

Music Theory Quick Reference Guide

Resource Type: Reference Sheet

Level: All Levels

Purpose: Quick lookup for essential music theory concepts

The Musical Alphabet

The musical alphabet consists of seven natural notes that repeat in octaves:

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

Between most of these notes are sharps (#) and flats (♭), creating a total of 12 unique pitches in Western music.

Intervals

An interval is the distance between two notes. Understanding intervals is fundamental to understanding harmony and melody.

Interval Name	Semitones	Example (from C)	Quality
Unison	0	C to C	Perfect
Minor 2nd	1	C to D \flat	Minor
Major 2nd	2	C to D	Major
Minor 3rd	3	C to E \flat	Minor
Major 3rd	4	C to E	Major
Perfect 4th	5	C to F	Perfect
Tritone	6	C to F \sharp / G \flat	Augmented/Diminished
Perfect 5th	7	C to G	Perfect
Minor 6th	8	C to A \flat	Minor
Major 6th	9	C to A	Major
Minor 7th	10	C to B \flat	Minor
Major 7th	11	C to B	Major
Octave	12	C to C	Perfect

Major Scales

A major scale follows this pattern of whole steps (W) and half steps (H):

W - W - H - W - W - W - H

All Major Scales

Key	Notes
C Major	C D E F G A B
G Major	G A B C D E F #
D Major	D E F # G A B C #
A Major	A B C # D E F # G #
E Major	E F # G # A B C # D #
B Major	B C # D # E F # G # A #
F # Major	F # G # A # B C # D # E #
F Major	F G A B b C D E
B b Major	B b C D E b F G A
E b Major	E b F G A b B b C D
A b Major	A b B b C D b E b F G
D b Major	D b E b F G b A b B b C
G b Major	G b A b B b C b D b E b F

Natural Minor Scales

A natural minor scale follows this pattern:

W - H - W - W - H - W - W

All Natural Minor Scales

Key	Notes
A Minor	A B C D E F G
E Minor	E F# G A B C D
B Minor	B C# D E F# G A
F# Minor	F# G# A B C# D E
C# Minor	C# D# E F# G# A B
G# Minor	G# A# B C# D# E F#
D Minor	D E F G A Bb C
G Minor	G A Bb C D Eb F
C Minor	C D Eb F G Ab Bb
F Minor	F G Ab Bb CD Eb
Bb Minor	Bb CD Eb FG Ab
Eb Minor	Eb FG Ab Bb Cb Db

Chord Construction

Triads

Triads are three-note chords built from stacking thirds.

Chord Type	Formula	Example ©	Sound
Major	1 - 3 - 5	C - E - G	Happy, stable
Minor	1 - b3 - 5	C - Eb - G	Sad, contemplative
Diminished	1 - b3 - b5	C - Eb - Gb	Tense, unstable
Augmented	1 - 3 - #5	C - E - G#	Mysterious, floating

Seventh Chords

Seventh chords add a fourth note to triads, creating richer harmonies.

Chord Type	Formula	Example ©	Common Use
Major 7th	1 - 3 - 5 - 7	C - E - G - B	Jazz, sophisticated pop
Dominant 7th	1 - 3 - 5 - \flat 7	C - E - G - B \flat	Blues, jazz, resolution
Minor 7th	1 - \flat 3 - 5 - \flat 7	C - E \flat - G - B \flat	Jazz, R&B, funk
Minor-Major 7th	1 - \flat 3 - 5 - 7	C - E \flat - G - B	Film scores, tension
Half-Diminished 7th	1 - \flat 3 - \flat 5 - \flat 7	C - E \flat - G \flat - B \flat	Jazz, as ii in minor
Diminished 7th	1 - \flat 3 - \flat 5 - \flat \flat 7	C - E \flat - G \flat - A	Transition, tension

Circle of Fifths

The Circle of Fifths shows the relationship between keys and helps with understanding key signatures.

Clockwise (Fifths): C → G → D → A → E → B → F# → C# → G# → D# → A# → F → C

Counter-clockwise (Fourths): C → F → B \flat → E \flat → A \flat → D \flat → G \flat → B → E → A → D → G → C

Key Signatures

Major Key	Relative Minor	Sharps/Flats
C Major	A Minor	None
G Major	E Minor	1 # (F #)
D Major	B Minor	2 # (F #, C #)
A Major	F # Minor	3 # (F #, C #, G #)
E Major	C # Minor	4 # (F #, C #, G #, D #)
B Major	G # Minor	5 # (F #, C #, G #, D #, A #)
F Major	D Minor	1 b (B b)
B b Major	G Minor	2 b (B b, E b)
E b Major	C Minor	3 b (B b, E b, A b)
A b Major	F Minor	4 b (B b, E b, A b, D b)
D b Major	B b Minor	5 b (B b, E b, A b, D b, G b)

Time Signatures

Time signatures indicate how many beats are in each measure and what note value gets one beat.

Time Signature	Beats per Measure	Beat Unit	Common Name	Feel
$\frac{4}{4}$	4	Quarter note	Common time	Standard, march-like
$\frac{3}{4}$	3	Quarter note	Waltz time	Waltz, flowing
$\frac{6}{8}$	6	Eighth note	Compound duple	Lilting, dance-like
$\frac{2}{4}$	2	Quarter note	March time	Quick march
$\frac{5}{4}$	5	Quarter note	Quintuple	Unusual, prog rock
$\frac{7}{8}$	7	Eighth note	Septuple	Complex, world music
$\frac{12}{8}$	12	Eighth note	Compound quadruple	Slow blues, ballad

Note Values and Rests

Note Name	Duration	Rest Symbol	Relative Value
Whole Note	4 beats	—	1
Half Note	2 beats	—	$\frac{1}{2}$
Quarter Note	1 beat	♪	$\frac{1}{4}$
Eighth Note	$\frac{1}{2}$ beat	♪	$\frac{1}{8}$
Sixteenth Note	$\frac{1}{4}$ beat	♪	$\frac{1}{16}$
Thirty-second Note	$\frac{1}{8}$ beat	♪	$\frac{1}{32}$

Common Musical Terms

Tempo Markings

Term	BPM Range	Meaning
Largo	40-60	Very slow, broad
Adagio	66-76	Slow, at ease
Andante	76-108	Walking pace
Moderato	108-120	Moderate
Allegro	120-168	Fast, lively
Presto	168-200	Very fast
Prestissimo	200+	Extremely fast

Dynamic Markings

Symbol	Term	Meaning
ppp	Pianississimo	Extremely soft
pp	Pianissimo	Very soft
p	Piano	Soft
mp	Mezzo-piano	Moderately soft
mf	Mezzo-forte	Moderately loud
f	Forte	Loud
ff	Fortissimo	Very loud
fff	Fortississimo	Extremely loud

Modes

Modes are variations of scales that create different melodic and harmonic colors.

Mode	Formula	Example ©	Character
Ionian	W-W-H-W-W-W-H	C D E F G A B	Major scale, happy
Dorian	W-H-W-W-W-H-W	C D E ♭ F G A B ♭	Minor with bright 6th
Phrygian	H-W-W-W-H-W-W	C D ♭ E ♭ F G A ♭ B ♭	Spanish, exotic
Lydian	W-W-W-H-W-W-H	C D E F # G A B	Dreamy, floating
Mixolydian	W-W-H-W-W-H-W	C D E F G A B ♭	Bluesy, rock
Aeolian	W-H-W-W-H-W-W	C D E ♭ F G A ♭ B ♭	Natural minor
Locrian	H-W-W-H-W-W-W	C D ♭ E ♭ F G ♭ A ♭ B ♭	Unstable, rare

Quick Practice Tips

Daily Fundamentals:

- Practice scales in all keys
- Work on interval recognition
- Build chords from scale degrees
- Analyze songs you love

Theory in Action:

- Identify chord progressions in your favorite songs
- Transpose melodies to different keys
- Write out scales and chords by hand
- Use theory to understand why music moves you

Related Resources:

- “Common Chord Progressions Practice Sheet”
- “Understanding Music Theory Fundamentals” (Article)
- “Developing Your Musical Ear” (Article)