Material on these three pages is by Stephen Lias, Stephen F. Austin State University
Found at www.tsmp.org (the Texas School Music Project website)

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MUSIC THEORY QUICK FACTS SHEET

PART-WRITING RULES

1. Allow all tendency tones to resolve correctly.
2. Do not create parallel octaves, fifths, or unisons (by parallel or contrary motion).
3. If it is possible to keep a note, do so, if not, move each part by the smallest possible interval. Avoid leaping by large, or difficult intervals – especially augmented intervals.
4. No more than an octave between SA and AT.
5. No crossed voicings or overlapping of voices.
6. When there is a choice of which chord member to double, use the most stable tone present. Usually, this is the root, followed by the fifth. Never double a tendency tone as this will force you to break rule 1 or 2.
7. Never omit any note of a triad or seventh chord except the fifth – and only omit the fifth when you must do so in order to follow rule 1.

These principles assume that you have written with the correct ranges and that all the chords actually contain the notes you say they do.

NON-CHORD TONES

Type	Approached By:	Left By:
Neighbor Tone	step	step in opposite direction
Passing Tone	step	step in the same direction
Appoggiatura	leap	step in the opposite direction
Escape Tone	step	leap in the opposite direction
Suspension	same note	step down
Retardation	same note	step up
Anticipation	step or leap	same note
Pedal Tone	same note	same note

TENDENCY TONES

- The leading tone in a V or vii° chord resolves UP by step to the tonic pitch when going to I or vi.
- The 7th of any chord resolves DOWN by step.
- The root of a Neapolitan chord (lowered 2nd scale degree) resolves DOWN by diminished 3rd to the leading tone of a V chord.
- The pitches forming the augmented 6th interval in any of the augmented sixth chords resolve outward by halfstep in both directions to the dominant pitch.
- Any pitch that is altered usually resolves in the direction of its alteration.

CADENCE TYPES

Cadence Name	Identifying Characteristics
PAC (Perfect Authentic Cadence)	V or V⁷ moving to I. Both chords in root position. Soprano on root of I chord.
IAC (Imperfect Authentic Cadence)	V or V⁷ moving to I, but with either an inverted chord, or the soprano not finishing on the tonic.
HC (Half Cadence)	A cadence that ends on a V chord. The V chord can be approached from a number of other chords (I, ii, IV, V/V, etc.)
PC (Plagal Cadence)	IV moving to I. Also known as "church" cadence. Named for the "Amen" commonly used at the end of hymns.
DC (Deceptive Cadence)	A cadence that creates the expectation of going to I, but substitutes another chord instead. Common substitutes for I are: vi, IV⁶, ♭VI, and occasionally IV or V/ii.

INVERSION SYMBOLS

	Root Position	1st Inv.	2nd Inv.	3rd Inv.
Triad	*none*	6	6 4	*none*
Seventh Chord	7	6 5	4 3	4 2

DIATONIC CHORD QUALITIES

Major	I	ii	iii	IV	V	vi	vii°
Minor	i	ii°	III	iv	V (v)	VI	vii° (VII)

** In **minor** the V and the vii° require an accidental to raise the leading tone.*

NUMBER OF HALFSTEPS IN SIMPLE INTERVALS

	Dim	Min	Maj	Aug
2nd	0	1	2	3
3rd	2	3	4	5
6th	7	8	9	10
7th	9	10	11	12

	Dim	Per	Aug
4th	4	5	6
5th	6	7	8
8th	11	12	13

FUNCTIONAL DIATONIC CHORD PROGRESSIONS

Rule of Thumb	Diagram of Common Functional Progressions

Root movement by:	Typical Direction
2nd	Ascending
3rd	Descending
5th	Descending

CHROMATIC CHORDS

Type	Notation	Distinguishing Features
Secondary Chord	V/ii vii°⁷/V	Any dominant-functioning chromatic chord that leads (by falling 5th or rising halfstep root movement) to a diatonic pitch. The chord on the top can be any of the following (in any inversion): V, V^7, $vii°$, $vii°^7$, $vii°^7$. The chord on the bottom can be any diatonic or borrowed chord that is major or minor.
Borrowed Chord	see borrowed chord chart	Any chromatic triad or seventh chord that is "borrowed" from the parallel minor (or the parallel major if the original key is minor). All notes in the chord must exist in the parallel key to qualify.
Neapolitan 6th Chord	N^6	A major triad in first inversion with a lowered 2nd scale degree as its root. This chord functions as a pre-dominant chord, usually coming before a V or a I^6_4.
Augmented 6th Chord	It^{+6} Fr^{+6} Ger^{+6}	Any of three specific chords which contain the interval of an augmented sixth resolving outward by half-steps in both directions to the dominant pitch. See chart.

AUGMENTED 6TH CHORDS

	Notes Present	Example (Key of C)
It^{+6}	Three pitches only. The characteristic augmented sixth interval, and the tonic pitch.	
Fr^{+6}	The characteristic augmented sixth interval, the tonic pitch, and the second scale degree.	
Ger^{+6}	The characteristic augmented sixth interval, the tonic pitch, and the lowered third (or the regular third in minor).	

The "characteristic augmented sixth interval" consists of two pitches, an augmented sixth apart, that resolve outward by halfsteps to the dominant pitch.

BORROWED CHORDS
(Mode Mixture)

Triads – Major Key

Diatonic Chord	I	ii	iii	IV	V	vi	vii°
Borrowed Chord	i	ii°	♭III	iv	v	♭VI	♭VII

The only triads commonly borrowed in minor keys are the I and the IV

Seventh Chords – Major Key

Diatonic Chord	I^{M7}	ii^7	iii^7	IV^{M7}	V^7	vi^7	$vii^{ø7}$
Borrowed Chord	i^7	$ii^{ø7}$	$♭III^{M7}$	iv^7	v^7	$♭VI^{M7}$	$♭VII^7$ $vii°^7$

SCALES

Major	
Natural Minor	
Harmonic Minor	
Melodic Minor	
Pentatonic	
Whole Tone	
Blues	
Octatonic (H-W)	
Octatonic (W-H)	

CIRCLE OF FIFTHS
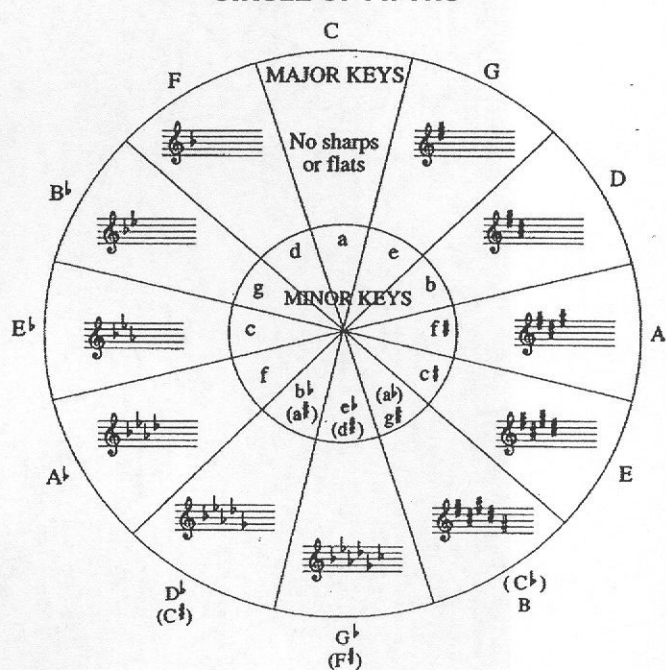
CHORD QUALITIES
Triads

Chord Type	Bottom Interval	Top Interval	Outside Interval	Roman Numeral	Jazz Symbol	Example (key of F)
Major Triad	M3	m3	P5	IV	B♭	
Minor Triad	m3	M3	P5	vi	Dm, Dmi, Dmin, D-	
Augmented Triad	M3	M3	A5	V⁺	C⁺, Caug	
Diminished Triad	m3	m3	d5	vii°	E°, Edim	

Seventh Chords

Chord Type	Common Name	Bottom Interval	Middle Interval	Top Interval	Outside Interval	Roman Numeral	Jazz Symbol	Example (key of G)
Minor-minor 7th	Minor 7th	m3	M3	m3	m7	ii⁷	Am7, Ami7, A-7	
Major-major 7th	Major 7th	M3	m3	M3	M7	I^M7	GM7, Gma7, Gmaj7, GΔ7	
Major-minor 7th	Dominant 7th	M3	m3	m3	m7	V⁷	D7	
Fully diminished 7th	Diminished 7th	m3	m3	m3	d7	vii°⁷	F#°⁷, F#dim7	
Half diminished 7th	Half diminished 7th	m3	m3	m3	M3	ii^ø7	Am7(♭5)	
Minor-major 7th	Minor-major 7th	m3	M3	M3	M7	n/a	Em^(maj7)	

SAMPLE ANALYSIS

Non-Chord Tones Labeled

Jazz Chords Above

E♭ B♭/D E♭ E♭/D♭ A♭/C B⁷⁽♭⁵⁾ B♭   E♭/G A♭ Am⁷⁽♭⁵⁾ B♭7 E♭

PT   UNT   SUS

E♭:   I   V⁶   I   V⁴₂/IV   IV⁶   Fr⁺⁶   V   I⁶   IV   vii°⁷/V   V⁷   I

Key Identified

HC

IAC

Roman Numerals and Figures Below

Cadences Labeled