third and fifth scale step (arpeggio) played at the same time. To play in tune (just temperament), the 5<sup>th</sup> must be 2-cents sharp and the 3<sup>rd</sup> must be 13.7-cents flat.
- Minor chord – comprised of the root, flatted-third and fifth scale step, played at the same time. To play in tune (just temperament) the 5<sup>th</sup> must be 2-cents sharp and the 3<sup>rd</sup> must be 15.7-cents sharp.