

# Theory 1

*From Fundamentals of Jazz Improvisation:  
What Everybody Thinks You Already Know*

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# Jazz Theory 1

This text is designed for students who have had at least one year of college level music theory and ear training. Principles unique to, or of more emphasis in jazz, are expounded upon.

Intervals

Ear Training Concepts

Tunes for Interval Ear Training

Basic Chord/Scale Relationships

Modes of the Major Scale

    Ionian (major)

    Dorian (minor)

    Mixolydian (dominant)

The ii V7 I Progression

Chromaticism

Pentatonics

Scale Syllabus

Chord Symbol Chart

Piano (found within worksheet packets):

    Major Voicing 1, 2, 3

    Minor Voicing 1, 2, 3

    Dominant Voicing 1, 2, 3

    ii V7 I Voicing 1, 2, 3

    Blues Voicing 1, 2

    Tune: Student Choice (part of Tune Learning concepts and check sheet)

Worksheets:

    Intervals

    Packet 1, Major: Scale, Arpeggio, Chord, Pattern, Analysis and Application

    Packet 2, Minor: Scale, Arpeggio, Chord, Pattern, Analysis and Application

    Packet 3, Dominant: Scale, Arpeggio, Chord, Pattern, Analysis and Application

    Packet 4, Chromaticism: Dominant Bebop, Minor Bebop, Major Bebop, Pickup and Passing

        Notes, Diatonic Enclosure, Chromatic Enclosure, Inclusive Pattern, Analysis and Application

    Packet 5, ii V7 I: Voicing I, Voicing II, One Measure Pattern, Two Measure Pattern, Analysis and Application

    Packet 6, Pentatonics: Major Scales, Minor Scales, Patterns, Analysis and Application

    Improv Composition

Theory covered in other chapters pertinent to this chapter:

    Chord Progression

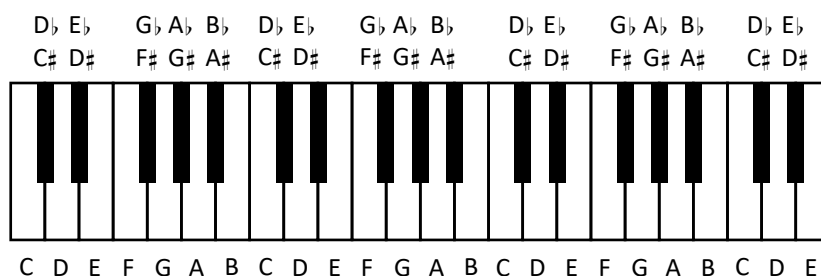
    Chord Substitution and Turnaround

    Intro and Tag

    Form and Structure

    Blues

# Intervals



Half-Step: the distance from one key to the next closest key, up or down.

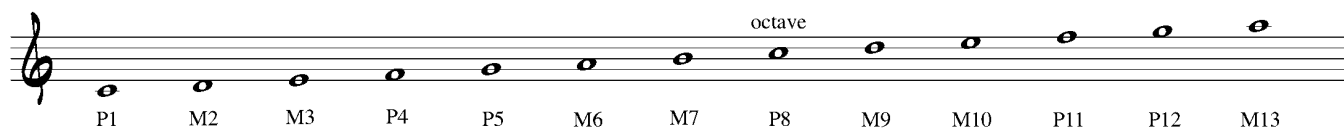
Whole-Step: two half-steps, two notes on the keyboard with one in between.

## Melodic Intervals

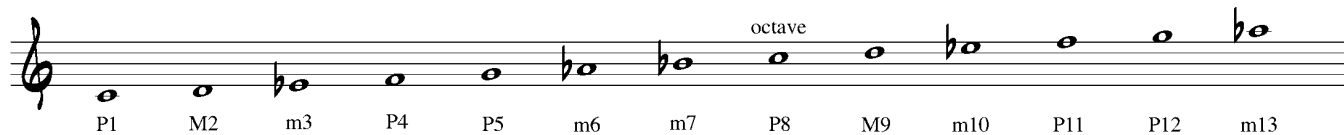
Scale: a pattern of whole-steps and half-steps



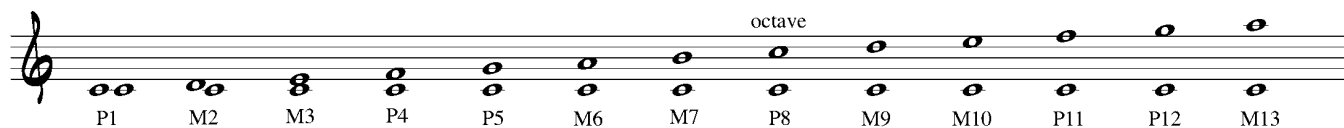
Major Scale Intervals: major and perfect (distance from the first note of the scale to the note in question)



Natural Minor Scale Intervals: minor and perfect (except second and ninth)



## Harmonic Intervals

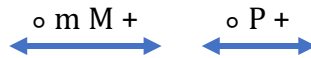


Intervals can be measured ascending or descending. When determining intervals, both melodic and harmonic, make the assessment based on the lowest note.

## Quality

First consider the numeric distance (2nd, 3rd, 4th, etc.). This is calculated by associating the number (scale degree) to the alphabetic name (if C is 1, E is 3). Do not use enharmonics: F-flat is not E, C-flat is not B, etc.

Next, determine the quality of the interval (perfect, minor, major, diminished, augmented). Start with the known qualities of the major scale: all intervals are major except the unison, octave, 4<sup>th</sup> and 5<sup>th</sup>, which are perfect. In reducing intervals, major can be made minor; minor can be made diminished. In enlarging intervals, major can be made augmented. Perfect intervals can be diminished or augmented. The reduction or increase is by half-step.



Practical application in jazz is as follows:

Unison: remains unison, no diminished or augmented usage.

Second: a major second can become minor or augmented; augmented is uncommon.

Third: major and minor thirds are common; the augmented third is not, it becomes a perfect fourth.

Fourth: augmented fourths are common; diminished fourths are not, they become major thirds.

Fifth: both the diminished and augmented fifth is common.

Sixth: are major or minor; augmented sixths become minor sevenths.

Seventh: major, minor, and diminished sevenths are common; augmented becomes the octave.

Diminished: *flat* as in *flat five*, *flat nine*, or *flat thirteen*.

Augmented: *sharp* as in *sharp four*, *sharp five*, *sharp nine*, or *sharp eleven*; or *plus* as in *plus four*, *plus five*.

A to D-sharp is a fourth because four letters of the alphabet are involved. D natural is the note found in the major scale (all intervals are major except the unison, octave, 4<sup>th</sup> and 5<sup>th</sup>, which are perfect); it is a perfect fourth. Perfect intervals can be diminished or augmented. A to D-sharp is augmented, often called *sharp four* or *plus four*.

A to E-flat is a fifth because five letters of the alphabet are involved. E natural is the note found in the major scale; it is a perfect fifth. A to E-flat is diminished often called a *lowered fifth* or *flat*

# Interval Worksheet

Identify the harmonic intervals.

\_\_\_\_\_

\_\_\_\_\_

0 Notate the prescribed harmonic intervals.

m2 below    P4 below    M7 above    m3 above    m6 below    m9 above    °5 above    +2 below

m7 above    M6 above    M3 below    +4 above    P5 below    M9 below    +5 below    °7 above

Notate the prescribed ascending melodic intervals.

M2    P4    m9    +4    M7    m2    M6    °5

M3    +11    m7    +2    m3    P5    °7    m6

Notate the prescribed descending melodic intervals.

M7    +2    P4    +11    m7    °5    M3    m9

M2    P5    m3    +5    M9    m6    m2    M6

# Ear Training Concepts

Practically every principle and exercise taught in jazz improvisation helps to develop the ear. Here are a few things to consider:

Active Listening (Chapter 1): Listening *for* something focuses the ear. Elements of concentration may be the bass line, instrumentation, harmony (consonant/dissonant; simple/complex), articulation, subdivision, dynamic, inflection, etc.

Practice Techniques (Chapter 6): Each technique focuses on something specific.

- PT 1: Practicing circular patterns tunes the ear to the particular chord/scale spectrum. It can help to play the companion chord on the piano while practicing circular patterns.
- PT 2: Same mode sequences saturate one in a particular mode. Shifting the root while maintaining the mode helps to focus on the quality of the mode verses the memorization, physical or aural, of specific pitch.
- PT 3: Taking a pattern through 12 keys helps one to comprehend the character of the pattern both aural and rhythmic. It is wise to include rhythm as an element of ear training. Like PT 1, it is valuable to play the requisite chord on the piano then play the pattern. It also helps to sing the pattern with the piano chord through 12 keys.
- PT 4: Application of many concepts is made in this exercise. They are applied to a recorded accompaniment that remains in a single mode. Applying the various techniques over a single chord helps familiarize one to that quality.
- PT 5: Chord progression (Chapter 14) learning techniques apply to ear training as above. Use recorded accompaniments such as Abersold, Hal Leonard or other sources with open ears but not as a crutch. Sing the exercises as much as possible.
- PT 6: All principles of independence apply to ear training. Keep in mind that one should be able to sing what one plays. The principles of independence are a great practice technique to strengthen this ability. Don't be afraid to try. Of course, singing an improvised solo with an accompaniment, recorded or live, is additionally invaluable.

Piano (Chapters 4 and 5): Practicing jazz chord voicings on the piano helps us to become familiar with how chords are realized in a jazz setting. It is a good way to become familiar with the jazz idiom harmonic sound.

Theory (Chapters 4 and 5): It is important to learn what one is attempting to hear. This intellectual knowledge will transfer to applied knowledge; it must, or one cannot play jazz. A large part of having a good ear comes from knowledge of what to expect. Certain chord progressions, for example, have distinctive sounds such as ii V7 I. Knowing the theory involved helps us identify what we are hearing and, consequently, expands our ears.

Tune Learning (Chapter 7): Singing the melodies to tunes, playing harmonies in 12 keys, listening; learning jazz tunes can include all techniques, principles, and methods known to enhance aural and physical skill needed for jazz improvisation. Over time, these techniques will develop the ear even if the work isn't labeled "ear training."

Transcription (Chapter 2): Lifting a solo off a recording is fundamental in the progress of one's aural and rhythmic ability. Some may start by "hen pecking" individual notes but eventually one should work with larger units. Sing them first, and then play the motifs. Learn the whole solo by memory. Also, pay attention to the method outlined for transcribing chords. Listening for one element at a time helps to focus the ear.

Ear Training Class: Although primarily classical in origin, any ear-training course regardless of idiom is valuable to the jazz musician.

Tunes for Ear Training: This is a chart on tunes that can help students recognize intervals through familiar means. They can eventually become independent of the reference tunes.

# Tunes for Interval Ear Training

The following chart lists tunes that have prominent motives utilizing the interval indicated to the left; they are not always the first notes. Find tunes that are already familiar. One will begin to realize that many intervals are already known and recognizable.

	Ascending	Descending
-2	Count Your Blessings Did You Think To Pray? Father in Heaven, We Do Believe (do) How Insensitive I Am a Child of God (a child) I Left My Heart In San Francisco I Remember You I'll Remember April I'm Getting Sentimental over You Joseph Smith's First Prayer Lord Is My Shepherd, The (I know) Nice Work If You Can Get It What's New	Birdland Bye, Bye Blackbird (on Blackbird) Come, Ye Children of the Lord Fly Me to the Moon For the Beauty of the Earth Joy to the World Lady Is A Tramp, The Major Scale (descending) O Little Town of Bethlehem (town) Solar (Miles Davis) Sophisticated Lady Stella by Starlight Theme, The (Miles Davis) Welcome, Welcome, Sabbath Morning
M2	Ain't Misbehavin' Are You Sleeping (Frere Jaques) Autumn Leaves Because I Have Been Given Much (been given) Blue Monk Body and Soul Bridge of Avignon, The Bye, Bye Blackbird (on Bye, Bye) Choose the Right Come, Come Ye Saints Desifinado Far, Far Away on Judea's Plains God Loved Us, So He Sent His Son God, Our Father, Hear Us Pray Happy Birthday He Is Risen! I've Got You Under My Skin In Humility, Our Savior In Memory of the Crucified Israel, Israel, God Is Calling It's All Right with Me Jesus of Nazareth, Savior and King Kookaburra Love One Another Major Scale (ascending) My Country, 'Tis of Thee My Funny Valentine My Hat Nice Work If You Can Get It (Nice Work) Now the Day Is Over (Night) Onward, Christian soldiers (soldiers) Polka Dots and Moonbeams Redeemer of Israel Rudolph the Red Nosed Reindeer Sakura Silent Night There Will Never Be Another You This Land Is Your land Upon the Cross of Calvary We Are All Enlisted We Thank Thee, O God, for a Prophet Woody 'n You You'd Be So Nice to Come Home To	'Tis Sweet to Sing the Matchless Love Abide with Me Be Still My Soul Be Thou Humble Corcovado (Quiet Nights) Do What Is right Don't Get Around Much Anymore Fever Hot Cross Buns Jesus, the Very Thought of Thee Jesus, the Very Thought of Thee (the ver-) Jolly Old Saint Nicholas Lord, Dismiss Us with Thy Blessing Lord, I Would Follow Thee Mary Had a Little Lamb Mercy, Mercy, Mercy Now Let Us Rejoice Poor Wayfaring Man of Grief, A Precious Savior, Dear Redeemer Satin Doll So What Sonnymoon for Two The First Noel Theme from M*A*S*H Three blind Mice Tune Up We Three Kings of Orient Are
-3	Abide with Me; 'Tis Eventide Angels We Have Heard on High Blue Trane Blues by Five	500 Miles High America the Beautiful April in Paris Caisson Song, The (Over Hill, Over Dale)

	<p>Boplicity          Brahms' Lullaby          Confirmation          Foggy Day, A          Georgia on My Mind          Go Tell It on the Mountain          God Be With You Till We Meet Again          Greensleeves          I'll Go Where You Want Me to Go (not be)          Impossible Dream, The          In Remembrance of Thy Suffering          Minor Chord          Spring Can Really Hang You Up the Most          Stompin' at the Savoy          We Three Kings (Oh)          While of These Emblems We Partake          Work song</p>	<p>Camptown Races          For All the Saints          Frosty the Snow Man          Girl from Ipanema, The          Glory to God on High          Hey Jude          How Great Thou Art          Iron Rod, The (hold to)          Jesus, Once of Humble Birth          Kookaburra (old gum tree)          Misty          O God, the Eternal Father          On Top of Old Smoky (smoky)          Shortnin' Bread          Star Spangle Banner, The          This Old Man          What is This thing Called Love</p>
M3	<p>Come, Listen to a Prophet's Voice          I Can't Get Started          I Heard the Bells on Christmas Day          I Need Thee Every Hour          Kumbaya          Little Tom Tinker (goy burned)          Major Triad          Marines' Hymn, The          Michael, Row the Boat Ashore          Oh When the Saints          On Top of Old Smoky          Praise to the Man          Sweet Hour of Prayer</p>	<p>Abide with Me (2<sup>nd</sup> and 4<sup>th</sup> notes)          Come Rain or Come Shine          Come, Follow Me          Down in the Valley (valley)          Giant Steps          He Is Risen! (risen)          How Gentle God's Commands          Lord, Dismiss Us with Thy Blessing (2<sup>nd</sup> and 4<sup>th</sup> notes)          Nearer, Dear Savior, to Thee          Shoo, fly, Don't Bother Me          Skip to My Lou          Summertime          Swing Low, Sweet Chariot          Tenor Madness (Sonny Rollins)</p>
P4	<p>'Round Midnight          All the Things You Are          Auld Lang Syne          Away in a Manger (Hymn Book version)          Behold the Great Redeemer Die          Bingo          C Jam Blues          Come, Let Us Anew          Down in the Valley          Doxy          Hark! the Herald angels Sing          Have I Done any Good?          Here Comes the Bride          High On a Mountain Top          How Firm a Foundation          How High the Moon          I Saw Three Ships          I Stand All Amazed          Improve the Shining Moments          Love Me Tender (aura Lee)          Maiden Voyage          More Holiness Give Me          Now's the Time          Oh Christmas Tree          Ornithology          Rejoice, the Lord Is King          Reveille          Shadow of Your Smile, The          Shenandoah          Someday My Prince Will Come          Song for My Father          Straight No Chaser          Taps          The Day Dawn Is Breaking          The Spirit of God          Twelve Days of Christmas, The          We Wish You a Merry Christmas          When I Fall in Love          Ye elders of Israel</p>	<p>All Creatures of Our God and King (thou Burning Sun)          All of Me          Blues for alicie          Clementine          Good King Wenceslaus (looked out)          Great Is the Lord          Hope of Israel (Israel)          I Didn't Know What Time It Was          I've Been Workin' On the Railroad          Little Tom Tinker (Ma)          Mighty fortress Is Our God, A          Oh Come All Ye Faithful          Old MacDonald Had a Farm          Softly As a Morning Sunrise          Valse Hot          Walkin' (after intro)          What is This Thing Called Love?          When Johnny Comes Marching Home          Yardbird Suite</p>

TT	Angel Eyes (1 <sup>st</sup> to 3 <sup>rd</sup> notes) Maria Theme from The Simpson's	Blue Seven (Sonny Rollins) Sakura (12 <sup>th</sup> and 14 <sup>th</sup> notes, gi-ri of kagiri or the sky)
P5	All Glory, Laud, and Honor All the Pretty Little Horses Angel eyes Baa, Baa, Black Sheep Bag's Groove God Rest Ye Merry Gentlemen Iron Rod, The Let Us Oft Speak Kind Words My Favorite Things Nica's Dream Praise to the Lord, the Almighty Press Forward, Saints Scarborough Fair Twinkle, Twinkle Little Star Twinkle, Twinkle Little Star Wayfaring Stranger While Shepherds Watched Their Flocks You Can Make the Pathway Bright (2 Xs)	Bring a Torch, Jeannette, Isabella Buffalo Gals Feelings Have You Met Miss Jones It Don't Mean a Thing
+5, -6	Home on the Range (buffalo roam) Lord, I Would Follow Thee (I learn)	Just Friends (5 <sup>th</sup> and 6 <sup>th</sup> notes) Let Us All Press On (press on) Misty (1 <sup>st</sup> to 3 <sup>rd</sup> note) Please Don't Talk About Me When I'm gone Take the "A" Train (5 <sup>th</sup> and 6 <sup>th</sup> notes) You're Everything (Chick Corea)
M6	America the Beautiful (America) Days of Wine and Roses How Great the Wisdom and the Love Hush, Little Baby I Believe In Christ (He Is) Inch Worm It Came upon a Midnight Clear Jingle Bells (dashing) Lord Is My Shepherd, The Love at Home My Bonnie Lies Over the Ocean NBC Oh Say, What Is Truth? Put Your Shoulder to the wheel Short'nin' Bread (chorus) Speak Low Take the "A" Train We'll Sing All Hail to Jesus's Name When Sunny Gets blue	Indiana Love One another (have loved) Nobody Knows the Trouble I've Seen There Is Sunshine in My Soul Today (sunshine)
-7	As Now We Take the Sacrament Lord Is My Shepherd, The (I feed) Theme from Star Trek	Honeysuckle Rose (1 <sup>st</sup> and 3 <sup>rd</sup> notes) Watermelon Man
M7	Ceora	I Love You
P8	Called to Serve Christmas Song, The Let It Snow Old Folks at Home (Swanee) Sing a Song of sixpence (sixpence) Somewhere Over the Rainbow	Willow Weep for Me

# Basic Chord/Scale Relationships

Some scales may be considered chords with extensions. For example, C E G B is every other note of the C Major scale: C D E F G A B C. If one continues with this every other note concept, a CMaj<sup>13</sup> chord results: C E G B D F A. On major chords, the 11<sup>th</sup> (F in this case) is usually omitted or raised a half step, but the principle remains intact. Thus, playing the notes of a scale horizontally in any order (as in a melody or improvisation), while staying true to the collection of pitches, is the same as playing the related chord harmonically. Granted, the notes are not sounded simultaneously so not technically a *chord*, but the notes will fit and the progression will be heard.

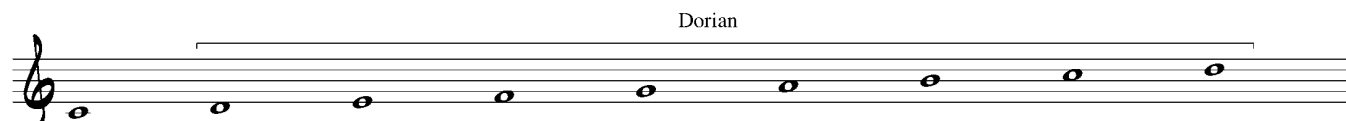
The chord/scale relationship comes to us from the common practice period of classical western European art music from the Baroque through the Romantic eras, 1600's to 1800's. Major scale note choices were used in major keys. Natural, melodic, and harmonic minor scale note choices were used in minor keys.

A common trend in jazz theory is to label according to the modes of the major scale. When we have a chord progression like ii V7 I, we use the tones of the Dorian mode for the ii chord, the tones of the Mixolydian mode for the V7, and the tones of the Ionian mode (Major) for the I chord. This is simply playing in the key signature. The mode names equal scale names. Dorian, ii (super tonic), is minor. Dorian can function as tonic in minor keys, and often in modal tunes, not as part of ii V7 I. Mixolydian, V7 (Dominant), fits a major minor 7 chord. In reality, Dorian and Mixolydian are in the key of its tonic (I) with consideration for minor and dominant chord tones. Mixolydian can also function as a tonic, as is the case for the blues.

The other modes of the major scale have application to certain chord types, however, there are simpler ways to apply those sounds. Lydian, the 4<sup>th</sup> mode of major, applies to a major #11 chord. Rather than thinking of its relation to a major scale, a perfect 4<sup>th</sup> lower, it's easier to think of a major scale with a raised 4<sup>th</sup>. Aeolian is natural minor and is often played on the vi of a iii vi ii V7 I progression, since it remains in the key of tonic. Locrian, the 7<sup>th</sup> mode of major, applies to a half-diminished chord ( $\emptyset$  or min7<sub>b5</sub>). Rather than thinking Major key signature a half step above the root of the half-diminished chord, which shows the half-diminished as a function of vii $\emptyset$ , it is in reality, the minor key, a whole step below the root of the half-diminished chord, which is a function of ii $\emptyset$ . The minor ii $\emptyset$  V7alt i will be discussed in chapter 5. Phrygian, the third mode of major, is like the Dorian minor, with a flat 2. This will also be discussed in Chapter 5.

# Modes of the Major Scale

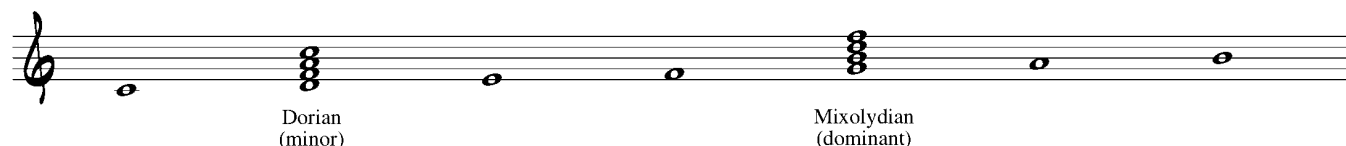
The modes of the major scale are scales derived from starting on a given scale degree and retaining the key signature of the source major scale. For example, the key of C Major has no sharps and no flats. If we start on D, retain the C Major key signature, and play a step-wise motion, we are in the Dorian mode, which is like a D Major scale with a flat-3 (F natural instead of F#) and flat-7 (C natural instead of C#), or like natural minor with a raised 6<sup>th</sup> (B natural).



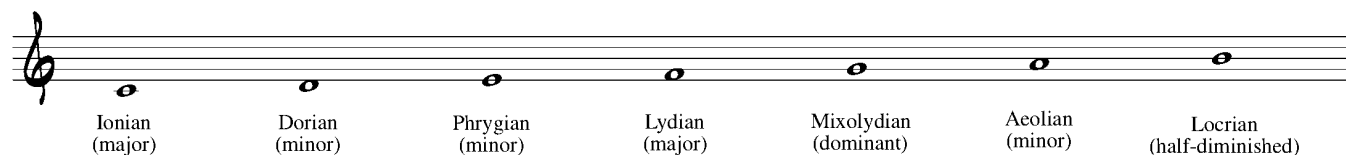
If we start on G and use those notes intact as a group with the C Major key signature, it is the Mixolydian mode—like G Major with a flat-7 (F natural instead of F).



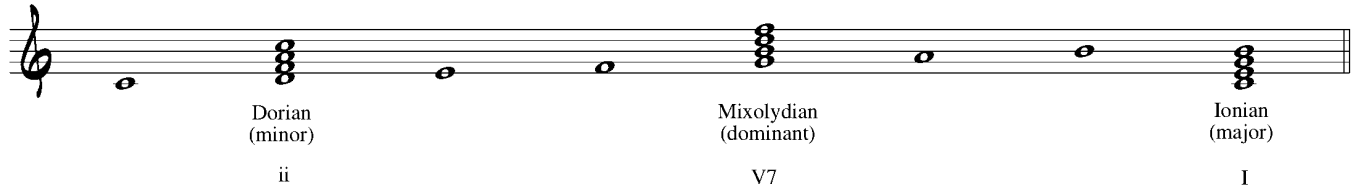
A distinguishing element is the chord these scales represent. Dorian is a minor scale appropriate to a minor chord from a simple triad through extensions 9, 11, and 13. Mixolydian is a dominant scale appropriate to a dominant chord from the triad through extensions 9 and 13. Notice that the minor chord in the example below is a mm7 and the dominant is a Mm7 chord. When applying extensions, include the 7<sup>th</sup> and keep stacking thirds. The numbers are derived from scale degrees.



The names of the remaining modes are:



The Dorian, Mixolydian, and Ionian (Major) modes are most significant due to their place in a ii V7 I chord progression. The sequence is derived from a chord that starts on the second scale degree of the major, or *tonic*, scale, moves to a chord starting on the fifth scale degree and resolves to tonic, or I. These chords all share the same key signature.



Teaching of the major scale modes has become fairly universal within our college institutions and in our improvisation text books. It should be understood that Louis Armstrong, Duke Ellington, Charlie Parker, and other giants in the first half of our jazz history were not thinking of theory in terms of modes. This way of thinking grew out of George Russell's *Lydian Chromatic Concept* (1953), the modal music of Miles Davis, John Coltrane and others in the late 1950s through the mid 1960s, with scales derived from modes gaining in popularity by the late 1960s.

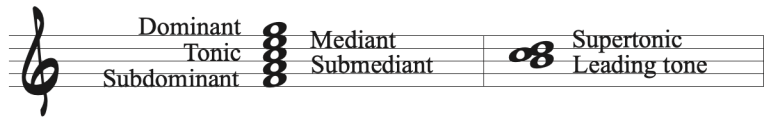
Dorian and Mixolydian as source notes on ii and V7 are useful for a variety of reasons, one being that they share the key signature with their relative tonic—so a ii V7 I progression has the same notes for melodic resource. Even with this logic, we know that many additional or substitute notes can, and probably should, be used.

We will cover Ionian (major), Dorian (minor) and Mixolydian (dominant) here, leaving Phrygian, Lydian, Aeolian (natural minor), and Locrian for Chapter 5: Theory 2.

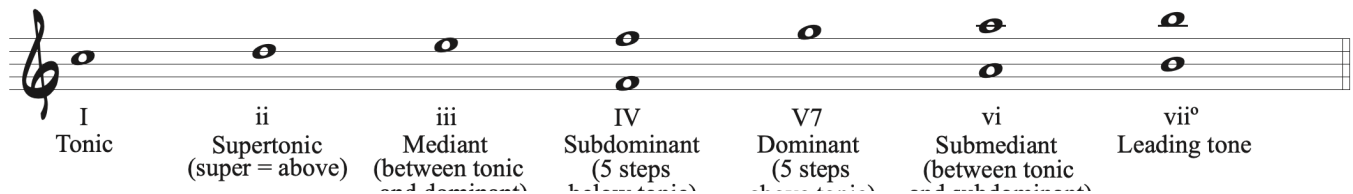
# The ii V7 I Progression

The ii (supertonic) V7 (dominant I (tonic) chord progression (horizontal sequence of harmonies) is the most prevalent in jazz. It is closely related to the IV V7 I progression that is often found in common practice period classical music (i.e. Bach and Mozart). The ii V7 I can appear in the midst of a composition, not only at end-of-phrase cadence points. It can appear in any key—similar to the tonicization principle found in Romantic era composition where one is in another key for a brief moment. The ii V7 I progression may not resolve to I—ii V7 only—and may be found in various sequences, such as the cycle of fourths or descending chromatic, which we’ll look at shortly.

In talking about the ii V7 I sequence, we often say, “two, five, one.” Classical terminology labels these chords *supertonic*, *dominant*, and *tonic*. From these, jazz musicians retain the *dominant* term. Here’s how the labeling works: *dominant* is five notes up from tonic, while *subdominant* is five notes down; *mediant* is halfway between tonic and dominant, and *submediant* halfway between tonic and subdominant; *supertonic* is one note above tonic (*super* means *above*). The chord built on the 7<sup>th</sup> scale degree in major is the leading tone chord, but in minor the 7<sup>th</sup> degree is flat and called *subtonic* if not altered. Since we usually raise this tone, it can also be called the leading tone chord.



Numbers are applied to the scale degrees of the tonic scale (key of the composition). When referring to scale degrees, these numbers are Arabic; when referring to the chords built on the scale degrees, the number are Roman. This numbering can lead to confusion regarding the names of the chords—subdominant is not *sub* because it is a scale degree below dominant. And, it doesn’t seem logical for submediant to be a step above dominant—it’s not halfway between anything that would justify sub-*mediant*.



Root movement for the ii V7 I progression follows the *cycle*. Looking at the circle of fifths wheel, we might think clock-wise and imagine root movement. This wheel was not designed to show root movement; it was designed to show key signatures, the addition of sharps and flats, sharps to the right, flats to the left. In jazz, we say, “cycle of fourths,” to clarify the difference between ascending fifths and ascending fourths—jazz progressions frequently move by ascending fourths (descending fifths), not clock-wise around the wheel but counter-clockwise.



# Chromaticism

Chromatic notes are those that don't fit purely within a key signature or the prescribed notes of a chord or scale. There are six principles for adding color to solos that can apply to most chords and scale situations. In Parker's playing, these appears in the following ways:

1. Pickup notes
2. Single chromatic approach tones
3. Passing tones
4. Neighbor Tones
5. Enclosures
6. Altered pitches

## PICKUP NOTES AND SINGLE CHROMATIC APPROACH TONES

### Pickup Notes

Any note can be approached by either a diatonic or chromatic pitch from above or below. The note to be approached depends on the sound desired, but chord tones are most common. Chromatic approach tones can be pickup notes at the onset of a phrase or motive or lead by half-step to notes within a line.

#### Example 1—At the onset



### Single Chromatic Approach Tones

Single Chromatic Approach Tones are 1/2-step resolutions to chord tones (up or down). This is different from "Resolutions," which often move by 1/2-step to clarify a new chord—for example, in a ii V the seventh of ii may move to the third of V (See "Resolutions" above). Another distinction is between "Single Chromatic Approach Tones" and "Pickup Notes." Essentially, they are the same. Single Chromatic Approach Tones, as referred to here, are within a phrase not the first note of a phrase as above. These notes may be on upbeats or down beats, if on down beats, they are called *accented*.

#### Example 2—At onset and within



## PASSING TONES

Chromatic passing tones (PT) can be placed anywhere that enhances the success of an improvised line according to the dictates of the soloist. However, certain placements became more frequent with the bebop players. These placements ensured emphasis of chord tones on the beats to help outline the harmonic progression amidst melodic passages.

The frequency of ½-step placement in the list below is a ranking of Charlie Parker's usage. The numbers in this list refer to the examples in the notation.

1. Placement of a half-step between the root and ♭7 of a dominant chord is the most common chromatic passing tone. Below, the example shows G F♯ to F on G<sup>7</sup>. A half-step between 1 and ♭7 is possible on a minor chord, but it is rare—only one instance in the twelve analyzed Parker solos. (Three additional solos in minor keys were analyzed to assess Parker's half-step passing tones on minor tonics. Placement between the root and the 7<sup>th</sup> remains rare.)
2. Parker did not play many tunes in minor keys. Most use of minor is as part of a ii V progression. Here, Parker places a half-step between 4 and ♭3, which are the same pitches as 1 to ♭7 on the V chord. On G<sup>7</sup>, 1 is G and ♭7 is F, with F♯ between. So, on D minor (d min. G<sup>7</sup> ii V) 4 is G and ♭3 is F with F♯ between. It is common for Parker to blanket a ii V with V.
3. Moving chromatically from the 9<sup>th</sup> to the root is common in Parker's playing and can apply to major, minor, and dominant chord qualities.
4. On dominant harmonies the chromatic movement from the 9<sup>th</sup> to the root may continue to the ♭7. This movement can be applied to a minor chord, although this is uncommon in Parker's playing.
5. The most used stepwise chromatic motion on major chords is from the 6<sup>th</sup> to the 5<sup>th</sup>. In Parker's time, sixth chords (G<sup>6</sup> = G B D E) were common especially as tonic. This chromatic placement emphasizes the 6<sup>th</sup> as a chord tone. Chromatic motion from the 6<sup>th</sup> to the 5<sup>th</sup> works on dominant and minor chord qualities, but isn't common in Parker's improvisations.
6. If one starts on the 7<sup>th</sup> of a major chord, the ♭7 becomes a passing tone to the 6<sup>th</sup> where chromatic movement may continue to the 5<sup>th</sup>.
7. Parker occasionally played 16<sup>th</sup> note approaches to the 3<sup>rd</sup> by ascending chromatically from the 9<sup>th</sup> (=2<sup>nd</sup>). Chromatic movement from the 3<sup>rd</sup> to the 9<sup>th</sup> can be either ascending or descending, as is true of all chromatic motion. This placement is fairly rare in Parker's playing.
8. Chromatic movement from the 3<sup>rd</sup> to the root aligns chord tones, but was only seen once in the twelve Parker solos analyzed for this discussion (*Scrapple from the Apple*, m. 18 beat 3 to m. 19 beat 1). These passing tones, as well as number 7 above, may be applied to major and dominant qualities.
9. On dominant chords chromatic movement may continue to the ♭7. Again, this was not seen any of the twelve Parker solos analyzed.
10. Triplet motion by half-steps from the 3<sup>rd</sup> to the 5<sup>th</sup> is heard from various Bebop musicians. Parker only did this once in the twelve solos (*Anthropology*, m. 1 beat 1 to 2).

Exercise 1: Root-b7 on Dominant. The notation consists of two staves of music. The first staff contains measures 1 through 5, and the second staff contains measures 6 through 10. Chord symbols are placed above the notes: G7, D-7, G7, G9, CΔ7 in the first staff; CΔ7, CΔ7, CΔ7, G7, G7 in the second staff. Fingering numbers are written below the notes.

1. Root-b7 on Dominant

*Anthropology*, m. 21-25

Measure 22, beat 1 A moves chromatically to G on A7.

Exercise 2: 4-3 on Minor of ii V. The notation consists of two staves of music. The first staff contains measures 21 through 23, and the second staff contains measures 24 and 25. Chord symbols are placed above the notes: A7, D7, G6. Fingering numbers and accents are present.

2. 4-3 on Minor of ii V

*Dewey Square*, m. 7-9

On the D minor of the D minor, G7 ii V in m. 8, beat 1, Parker moves chromatically from the fourth (G) to the minor third (F).

Exercise 3: 9-1. The notation consists of one staff of music containing measures 7 through 9. Chord symbols are placed above the notes: CΔ7, D-7, G7, CΔ7. Fingering numbers and an accent are present.

3. 9-1

*Now's the Time*, m. 16-18

Parker moves chromatically from the ninth of G7 to the root from beats 4 to 1 in m. 17-18.

double tongue

G7

16 17 3 18

4. 9-root-b7

*Moose the Mooche*, m. 11-15

The ninth of G7 (A) moves to the root then continues to the minor seven (F) in m. 13.

GΔ7

A-7

D7

G7

CΔ7

F7

11 12 13 14 15

5. 6-5 on Major

*Ornithology*, m. 21-23

Beat 4 in m. 21 moves chromatically from the sixth of D major (B) to the fifth (A) of beat 1 of m. 22.

DΔ7

D-7

21 22 23

6. Starting on Major 7<sup>th</sup>

*Au Privave*, m. 7-11

Parker sometimes plays the major 7<sup>th</sup> on the tonic of the blues. On beat 3 of m. 7, he starts a chromatic line on the major 7<sup>th</sup> of D.

7. 9-3 Sixteenths

*Anthropology*, m. 57-58

Moving by sixteenths, Parker plays A A# B (9-3) on G major in m. 57, beats 3 to 4.

8. 3-1

No examples in the twelve solos analyzed.

9. 3-b7

No examples in the twelve solos analyzed.

10. Major 3<sup>rd</sup> to 5

*Anthropology*, m. 1-2

Measure 1, beat 1 starts on the major third of G major and moves chromatically by triple to the fifth. Parker only does this once in the twelve solos analyzed, but it is heard by other bebop players, often ascending and descending as a triplet pair.

Bebop Scales

Due to the prevalence of a half-step placed between the root and the ♭7 on dominant chords and between the 6<sup>th</sup> and 5<sup>th</sup> of major chords, jazz pedagogues have labeled these placements as Bebop Scales. As is evident from the example below, this places the chord tones on beats regardless of

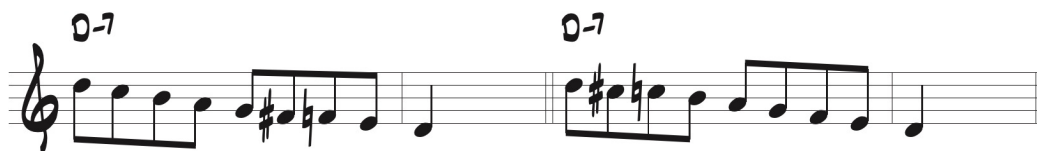
which chord tone starts the line. The 6<sup>th</sup> on a major chord is considered a chord tone. Also notice that the lines are descending, a common tendency for bebop scales. Caveat: these scales and their reasoning have come to us via jazz pedagogues over many decades; however, it should be noted that the inclusion of a full scale in a Bebop improvisation is very rare—Parker seldom played more than three or four notes in succession diatonically (sometimes more if chromatic).

#### Dominant Bebop Scale

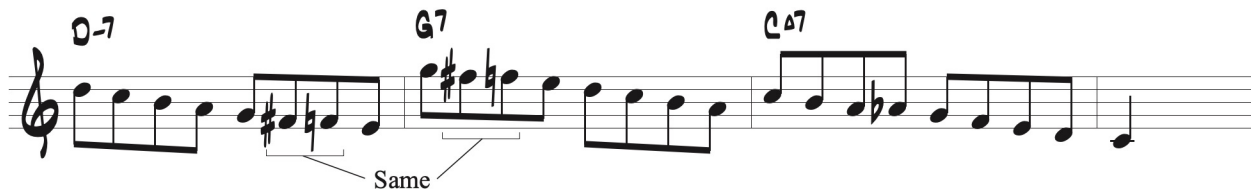
#### Major Bebop Scale



There are two placements for chromatic passing tones in minor scales, the first being much more common. In this, the half-step is between the 4<sup>th</sup> and the minor 3<sup>rd</sup>. The other placement is between the root and the ♭7, like with dominant scales (only one example in the twelve solos analyzed). When this placement is used, the scale seldom, if ever, descends past the 5<sup>th</sup>.



One reason for the half-step being between the 4<sup>th</sup> and the ♭3 is its relation to the dominant in a ii V progression. In the key of C major, ii is D minor and V is G dominant. Stepwise motion for these chords uses the same key signature as tonic (C major), no sharps and no flats. D minor equals chord tones D F A C and scale degrees D F G A B C. G dominant equals chord tones G B D F, and scale degrees G A B C D E F. The bebop scale for G<sup>7</sup> places an F# between G and F natural (1-b7). The bebop scale for D minor also places an F# between G and F natural (4-b3).



## ENCLOSURES

Notes, usually chord tones, can be approached from above and below with diatonic and chromatic pitches. This surrounding is called an *enclosure*. There are at least seven different types of *enclosures*.

1. Diatonic

2. Inverted diatonic
3. Chromatic
4. Inverted chromatic
5. Diatonic hybrid
6. Inverted diatonic hybrid
7. Extended

## Two Note Enclosures

### Diatonic

Both enclosure pitches are diatonic, above first.

Example-Diatonic Enclosures

Notes preceding the chord tones of a C<sup>7</sup> are diatonic to the key (C<sup>7</sup> belongs to the F Major key signature).



### Inverted diatonic

Both enclosure pitches are diatonic, below first.

Example-Inverted Diatonic Enclosures

Enclosures on the chord tones of C<sup>7</sup> begin with the lower note first.



### Chromatic

Both enclosure pitches are chromatic (1/2-step above, 1/2-step below), above first.

Example- Chromatic Enclosures

The chord tones of C<sup>7</sup> are enclosed with a 1/2-step above and a 1/2-step below.



## Inverted Chromatic

Both enclosure pitches are chromatic, below first. Although this enclosure is possible and found in some players improvisations, there are no examples of inverted Chromatic Enclosures in the twelve Parker solos analyzed.

### Example-Inverted Chromatic Enclosure

A ½-step below then a ½-step above precede the chord tones of C<sup>7</sup>.



## Diatonic Hybrid

These are diatonic and chromatic pitches resolving to a chord tone, above first. Either the diatonic or chromatic pitch may be above or below.

### Example 1-Hybrid Enclosures, Chromatic Pitch Below

These enclosures combine a diatonic pitch and a chromatic pitch preceding a chord tone on C<sup>7</sup>. The chromatic pitch is below.



### Example 2-Hybrid Enclosure, Chromatic Pitch Above

The C<sup>7</sup> chord tones are preceded by a chromatic pitch above followed by a diatonic pitch below.



## Inverted Diatonic Hybrid

A diatonic and a chromatic pitch, either order, below first.

### Example 1-Inverted Hybrid Enclosure, Chromatic Pitch Below

A chromatic pitch below the chord tones of C<sup>7</sup> begins the enclosures followed by a diatonic pitch above and then resolving.



### Example 2-Inverted Hybrid Enclosure, Chromatic Pitch Above

Chromatic and diatonic enclosure pitches are reversed. Enclosures move from a diatonic pitch below to a chromatic pitch above and resolve to the chord tones of C<sup>7</sup>.



## Three Note Extended Enclosures

An enclosure may be extended by adding a note in the appropriate place according to the enclosure type and the chord tone to which it is applied.

### Diatonic

Inserting a note a third below a chord tone, in-between the two notes of the diatonic enclosure will extend the approach. For example, on a D major chord the diatonic enclosure for the root is E C# D. The note that is a third below D is B, which can be inserted between the E and C#.



### Examples- Extended Diatonic Enclosures on 1 3 5 7 of D Major, Dominant, and Minor

#### Major



#### Dominant



Minor



## Hybrid

There are at least two types of hybrid extended enclosures and inversion possibilities. In addition, a chromatic enclosure can be created by lowering the first pitch of a hybrid 1 enclosure by a half step.

### Hybrid 1

One way to extend a hybrid enclosure (diatonic pitch above, chromatic pitch below, resolve to chord tone) is to insert a pitch that is a whole step below the chord tone in-between the original notes of the enclosure.



An inverted hybrid enclosure may be extended by adding a pitch a whole step above the chord tone.



The choice of extended hybrid enclosure or inverted extended hybrid enclosure may be determined by the consonance of the added pitch. For example, if one is placing the enclosure on the fifth of a major chord, the added pitch is the fourth played on a downbeat. Some would find this sound undesirable. If a hybrid extended enclosure is placed on the root of a major chord, the minor 7<sup>th</sup>, a non-chord tone, is emphasized. On a minor chord, the added pitch would be the minor second or ♭9. In these instances, an inverted extended hybrid enclosure may be chosen to maintain consonance in the chord.

Examples-Extended Hybrid 1 Enclosures on 1 3 5 7 of D Major, Dominant, and Minor

Major



Dominant



Minor

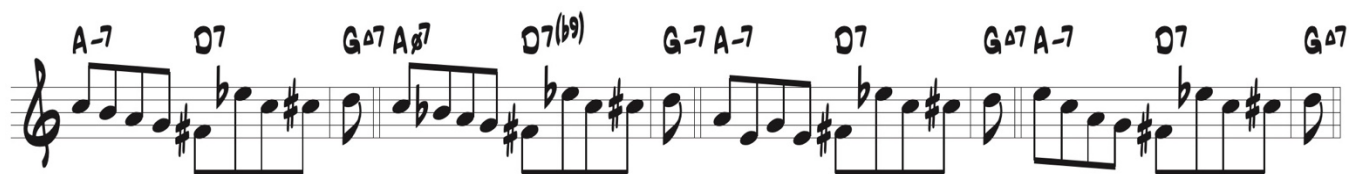


### Chromatic/Dominant ♭9

This is the most frequently used extended enclosure by Parker. It is the same as the extended hybrid enclosure except that the upper note is lowered a half step. It is applied most commonly to the root of a dominant chord. Pitches are the ♭9 to the minor 7<sup>th</sup> with a chromatic passing tone to the root. It is usually applied on the upbeat of 3 resolving to 1 of the next measure. In a V I sequence, the resolution is the root of the V but becomes the 5<sup>th</sup> of I. This may be considered a chromatic extended enclosure where the added note of a whole step below the chord tone is placed between the two approach tones of a chromatic enclosure. For example, a chromatic enclosure on the root of D<sup>7</sup> is E♭, C♯ to D. The added whole step below the chord tone is C, making the extended chromatic enclosure E♭, C C♯ D.



Often, this enclosure on the root of the dominant chord is preceded by the 3<sup>rd</sup> on beat 3. Leading into the 3<sup>rd</sup> is usually the 7<sup>th</sup> of the ii chord, a 7-3 resolution. The following examples show oft used melodic patterns by Charlie Parker.



### Hybrid 2

Another way to extend a hybrid enclosure is to add a note before the enclosure. The added note is the lower of the two pitches leading to the chord tone. For example, on the root of D major the hybrid enclosure is E C# D. It is extended by adding a C#, C# E C# D.



Examples-Extended Diatonic Hybrid 2 Enclosures on 1 3 5 7 of D Major, Dominant, and Minor

Major



Dominant



Minor



The same can be done to an inverted hybrid enclosure. On the root of D major, the inverted hybrid enclosure is C# E D. Adding an E before the inverted hybrid enclosure extends it, E C# E D.



Examples-Extended Inverted Diatonic Hybrid 2 Enclosures on 1 3 5 7 of D Major, Dominant, and Minor

Major



Dominant



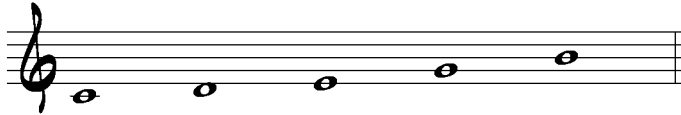
Minor



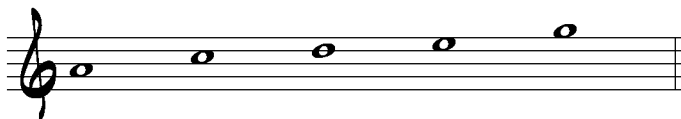
# Pentatonics 1

Pentatonics have been used in much of the folk music of the world for centuries. They are groups of any five different pitches. In Western art music, two types have become common.

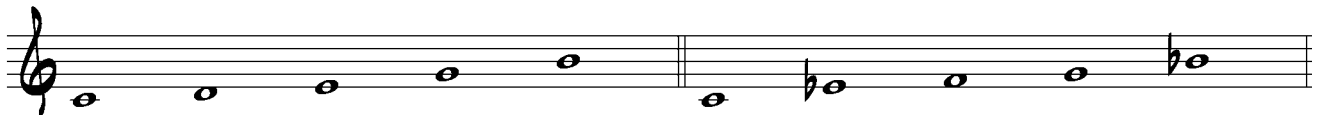
The Major Pentatonic scale is comprised of scale degrees 12356 of the Major Scale.



Minor Pentatonic can be found by one of two ways. It is related to major similarly to relative minor. From major, use scale degrees 61235 in that order. For example, C Major Pentatonic is CDEGA. Minor Pentatonic is ACDEG.



The second way to determine minor pentatonic is through alteration of the major scale, as follows: 1, flat-3, 4, 5, flat-7.



The Minor Pentatonic with an added flat-5 constitutes the Blues Scale.



The Major Pentatonic with an added flat-3 is also a Blues Scale (i.e. C Major Pentatonic with an added flat-3 is C, D, E-flat, E-natural, G, A). This is the same as “the” Blues Scale starting on the 6<sup>th</sup> scale degree of tonic.



Major Pentatonic and the various blues scales can be used on any dominant chord. Minor Pentatonic can be used on any minor chord.

The Minor Pentatonic works on a sus4 chord if one starts on the 5<sup>th</sup> scale degree. For example, on Csus4 start on G and play the G Minor Pentatonic. This is the same as playing the Major Pentatonic starting on the minor 7<sup>th</sup>. The pitches of these two pentatonic scales are the same as the chord tones of a 9sus4 chord.

The image shows a musical staff with a treble clef and a key signature of one flat (Bb). The first measure contains a C9sus4 chord, represented by a chord symbol above the staff and notes for C, G, Bb, and E. The second measure is labeled 'G Minor Pentatonic' and contains the notes G, Bb, C, D, and E. The third measure is labeled 'Bb Major Pentatonic' and contains the notes Bb, C, D, E, and F.

The pentatonic scale's strong melodic sound creates a momentum that sometimes allows the improviser to blanket lines over varying chord sequences.

# Scale Syllabus

All of the notes in the scales labeled on the left of each of the following examples, with the disputed fourth note of the major scale, will work as note choices, again in any order, for the chords indicated to the right of the example.

Major

Minor (Dorian)

Dominant (Mixolydian)

Dominant Bebop

Minor Bebop

Major Bebop

Blues

(Minor pentatonic with flat-5)

Harmonic Minor

Chords:  $D\emptyset$ ,  $G7(b9)$ ,  $C-(\Delta 7)$   
 iiø V7(b9) i

Dominant Sharp-5 (Whole Tone)

flat-5 sharp-5  
 Chords:  $C7(b5)$ ,  $C9(b5)$ ,  $C7(\#5)$ ,  $C9(\#5)$

Dominant @9 (Diminished 1/2 step 1st)

1 flat-9 sharp-9 3 sharp-11 5 6 flat-7  
 (Alternation of half-steps and whole-steps)  
 Chords:  $C7(\#9)$ ,  $C7(b9)$

Dominant Altered (super-Locrian, Diminished Whole Tone, Altered)

1 flat-9 sharp-9 3 sharp-11 flat-5 sharp-5 flat-13 flat-7  
 may include other alterations  
 Chords:  $C7(\#9)$ ,  $C7ALT$

Half-diminished (Locrian)

1 flat-3 flat-5 flat-7 (not dim.)  
 (down a whole-step, natural minor)  
 Chords:  $C\emptyset 7$ , minor7th (not dim.)

Half-diminished Major 9 (Locrian #2)

1 flat-3 flat-5 flat-7 sharp-9  
 M2/9  
 Chords:  $C\emptyset 7$ , major 9

Diminished

1 flat-3 flat-5 dim.-7  
 (alternation of whole-steps and half-steps)  
 Chords:  $C\emptyset 7$ , dim. 7th

Major Sharp 11 (Lydian)

1 sharp-11  
 Chords:  $C\Delta 7(\#11)$ ,  $C\Delta 9(\#11)$

Dominant Sharp 11 (Lydian Dominant)

sharp-11 flat-7 C7(#11) C9(#11)

Major Pentatonic

1 2 3 5 6 CΔ7 CΔ9 C7 C9

Minor Pentatonic

1 flat-3 4 5 flat-7 C-7 C-9 C7 C9

Sus4 1: Minor Pentatonic or Blues (starting on 5<sup>th</sup>)

blues note not sustained C7sus C9sus

Sus4 2: Major Pentatonic (starting on @7)

blues note not sustained

Sus4 3: Mixolydian or Dorian

1 major or minor 3rd usually not sustained 4th flat-7

Sus4 4: Phrygian

1 altered 9ths 4th altered 5ths flat-7

# Chord Symbol Chart

Many more chord qualities exist than are included in this chart. Use of *M* for major and *m* for minor is not recommended. One may also see + for sharp and - for flat. The *prefix* of a chord is its root letter name such as A for A<sup>7</sup>. The *suffix* of a chord is what follows to indicate quality, extension, and/or alteration.

Quality	Possible Chord Tones	Quality	Extensions	Examples (Root and Suffix)
Major	1 3 5 7 9 13	Maj maj M ma Δ	7 9 13	C <sub>M</sub> A7 B <sub>M</sub> ma7 G <sub>M</sub> ma9 F <sub>M</sub> # <sub>13</sub>
Major 6	1 3 5 6	Maj maj M ma Δ (or none)	6	F <sub>6</sub> A <sub>M</sub> a6 E <sub>b</sub> a6 D <sub>M</sub> a6
Major 6/9	1 3 5 6 9	Maj maj M ma Δ (or none)	6 9	C <sub>6/9</sub> C <sub>M</sub> a <sub>6/9</sub> B <sub>a</sub> <sub>6/9</sub> A <sub>b</sub> ma <sub>6/9</sub>
Minor/Dorian	1 b3 5 b7 9 11 13	Min min m mi -	7 9 11 13	B <sub>m</sub> i7 C <sub>m</sub> i9 E <sub>b</sub> min <sup>11</sup> E- <sub>13</sub>
Minor 6	1 b3 5 6	Min min m mi -	6	A <sub>b</sub> mi6 D <sub>M</sub> #mi6 F- <sub>6</sub>
Minor 6/9	1 b3 5 6 9	Min min m mi -	6 9	C- <sub>6/9</sub> D <sub>m</sub> i <sub>6/9</sub> B <sub>b</sub> min <sub>6/9</sub>
Dominant	1 3 5 b7 9 13	none	7 9 13	A7 F <sub>M</sub> # <sub>13</sub> G <sub>9</sub> D <sub>b</sub> 11
Minor/Major	1 b3 5 Δ7 9	Min min m mi -	Δ7 9 11 13	E <sub>m</sub> (Δ7) F- <sub>11</sub> (Δ7) C <sub>M</sub> # <sub>11</sub> (Δ7) D <sub>m</sub> i9(Δ7)
Dominant Flat 9	1 3 5 b7 b9 13	none	7 9 13	G7(b9)
Half-diminished	1 b3 b5 b7	Min min mi m - ∅(alone or with 7)	7 <sup>(b5)</sup>	F <sub>m</sub> i7(b5) D-7(b5) C <sub>m</sub> i7(b5) B <sub>b</sub> D <sub>M</sub> # <sub>7</sub>
Half-dim. Major 9	1 b3 b5 b7 Δ9	Min min m mi - ∅(alone or with ext)	9 <sup>(b5)</sup> 11 <sup>(b5)</sup>	D-9(b5) E <sub>b</sub> -11(b5) B <sub>m</sub> i11(b5) C <sub>m</sub> i9(b5) G <sub>M</sub> #11
Dominant Sharp 5	1 3 #5 b7 9	none OR +(with 7 or 9)	7 <sup>(#5)</sup> 9 <sup>(#5)</sup>	F+9 A7(#5) E <sub>b</sub> 9(#5) G <sub>M</sub> #+7
Dominant Altered	1 3 b5#5 b7 b9 #9	none	7alt or specific	A7 <sub>ALT</sub> B <sub>b</sub> 7 <sup>(#9)</sup> C7 <sup>(b9)</sup> E7 <sup>(#9)</sup>
Major Sharp 11	1 3 5 7 9 #11	Maj maj M ma Δ	7 <sup>(#11)</sup> 9 <sup>(#11)</sup>	G <sub>b</sub> Δ <sub>13</sub> (#11) C <sub>M</sub> a7(#11) A <sub>b</sub> ma9(#11)
Dominant Sharp 11	1 3 5 b7 9 #11	none	7 <sup>(#11)</sup> 9 <sup>(#11)</sup>	G7(#11) D9(#11) A <sub>13</sub> (#11)
Sus4	1 4 5 7 9 13	sus	7 9 13	C <sub>SUS</sub> F <sub>7</sub> SUS B <sub>b</sub> 7 <sub>SUS</sub> 4 E <sub>b</sub> 9 <sub>SUS</sub> A <sub>b</sub> 9 <sub>SUS</sub> 4 D <sub>SUS</sub> 4
Diminished	1 b3 b5 b7	Dim dim ∅	b7	D <sub>o</sub> A <sub>o</sub> 7 E <sub>o</sub> i <sub>M</sub> D <sub>b</sub> 11

# Worksheet Packet #1: Major

## Scale

Write all scales up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Arpeggio

Write all arpeggios up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Chords

Write chord voicings as in the example given.  
Keep voicings centered around middle C.  
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.  
Play the companion scale, arpeggio, and pattern.

## Patterns

Several examples are given with the chord most appropriate to the pattern included.  
Find two patterns that are specific to the quality (major). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker's *Pattern for Jazz*, a reputable professional.  
Include the appropriate chord symbol and pattern source.  
Add patterns to the log to increase vocabulary.

## Analysis and Application

Exercise 1: Indicate scale degree digits below the staff for the major chords for the first chorus of John Coltrane's solo on Giant Steps.  
Exercise 2; Provide chord symbols above the staff identifying 6, 7, 9, or 13.  
Exercise 3: Compose a four measure solo using notes appropriate to the chords.

# Scale

Example:

Musical notation for a scale in B-flat major. The scale is written on a single staff with a treble clef. The key signature has two flats (B-flat and E-flat). The scale is shown in two parts: an ascending sequence and a descending sequence. The ascending sequence starts on B-flat and goes up to B-flat. The descending sequence starts on B-flat and goes down to B-flat. The notes are: B-flat, C, D, E-flat, F, G, A, B-flat.

Musical staff with notes C and F.

Musical staff with notes B $\flat$  and E $\flat$ .

Musical staff with notes A $\flat$  and G $\sharp$ .

Musical staff with notes D $\flat$  and C $\sharp$ .

Musical staff with notes G $\flat$  and F $\sharp$ .

Musical staff with notes B and E.

Musical staff with notes A and D.

Musical staff with note G.

# Arpeggio

Example:

Musical notation for an arpeggio in C# major, split into two staves. The first staff is in treble clef and the second in bass clef. The notes are C#, D#, E#, F#, G#, A#, B#, and C#.

Musical staff with a common time signature 'C' on the left and a fermata 'F' on the right.

Musical staff with a flat sign 'Bb' on the left and a flat sign 'Eb' on the right.

Musical staff with a flat sign 'Ab' on the left and a sharp sign 'G#' on the right.

Musical staff with a flat sign 'Db' on the left and a sharp sign 'C#' on the right.

Musical staff with a flat sign 'Gb' on the left and a sharp sign 'F#' on the right.

Musical staff with a natural sign 'B' on the left and a natural sign 'E' on the right.

Musical staff with a natural sign 'A' on the left and a natural sign 'D' on the right.

Musical staff with a natural sign 'G' on the left.

# Chord 1

**C $\Delta$ 9**      **F $\Delta$ 9**      **B $\flat$  $\Delta$ 9**      **E $\flat$  $\Delta$ 9**      **A $\flat$  $\Delta$ 9**

chord tones

**G $\sharp$  $\Delta$ 9**      **D $\flat$  $\Delta$ 9**      **C $\sharp$  $\Delta$ 9**      **G $\flat$  $\Delta$ 9**      **F $\sharp$  $\Delta$ 9**

**B $\Delta$ 9**      **E $\Delta$ 9**      **A $\Delta$ 9**      **D $\Delta$ 9**      **G $\Delta$ 9**

# Chord 2

**C $\Delta$ 13**      **F $\Delta$ 13**      **B $\flat$  $\Delta$ 13**      **E $\flat$  $\Delta$ 13**      **A $\flat$  $\Delta$ 13**

chord tones

**G $\sharp$  $\Delta$ 13**      **D $\flat$  $\Delta$ 13**      **C $\sharp$  $\Delta$ 13**      **G $\flat$  $\Delta$ 13**      **F $\sharp$  $\Delta$ 13**

**B $\Delta$ 13**      **E $\Delta$ 13**      **A $\Delta$ 13**      **D $\Delta$ 13**      **G $\Delta$ 13**

# Chord 3

**C<sup>6</sup>/9**      **F<sup>6</sup>/9**      **B<sup>b</sup>6/9**      **E<sup>b</sup>6/9**      **A<sup>b</sup>6/9**

chord tones

**G<sup>#</sup>6/9**      **D<sup>b</sup>6/9**      **C<sup>#</sup>6/9**      **G<sup>b</sup>6/9**      **F<sup>#</sup>6/9**

**B<sup>6</sup>/9**      **E<sup>6</sup>/9**      **A<sup>6</sup>/9**      **D<sup>6</sup>/9**      **G<sup>6</sup>/9**

# Patterns (treble)

Examples:

The first staff contains a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. Above the first three notes is the annotation  $C\Delta 9$ . Above the last three notes is the annotation  $C\Delta 9$  or  $C\Delta 9(\#11)$ . Below the staff is the text "(with or without sharp-11)".

The second staff contains a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5, B4, A4, G4, F4, E4, D4, C4. Above the first three notes is the annotation  $C\Delta 9(\#11)$ . Above the last three notes is the annotation  $C\Delta 9$  or  $C\Delta 9(\#11)$ . Below the staff is the text "(with or without sharp-11)".

Seven empty musical staves, each with a treble clef and a double bar line, provided for practice.

# Patterns (bass)

Examples:

$C\Delta 9$   $C\Delta 9$  or  $C\Delta 9(\#11)$

(with or without sharp-11)

$C\Delta 9(\#11)$  etc.  $C\Delta 9$  or  $C\Delta 9(\#11)$  etc.

(with or without sharp-11)

## Analysis and Application (treble)

Exercise 1; Write the scale degrees below the staff for the major chords played by John Coltrane during his first chorus on Giant Steps.

Handwritten chord symbols for Exercise 1:

- Measure 1: C<sup>#</sup>MA7
- Measure 2: E7
- Measure 3: A<sup>#</sup>MA7
- Measure 4: C7
- Measure 5: F<sup>#</sup>MA7
- Measure 6: B<sup>mi</sup>7
- Measure 7: E7
- Measure 8: A<sup>#</sup>MA7
- Measure 9: C7
- Measure 10: F<sup>#</sup>MA7
- Measure 11: A<sup>b</sup>7
- Measure 12: C<sup>#</sup>MA7
- Measure 13: G<sup>mi</sup>7
- Measure 14: C7
- Measure 15: F<sup>#</sup>MA7
- Measure 16: B<sup>mi</sup>7
- Measure 17: E7
- Measure 18: A<sup>#</sup>MA7
- Measure 19: E<sup>b</sup>mi7
- Measure 20: A<sup>b</sup>7
- Measure 21: D<sup>b</sup>MA7
- Measure 22: G<sup>mi</sup>7
- Measure 23: C7
- Measure 24: F<sup>#</sup>MA7
- Measure 25: E<sup>b</sup>mi7
- Measure 26: A<sup>b</sup>7

Exercise 2; Identify above the staff the following chords as Major 6, 7, 9, or 13.

Chords for Exercise 2 (written above the staff):

- Measure 1: C<sup>#</sup>7
- Measure 2: E7
- Measure 3: B<sup>b</sup>7
- Measure 4: C<sup>#</sup>7

Exercise 3: Compose four measures of improvised solo over the following progression:

Chord symbols for Exercise 3:

- Measure 1: E<sup>b</sup>MA<sup>9</sup>
- Measure 2: EMA<sup>9</sup>
- Measure 3: AMA<sup>9</sup>
- Measure 4: CMA<sup>9</sup>

## Analysis and Application (bass)

Exercise 1; Write the scale degrees below the staff for the major chords played by John Coltrane during his first chorus on Giant Steps.

Chord progression for Exercise 1 (written above the staff):

C<sup>#</sup>MA<sup>7</sup> E<sup>7</sup> A<sup>+</sup>MA<sup>7</sup> C<sup>7</sup> F<sup>+</sup>MA<sup>7</sup> B<sup>mi</sup>7 E<sup>7</sup>

AMA<sup>7</sup> C<sup>7</sup> F<sup>+</sup>MA<sup>7</sup> A<sup>b</sup>7 C<sup>#</sup>MA<sup>7</sup> G<sup>mi</sup>7 C<sup>7</sup>

F<sup>+</sup>MA<sup>7</sup> B<sup>mi</sup>7 E<sup>7</sup> A<sup>+</sup>MA<sup>7</sup> E<sup>b</sup>mi<sup>7</sup> A<sup>b</sup>7

D<sup>b</sup>MA<sup>7</sup> G<sup>mi</sup>7 C<sup>7</sup> F<sup>+</sup>MA<sup>7</sup> E<sup>b</sup>mi<sup>7</sup> A<sup>b</sup>7

Exercise 2: Identify, above the staff, the following chords as Major 6, 7, 9, or 13.

Chords for Exercise 2 (written above the staff):

C<sup>+</sup> D<sup>+</sup> E<sup>+</sup> F<sup>+</sup>

Exercise 3: Compose four measures of improvised solo over the following progression:

Chord progression for Exercise 3 (written above the staff):

E<sup>b</sup>MA<sup>7</sup> E<sup>+</sup>MA<sup>7</sup> A<sup>+</sup>MA<sup>7</sup> C<sup>+</sup>MA<sup>7</sup>

# Worksheet Packet #2: Minor

## Scale

Write all scales up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Arpeggio

Write all arpeggios up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Chords

Write chord voicings as in the example given.  
Keep voicings centered around middle C.  
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.  
Play the companion scale, arpeggio, and pattern.

## Patterns

Several examples are given with the chord most appropriate to the pattern included.  
Find two patterns that are specific to the quality (minor). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker's *Pattern for Jazz*, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).  
Include the appropriate chord symbol and pattern source.  
Add patterns to the log to increase vocabulary.

## Analysis and Application

Exercise 1; Add appropriate accidentals to the Miles Davis excerpt from So What.  
Exercise 2: Provide the chord symbol above the staff for the notated chords.  
Exercise 3: Compose four measures of improvised solo over the progression given.

# Scale

Example:

Musical notation for a scale in B-flat major. The notation is written on a single staff with a treble clef and a key signature of two flats (B-flat and E-flat). The scale is shown in two parts: an ascending line and a descending line. The notes are: B-flat, C, D, E-flat, F, G, A, B-flat, A, G, F, E-flat, D, C, B-flat.

Musical notation for a scale in C major. The notation is written on a single staff with a treble clef and a key signature of no sharps or flats. The scale is shown in two parts: an ascending line and a descending line. The notes are: C, D, E, F, G, A, B, A, G, F, E, D, C.

Musical notation for a scale in B-flat major. The notation is written on a single staff with a treble clef and a key signature of two flats (B-flat and E-flat). The scale is shown in two parts: an ascending line and a descending line. The notes are: B-flat, C, D, E-flat, F, G, A, B-flat, A, G, F, E-flat, D, C, B-flat.

Musical notation for a scale in A-flat major. The notation is written on a single staff with a treble clef and a key signature of four flats (B-flat, E-flat, A-flat, and D-flat). The scale is shown in two parts: an ascending line and a descending line. The notes are: A-flat, B-flat, C, D-flat, E-flat, F, G, A-flat, G, F, E-flat, D-flat, C, B-flat, A-flat.

Musical notation for a scale in G-flat major. The notation is written on a single staff with a treble clef and a key signature of three flats (B-flat, E-flat, and A-flat). The scale is shown in two parts: an ascending line and a descending line. The notes are: G-flat, A-flat, B-flat, C, D-flat, E-flat, F, G-flat, F, E-flat, D-flat, C, B-flat, A-flat, G-flat.

Musical notation for a scale in F major. The notation is written on a single staff with a treble clef and a key signature of one flat (B-flat). The scale is shown in two parts: an ascending line and a descending line. The notes are: F, G, A, B-flat, C, D, E, F, E, D, C, B-flat, A, G, F.

Musical notation for a scale in E major. The notation is written on a single staff with a treble clef and a key signature of one sharp (F-sharp). The scale is shown in two parts: an ascending line and a descending line. The notes are: E, F-sharp, G, A, B, C, D, E, D, C, B, A, G, F-sharp, E.

Musical notation for a scale in D major. The notation is written on a single staff with a treble clef and a key signature of two sharps (F-sharp and C-sharp). The scale is shown in two parts: an ascending line and a descending line. The notes are: D, E, F-sharp, G, A, B, C, D, C, B, A, G, F-sharp, E, D.

Musical notation for a scale in C major. The notation is written on a single staff with a treble clef and a key signature of no sharps or flats. The scale is shown in two parts: an ascending line and a descending line. The notes are: C, D, E, F, G, A, B, A, G, F, E, D, C.

# Arpeggio

Example:

Musical notation for an arpeggio in C# minor. The notation is written on a single staff with a treble clef. The key signature has two sharps (F# and C#). The melody consists of the following notes: C#4, D4, E4, F#4, G4, A4, B4, C#5, B4, A4, G4, F#4, E4, D4, C#4. The notes are grouped into two measures by a double bar line. The first measure contains the notes C#4, D4, E4, F#4, G4, A4, B4, and C#5. The second measure contains the notes B4, A4, G4, F#4, E4, D4, and C#4. The notes are beamed together in each measure.

Bass line for C major chord. The staff shows a whole note chord labeled 'C' on the right side of the staff.

Bass line for Bb major chord. The staff shows a whole note chord labeled 'Bb' on the left side of the staff.

Bass line for Ab major chord. The staff shows a whole note chord labeled 'Ab' on the left side of the staff.

Bass line for Db major chord. The staff shows a whole note chord labeled 'Db' on the left side of the staff.

Bass line for Gb major chord. The staff shows a whole note chord labeled 'Gb' on the left side of the staff.

Bass line for B major chord. The staff shows a whole note chord labeled 'B' on the left side of the staff.

Bass line for A major chord. The staff shows a whole note chord labeled 'A' on the left side of the staff.

Bass line for G major chord. The staff shows a whole note chord labeled 'G' on the left side of the staff.

# Chord 1

C-9      F-9      Bb-9      Eb-9      Ab-9

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G#-9      Db-9      C#-9      Gb-9      F#-9

--	--	--	--	--

B-9      E-9      A-9      D-9      G-9

--	--	--	--	--

# Chord 2

C-13      F-13      B $\flat$ -13      E $\flat$ -13      A $\flat$ -13

--	--	--	--	--

G $\sharp$ -13      D $\flat$ -13      C $\sharp$ -13      G $\flat$ -13      F $\sharp$ -13

--	--	--	--	--

B-13      E-13      A-13      D-13      G-13

--	--	--	--	--

# Chord 3

C-13      F-13      Bb-13      Eb-13      Ab-13

$\text{C-13}$	$\text{F-13}$	$\text{Bb-13}$	$\text{Eb-13}$	$\text{Ab-13}$
---------------	---------------	----------------	----------------	----------------

G#-13      Db-13      C#-13      Gb-13      F#-13

$\text{G\#-13}$	$\text{Db-13}$	$\text{C\#-13}$	$\text{Gb-13}$	$\text{F\#-13}$
-----------------	----------------	-----------------	----------------	-----------------

B-13      E-13      A-13      D-13      G-13

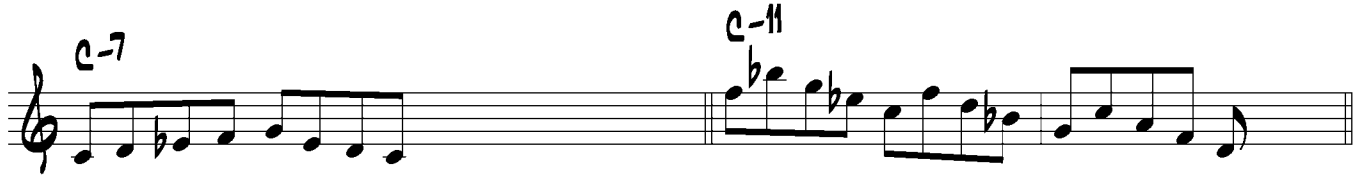
$\text{B-13}$	$\text{E-13}$	$\text{A-13}$	$\text{D-13}$	$\text{G-13}$
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# Patterns (treble)

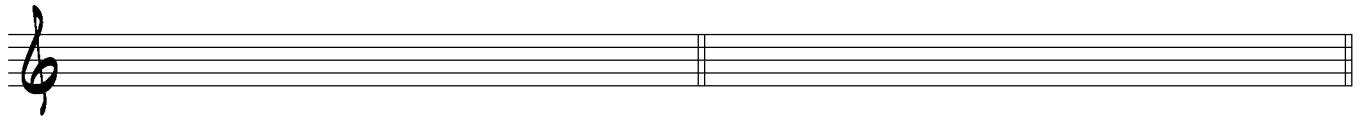
Examples:



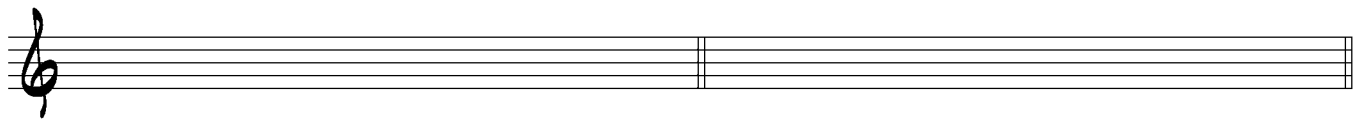
A musical staff in treble clef. The first measure contains a C-9 chord (C4, E4, G4, Bb4, D5, F5) and a triplet of eighth notes: G4, A4, B4. The second measure contains a C-13 chord (C4, E4, G4, Bb4, D5, F5, Ab5) and a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4.



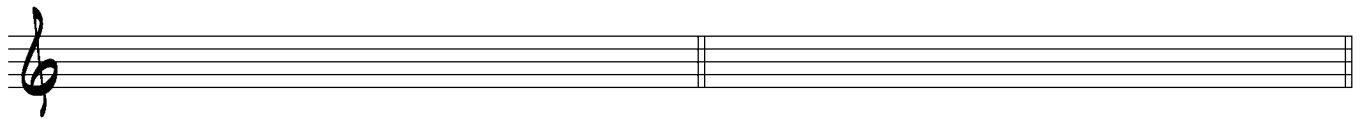
A musical staff in treble clef. The first measure contains a C-7 chord (C4, E4, G4, Bb4, D5) and a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4. The second measure contains a C-11 chord (C4, E4, G4, Bb4, D5, F5, Ab5) and a sequence of eighth notes: G4, A4, B4, C5, B4, A4, G4.



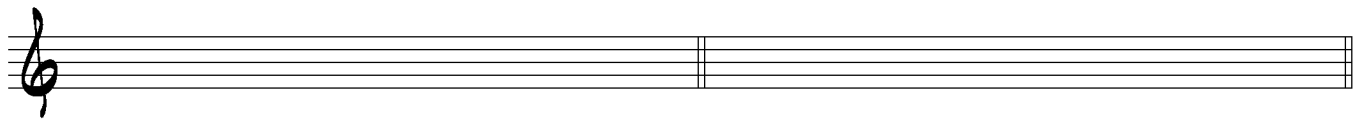
An empty musical staff with a treble clef.



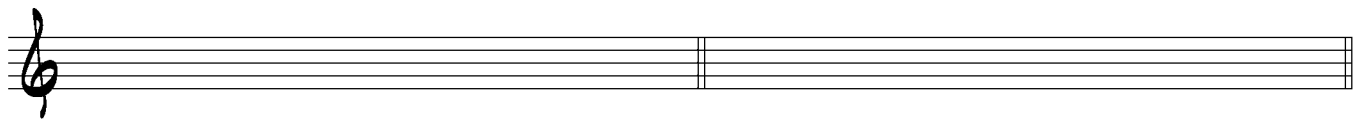
An empty musical staff with a treble clef.



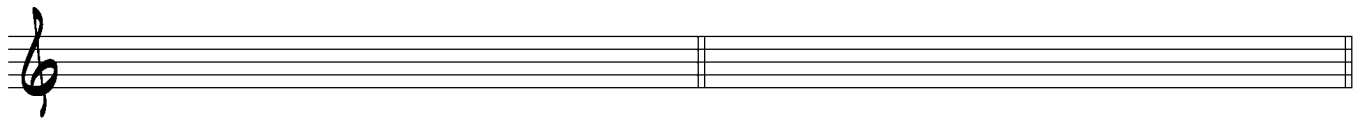
An empty musical staff with a treble clef.



An empty musical staff with a treble clef.



An empty musical staff with a treble clef.



An empty musical staff with a treble clef.

# Patterns (bass)

Examples:

Two measures of bass notation. The first measure is labeled **C-9** and contains a triplet of notes: G2, F2, E2. The second measure is labeled **C-13** and contains a sequence of notes: G#2, F2, E2, D2, C2, B1, A1, G1.

Two measures of bass notation. The first measure is labeled **C-7** and contains a sequence of notes: G2, F2, E2, D2, C2, B1, A1, G1. The second measure is labeled **C-11** and contains a sequence of notes: G2, F2, E2, D2, C2, B1, A1, G1. A dashed line above the second measure is labeled "or 8<sup>va</sup>".

An empty bass staff with a double bar line in the middle.

An empty bass staff with a double bar line in the middle.

An empty bass staff with a double bar line in the middle.

An empty bass staff with a double bar line in the middle.

An empty bass staff with a double bar line in the middle.

An empty bass staff with a double bar line in the middle.

## Analysis and Application (treble)

Exercise 1; Add appropriate accidentals to the Miles Davis excerpt from *So What*.

The image shows a four-staff musical notation in treble clef. The first staff begins with an  $F-7$  chord symbol above the first measure. The second staff concludes with an  $(E-7)$  chord symbol above the final measure. The third staff starts with an  $E-7$  chord symbol above the first measure. The fourth staff contains the final two measures of the excerpt.

Exercise 2: Provide the chord symbol above the staff for the following chords.

The image shows a single staff in treble clef with four chords. The first chord is a triad consisting of F, A, and C. The second chord is a triad consisting of B $\flat$ , D $\flat$ , and F. The third chord is a triad consisting of E $\flat$ , G $\flat$ , and B $\flat$ . The fourth chord is a triad consisting of A $\flat$ , C $\flat$ , and E $\flat$ .

Exercise 3: Compose four measures of improvised solo over the following progression.

The image shows a single staff in treble clef divided into four measures. Above the first measure is the chord symbol  $E\flat m11$ , above the second is  $B\flat m11$ , above the third is  $B m11$ , and above the fourth is  $F\sharp m11$ .

# Analysis and Application (bass)

Exercise 1; Add appropriate accidentals to the Miles Davis excerpt from *So What*.

The image shows a bass line for the Miles Davis excerpt from "So What". The key signature is two flats (B-flat and E-flat). The notation consists of four staves of music. The first staff begins with a chord symbol "F-7" above the first measure. The second staff ends with a chord symbol "(E-7)" above the final measure. The third staff begins with a chord symbol "E-7" above the first measure. The fourth staff contains the final measures of the excerpt. The notes are: Staff 1: F2, G2, A2, Bb2, C3, D3, Eb3, F3. Staff 2: G3, A3, Bb3, C4, D4, Eb4, F4, G4. Staff 3: A4, Bb4, C5, D5, Eb5, F5, G5. Staff 4: A5, Bb5, C6, D6, Eb6, F6, G6.

Exercise 2: Provide the chord symbol above the staff for the following chords.

The image shows a bass line with four chords. The first chord is a triad with notes F, A, and C. The second chord is a triad with notes Bb, D, and F. The third chord is a triad with notes Eb, G, and Bb. The fourth chord is a triad with notes F, Ab, and C.

Exercise 3: Compose four measures of improvised solo over the following progression.

The image shows a bass line with four measures of chords. The chords are: Ebmaj7, Bbmaj7, Bmaj7, and F#maj7. The notation consists of a single staff with a bass clef and four empty measures.

# Worksheet Packet #3: Dominant

## Scale

Write all scales up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Arpeggio

Write all arpeggios up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Chords

Write chord voicings as in the example given.  
Keep voicings centered around middle C.  
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.  
Play the companion scale, arpeggio, and pattern.

## Patterns

Several examples are given with the chord most appropriate to the pattern included.  
Find two patterns that are specific to the quality (dominant). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker's *Pattern for Jazz*, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).  
Include the appropriate chord symbol and pattern source.  
Add patterns to the log to increase vocabulary.

## Analysis and Application

Exercise 1: Circle the *active* notes for each harmony. Lester Young, *Lester Leaps In*.  
Exercise 2: Provide chord symbols for the written improvisation. New harmonies every two bars.  
Exercise 3: Add proper extensions to the chord symbols according to the written pitches.  
Exercise 4: Compose an improvised line over the indicated chord sequence.

# Scale

Example:

Musical notation for a scale in B-flat major. The scale is written on a single staff with a treble clef and a key signature of two flats (B-flat and E-flat). The ascending line starts on B-flat and goes up to B-flat. The descending line starts on B-flat and goes down to B-flat. A repeat sign is placed in the middle of the scale.

Staff with chord symbols: C | F

Staff with chord symbols: B $\flat$  | E $\flat$

Staff with chord symbols: A $\flat$  | G $\sharp$

Staff with chord symbols: D $\flat$  | C $\sharp$

Staff with chord symbols: G $\flat$  | F $\sharp$

Staff with chord symbols: B | E

Staff with chord symbols: A | D

Staff with chord symbol: G

# Arpeggio

Example:

Musical notation for an arpeggio example in C major, showing a treble clef, a common time signature, and a sequence of notes: C4, D4, E4, F4, G4, A4, B4, C5.

Musical staff with a common time signature 'C' and a chord symbol 'F'.

Musical staff with a chord symbol 'Bb' and a chord symbol 'Eb'.

Musical staff with a chord symbol 'Ab' and a chord symbol 'G#'.

Musical staff with a chord symbol 'Db' and a chord symbol 'C#'.

Musical staff with a chord symbol 'Gb' and a chord symbol 'F#'.

Musical staff with a chord symbol 'B' and a chord symbol 'E'.

Musical staff with a chord symbol 'A' and a chord symbol 'D'.

Musical staff with a chord symbol 'G'.

# Chord 1

C<sup>9</sup>                      F<sup>9</sup>                      B<sup>b9</sup>                      E<sup>bΔ9</sup>                      A<sup>b9</sup>

C <sup>9</sup>	F <sup>9</sup>	B <sup>b9</sup>	E <sup>bΔ9</sup>	A <sup>b9</sup>
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G<sup>#9</sup>                      D<sup>b9</sup>                      C<sup>#9</sup>                      G<sup>b9</sup>                      F<sup>#9</sup>

G <sup>#9</sup>	D <sup>b9</sup>	C <sup>#9</sup>	G <sup>b9</sup>	F <sup>#9</sup>
-----------------	-----------------	-----------------	-----------------	-----------------

B<sup>9</sup>                      E<sup>9</sup>                      A<sup>9</sup>                      D<sup>9</sup>                      G<sup>9</sup>

B <sup>9</sup>	E <sup>9</sup>	A <sup>9</sup>	D <sup>9</sup>	G <sup>9</sup>
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# Chord 2

**C13**                      **F13**                      **Bb13**                      **EbΔ9**                      **Ab13**

<b>C13</b>	<b>F13</b>	<b>Bb13</b>	<b>EbΔ9</b>	<b>Ab13</b>
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**G#13**                      **Db13**                      **C#13**                      **Gb13**                      **F#13**

<b>G#13</b>	<b>Db13</b>	<b>C#13</b>	<b>Gb13</b>	<b>F#13</b>
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**B13**                      **E13**                      **A13**                      **D13**                      **G13**

<b>B13</b>	<b>E13</b>	<b>A13</b>	<b>D13</b>	<b>G13</b>
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# Chord 3

**C13**                      **F13**                      **Bb13**                      **EbΔ9**                      **Ab13**

3/4

**G#13**                      **Db13**                      **C#13**                      **Gb13**                      **F#13**

**B13**                      **E13**                      **A13**                      **D13**                      **G13**

# Patterns (treble)

Examples:

Example 1: Treble clef, C major key signature. Chords: C7 or C9, FΔ7. Notes: C4, D4, E4, F4, G4, A4, B4, C5.

Example 2: Treble clef, C major key signature. Chords: C7(#9) 3, FΔ9, C7 or C9, FΔ7. Notes: C4, D4, E4, F4, G4, A4, B4, C5.

Empty musical staff 3: Treble clef.

Empty musical staff 4: Treble clef.

Empty musical staff 5: Treble clef.

Empty musical staff 6: Treble clef.

Empty musical staff 7: Treble clef.

Empty musical staff 8: Treble clef.

# Patterns (bass)

Examples:

Example 1: A bass line in C major. The first measure contains a C7 or C9 chord with notes C, E, G, Bb, C. The second measure contains an FΔ7 chord with notes F, Ab, C, Eb. The third measure contains a C7 or C9 chord with notes C, E, G, Bb, C. The fourth measure contains an FΔ9 chord with notes F, Ab, C, Eb, G.

Example 2: A bass line in C major. The first measure contains a C7(#9) chord with notes C, Eb, G, Bb, C, marked with a triplet '3'. The second measure contains an FΔ9 chord with notes F, Ab, C, Eb, G. The third measure contains a C7 or C9 chord with notes C, Eb, G, Bb, C. The fourth measure contains an FΔ7 chord with notes F, Ab, C, Eb.

Empty bass staff 1.

Empty bass staff 2.

Empty bass staff 3.

Empty bass staff 4.

Empty bass staff 5.

Empty bass staff 6.

## Analysis and Application (treble)

Exercise 1: Circle the *active* notes for each harmony. Lester Young, *Lester Leaps In*.

Exercise 1 musical notation showing two staves of music. The first staff contains four measures with chord symbols E7 and A7. The second staff contains four measures with chord symbols D7 and G7. The notes are written in treble clef.

Exercise 2: Provide chord symbols for the improvisation below. New harmonies every two bars.

Exercise 2 musical notation showing two staves of improvisation. The first staff has four measures with a triplet of eighth notes in the first measure. The second staff has four measures with triplet markings in the first, third, and fourth measures.

Exercise 3: Add proper extensions to the chord symbols according to the written pitches.

Exercise 3 musical notation showing a grand staff with four measures of chords. The chords are labeled F, G $\flat$ , E, and E $\flat$ . The notes are written in both treble and bass clefs.

Exercise 4: Compose an improvised line over the indicated chord sequence.

Exercise 4 musical notation showing a single staff with four measures of empty space. The chords are labeled B $\flat$ 7, A7, A $\flat$ 7, and G7.

## Analysis and Application (bass)

Exercise 1: Circle the *active* notes for each harmony. Lester Young, *Lester Leaps In*.

Two staves of bass clef music. The first staff contains measures 1-4 with chord symbols E7 and A7. The second staff contains measures 5-8 with chord symbols D7 and G7.

Exercise 2: Provide chord symbols for the improvisation below. New harmonies every two bars.

Two staves of bass clef music showing improvisation lines over a sequence of chords. The first staff contains measures 1-4, and the second staff contains measures 5-8.

Exercise 3: Add proper extensions to the chord symbols according to the written pitches.

A grand staff showing four measures of chords with handwritten extensions. The chords are F, Gb, E, and Eb. The extensions are written as 8, 9, 8, and 9 respectively.

Exercise 4: Compose an improvised line over the indicated chord sequence.

A bass clef staff with four measures and chord symbols Bb7, A7, Ab7, and G7.

# Worksheet Packet #4: ii V7 I

## ii V7 I Voicings

Write chord voicings as in the example given.

Keep voicings centered around middle C.

Follow the sequence indicated.

Play all chords on the piano, listen, become familiar with the sound of the ii V7 I.

Voicing options are provided for:

Shell

3-note

4-note

## Patterns

Several examples are given with the chord most appropriate to the pattern included.

Find two patterns that are specific to the quality (major). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker's *Pattern for Jazz*, a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).

Include the appropriate chord symbol and pattern source.

Add patterns to the log to increase vocabulary.

Worksheets for one and two measure ii V7 I patterns are provided.

## Analysis and Application

Exercise 1: Write scale degree digits below notes for all ii V7 sequences. Keith Jarrett, *Four*.

Exercise 2: For each ii V progression indicate the tonicized key by writing the assumed tonic under the applicable measure.

Exercise 3: Notate the guide tones.

Exercise 4: On the second staff, substitute V for ii V and ii V for V.

Exercise 5: Identify the ii V measure

Exercise 6: Compose an improvised solo over the given progression.

# Chord 1

Musical notation for Chord 1 in B-flat major. The first system shows a ii-V7-I progression in both treble and bass clefs. The treble clef notes are: C4 (ii), D4 (V7), E4 (I) in the first measure; F4 (ii), G4 (V7), A4 (I) in the second measure; and Bb4 (ii), C5 (V7), D5 (I) in the third measure. The bass clef notes are: Bb3 (ii), C4 (V7), D4 (I) in the first measure; Bb3 (ii), C4 (V7), D4 (I) in the second measure; and C4 (ii), D4 (V7), E4 (I) in the third measure. Chord symbols are written below the bass clef: C-7, F7, BbΔ7 in the first measure; Bb-7, Eb7, AbΔ7 in the second measure; and Bb-7, Eb7, AbΔ7 in the third measure.

Empty musical staves for Chord 1.

Musical notation for Chord 1 in C major. The first system shows a ii-V7-I progression in both treble and bass clefs. The treble clef notes are: C4 (ii), D4 (V7), E4 (I) in the first measure; F4 (ii), G4 (V7), A4 (I) in the second measure; and B4 (ii), C5 (V7), D5 (I) in the third measure. The bass clef notes are: C3 (ii), D3 (V7), E3 (I) in the first measure; C3 (ii), D3 (V7), E3 (I) in the second measure; and D3 (ii), E3 (V7), F3 (I) in the third measure. Chord symbols are written below the bass clef: C#-7, F#7, BΔ7 in the first measure; C#-7, F#7, BΔ7 in the second measure; and C#-7, F#7, BΔ7 in the third measure.

Empty musical staves for Chord 1.

# Chord 2

ii V9 I ii V9 I

↑ chord tones (fingerings)

ii V9 I

# Chord 3

ii V9 I ii V9 I

↑ chord tones (fingerings)

ii V9 I

# Patterns: 1-measure (treble)

Examples:

Example 1: Treble clef, 1-measure pattern. Chords: D-7, G7, CΔ7. The melody consists of quarter notes: D4, E4, F4, G4, A4, B4, C5, D5.

Example 2: Treble clef, 1-measure pattern. Chords: D-7, G7, CΔ7. The melody consists of quarter notes: D4, E4, F4, G4, A4, B4, C5, D5.

Empty staff 3: Treble clef, 1-measure pattern.

Empty staff 4: Treble clef, 1-measure pattern.

Empty staff 5: Treble clef, 1-measure pattern.

Empty staff 6: Treble clef, 1-measure pattern.

Empty staff 7: Treble clef, 1-measure pattern.

Empty staff 8: Treble clef, 1-measure pattern.

# Patterns: 1-measure (bass)

Examples:

Example 1: A bass clef staff with a 1-measure pattern. The notes are G2, A2, B2, C3, D3, E3, F3, G3. Above the staff are three chords: D-7, G7, and CΔ7.

Example 2: A bass clef staff with a 1-measure pattern. The notes are G2, A2, B2, C3, D3, E3, F3, G3. Above the staff are three chords: D-7, G7, and CΔ7.

Empty bass clef staff.

Empty bass clef staff.

Empty bass clef staff.

Empty bass clef staff.

Empty bass clef staff.

Empty bass clef staff.

# Patterns: 2-measure (treble)

Examples:

Example 1: Treble clef, 7/8 time signature. Chords: D-7, G7, CΔ7, D-7, G7, CΔ7. Includes a triplet of eighth notes.

Example 2: Treble clef, 7/8 time signature. Chords: D-7, G7, CΔ7, D-7, G7, CΔ7. Includes a triplet of eighth notes.

Empty musical staff with treble clef and a double bar line.

Empty musical staff with treble clef and a double bar line.

Empty musical staff with treble clef and a double bar line.

Empty musical staff with treble clef and a double bar line.

Empty musical staff with treble clef and a double bar line.

Empty musical staff with treble clef and a double bar line.

# Patterns: 1-measure (bass)

Examples:

Two examples of 1-measure bass patterns in G major. The first example shows a pattern with a triplet of eighth notes in the first measure, followed by eighth notes in the second measure, and a quarter note in the third measure. The second example shows a pattern with eighth notes in the first measure, eighth notes in the second measure, and a quarter note in the third measure. Both examples are accompanied by chords D-7, G7, and CΔ7.

An empty bass staff with a double bar line, intended for practice.

An empty bass staff with a double bar line, intended for practice.

An empty bass staff with a double bar line, intended for practice.

An empty bass staff with a double bar line, intended for practice.

An empty bass staff with a double bar line, intended for practice.

An empty bass staff with a double bar line, intended for practice.

## Analysis and Application (treble)

Exercise 1: Write scale degree digits below notes for all ii V7 sequences. Keith Jarrett, *Four*.

The image shows four staves of musical notation in treble clef. The first staff starts with a treble clef and a key signature of one flat (Bb). It contains a melodic line with chords F, F-7, and Bb7. The second staff continues the melodic line with chords G-7, Bb-7, and Eb7. The third staff has a 7/8 time signature and contains chords F/A, Ab-7, Db7, G-7, Eb7, and A7. The fourth staff has a 4/4 time signature and contains chords D-7, G7, G-7, C7, F (with a triplet), G-7, and C7.

Exercise 2: For each ii V progression indicate the tonicized key by writing the assumed tonic under the applicable measure.

The image shows two staves of musical notation in treble clef. The first staff has a key signature of one flat (Bb) and contains the following chords: D, C#mi7(b5), F#7, Bmi, E7, Ami, and D7. The second staff has a key signature of one flat (Bb) and contains the following chords: G7, F#mi, B7, E7, Emi, and A7. Each chord is written above a measure of a staff with slash marks indicating the notes.

Exercise 3: Notate the guide tones.

The image shows a single staff of musical notation in treble clef. Above the staff are the following chords: F#-7, B7, E-7, A7, A-7, D7, G-7, and C7. The staff itself is empty, intended for the student to notate the guide tones for each chord.

Exercise 4: On the second staff, substitute V for ii V and ii V for V.

$E^7$ 
 $A^{min9}$ 
 $D^{13}$ 
 $D^{b13}$ 
 $G^{min13}$ 
 $C^9$

Exercise 5: Identify the ii V measure.

Exercise 6: Compose an improvised solo over the following progression.

$B^b_{maj7}$ 
 $E^{min7}$ 
 $A^7$ 
 $D^{min}$ 
 $B^b_{min7}$ 
 $E^b7$

$F_{maj7}$ 
 $E^{min7}$ 
 $A^7$ 
 $A^{min7}$ 
 $D^7$

## Analysis and Application (bass)

Exercise 1: Write scale degree digits below notes for all ii V7 sequences. Keith Jarrett, *Four*.

The first staff shows a sequence of chords: F, F-7, Bb7. The second staff shows: G-7, Bb-7, Eb7. The third staff shows: F/A, Ab-7, Db7, G-7, Eb7, A7. The fourth staff shows: D-7, G7, G-7, C7, F, G-7, C7.

Exercise 2: For each ii V progression indicate the tonicized key by writing the assumed tonic under the applicable measure.

The first staff shows: D, C#mi7(b9), F#7, Bmi, E7, Ami, D7. The second staff shows: G7, F#mi, B7, E7, Emi, A7.

Exercise 3: Notate the guide tones.

The chords listed above the staff are: F#-7, B7, E-7, A7, A-7, D7, G-7, C7.

Exercise 4: On the second staff, substitute V for ii V and ii V for V.

$E7$ 
 $A_{min}9$ 
 $D_{b13}$ 
 $D_{b13}$ 
 $G_{min}13$ 
 $C9$

Exercise 5: Identify the ii V measure.

Exercise 6: Compose an improvised solo over the following progression.

$Bb_{maj}7$ 
 $E_{min}7$ 
 $A7$ 
 $D_{min}$ 
 $Bb_{min}7$ 
 $E_{b}7$

$F_{maj}7$ 
 $E_{min}7$ 
 $A7$ 
 $A_{min}7$ 
 $D7$

# Worksheet Packet #5: Chromaticism

## Pick-up and Passing Notes

Chromatic Pickup Note: Any desired note of emphasis, usually a chord tone, can be approached by 1/2 step either above or below.

Passing Tone: 1/2 steps can connect chord tones within a chord, as in the bebop scales, or between chords as below.

Transpose pattern example in 12 keys.

Include chord symbols.

Do not use enharmonics.

## Scale

Write all scales up to the 9th and down.

Do not use key signatures.

Include accidentals ascending and descending.

## Diatonic Enclosure

Precede chord tone by the diatonic scale tone above and 1/2 step below.

Transpose pattern example in 12 keys.

## Chromatic Enclosure

Precede chord tone by 1/2 above and 1/2 step below, or visa versa.

Transpose pattern example in 12 keys.

## Inclusive Pattern

Notice in the example that this contrived pattern includes both chromatic passing tones and enclosures.

Transpose pattern example in 12 keys.

## Analysis and Application

Exercise 1: Circle and define the chromatic elements of this section of Charlie Parker's solo on *Moose the Mooche*.

Exercise 2: Circle and define the chromatic elements of this section of Joe Pass' solo on *Have You Met Miss Jones*.

Exercise 3: Create a written improvised solo by adding chromatic concepts to the notation. Quarter notes may be converted to eighths or triplets.

Exercise 4: Compose a dominant pattern utilizing chromatic concepts. Indicate the chord choice.

# Pick-up and Passing Notes

Example:

The example shows a musical phrase in 7/8 time, split into two measures. The first measure contains a pickup note (F#) and a triplet of notes (G, A, B) leading to a passing note (C#). The second measure contains a pickup note (F#) and a triplet of notes (G, A, B) leading to a passing note (C#). Chord symbols E-7, D7, G, and E-7 are placed above the notes. The labels 'Pickup' and 'Passing' are placed below the notes.

# Be-bop Scale: Dominant

Example:

C F

Bb Eb

Ab G#

Db C#

Gb F#

B E

A D

G

# Be-bop Scale: Major

Example:

Musical notation for the Be-bop Scale: Major. The scale is shown in two parts: an ascending line starting on a treble clef and a descending line starting on a bass clef. Both lines are marked with a  $Bb\Delta 7$  chord. The notes are:  $Bb$ , C, D,  $Eb$ , F, G,  $Ab$ ,  $Bb$ , C, D,  $Eb$ , F, G,  $Ab$ ,  $Bb$ , C.

Empty musical staff with a C chord above the first measure and an F chord above the second measure.

Empty musical staff with a  $Bb$  chord above the first measure and an  $Eb$  chord above the second measure.

Empty musical staff with an  $Ab$  chord above the first measure and a  $G\#$  chord above the second measure.

Empty musical staff with a  $Db$  chord above the first measure and a  $C\#$  chord above the second measure.

Empty musical staff with a  $Gb$  chord above the first measure and an  $F\#$  chord above the second measure.

Empty musical staff with a B chord above the first measure and an E chord above the second measure.

Empty musical staff with an A chord above the first measure and a D chord above the second measure.

Empty musical staff with a G chord above the first measure.

# Be-bop Scale: Minor

Examples:

The image shows the Be-bop Scale: Minor in two parts. The first part is the ascending scale in treble clef, starting on Bb and ending on Bb. The second part is the descending scale in bass clef, starting on Bb and ending on Bb. Both scales are written in 4/4 time. The interval between the 7th and 8th notes is marked as 8b-7.

A musical staff with two measures. The first measure contains the chord symbol **C**. The second measure contains the chord symbol **F**.

A musical staff with two measures. The first measure contains the chord symbol **Bb**. The second measure contains the chord symbol **Eb**.

A musical staff with two measures. The first measure contains the chord symbol **Ab**. The second measure contains the chord symbol **G#**.

A musical staff with two measures. The first measure contains the chord symbol **Db**. The second measure contains the chord symbol **C#**.

A musical staff with two measures. The first measure contains the chord symbol **Gb**. The second measure contains the chord symbol **F#**.

A musical staff with two measures. The first measure contains the chord symbol **B**. The second measure contains the chord symbol **E**.

A musical staff with two measures. The first measure contains the chord symbol **A**. The second measure contains the chord symbol **D**.

A musical staff with one measure containing the chord symbol **G**.

# Enclosure: Diatonic

Examples:

A musical notation example on a single staff. It begins with a treble clef and a common time signature (C). The key signature has one sharp (F#). The melody consists of the following notes: C4, D4, E4, F#4, G4, A4, B4, C5, B4, A4, G4, F#4, E4, D4, C4. A double bar line is placed after the eighth note (C5). The second part of the example starts with a bass clef and a common time signature (C). The melody consists of the following notes: C4, B3, A3, G3, F#3, E3, D3, C3, B2, A2, G2, F#2, E2, D2, C2. A double bar line is placed after the eighth note (C3).

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

An empty musical staff consisting of five horizontal lines, divided into two equal halves by a double bar line.

# Enclosure: Chromatic

Example:

The example shows a single staff of music in treble clef with a key signature of one flat (Bb). The time signature is common time (C). The melody consists of two measures. The first measure starts with a C4 quarter note, followed by a chromatic descent: Bb4, A4, G4, F4, E4, D4, C4. The second measure starts with a C4 quarter note, followed by a chromatic ascent: D4, E4, F4, G4, A4, Bb4, C4. Above the first measure is a circled '9' indicating a 9th chord. Above the second measure is a circled '9' indicating a 9th chord.

# Inclusive Pattern

Example:

ii V7 I  
 D7 (blues) → 6 1 6 6 7 5  
 3 5 3 1 7 5 9 3 1

pickup      passing      enclosure      bebop      enclosure      enclosure alteration      passing      diatonic

Transpose above pattern in 12 keys.

## Analysis and Application (treble)

Exercise 1: Circle and define the chromatic elements of this section of Charlie Parker's solo on *Moose the Mooche*.

The image shows four staves of musical notation for Charlie Parker's solo on "Moose the Mooche". The notation is in treble clef with a key signature of one sharp (F#). The first staff contains measures 1-4 with chords G, A-, D7, G, A-, and D7. The second staff contains measures 5-8 with chords G7, C, C-b, G, A-, and D7. The third staff contains measures 9-12 with chords G, A-, D7, G, A-, and D7. The fourth staff contains measures 13-16 with chords G7, C, F7, and G. Chromatic lines are indicated by slurs and accidentals (sharps and flats) on various notes, and triplets are marked with a '3'.

Exercise 2: Circle and define the chromatic elements of this section of Joe Pass' solo on *Have You Met Miss Jones*.

The image shows two staves of musical notation for Joe Pass' solo on "Have You Met Miss Jones". The notation is in treble clef with a key signature of one sharp (F#). The first staff contains measures 1-5 with chords F#m7, A-7, D7, G-7, and C7. The second staff contains measures 6-10 with chords A-7, D-7, G-7, and C7. Chromatic lines are indicated by slurs and accidentals (sharps and flats) on various notes, and triplets are marked with a '3'.

Exercise 3: Create a written improvised solo by adding chromatic concepts to the following notation. Quarter notes may be converted to eighths or triplets.

Two staves of musical notation. The first staff has a treble clef and a key signature of one flat (Bb). It contains a sequence of quarter notes: Bb2, Bb3, Bb4, Bb5, Bb6, Bb7, Bb8, Bb9. Above the first two notes is the chord symbol 'FΔ7', and above the last two notes is 'G7'. The second staff has a treble clef and a key signature of two flats (Bb, Eb). It contains a sequence of quarter notes: Bb2, Bb3, Bb4, Bb5, Bb6, Bb7, Bb8, Bb9. Above the first two notes is 'G-7', above the next two is 'Gb7', and above the last two is 'FΔ7'.

Exercise 4: Compose a dominant pattern utilizing chromatic concepts. Indicate the chord choice.

A blank musical staff with a treble clef and a key signature of one flat (Bb).

# Analysis and Application (bass)

Exercise 1: Circle and define the chromatic elements of this section of Charlie Parker's solo on *Moose the Mooche*.

Exercise 1 musical notation (bass clef):

- Staff 1: Chords G, A-, D7, G, A-, D7. Includes a triplet of eighth notes.
- Staff 2: Chords G7, C, C-b, G, A-, D7.
- Staff 3: Chords G, A-, D7, G, A-, D7. Includes a triplet of eighth notes.
- Staff 4: Chords G7, C, F7, G. Includes a triplet of eighth notes.

Exercise 2: Circle and define the chromatic elements of this section of Joe Pass' solo on *Have You Met Miss Jones*.

Exercise 2 musical notation (bass clef):

- Staff 1: Chords Fmaj7, A-7, D7, G-7, C7.
- Staff 2: Chords A-7, D-7, G-7, C7. Includes a triplet of eighth notes.

Exercise 3: Create a written improvised solo by adding chromatic concepts to the following notation. Quarter notes may be converted to eighths or triplets.

The image shows two staves of musical notation in bass clef. The first staff contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4. Chord symbols F#7 and G7 are placed above the first and fifth notes respectively. The second staff contains a sequence of quarter notes: G2, A2, B2, C3, D3, E3, F3, G3, A3, B3, C4. Chord symbols G-7, Gb7, and F#7 are placed above the first, third, and seventh notes respectively.

Exercise 4: Compose a dominant pattern utilizing chromatic concepts. Indicate the chord choice.

A blank musical staff in bass clef, intended for composing a dominant pattern.

# Worksheet Packet #6: Pentatonics 1

## Scale

Write all scales up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Arpeggio

Write all arpeggios up to the 9th and down.  
Do not use key signatures.  
Include accidentals ascending and descending.

## Chords

Write chord voicings as in the example given.  
Keep voicings centered around middle C.  
Play all chords on the piano, listen, become familiar with the sound of the jazz voicing.  
Play the companion scale, arpeggio, and pattern.

## Patterns

Several examples are given with the chord most appropriate to the pattern included.  
Find two patterns that are specific to the quality (major). Sources might include a transcription, a jazz improvisation textbook, Aebersold play-a-long series, a book on jazz patterns such as Jerry Coker's *Pattern for Jazz*, or a reputable professional (i.e. Aaron Miller, Ryan Nielsen, Mark Watkins, Jay Lawrence, Keith Phillips, Justin Nielsen, or a visiting guest).  
Include the appropriate chord symbol and pattern source.  
Add patterns to the log to increase vocabulary.

# Scale: Major Pentatonic

Example:

C C6 C6/9 CΔ7 CΔ9 CΔ13 C7 C9 C13

C F

Bb Eb

Ab G#

Db C#

Gb F#

B E

A D

G

# Scale: Minor Pentatonic

Example:

C- C-7 C-9 C-11 C-13 C7 C9 C13

C F

Bb Eb

Ab G#

Db C#

Gb F#

B E

A D

G

# Patterns (treble)

Examples:

C7 C-7 Eb7 F#sus

(circular)

start on lowest note of instrument,  
continue pattern starting on next scale degree

(circular)

same as above

(circular) C minor = E-flat major

same as above

# Patterns (bass)

Examples:

C7 C-7 EbΔ7 F9sus



(circular)

start on lowest note of instrument,  
continue pattern starting on next scale degree



(circular)

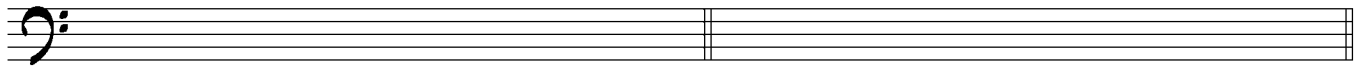
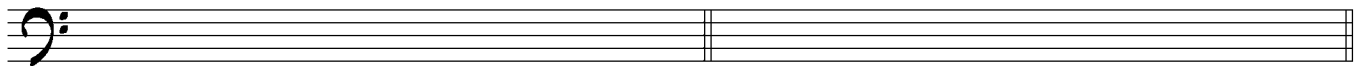
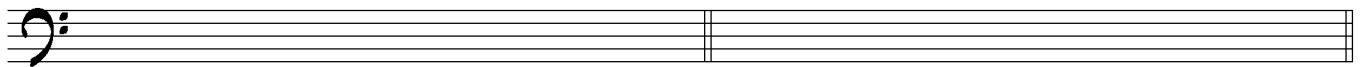
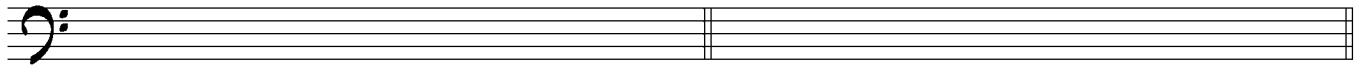
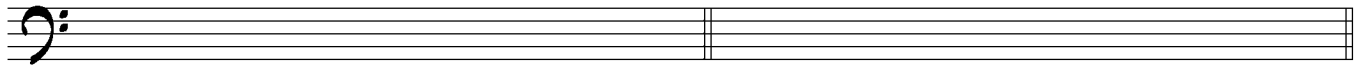
same as above



(circular)

C minor = E-flat major

same as above



## Analysis and Application (treble)

Analyze the following improvisation in terms of scale types and chromaticism concepts. Joe Henderson, *Song for My Father*.

The image displays a musical score for an improvisation in treble clef, consisting of eight staves. The key signature is one flat (B-flat major / D minor). The score includes various musical notations such as notes, rests, and accidentals, along with handwritten chord symbols and articulation marks.

Chord symbols and other markings include:

- Staff 1: G- (above measure 2), F7 (above measure 4)
- Staff 2: Eb7 (above measure 1), A-/O (above measure 2), G-7 (above measure 3)
- Staff 3: G- (above measure 1), F7 (above measure 4)
- Staff 4: Eb7 (above measure 2), A-/O (above measure 3)
- Staff 5: G-7 (above measure 1), F7 (above measure 4)
- Staff 6: G-7 (above measure 2)
- Staff 7: F7 (above measure 1), Eb7 (above measure 2), A-/O (above measure 3), G-7 (above measure 4)
- Staff 8: G- (above measure 2)

The score features several triplet markings (indicated by a '3' below the notes) and various rests, including a full bar rest in measure 4 of the fifth staff.

# Analysis and Application (bass)

Analyze the following improvisation in terms of scale types and chromaticism concepts.

Joe Henderson, *Song for My Father*.

The musical score is written in bass clef with a 4/4 time signature. It features a series of improvisations with various chord symbols and scale runs. The key signature is one flat (B-flat major/D minor). The improvisation includes various scale runs, chromatic lines, and triplets. Chord symbols are written above the notes: G-, F7, Eb7, A-/D, G-7, G-, F7, Eb7, A-/D 8VA, G-7 (8VA), F7, Eb7, A-/D, G-7, G-7 (8VA), F7, Eb7, A-/D, G-7 (8VA), and G-.