The biggest mystery surrounding the subject of single-note playing (also known as “lead” playing, or “soloing”) can be summed up in the question, “What notes or scales sound good over any given chord changes?”

There are basically two types of situations that you have to be ready to deal with as far as chord changes go:

1) One in which two or more successive chords belong to the same key or scale (all scales have certain chords inherent in their notes—more on this soon), and

2) One in which each successive chord belongs to its own key or scale.

Actually, most songs or pieces of music contain both situations, so naturally you will want to be familiar with ways to deal with both types.

So, back to the premise that chords are inherent in scales—here is a simple way to build the chords from virtually any scale:

1) **The first chord in a scale is built by combining every other note in the scale, starting with the 1st note.**
   
   Example: Using the C major scale (C, D, E, F, G, A, B, C) we will combine every other note in the scale, starting with the first note of the scale, stopping after 3 notes are combine. Result: we would have a chord consisting of the notes C, E and G. Three-note chords built in this fashion are commonly called **Triads**.

2) Triads can also be built by combining every other note in a scale but starting from other notes than the 1st one.
   
   Example: In the C major scale, you also have the following triads: DFA, EGB, FAC, GBD, ACE and BDF. Naturally, all these triads have names:

<table>
<thead>
<tr>
<th>NOTES:</th>
<th>G</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAMES:</td>
<td>C</td>
<td>Dm</td>
<td>Em</td>
<td>F</td>
<td>G</td>
<td>Am</td>
<td>B°</td>
</tr>
</tbody>
</table>

If you do not understand why the chords are called what they are, then you should be studying the fundamentals of music theory at the same time that you are studying this material.

Another way to view the construction of the triads from a scale is to build the first chord as explained above, and then move each note of this first triad up to the next note in the scale.

Take a moment and apply this type of thinking to the C major scale.

So now you may be wondering, “How is all this information going to help me learn to play good solos?” Be patient, the answers are coming soon. But first….

Sticking with the major scale for now, it is very important to realize that all the above information can be applied to any and all keys. Following is a list of the triads that can be built from the other major scales:

**Key of G:** G Am Bm C D Em F#°
**Key of F:** F Gm Am Bb C Dm E°
**Key of D:** D Em F#m G A Bm C#°
**Key of Bb:** Bb Cm Dm Eb F Gm A°
**Key of A:** A Bm C#m D E F#m G#°
**Key of Eb:** Eb Fm Gm Ab Bb Cm D°
**Key of E:** E F#m G#m A B C#m D#°
**Key of Ab:** Ab Bbm Cm Db Eb Fm G°
**Key of B:** B C#m D#m E F# G#m A#°
**Key of Db:** Db Ebm Fm Gb Ab Bbm C°
**Key of F#:** F# G#m A#m B C# D#m E#°
**Key of Gb:** Gb Abm Bbm Cb Db Ebm F°
**Key of C#:** C# D#m E#m F# G# A#m B#°
**Key of Cb:** Cb Dbm Ebm Fb Gb Abm Bb°

Triads built from scales are also called diatonic triads (diatonic means “using only notes of the scale”). This new word will take on increasing importance as you progress on. Actually, the full titles of the above are the DIATONIC (Major Scale) TRIADS.
As you may have noticed, the same chord qualities (types of chords) appear in all the keys. That is, the first, fourth and fifth chords are majors; the second, third and sixth are minors; and the seventh is a diminished. The commonly accepted musical shorthand for this information is as follows: **I ii iii IV V vi vii°**

These Roman numeral symbols will be a big help to you in various areas such as transposition (playing something in a different key than it was written or given in), communication with other musicians, and the theme of these sheets—your single-note playing.

You should commit all of the information given so far to memory, as soon as possible. In the long run it is the fastest way to go, even though it may seem to be the slowest, most tedious way right now.

So, how can you use this info in your single-note playing? By using the following principle:

**When any chord progression contains two or more chords that are derived from the same scale, use that scale in your single-note playing for those particular chords.**

Example: Suppose you see this chord progression: **G – A – D**, or this one: **Em – A – D**.

Which scale would you play over these chords? Answer: the D major scale.

To be sure, there are some toss-up situations (for instance, which is right for the chord progression **G – D**? Two answers: The G or D major scales), but these are virtually eliminated in contemporary music, due to the use of more modern chord types such as 7ths, 9ths, 11ths and 13ths (this statement will become clear very soon).

Before we go any further, you should get a chance to apply some of this information to some chord progressions; naturally, in order to do this, you have to know how to play the major scale, so here are some diagrams that you should play through and memorize. As far as the left hand fingering goes, experiment, and also get other players’ opinions on the subject.

All examples are given in the key of D but should be learned in all keys as soon as possible.

![Diagram of Common Diatonic Chord Progressions](image)

Now, for applying these sounds—here are some diatonic chord progressions in the key of D. You might put them on tape and practice your scales “over” them, or maybe you could get together with another person who can play the chords while you solo. (As far as how to play these scales, or how to mix the notes up, just experiment for now. Separate material will be given soon on this subject.) Try lots of different rhythms and right-hand techniques in these progressions.

**Common Diatonic Chord Progressions (Key of D) Using Triads**

1) ||: **D – G – D – G :||**
4) ||: **D – A – G – A :||**
7) ||: **D – Bm – G – D :||**
10) ||: **D – F#m – G – A :||**
13) ||: **Bm – F#m – G – D :||**
15) ||: **D – A – Bm – F#m – G – D – Em – A :||**
16) ||: **D – A3 – Bm – F#m3 – G – D3 – Em7 – A11 :||

Bass note (3rd of chord)

These more modern chords are used here for extra color (they will be discussed soon).
COMMON DIATOMIC CHORD PROGRESSION EXAMPLES (MAJOR KEY)

Write a Roman numeral analysis below each progression and then transpose the examples to keys of C, E, F, G, A and B. Also, where possible, transpose all progressions to other string sets.

For extra interest: add diatonic decoration.
Most music written in the 20th century does not use triads only, but also, more modern chord types such as 7ths, 9ths, 11ths and 13ths.

**Building 7th Chords**

If you were to start from the 1st tone in a scale, and combine every other note until you had 4 notes (remember that triads were the result of the combination of 3 notes), the result would be what is called a **diatonic 7th chord**. It is called a 7th chord because it contains a note (“on top” of the triad) that is, the interval of a 7th above the root. As with triads, diatonic 7th chords can be built starting from other notes in a scale. Following are all the diatonic 7th chords in the key of C major:

<table>
<thead>
<tr>
<th>DIATONIC (Major Scale)</th>
<th>NAMES:</th>
</tr>
</thead>
<tbody>
<tr>
<td>B C D E F G A</td>
<td>C7</td>
</tr>
<tr>
<td>G A B C D E F</td>
<td>Dm7</td>
</tr>
<tr>
<td>E F G A B C D</td>
<td>Em7</td>
</tr>
<tr>
<td>C D E F G A B</td>
<td>F7</td>
</tr>
<tr>
<td></td>
<td>G7</td>
</tr>
<tr>
<td></td>
<td>Am7</td>
</tr>
<tr>
<td></td>
<td>Bm7b5</td>
</tr>
</tbody>
</table>

The common Roman Numeral symbols are as follows: I7 ii7 iii7 IV7 V7 vi7 vii7b5 or vii07

**ASSIGNMENT:** Write out similar charts of the diatonic 7th chords in all 15 keys.

Diatonic 7th chords are often used in place of diatonic triads (meaning, if you saw a progression of, say, Bm – F#m – G – D, [key of D] you might play Bm7 – F#m7 – G7 – D7). As far as soloing over the diatonic 7th chords goes, the principle is the same as with diatonic triads; that is, if you see two or more successive 7th chords that are diatonic to the same scale, use that scale in your single-note playing. To get familiar with the sound of all this, you might try going back to the chord progressions on page 2 (part 2) and substituting diatonic 7ths for the triads, and then soloing over these new chords. Also, here are some new progressions to practice: (Given in key of D)

17) ||: D7 – Em7 – F#m7 – Em7 :|| 18) ||: G7 – F#m7 – Em7 – D7 :|| 19) ||: F#m7 – Bm7 – Em7 – A7 :||

**ASSIGNMENT:** Notice the Roman numerals included here. If you haven’t already done so, go back to the progressions on page 2 (part 2), figure out what the progressions would be in terms of Roman numerals, write out these numerals on a separate page, and then transpose the progressions to at least a few new keys. Then transpose the above progressions also. The reason for all this emphasis on transposing and progressions is so that you learn to instantly tell what key a song or portion of a song is in, which then tells you which scale to play for soloing.

**Building 9th, 11th and 13th Chords, and “Added Note” Chords**

If you were to take the principle of combining alternate notes in a scale and carry it out farther until you had 5 notes, the result would be **diatonic 9th chords**; with 6 notes, you have **diatonic 11th chords** and with 7 notes, you have **diatonic 13th chords**. Not all of these chords are commonly used, because some of them sound pretty awkward, but the ones that sound good, really sound good.

In addition, many of these chords sound good when certain notes are left out. Also, another group of important chords are the “added note” chords. Example: Dadd9 (D/9) contains the notes D, F#, A, E. Anyway, on the next page will be a bit of the more commonly used of all these chords; the list will be given in the key of D.
( C# ↔ Em13 )

B  E  E  E  F#  A  F#  B
C#  C#  B  B  E  D  D  F#  E
A  A  A  A  A  B  B  B  C#
F#  F#  F#  F#  F#  G  G  G  A
D  D  D  D  D  E  E  E  F#

D9  D/9  D43  D6  D6/9  D2  Em9  Em7/11  Em11  Em/9  F#m7/11

I or I7  ii or ii7  iii or iii7

Triad or 7th symbols are commonly used for the “fancy” chords as well.

ASSIGNMENT: Naturally, you should try using these new chords in your progressions, as substitutes for the triads or 7th chords, and then try soloing over them. Do all this in various keys, as before.

Here are some new progressions to try also: 20) ||: G7 – C#m7b5 – F#m7 – Bm7 – Em7 – A7 – D7 – D7 :||

IV7  vii7  iii7  vi7  ii7  V7  I7

21) ||: Em7 – A7 – D7 – (Bm7) :||

22) ||: D7 – Bm7 – Em7 – A7 :||

23) ||: F#m7 – Bm7 – Em7 – A7 :||
DIATONIC ARPEGGIOS (Major Scale)

Many of the best single-note players derive most of the notes in their solos from the *notes in the chords* over which they are soloing. Example: in the key of D, if an Em chord comes up, a lot of players would probably see the notes of the different Em types (that are diatonic to the key of D)—namely, E, G, B, D, F#, A and maybe the C# too.

“Wait a minute,” you’re saying, “this is the whole D scale, so what’s the big deal?” The big deal is that players use these notes in certain groupings which, like it or not (don’t worry, human ears like it), the ear integrates as a chord being played one note at a time, which brings us to the definition of an arpeggio: An **ARPEGGIO** is simply a “broken chord”—that is, in an arpeggio, the notes of a chord are played successively rather than simultaneously. A thorough knowledge of diatonic arpeggios is ULTRA-important to anyone wanting to be a great single-note player.

A list of these arpeggios will follow soon.

Here is a practice procedure for learning and applying them:

1) Learn a fingering of a given arpeggio “from the bottom up.”
2) Then try breaking it up into 4 (or 3) note groups, also from the bottom up.
   Example: given a D7 arpeggio with the notes D, F#, A, C#, D, F#, A, C#, D from the bottom up,
   the 4-note groups would be:  D F# A C,  F# A C# D,  A C# D F#,  C# D F# A,  D F# A C,  etc.
3) Now reverse the procedure, from the “top down.”
4) Then try random “break ups.”
5) Then mix in other diatonic notes with the arpeggio tones.
6) Repeat the process for other arpeggios, and when you have enough different sounds under control, try applying all of this to your progressions.

Please note that a sophisticated arpeggio sound may be played over a more simple chord; in fact, this is desirable. Example: over an Em chord, try an Em7 or Em9 or Em11 or Em13 arpeggio.

The principle doesn’t work too well in reverse (like an Em7 arpeggio over an Em11 chord is not as desirable as an Em9 or Em11 arpeggio over an Em11 chord).
The biggest mystery surrounding the subject of single note playing (also known as "lead" playing, or "soloing") can be summed up in the question: "What notes in scales sound good over any given chord changes?" There are basically two types of situations that you have to be ready to deal with as far as chord changes go: 1) One in which two or more successive chords belong to the same key or scale (all scales have certain chords inherent in their notes — move on this soon) and 2) One in which each successive chord belongs to its own key or scale. Actually, most songs or pieces of music contain both situations, so naturally, you will want to be familiar with ways to deal with both types.

So back to the premise that chords are inherent in scales—here is a simple way to build the chords from virtually any scale:

1. The first chord in a scale is built by combining every other note in the scale, starting with the 1st note.

   **Example:** Using the C major scale (CDEFGAB), we will combine every other note in the scale, starting with the first note of the scale, stopping after 3 notes are combined. Result: We would have a chord consisting of the notes C, E, and G. These note chords built in this fashion are commonly called TRIADS. 2. This can also be built by combining every other note in a scale but starting from other notes than the 1st one. **Examples:**

   - in the C major scale, you also have the following triads: DFA, EGB, FAC, GB, AC and BD. Naturally, all these triads have names:

   - **Key of G:** G Am Bm C D Em F# Cm
   - **Key of F:** F Gm Am Bb C Dm E
   - **Key of Bb:** Bb Cm Dm Eb F Gm A
   - **Key of Eb:** Eb Fm Gm Ab Bb Cm D
   - **Key of Ab:** Ab Bbm C# Db Eb Fm G
   - **Key of Db:** Db Ebm Fm Gb Ab Bbm C
   - **Key of Gb:** Gb Dbm Em Fm Gb Ab Bbm C
   - **Key of Db:** Db Ebm Fm Gb Ab Bbm C

   If you do not understand why the chords are called what they are, then you should be studying the fundamentals of music theory at the same time that you are studying this material.

Another way to view the construction of the triads from a scale is to build the first chord as explained above, and then move each note of this first triad up to the next note in the scale. Take a moment and apply this type of thinking to the C major scale.

So now you may be wondering "How is all this information going to help me learn to play good notes?" The patient answer is coming soon, but first……

Sticking with the major scale for now, it is very important to realize that all the above information can be applied to any and all keys. Following is a list of the triads that can be built from the other major scales:

1. **Diatomic (major scale) TRIADS.**
As you may have noticed, the same chord qualities (types of chords) appear in all the keys. That is, the first, fourth, and fifth chords are majors, the second, third, and sixth are minors, and the seventh is a diminished. The commonly accepted musical shorthand for this information is as follows: I ii iii IV V vi vii°. These Roman numeral symbols will be a big help to you in various areas such as transposition (playing something in a different key than it was written or given in), communication with other musicians, and the theory of these sheets - your single note playing.

You should commit all of the information given so far to memory, as soon as possible. In the long run it is the fastest, most tedious way to go, even though it may seem to be the slowest, most tedious way to go right now.

So, how can you use this info in your single note playing? By using the following principle: any chord progression contains two or more successive chords that are derived from the same scale, use that scale in your single note playing for those particular chords. Example: Suppose you see this chord progression G A D for the one: Em A D. Which scale would you play over these chords?

Answer: the D major scale. To be sure, there are some toe-up situations (for instance, which scale is right for the chord progression G D ?) answers: the G or D major scales), but these are virtually eliminated in contemporary music due to the use of more modern chord types such as 7ths, 9ths, 11ths and 13ths (this statement will become clear very soon).

Before we go any further, you should get a chance to apply some of this information to some chord progressions; naturally, in order to do this, you have to know how to play the major scale, so here are some diagrams that you should play through and memorize. As far as left hand fingerings goes, experiment, and also get other players' opinions on the subject.

All examples are given in the key of D but should be learned in all keys as soon as possible.

Now, for applying these sounds - here are some diatonic chord progressions in the key of D. You might put them on tape and practice your scales over them, or maybe you could get together with another person who can play the chords while you solo. (As far as how to play these scales, or how to mix the toe-up, just experiment for now, separate material will be given soon on this subject). Any data of different rhythm and right-hand techniques in chords are used here for extra color (they will be discussed soon).

Common Diatonic Chord Progressions (Key of D) Using Triads These Progresses:

1. D G D G etc.
2. D G A D D G A D etc.
3. D A G D D A G D etc.
4. E D A G A I
5. F D G A I
6. G D A G I
7. Bm G D I
8. Bm G A I
9. D F#m G D I
10. D F#m G A I
11. D Em G D I
12. D Em G A I
13. Bm F#m G D I
14. Em Bm G D I
15. D A Bm F#m G D Em A I
16. A Bm F#m G D Em A I

Base note (3rd of chord)
Most music written in the 20th Century does not use triads only, but also, more modern chord types such as 7ths, 9ths, 11ths, and 13ths.

**BUILDING 7TH CHORDS**

If you were to start from the 1st tone in a scale, and combine every other note until you had 7 notes (remember that triads were the result of the combination of 3 notes), the result would be what is called a diatonic 7th chord. It is called a 7th chord because it contains a note ("on top" of the triad) that is the interval of a 7th above the root. As with triads, diatonic 7th chords can be built starting from other notes in a scale. Following are all the diatonic 7th chords in the key of C major:  

**DIATONIC (MAJOR SCALE) 7TH CHORDS:**

- B7
- C7
- D7
- E7
- F7
- G7
- A7
- B7

**Assignment:** Write out similar charts of the diatonic 7th chords in all 15 keys.

The common Roman Numeral symbols are as follows: I, ii, iii, IV, V, VI, vii, viii

Diatonic 7th chords are often used in place of diatonic triads (meaning, if you saw a progression of, say, Bm F#m G, you might play Bm7 F#7 G7 D7). As far as soloing over the diatonic 7th chords goes, the principle is the same as with diatonic triads; that is, if you see two or more successive 7th chords that are diatonic to the same scale, use that scale in your soloing. To get familiar with the sound of all this, you might try going back to the chord progressions on page 2, and substituting diatonic 7ths for the triads, and then soloing over these new chords. Also, here are some new progressions to practice: (Churn in key of D)

**Assignment:** Notice the Roman numerals included here. If you haven't already done so, go back to the progressions on page 2, figure out what the progressions would be in terms of Roman numerals, write out these numerals on a separate page, and then transpose the progressions to at least a few new keys. Then transpose the above progressions also. The reason for all this emphasis on transposing and progressions is so that you learn to instantly tell what key a song or portion of a song is in, which then tells you which scale to play for soloing.

**BUILDING 9TH, 11TH, AND 13TH CHORDS:**

If you were to take the principle of combining alternate notes in a scale, and carry it out further until you had 5 notes, the result would be diatonic 9th chords; with 6 notes, you have diatonic 11th chords and with 7 notes, you have diatonic 13th chords. Not all of these chords are commonly used because some or them sound pretty awkward, but the ones that sound good, really sound good.

In addition, many of these chords sound good when certain notes are left out.

Also, another group of important chords are the "added note" chords. Example: D#9 contains the notes D, F, A, E. Anyway, on the next page will be a list of the more commonly used of all these chords; the list will be given in the key of D.
ASSIGNMENT: Naturally you should try using these new chords in your progressions, as substitutes for the triads or 7th chords, and then try soloing over them. Do all this in various keys, as before.

Here are some new progressions to try also: 20. G7, F7, Bm7, Em7, A7, D7, D7.
22. D7, Bm7, Em7, A7.
23. F#7, Bm7, Em7, A7.

DIATONIC ARPEGGIOS (MAJOR SCALE)

Many of the best single note players derive most of the notes in their solos from the notes in the chords over which they are soloing. Example: In the key of G, if an Em chord comes up, most players would probably use the notes of the different Em types (that are diatonic to the key of G—namely, E G B D F# A and maybe the C too). “Wait a minute,” you’re saying, “is this the whole G scale, so what’s the big deal?” The big deal is that players use these notes in certain groupings which, like it or not (don’t worry, human ears like it), the ear interprets as a chord being played one note at a time, which brings us to the definition of an arpeggio: An arpeggio is simply a “broken chord” — that is, in an arpeggio, the notes of a chord are played successively rather than simultaneously. A thorough knowledge of diatonic arpeggios is ULTRA important to anyone wanting to be a great single note player.

A list of these arpeggios will follow soon. Here is a practice procedure for learning and applying them:
1. Learn a fingering of a given arpeggio “from the bottom up”.
2. Then try breaking it up into 4 (or 3) note groups also “from the bottom up”.
3. Example: Given a D7 arpeggio with the notes D F# A C# D F# A C# from the bottom up, the 4 note groups would be D F# A C#; F# A C# D F#; A C# D F#; C# D F#.
4. Then try random “break ups.”
5. Then mix in other diatonic notes with the arpeggio tones.
6. Repeat the process for other arpeggios and when you have enough different sounds under control, try applying all of this to your progressions.

Please note that a sophisticated arpeggio sound may be played over a more simple chord, in fact, this is desirable. Example: Over an Em chord, try an Em7 or Em7/F# or Em7/F#11 or Em7/13 arpeggio.

This principle doesn’t work as well in reverse (like an Em7 arpeggio over an Em7 chord is not as desirable as an Em7 or Em7/F# arpeggio over an Em7 chord).