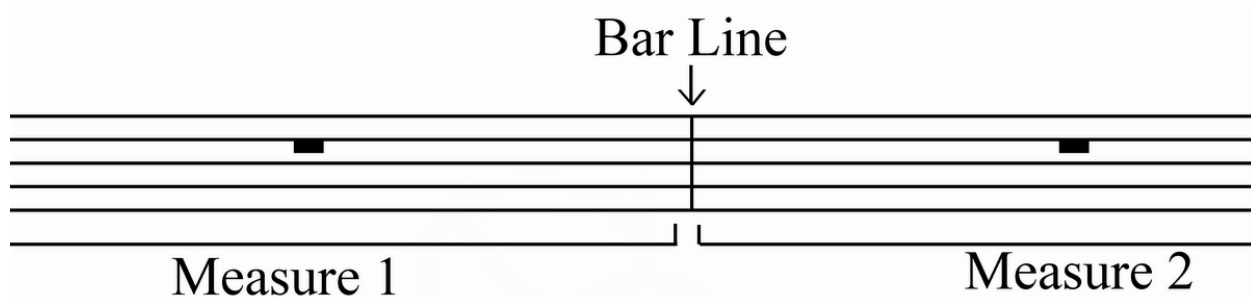



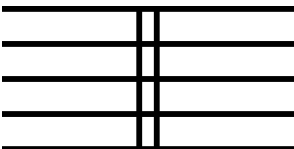

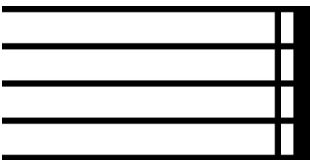
Basic Music Theory Study Guide

From Simple Studies: <https://simplestudies.edublogs.org> & @simplestudiesinc
on Instagram

Basics:

- In a **stave**, bar lines separate measures. Each measure has a select number of beats.
 - This number of beats is set by the time signature
- There are five lines in a stave and four spaces in between



Name	What it looks like	What it does
Single bar line		Separates and ends measures
Double bar line		Ends a section of the music
Repeat symbol		repeats everything between the two repeat symbols once
End bar line		ends the entire piece of music

Drawing Notes and Accidentals:





- **Notes:**

- Notes are ovular in shape; they're not circles
- Be sure to have proper spacing in between notes
- When drawing half notes, quarter notes, and eighth notes, there is a specific way to draw the stems.
 - Up until the 4th line, the stems of the notes go **upward** on the **right**
 - When the notes reach the 3rd line, the stems of the notes go **downward** on the **left**

- **Accidentals:**

- Accidentals go before the note on the staff
- The Accidental should be centered on the line or space it is on

Note and Rest Values:

Name	What it looks like	How many beats
Whole note/rest		4 beats
Half Note/rest		2 beats
Quarter Note/rest		1 beat
Eighth Note/rest		½ beat

16th Note/rest		¼ beat
----------------	---	--------

Dotted Notes:

- Dotted notes add half of the value of the note to a note
 - Dotted notes formula: (value of the note) + (value of the note * ½)
 - Example: a dotted whole note would be 6 beats (4 beats + 2 beats = 6 beats)

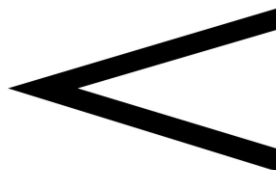


Dynamics:

- **Dynamics** measure how soft or loud a note is
- **Dynamic Markings:** show how soft or loud a piece should be played
 - **Piano:** soft (quiet)
 - **Forte:** loud
- The dynamic markings appear below in order from softest to loudest

Dynamic marking	Name	Meaning
<i>pp</i>	pianissimo	very soft
<i>p</i>	piano	soft
<i>mp</i>	mezzo piano	moderately soft
<i>mf</i>	mezzo forte	moderately loud
<i>f</i>	forte	loud
<i>ff</i>	fortissimo	very loud

- **Crescendo:** gradually getting louder



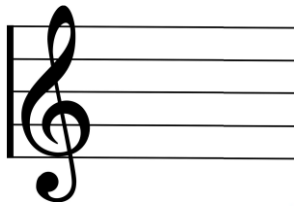
- **Decrescendo:** gradually getting softer



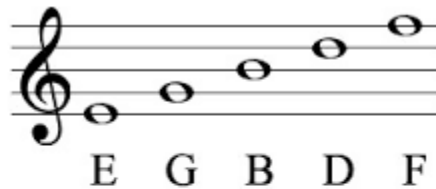
- Crescendos and Decrescendos will appear under a string of notes
- As the notes progress, they will either get gradually louder or gradually softer

Clefs:

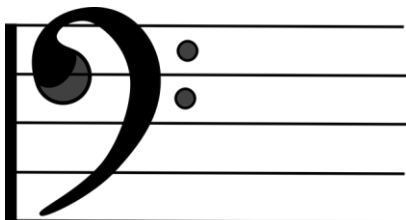
- Clefs show where a certain note is on the staff
- **Treble Clef (G clef)**- shows where the g note is



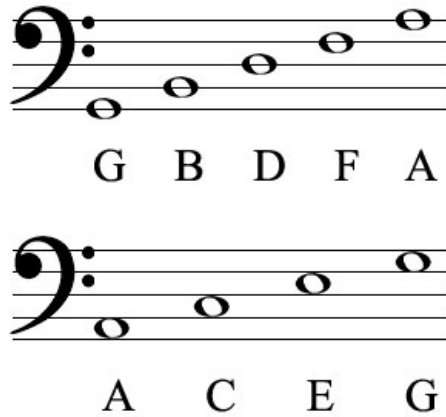
- Notes in a treble clef:



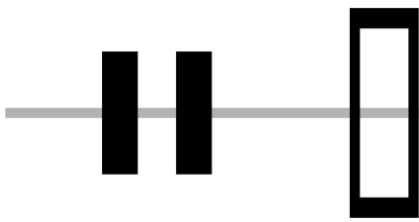
- You can remember the notes on the lines of the treble clef with the mnemonic device “Every Good Boy Does Fine”
- **Bass Clef (f clef)**- shows where the f note is



- Notes in a bass clef:



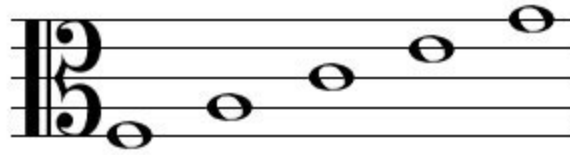
- **Rhythm Clef (neutral clef)**- no pitches, used for percussion



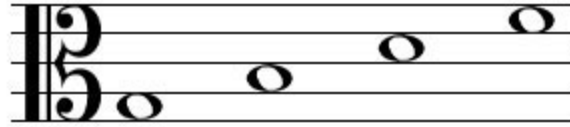
- **Alto clef (C clef)**- shows where c is



- Notes in a C clef:



F A C E G

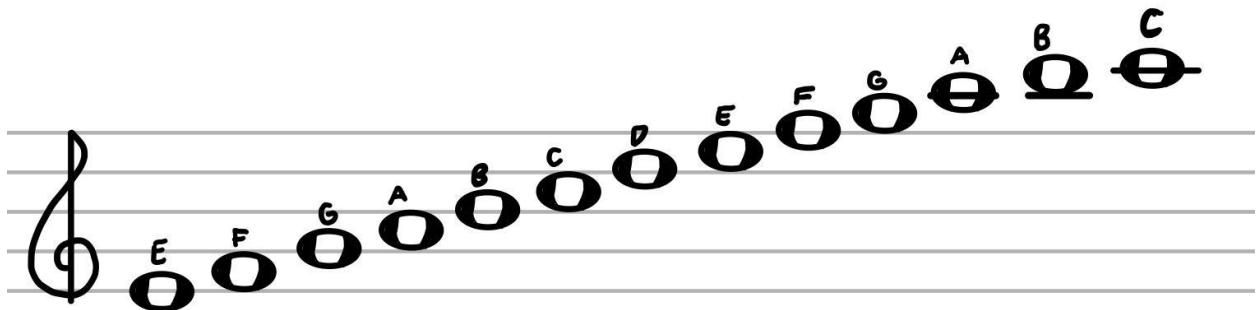


G B D F

- **Grand Staff**- two staves above one another; one a treble clef, one a bass clef, connected by a brace and a barline (usually used for piano scores)

Ledger Lines:

- **ledger lines**: extensions of the staff that go above or below the staff



Pitches:

- **Pitches** are measured by high and low, not soft and loud (that is dynamic).
- The musical alphabet goes as follows:
 - ABCDEFG
- A guitar is tuned as follows:
 - EADGBE
 - Mnemonic device: Eddie Ate Dynamite, Good Bye Eddie
- There are 7 pitch names in western music, but there are 12 possible pitches.

- **Half step:** smallest step in western music
- Whole step: two half steps
- In two places, there are half steps between notes. On a C-tuned instrument, half steps occur between B & C and E & F.
- C-tuned instruments: flute, piano, guitar, violin, cello, all string instruments

Accidentals:

- **Accidentals:** symbols used in music that alter the pitch of a note
- **Sharp (#)** - raises a note a half step higher
- **Flat (b)** - makes a note a half step lower
- **Natural (♮)** - in a key where a pitch is meant to be sharp or flat, a natural is added to remove the sharp or flat
 - Example: In the key of F, B is flat. If a composer does not want the B to be flat, they will add a natural.
- **Writing accidentals:** write it before the note, after the letter
 - C#
 - #J
- **Double Accidentals:**
 - Double Sharp: raises a note two half steps higher

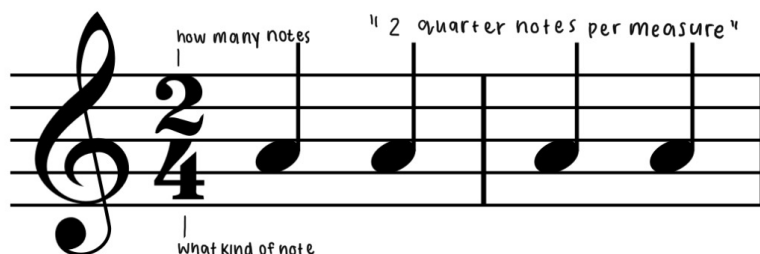


- Double Flat: lowers a note by two half steps



Time signatures (meter):

- **Time signatures** tell you how many beats fit in each measure (bar)



- **Note:** any combination of notes can be in each measure as long as they add up to the amount of beats per measure set by the time signature.
 - Example: In the time signature of 4/4, you can have one whole note, two half notes, 4 quarter notes, etc.

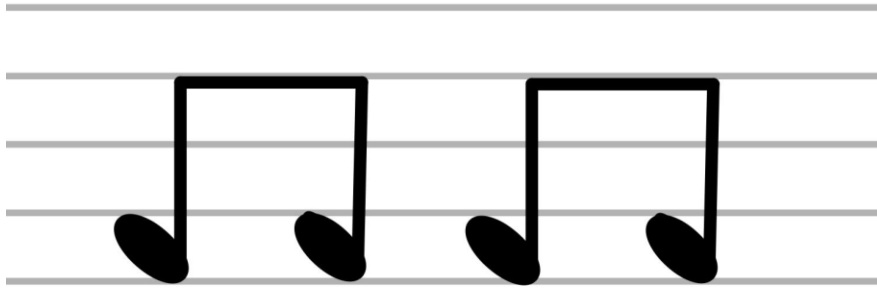
What the bottom numbers mean:

- 4: quarter notes
- 8: eighth notes
- 2: half notes
- 16: sixteenth notes

Compound meter:

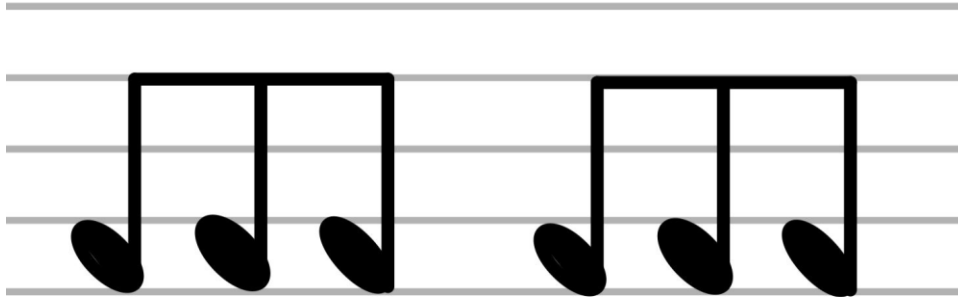
- Each time signature can be put into duple, triple or quadruple sections
- **Simple:** can be divided into two notes
- **Compound:** can be divided into 3 notes
- **Duple:** two sets of connected eighth notes
 - Two beats per measure
- **Triple:** three sets of connected eighth notes
 - Three beats per measure
- **Quadruple:** four sets of connected eighth notes
 - Four beats per measure
- All of the notes below are eighth notes with connected flags

Simple duple:



- Time signatures: 2/2, 2/4, 2/8

Compound Duple:



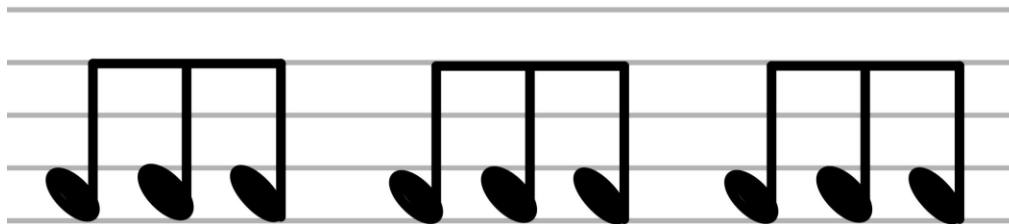
- Time signatures: 6/16, 6/8, 6/4

Simple triple:



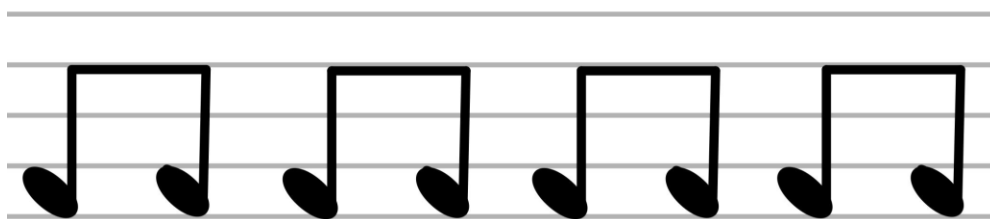
- Time signatures: 3/2, 3/4, 3/8

Compound triple:



- Time signatures: 9/4, 9/8, 9/2, 9/16

Simple quadruple:



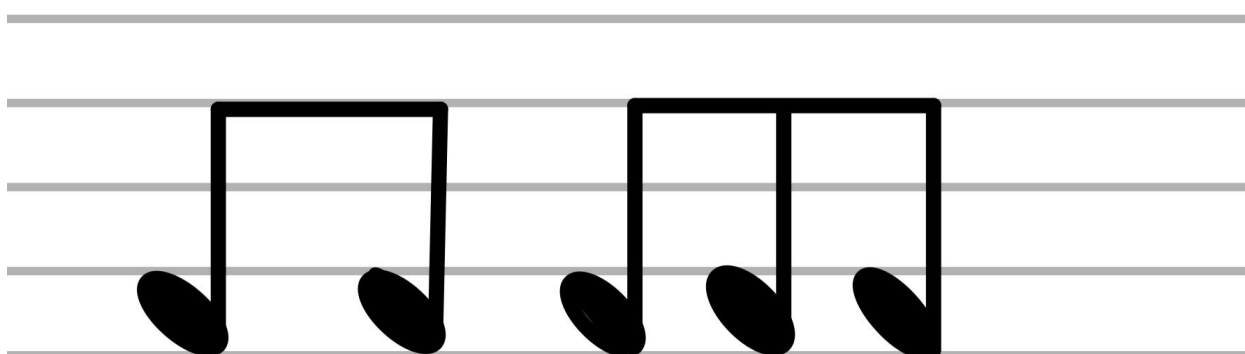
- Time signatures: 4/4, 4/2, 4/8

Compound quadruple:

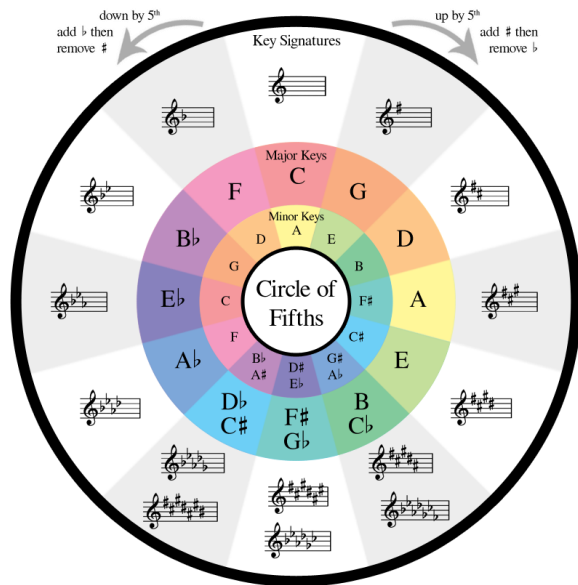


- Time signatures: 12/8, 12/16

Complex:



Circle of Fifths:



- The **circle of fifths** shows how many sharps or flats are in a key, as well as the relative minor to the major
- The circle of fifths also shows the key signature to the major key and the relative minor
- Add a sharp or remove a flat everytime you go clockwise on the circle of fifths
- Remove a sharp or add a flat everytime you go clockwise on the circle of fifths
- This is how the key signature for each key is formed
- **Key**: collection of pitches with a particular number of sharps or flats
- **Key signature**: shows what sharps or flats are in a particular key



- **Sharps in each key:**

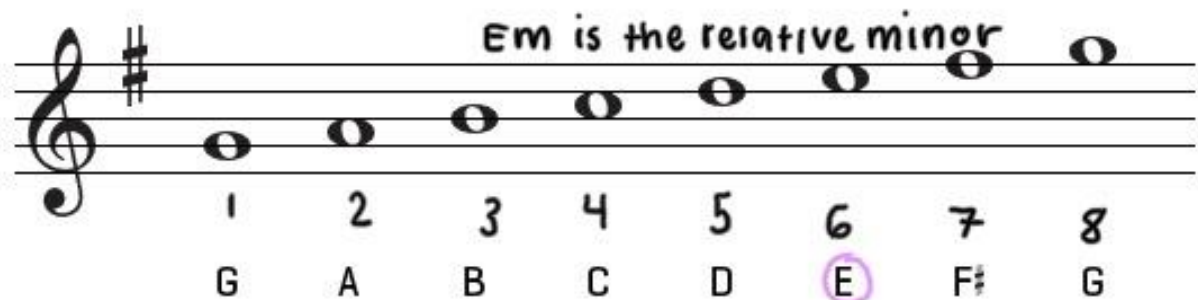
- C major: no sharps or flats
- G major: F#
- D major: F#, C#
- A major: F#, C#, G#
- E major: F#, C#, G#, D#
- B major: F#, C#, G#, D#, A#
- F# major: F#, C#, G#, D#, A#, E#
- C# major: F#, C#, G#, D#, A#, E#, B#

- **Flats in each key:**

- F major: Bb
- Bb major: Bb, Eb
- Eb major: Bb, Eb, Ab
- Ab major: Bb, Eb, Ab, Db
- Db major: Bb, Eb, Ab, Db, Gb
- Gb major: Bb, Eb, Ab, Db, Gb, Cb

- C \flat major: B \flat , E \flat , A \flat , D \flat , G \flat , C \flat , F \flat
- **Relative Minor:** minor key that shares the same key signature as its corresponding major
 - To find the relative minor, go to the 6th scale degree.
 - **What does this mean?:** Each key has a collection of pitches, to find the relative minor, go to the sixth one, considering the sharps or flats in the key.

G key signature and scale (treble clef)

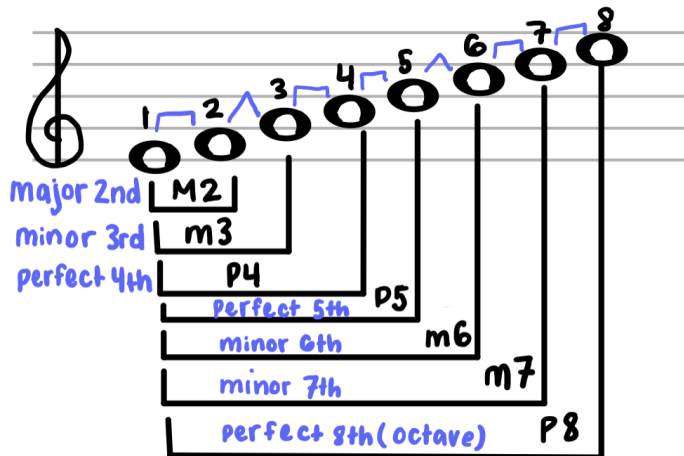


- Similarly, to find the corresponding major of a minor key, go to the 3rd scale degree.
- **Parallel minor:** the minor key of the same starting pitch (tonic)
 - **What does this mean?:** Parallel minor has the same letter as the major
 - To find the parallel minor: flat the 3rd, the 6th, and the 7th
 - To find the parallel major: sharp the 3rd, the 6th, and the 7th
- Ex: The **relative minor** of C is Am and the parallel minor is Cm
- **Order of sharps:** F C G D A E B
 - Mnemonic device: Fat Cats Go Down Alleys Eating Birds
- **Order of flats:** B E A D G C F
 - Mnemonic device: BEAD Go Catch Fish
- **Fifth:** an interval; the distance between two notes
- **Octave:** a note that is 8 notes away (same letter)
 - There are 12 half steps in an octave

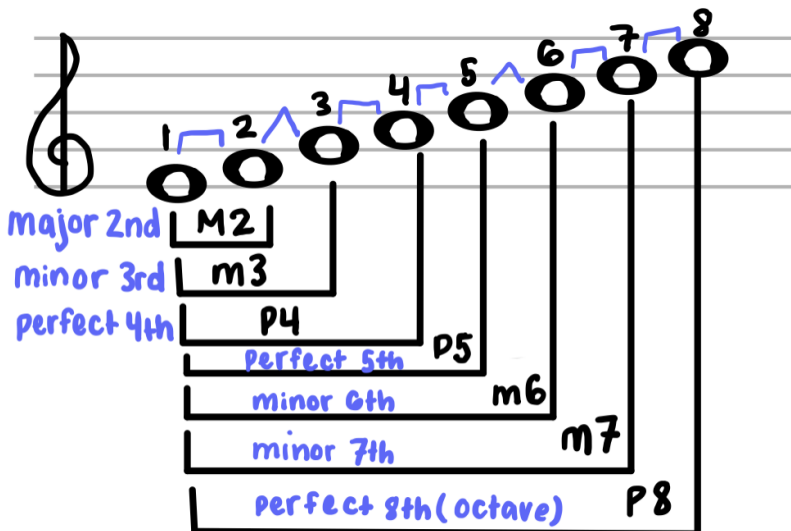
Intervals:

- **Interval:** the distance between two notes
 - Can be **major/minor** or **perfect/augmented/diminished**
- A major interval is a half step larger than a minor interval

Major Scale Intervals:

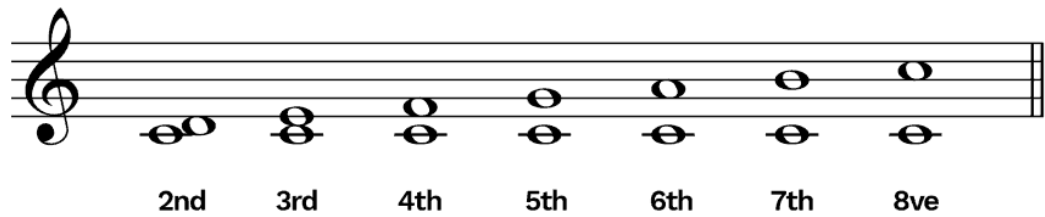


Minor Scale Intervals:



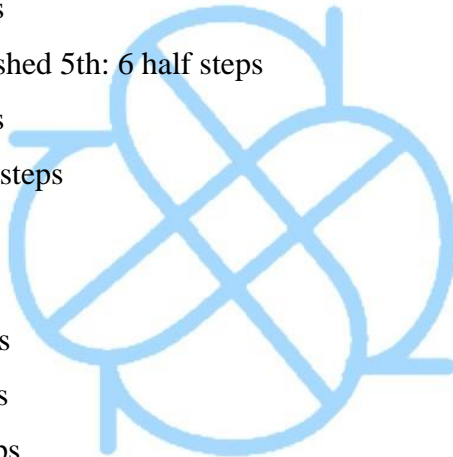
- **Augmented interval**- $\frac{1}{2}$ step higher than a perfect interval
- **Diminished interval**- $\frac{1}{2}$ smaller than a perfect interval

- **Smallest interval:** minor 2nd (one half step)



Half steps in each interval:

- Minor 2nd: 1 half step
- Major 2nd: 2 half steps
- Minor 3rd: 3 half steps
- Major 3rd: 4 half steps
- Diminished 4th: 4 half steps
- Perfect 4th: 5 half steps
- Augmented 4th/diminished 5th: 6 half steps
- Perfect 5th: 7 half steps
- Augmented 5th: 8 half steps
- Minor 6th: 8 half steps
- Major 6th: 9 half steps
- Minor 7th: 10 half steps
- Major 7th: 11 half steps
- Perfect 8th: 12 half steps



Why do the augmented 4th and diminished 5th share the same number of half steps?

- The diminished 5th is $\frac{1}{2}$ step lower than the perfect 5th (7 half steps)
- The augmented 4th is $\frac{1}{2}$ step higher than the perfect 4th (5 half steps)
- Both intervals come out to be 6 half steps
- This similarity is known as **enharmonic equivalent**

Triads:

- **Triad:** a 3 note chord made of thirds (major or minor)
- Triads are the root of all **chords**
- **Chords:** made up of several notes played at the same time
- The triad “equation”: 1-3-5

- **What does this mean?:** Every key has a collection of pitches and the triad is made of the 1st note, the 3rd note, and the 5th note.
- Example: In the key of F, the 1st note is F, the 3rd note is A, and the 5th note is C. This makes the triad of F FAC.

F major chord



F A C F maj

- There are 4 different types of triads:

- **Major**

- Leave 1-3-5 as is

- **Minor**

- Flat the 3

F minor chord



■ F Ab C F min

- **Diminished**

- Flat the 5 and the 3

F diminished chord



■ F Ab Cb F dim

- **Augmented**

- Sharp the 5

F augmented chord



■ F A C# F aug

Scales:

- **Scale:** a collection of pitches
- There are two half steps in every scale
- **Major scale equation:** WWHWWWH



- **Minor Scale equation:** WHWWHWW



- **What does this mean?:** The sharps and flats in a scale are according to the scale equation, meaning a sharp or a flat will need to be put in a certain place to make sure there is a half step or whole step between two notes.
 - Example: In the G major scale, the F is sharp because there needs to be a half step between F and G according to the major scale equation.
- There are two ways to find the minor scale:
 - Use the minor scale equation
 - Use the major 3rd (flat the 3rd, the 6th, and the 7th)
- **Scale Degrees:** each note in a scale has a specific name
 - Tonic: the first and last note of the scale (same letter as the key)

- Supertonic: 2nd note
- Mediant: 3rd note
- Subdominant: 4th note
- Dominant: 5th note
- Submediant: 6th note
- Leading tone: 7th note (half step below the tonic)
- The 1st note and 8th note are an **octave** (8 steps) apart
 - If you lower or raise any note by an octave, you will end up at the same note

Types of Scales:

- **Chromatic Scale:** scale made only up of half steps next to each other
 - 12 possible pitches



note names: C C# D D# E F F# G G# A A# B C

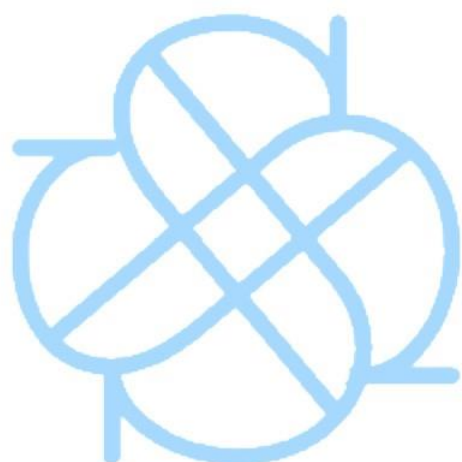
C B Bb A Ab G Gb F E Eb D Db C

The image shows two musical staves. The first staff represents the ascending chromatic scale, starting on C and moving up by half steps through C#, D, D#, E, F, F#, G, G#, A, A#, B, and ending on C. The second staff represents the descending chromatic scale, starting on C and moving down by half steps through B, Bb, A, Ab, G, Gb, F, E, Eb, D, Db, and ending on C. Each note is written as a quarter note.

- **Diatonic Scale:** made up of whole steps and half steps
 - One of each pitch: ABCDEFG
 - The Major and Minor scales are a type of diatonic scale
 - See minor and major scales for example

Other types of diatonic scales:

- Ionian: another term for the major scale
- Dorian: starts on the 2nd note of the major scale
- Phrygian: starts on the 3rd note of the major scale
- Lydian: starts on the 4th note of the major scale
- Mixolydian: starts on the 5th note
- Aeolian: Starts on the 6th note of the major scale



Sources:

Bar lines and measures:

https://bp3.blogger.com/_Tad4UOfdqXs/Ra9CN8L7i2I/AAAAAAAAAPs/C2C12NWf9W0/w1200-h630-p-k-no-nu/measures-1.gif

Single Bar lines:

<https://charbase.com/images/glyph/119040>

Double Bar lines:

<https://kids.kiddle.co/images/thumb/0/0f/Music-doublebar.svg/300px-Music-doublebar.svg.png>

Repeat symbol:

<https://i.pinimg.com/600x315/0f/99/06/0f99060a8bd8a32d0966b8c562f9db67.jpg>

End Bar line:

<https://upload.wikimedia.org/wikipedia/commons/thumb/d/d3/Music-endbar.svg/440px-Music-endbar.svg.png>

Half note:

<https://www.bethsnotesplus.com/wp-content/uploads/2012/10/half-note-icon-200.png>

Half rest:

[https://www.liveabout.com/thmb/0jZabvtCPFuW0hoq1QUFxDvjysA=/1110x1110/smart/filters:no_upscale\(\)/800px-Music-halfres-5baa986ac9e77c002c352acf.jpg](https://www.liveabout.com/thmb/0jZabvtCPFuW0hoq1QUFxDvjysA=/1110x1110/smart/filters:no_upscale()/800px-Music-halfres-5baa986ac9e77c002c352acf.jpg)

Whole note:

<https://www.iconspng.com/uploads/whole-note/whole-note.png>

Whole rest:

https://wpmedia.finalemusic.com/wp-content/uploads/wp_images/image%201.bmp

Quarter note:

[https://assets.onlinelabels.com/images/clip-art/jaschon/Quarter%20Note%20\(Stem%20Facing%20Up\)-92875.png](https://assets.onlinelabels.com/images/clip-art/jaschon/Quarter%20Note%20(Stem%20Facing%20Up)-92875.png)

Quarter rest:

https://musicadvisor.com/wp-content/uploads/2018/11/1024px-Music-quarterrest.svg_-1014x510.png

Eighth note:

<https://media.istockphoto.com/vectors/music-note-icon-black-minimalist-icon-isolated-on-white-background-vector-id866757280?k=6&m=866757280&s=612x612&w=0&h=b4v6UNQ-TWHS4E8IXIwOYYeqkJHvp6chXYGrP5RUzxk=>

Eighth rest:

https://musicadvisor.com/wp-content/uploads/2018/11/1024px-Music-eighthrest.svg_.png

Sixteenth note:

<https://content.instructables.com/ORIG/FX7/ANQ4/IYOQD65D/FX7ANQ4IYOQD65D.jpg?fit=bounds&frame=1&auto=webp&frame=1&height=300>

Sixteenth rest:

https://upload.wikimedia.org/wikipedia/commons/thumb/8/8c/16th_rest.svg/493px-16th_rest.svg.png

Dotted note:

https://www.pngkey.com/png/detail/55-551751_music-dotted-whole-note.png

Treble clef picture:

[https://www.liveabout.com/thmb/zpDIbDJxet6iSIuiAPmpTdcnueo=/1780x1096/filters:no_upscale\(\):max_bytes\(150000\):strip_icc\(\)/treble-304441_1280_-5c8721fbc9e77c00010c2285.jpg](https://www.liveabout.com/thmb/zpDIbDJxet6iSIuiAPmpTdcnueo=/1780x1096/filters:no_upscale():max_bytes(150000):strip_icc()/treble-304441_1280_-5c8721fbc9e77c00010c2285.jpg)

Notes in a treble clef:

<https://www.classicsforkids.com/images/notes-on-the-treble-clef.jpg>

Bass clef picture:

https://i0.wp.com/studionotesonline.com/wp-content/uploads/2020/04/bass-23998_340.png?fit=625%2C340&ssl=1

Notes in a bass clef:

<https://www.classicsforkids.com/images/notes-on-the-bass-clef.jpg>

Rhythm clef picture:

[https://www.liveabout.com/thmb/v2Kai7aB2YNu2Cv9_QlfXHbfMKo=/1920x0/filters:no_upscale\(\):max_bytes\(150000\):strip_icc\(\):format\(webp\)/Music-unpitchedclef2-5c8720cb46e0fb00015f8feb.jpg](https://www.liveabout.com/thmb/v2Kai7aB2YNu2Cv9_QlfXHbfMKo=/1920x0/filters:no_upscale():max_bytes(150000):strip_icc():format(webp)/Music-unpitchedclef2-5c8720cb46e0fb00015f8feb.jpg)

C clef picture:

[https://www.liveabout.com/thmb/1RUSPIA_naGvVRn4-RCVMmfakLk=/1197x0/filters:no_upscale\(\):max_bytes\(150000\):strip_icc\(\):format\(webp\)/CClef-5c871feb46e0fb0001cbf581.jpg](https://www.liveabout.com/thmb/1RUSPIA_naGvVRn4-RCVMmfakLk=/1197x0/filters:no_upscale():max_bytes(150000):strip_icc():format(webp)/CClef-5c871feb46e0fb0001cbf581.jpg)

Notes in a c clef:

<https://www.classicsforkids.com/images/notes-on-the-alto-clef.jpg>

Grand staff picture:

https://musicadvisor.com/wp-content/uploads/2018/11/256px-Grand_staff.svg_.png

2/4 meter picture picture: <https://39zsbo2fj4og6a79534grq31-wpengine.netdna-ssl.com/wp-content/uploads/24-Time-Ex-1-1024x338.png>

Circle of fifths:

<https://i.stack.imgur.com/BRiSC.png>

Key of G:

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Interval:

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Triad of F:

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F minor triad:

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F diminished triad:

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F augmented triad:

<https://www.basicmusictheory.com/img/f-augmented-chord-on-treble-clef.png>

Major Scale Equation:

<https://musictheorysite.com/assets/img/cmajorscale.gif>

Minor Scale Equation:

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G major scale:

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Diatonic Scale:

https://www.audiolabs-erlangen.de/resources/MIR/FMP/data/C5/FMP_C5_F09c.png

Crescendo:

<https://bloximages.newyork1.vip.townnews.com/yakimaherald.com/content/tncms/assets/v3/editorial/c/8e/c8e99a36-dd32-11e8-80e3-a73473bc5bba/5bd9e705c2e9c.image.jpg?crop=1743%2C980%2C0%2C103&resize=1120%2C630&order=crop%2Cresize>

Decrescendo:

<https://static.thenounproject.com/png/93783-200.png>

Double sharp:

<https://upload.wikimedia.org/wikipedia/commons/thumb/3/3a/DoubleSharp.svg/1200px-DoubleSharp.svg.png>

Double flat:

<https://upload.wikimedia.org/wikipedia/commons/thumb/2/23/Doubleflat.svg/681px-Doubleflat.svg.png>