

Music Theory Cheat Sheet

The beginner essentials on one page: notes, scales, intervals, chords, keys and rhythm.

1. Notes and steps

There are 12 notes that repeat: C, C#/Db, D, D#/Eb, E, F, F#/Gb, G, G#/Ab, A, A#/Bb, B. A half step is the next key up or down. A whole step is two half steps. E to F and B to C are half steps (no black key between them). The distance between a note and the next note with the same name is an octave (12 half steps). A sharp (#) raises a note by a half step, and a flat (b) lowers it by a half step.

2. Scales (W = whole step, H = half step)

Scale	Step pattern	Example
Major	W W H W W W H	C major: C D E F G A B C
Natural minor	W H W W H W W	A minor: A B C D E F G A
Major pentatonic	Major scale without the 4th and 7th	C D E G A
Minor pentatonic	Natural minor without the 2nd and 6th	A C D E G

3. Intervals (counted in half steps)

Interval	Half steps	Example from C	Interval	Half steps	Example from C
Minor 2nd	1	C to Db	Perfect 5th	7	C to G
Major 2nd	2	C to D	Minor 6th	8	C to Ab
Minor 3rd	3	C to Eb	Major 6th	9	C to A
Major 3rd	4	C to E	Minor 7th	10	C to Bb
Perfect 4th	5	C to F	Major 7th	11	C to B
Tritone	6	C to F#	Octave	12	C to C

4. Triads (three-note chords)

Chord	Built from	Example on C	Sound
Major	Root, major 3rd, perfect 5th	C E G	Bright, settled
Minor	Root, minor 3rd, perfect 5th	C Eb G	Darker, serious
Diminished	Root, minor 3rd, diminished 5th	C Eb Gb	Tense, unstable
Augmented	Root, major 3rd, augmented 5th	C E G#	Unresolved, dreamy

5. Chords in a major key

Degree	I	ii	iii	IV	V	vi	vii°
C major	C	Dm	Em	F	G	Am	Bdim
G major	G	Am	Bm	C	D	Em	F#dim
D major	D	Em	F#m	G	A	Bm	C#dim
F major	F	Gm	Am	Bb	C	Dm	Edim

Common progression: I V vi IV (in C: C G Am F). The I chord is home, and V pulls strongly back to I.

6. Key signatures (major key / relative minor)

Sharps	Key	Flats	Key
0	C major / A minor	1 flat	F major / D minor
1 sharp	G major / E minor	2 flats	Bb major / G minor
2 sharps	D major / B minor	3 flats	Eb major / C minor
3 sharps	A major / F# minor	4 flats	Ab major / F minor
4 sharps	E major / C# minor	5 flats	Db major / Bb minor

Shortcut: with sharps, the key is a half step above the last sharp. With flats, the second-to-last flat names the key (one flat = F major).

7. Rhythm basics

Beat = steady pulse. **Tempo** = speed in beats per minute (BPM). **Time signature** = beats per measure over the note that gets one beat. In 4/4: whole note = 4 beats, half note = 2, quarter note = 1, eighth note = 1/2. In 3/4 there are three quarter-note beats per measure (waltz feel).

Music Theory Worksheet: Beginner Level

Name: _____ Date: _____ Answers are on page 3.

A. Write out the major scale (use the pattern W W H W W W H)

1. G major: _____

2. F major: _____

B. Name each interval (for example: major 3rd, perfect 5th)

	Notes	Interval
3.	C up to E	
4.	C up to G	
5.	C up to F	
6.	C up to Eb	
7.	C up to D	
8.	C up to the next C	

C. Build each triad (write the three notes)

	Chord	Notes
9.	D major	
10.	A minor	
11.	E minor	
12.	F major	

D. Key signatures (name the major key and its relative minor)

	Key signature	Major key	Relative minor
13.	2 sharps (F# and C#)		
14.	1 flat (Bb)		
15.	3 sharps (F#, C# and G#)		

E. Chords in a key

16. In C major, the IV chord is _____, the V chord is _____ and the vi chord is _____.

17. In G major, the V chord is _____ and the vi chord is _____.

F. Rhythm

18. How many quarter notes equal one whole note? _____

19. In 4/4, a half note plus a quarter note plus two eighth notes adds up to how many beats? _____

20. How many beats are in each measure of 3/4? _____

Worksheet Answers

Check your work, then replay each answer on a piano or the free tools at solfattheory.site.

Q	Answer	Q	Answer
1	G A B C D E F# G	11	E G B
2	F G A Bb C D E F	12	F A C
3	Major 3rd	13	D major / B minor
4	Perfect 5th	14	F major / D minor
5	Perfect 4th	15	A major / F# minor
6	Minor 3rd	16	F, G, Am
7	Major 2nd	17	D, Em
8	Octave	18	4
9	D F# A	19	4 beats (2 + 1 + 1/2 + 1/2)
10	A C E	20	3

If you missed some: scales and intervals are explained at solfattheory.site/articles/intervals-explained.html, chords and keys in solfattheory.site/articles/music-theory-for-beginners.html, and finding a song's key in solfattheory.site/articles/how-to-find-the-key-of-a-song.html.