## Fretboard Aarmony

An approach to modern harmonic relationships that are unique to the guitar


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## Introduction

This book provides an approach to modern harmonic relationships that is unique to the guitar, creating the foundation necessary for a complete understanding of music theory as it relates to the guitar fingerboard. Designed for the elementary and intermediate player, this book does not require the ability to sight-read.

The book is divided into two sections: text and workbook. The text section is presented with a minimum of verbiage, the workbook section is comprised of simple exercises designed to promote assimilation and utilization of the information provided in the text.

Topics covered: Sharps, flats and enharmonics; symmetrical scales and technique exercises; the five pentatonic scale patterns; the "relative minor" relationship; pattern movements within I, IV, V progressions; intervals and their symbols; the fretboard geometry of intervals; the major scale and its role in present-day music; chords, chord progressions and chord substitutions; chord inversions; 15 common major-scaletype chord progressions; 45 real-world, useable chords diagrammed and explained; the five major scale patterns; root positions of the five major scale patterns; detailed presentations and analyses of three songs; the " D " tuning, with diagrams of 40 practical chords; line progressions, diagrammed and explained; passing chords, ascending and descending; contrasting major and minor keys; understanding minor progressions; and commonly used chord types in minor progressions.

It is recommended that players practice and study at least one hour per day to reap the maximum benefits from this book.
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## Acknowledgments

Fretboard Harmony is a distillation of 35 years of lessons learned from a vast pool of players, teachers, friends, studio engineers and even a few dogs and cats. All of their names and stories easily could fill a book - a book that would be far more interesting than a text for the guitar.

I am grateful to my wife, Julie, who with the help of her mother, Jo Hadley, took a loose, unorganized, and often long-winded manuscript and turned it into this beautifully produced book. Special thanks, also, to my talented friend Ben Bull (Obscure Design, San Bernardino, California), for his generous and invaluable computer-graphics advice during the production of this book.

I have also had more than my share of bright, talented and challenging students who have helped guide the presentation of these concepts.

As a teacher, Jack Smalley, at the Dick Grove Music Workshops, opened up a multitude of doors and insights into the tapestry of music and human experience. His positive vitality, honesty and humor were irresistible, and the learning was fun.

Thanks also to Jim Bogen for helping to arrange my classes at Pitzer College. Without his efforts I would not have undertaken this book.
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$$
\begin{array}{lll}
\mathrm{P} & \mathrm{~A} \quad \mathrm{R}^{\mathrm{T}}
\end{array}
$$

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## Textbook

## 1 <br> The Basics

## Sharps, Flats and Enharmonics

$b=$ flat $\quad$ Note is lowered by one fret, $1 / 2$ step
$\#=$ sharp $\quad$ Note is raised by one fret, $1 / 2$ step
4 = natural Used to cancel a previous sharp or flat instruction

The Chromatic Scale
The Ascending Chromatic Scale
The Descending Chromatic Scale
Enharmonic Equivalents
Example:

All 12 notes
$A A^{\#} B C C^{\#} D D^{\#} E F F^{\#} G G^{\#} A$
$A A^{b} G G^{b} F E E^{b} D D^{b} C B B^{b} A$
Same note with two names
$\left(A^{\#} \& B^{b}\right)\left(C^{\#} \& D^{b}\right)\left(D^{\#} \& E^{b}\right)$
$\left(F^{\sharp} \& G^{b}\right)\left(G^{\sharp} \& A^{b}\right)\left(B^{\sharp} \& C\right)$
$\left(B \& C^{b}\right)\left(F \& E^{\#}\right)$

## Exercises

Practice drawing and saying the alphabet A through G forwards, backwards, and every other letter.

Using workbook pages 129 through 136, draw and recite chromatic scales starting from each note.

## Symmetrical Scales and Technique

Symmetrical Scales are groups of evenly spaced notes.


## Exercises

Using workbook pages 137 through 142, draw the Symmetrical Scales.

## Pentatonic Scales

- Are the most universal scales
- Lay well on the fretboard
- Provide an open sound with great harmonic strength
- Are able to assume many harmonic identities
- When layered over with blues scales, provide wide range of possibilities


## Example of Pentatonic Scales in the key of A



## Exercises

Practice drawing chord shapes.

Play chord shapes and scales.

Break the patterns into parts and develop licks.

Advanced: Play as 4ths (two adjacent notes at once).

Using workbook pages 143 through 155, draw the pentatonic scale patterns and their corresponding chord shapes.

## Metronome Practice

Time is everything! Tell yourself this every day for life!

GET ONE - BUY ONE - STEAL ONE!

## Exercises

Practice playing the following with a metronome:
M.M. $200 \quad$ Play $1 / 2$ notes (one note equals two ticks)
M.M. $120 \quad$ Play $1 / 4$ notes (one note equals one tick)
M.M. $120 \quad$ Play $1 / 8$ notes (two notes equal one tick)
M.M. $120 \quad$ Play $1 / 8$ notes with swing feel (doo-ba)

Repeat the above, playing in between the metronome ticks.

## General Practice Tips

Warm up slowly with the symmetrical scales for three or four minutes.

Practice drawing what you are working on.

Isolate your weaknesses and allow them more time.

Keep a practice journal.

Save "getting off" for after practice.

Remember that two minutes of concentrated effort on a difficult passage is the equivalent of 15 to 20 minutes of song repetition.

Don't get discouraged! It is not uncommon for people to have difficulty assimilating this new information and incorporating it into their playing repertoire. Most people who embark upon concentrated studies of this nature tend to lose perspective on their growth rate. This is totally normal! A little faith and patience will help a lot.

## 2 Changing Major to Minor

## Major and Minor

All five basic chord shapes can be changed from major to minor. Doing this requires memorizing which of the chord notes are the 3rds.

## Key of "A" Major



Lowering the 3 rd by one fret ( $1 / 2$ step) changes the chord from major to minor.

## Key of"A" Minor



## Relative Minor

The term relative minor means that three frets down from any major chord lies a minor chord that shares most of its notes with its relative major chord, three frets up. "A" major's relative minor is " F " minor. " F "" minor's relative major is " A " major.

Here is how " F " minor fits into the five pentatonic scale patterns:

## Key of "F" Minor



Note that each of the five pentatonic patterns contains a major chord and its corresponding relative minor chord.

## Exercises

Experiment with new chord shapes within the patterns - most sound good and there are many possibilities - all of which can be substituted for their basic chord counterparts.

Using workbook pages 156 through 177, complete the major-to-minor exercises.

## Summary of Basic Major and Minor Chord Shapes within the Pentatonic Patterns

Preceding are five different fingerings and scale patterns of the Pentatonic Scale; each pattern contains the shape of a major chord, and the shape of its relative minor chord.

Example:

## The Keys of "A" Major and F" Minor

AEO-PENT at fret \#2 = "G" shaped major chord and "E" minor shaped chord. IO-PENT at fret \#5 = "E" shaped major chord and "D" minor shaped chord. DORI-PENT at fret \#7 = "D" shaped major chord and "C" minor shaped chord. LYDI-PENT at fret \#9 = "C" shaped major chord and "A" minor shaped chord. MIXO-PENT at fret \#12 = "A" shaped major chord and "G" minor shaped chord.

Also, three frets below any major chord is its relative minor chord.

Example:
Three frets below "A" major lies its relative minor chord, " F "" minor.

It follows then, when changing from major to minor, all of the patterns shift up the neck by $t$ three frets.

Example:
The "A" major chord becomes the "A" minor chord.

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## 3 I, IV, V Progressions

## Pentatonic Scales within I, IV, V Progressions

A chord progression is a group of chords played in succession.

Chord progressions typically have a beginning and an end — they are a cycle.

Chord progressions usually move between tension and resolution.

The most basic chord progression is the I, IV, V.

The Roman numerals are used to simplify transposition.

The Roman numeral "I" always names the key.

Example:

## The I, IV, V Progression in the Key of "A" Major

$$
\begin{aligned}
& \mathrm{I}=\text { "A" Major } \\
& \mathrm{IV}=\text { "D" Major } \\
& \mathrm{V}=\text { " } \mathrm{E} \text { " Major }
\end{aligned}
$$

Observe what occurs at the fifth fret when the "A", "D", and "E" chords are played. Notice all three chords can be easily played without ever leaving the fifth fret area of the neck.

"E" Shaped
${ }_{\text {" }}{ }^{\text {IV }}$ Major

"A" Shaped

"C" Shaped

Associating the learned pentatonic scale pattern for each of the five basic chord shapes produces the following I, IV, V Progression in the key of "A" Major, at the fifth fret:



## Exercises

Using workbook pages 178 through 180, complete the I, IV, V Progressions.

Observe a similar occurrence at the second fret:




At the seventh fret:


At the ninth fret:




At the twelfth fret:




## Exercises

Using workbook pages 181 through 186, complete the pattern movement exercises.

Remember that each chord in the I, IV, V Progression has a corresponding relative minor chord.

Example:

$$
\begin{aligned}
& I=\text { "A" Major and "F"" minor } \\
& I V=\text { "D" Major and "B" minor } \\
& V=\text { "E" Major and "C"" minor }
\end{aligned}
$$

A I, IV, V Minor Progression can be built using relative minor chords:

$$
\begin{aligned}
& I \text { minor }=\text { " } F " \text { " minor } \\
& \text { IV minor }=\text { " } B " \text { minor } \\
& V \text { minor }=" C " \text { minor }
\end{aligned}
$$

This would be called the key of "F" minor.

The learned pentatonic scale patterns are exactly the same for the:

$$
\begin{aligned}
& \text { I("A" Major), } \underline{\text { V ("D" Major), }, \underline{V} \text { ("E" Major) Progression in "A" }} \\
& \text { and the }
\end{aligned}
$$

Observe what occurs at the fifth fret when the "F" minor, "B" minor, and "C" minor chords are played. Notice all three chords can be played easily without ever leaving the fifth fret area of the neck.
$\underline{\text { Minor }}$
"F" minor

"D" mi. Shaped

"G" mi. Shaped
$\frac{\text { VMinor }}{\text { " } C^{\text {t" }} \text { minor }}$


Associating the learned pentatonic scale pattern for each of the five basic chord shapes produces the following I, IV, V Progression in the key of "F" minor, at the fifth fret:


Observe a similar occurrence at the second fret:

$$
\frac{\text { I Minor }}{\text { "F\#" minor }}
$$


AEO - PENT "E" mi. Shaped

At the seventh fret:

IV Minor
" B " minor

AEO - PENT
"E" mi. Shaped

LYDI - PENT "A" mi. Shaped


IV Minor
" B " minor
$\underset{\text { " } C^{\sharp " \text { minor }}}{\text { VMinor }}$


DORI - PENT
"C" mi. Shaped


At the ninth fret:



At the twelfth fret:

$$
\underline{\text { I Minor }}
$$



IV Minor
" B " minor


DORI - PENT
"C" mi. Shaped



IO - PENT "D" mi. Shaped

## Exercises

Using workbook pages 187 through 191, complete the pattern movement exercises.

This information should be absorbed slowly - it takes time!

## Exercises

Practice the I, IV, V chord/arpeggio and pattern changes at each of the five areas just reviewed.

Spending two minutes per area, for ten minutes a day, will do the trick.

Please be patient and consistent.

## 4 <br> Mixed I, IV, V Progressions

## Mixed I, IV, V Progression Combinations

I, IV, V Progressions in major and minor are often mixed together.

The possible combinations of Mixed I, IV, V Progressions are:

| I minor | IV Major | V Major |
| :--- | :--- | :--- |
| I Major | IV minor | V Major |
| I Major | IV Major | V minor |
| I minor | IV minor | V Major |
| I minor | IV Major | V minor |
| I Major | IV minor | V minor |

## Exercises

Using workbook pages 192 through 224, complete the pattern movement exercises.

## Simplifying the Pentatonic Pattern Movement in I, IV, V Progressions

The following pentatonic pattern movements are based on all of the possible two-part combinations of I, IV, V Progressions.

Although there are 16 possible two-part combinations of the I, IV, V Progressions, only seven different pattern movements are required to produce them.

In fact, of the seven movements, only four need be memorized, because the other three are the same movements in reverse order.

## Group One Pentatonic Movement



## Group Two Pentatonic Movement

## I to V

Inside circle $=\mathrm{I}(\mathrm{A})$
Outside circle $=V(E)$


Note: This is group one in reverse.

## Group Three Pentatonic Movement



## Group Four Pentatonic Movement

## I Major to V Minor



Note: This is group three in reverse.

## Group Five Pentatonic Movement

## IV Minor to V Major

Inside circle $=\mathrm{IV}$ minor ( $\mathrm{F}^{\#}$ minor )
Outside circle $=$ V Major $\left(G^{\#}\right)$


## Group Six Pentatonic Movement

## IMinor to V Major

Inside circle $=\mathrm{I}$ minor $\left(\mathrm{F}^{\#}\right.$ minor $)$
Outside circle $=$ V Major ( $\mathrm{C}^{\#}$ )


## Group Seven Pentatonic Movement



Note: This is group six in reverse.

## Interval Geometry

## Intervals and Symbols

In harmony the distance between notes is measured up or down using whole steps (two frets), and half steps (one fret).

Each distance or interval is given a name:
Root Up or Down Is Called $\underline{\text { Written As }}$

| "C" 6 whole steps | 6 whole steps | = "C", an octave | 8 |
| :---: | :---: | :---: | :---: |
| "C" 1 whole step |  | = "D", a major 2rd | 2 |
| "C" $1 \frac{112}{2}$ whole steps |  | $=" E{ }^{\text {b }}$, a minor 3rd | mi. 3 or ${ }^{\text {b }} 3$ |
| "C" 2 whole steps |  | = "E", a major 3rd | Ma.3,3or $\Delta^{3}$ |
| "C" $21 \frac{1}{2}$ whole steps |  | $=$ " F ", a perfect 4th | 4 |
| "C" 3 whole steps | 3 whole steps | $={ }^{\text {C }} \mathrm{l}$ ", a diminished 5th | flat 5 or ${ }^{\text {b }}$ |
| "C" 31/2 whole steps | $2 \frac{1}{2}$ whole steps | = "G", a perfect 5th | 5 |
| "C" 4 whole steps | 2 whole steps | $=" \mathrm{G}^{\sharp \prime}$, an augmented 5th | +5 |
| "C" 41122 whole steps | $1 \frac{1}{2}$ steps | = "A", a major 6th | Ma. 6, 6 or ${ }_{\Delta} 6$ |
| "C" 5 whole steps | 1 step | $=$ "B ${ }^{\text {", }}$ a minor 7 th | flat 7,7 or ${ }^{\text {b }}$ |
| "C" 51/2 whole steps | 1/2 step | $=$ " B ", a major 7th | $\mathrm{Ma}$.7 or $_{\Delta} 7$ |

## Upper Extensions

When describing an interval further than one octave above the root, the number seven (7) is added to the interval name.

Example:

> "C" is the root
> "D" is the major 2nd

One octave above " $D$ " is called the Major 9th

It follows:

$$
\begin{aligned}
& \text { " } F \text { " is the } 4 \text { th }=\text { one octave above " } F \text { " }=\underline{11 \text { th }} \\
& \text { " } A \text { " is the } 6 \text { th }=\text { one octave above " } A \text { " }=\underline{13 \text { th }}
\end{aligned}
$$

In everyday chord useage:

> 10ths are known as 3rds
> 12ths are known as 5ths
> 14ths are known as 7ths
> 15th are known as octaves

The exception is the 2nd, which is almost always referred to as a 9th!

## Exercises

Using workbook pages 225 through 231, complete the interval exercises.

## Interval Geometry

## $\underline{\text { Octave }=}$ The same note 12 frets away

If "C" is the root, then " $C$ " is also the octave.

## I and I



OCTAVE


OCTAVE


OCTAVE


OCTAVE


## Major 2nd = Two frets above root (or ten frets below)

If " $C$ " is the root ( I ), then " D " is the major 2nd (II).

## I and II

| Major 2nd |  |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| (    <br>     <br>     <br>     <br> $R$    <br>     <br>     <br>     |  |  |  |  |

Major 2nd


Major 2nd


Major 2nd


Major 2nd


## Minor 3rd = Three frets above root (or nine frets below)

If "C" is the root (I), then "E ${ }^{b}$ " is the minor 3rd (bIII or ${ }^{\text {b }}$ 3).

## I and ${ }^{\text {bIII }}$



Minor 3rd
Minor 3rd


Minor 3rd
Minor 3rd


$\underline{\text { Major 3rd }=\text { Four frets above root (or eight frets below) }}$

If " C " is the root ( I ), then " $E$ " is the major 3rd (III).

## I and III



Major 3rd




Major 3rd


## Perfect (Normal) 4th $=$ Five frets above root (or seven frets below)

If " $C$ " is the root ( I ), then " $F$ " is the perfect (normal) 4th (IV).

I and IV


## $\underline{\text { Diminished/Flatted 5th }=\text { Six frets above root (or six frets below) }}$

If " $C$ " is the root ( $(\mathrm{I})$, then " $G$ " " is the flatted 5th ( ${ }^{\mathrm{b}} \mathrm{V}$ ).

$$
\text { I and }{ }^{b} \mathbf{V}
$$

b5

b5

b5


\[

\]

## Perfect (Normal) 5th $=$ Seven frets above root (or five frets below)

If " $C$ " is the root ( I ), then " $G$ " is the perfect (normal) 5 th (V).

## I and V



Perfect 5th


Minor 6th or Augmented 5th = Eight frets above root (or four frets below)

If " $C$ " is the root ( $(\mathrm{I})$, then " $G$ " " is the augmented 5 th $(+V$ or +5$)$.

## I and +V

$+5$

$+5$

$+5$



## Major 6th $=$ Nine frets above root (or three frets below)

If " $C$ " is the root (I), then " $A$ " is the major 6th (VI).

I and VI


## Flatted 7th $=$ Ten frets above root (or two frets below)

If " $C$ " is the root ( I ), then " B " is the flatted 7 th (bVII or ${ }^{\mathrm{b}} 7$ ).

## I and ${ }^{b}$ VII

b7

b7

b7

b7


## $\underline{\text { Major 7th }=\text { Eleven frets above root (or one fret below) }}$

If " $C$ " is the root (I), then " $B$ " is the major 7th (VII).

## I and VII

| Major 7th |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|     |  |  |  |  |
| R |  |  |  |  |
|  |  |  |  |  |

Major 7th
Major 7th


Major 7th


## Exercises

Using workbook pages 232 through 238, draw the interval shapes.

## 6 <br> The Major Scale

## The Major Scale

The major scale is used to measure and describe harmonic relationships.

Producing the major scale requires a series of whole steps (two frets) and half steps (one fret).

In the following examples: "W" = whole step
"H" = half step

The sequence goes like this:

> W, W, H, W, W, W, H
(whole step, whole step, half step, whole step, whole step, whole step, half step)

The sequence applied to the chromatic scale:


Produces the major scale:
C D E F G A B C

Each note is assigned a Roman numeral:

> I II III IV V VI VII I
> C D E F G A B C

The familiar singable symbols are also assigned to each note:
I II III IV V VI VII I
C D E F G A B C
do re mi fa sol la ti do
Because the Roman numerals, singable symbols, and whole step/half step sequences always remain the same, it is easy to transpose from one key to another.

The following examples illustrate all 12 possible major scales and their practical spellings:

Key of "C" Major


No sharps or flats.

## Key of"F" Major



One flat.

# Key of "B'" Major <br>  

Two flats.

Key of"E"Major


Threeflats.

## Key of "A ${ }^{\prime}$ " Major



Four flats.

Key of " $\mathbf{D}$ "" Major*


Fiveflats.


Six flats.


Seven flats.

Key of"G" Major

| I |  | II |  | III |  | IV |  | V |  | VI |  | VII |  | I |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | W |  | W |  | H |  | W |  | W |  | W |  | H |  |
| G |  | A |  | B |  | C |  | D |  | E |  | $F^{\#}$ |  | G |

One sharp.

Key of"D" Major

| I |  | II |  | III |  | IV |  | V |  | VI |  | VII |  | I |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | W |  | W |  | H |  | W |  | W |  | W |  | H |  |
| D |  | E |  | $F^{\#}$ |  | G |  | A |  | B |  | $C^{\#}$ |  | D |

Two sharps.

## Key of "A" Major



Three sharps.

Key of "E" Major


Four sharps.

Key of "B" Major


Five sharps.


Six sharps.

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| Key of "C" Major* |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I |  | II |  | III |  | IV |  | V |  | VI |  | VII |  | I |
|  | w |  | w |  | H |  | W |  | w |  | w |  | H |  |
| $C^{\#}$ |  | $\mathrm{D}^{\#}$ |  | $\mathrm{E}^{\#}$ |  | $F^{\#}$ |  | $\mathrm{G}^{\#}$ |  | $A^{\#}$ |  | $B^{\#}$ |  | $C^{\#}$ |

* $\left(C^{b} \& B\right),\left(F^{\#} \& G^{b}\right)$, and $\left(C^{\sharp} \& D^{b}\right)$ are all enharmonic equivalents.


## Chords and Chord Progressions

Start by harmonizing the the major scale:

## Key of "C" Major

I = "C" Ma. 7 ("C", "C" sus., "C6", "C" Ma. 9, "C 69", etc.)
II = "D" mi. 7 ("D" mi. 6, "D" mi. 9, "D" mi. 11, etc.)
III $=$ "E" mi. 7
IV = "F" Ma. 7
$V=$ "G7" ("G7" sus. 4, "G9", "G13", etc.)
$\mathrm{VI}=$ "A" mi. 7
$\mathrm{VII}=$ " $\mathrm{B} "$ mi. 7 (b5)

- The use of 7th chords (four-part harmony), clearly illustrates how a chord fits into its "parent" scale.
- The substitution possiblities within the Roman numerals are:

III and VI are substitutes for I
II and IV are substitutes for each other - II, V, I in jazz and I, IV, V in rock
VII can substitute for V

The following are examples of chord progressions built from the major scale:

1. I Ma. 7 \& IV Ma. 7

C Ma. 7
FMa. 7

2. IV Ma. $7 \& V 7$

3. II mi. 7 \& V 7
4. I Ma. 7 \& II mi. 7
5. II mi. 7, V7, IMa. 7
6. IMa. 7, IV Ma. 7, V 7
7. I Ma. 7 \& VI mi. 7


C Ma. 7
A mi. 7

8. IV Ma. 7 \& II mi. 7

FMa. 7
D mi. 7

9. III mi. $7 \&$ I Ma. 7
Emi. 7
C Ma. 7

10. I Ma. 7, VI mi. 7, II mi 7, V7

11. I Ma. 7, V/3, VI mi. 7, V7
"Descending"

12. Ascending straight up the line starting from the IV Ma. 7

13. Moving primarily by 4 ths
C Ma. 7
FMa. 7
Emi. 7
A mi. 7


D mi. 7
G sus. G7
FMa. 7
B mi. 7 (b5)


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14. Moving primarily by 5 ths

15. Using inversions to embellish a bass line


## Learning New Chords

Learn "Root on E" and "Root on A" chords first, followed by "Root on D."

## About Inversions

In four-part harmony - 7th chords - any part of the chord can be put on the bottom of the "pile."

Using "G7" as an example:
First inversion $=" G$ " $7 / 3$ or " $G$ " $7 /$ " $B$ "
Second inversion = "G" $7 / 5$ or " $G$ " $7 /$ " $D$ "
Third inversion = "G" $7 /$ b7 or "G" $7 /$ " $F$ "

The primary reason to invert a chord is to achieve a desirable bass line (refer to chord progression example number 15 , on page 56 ).

## Examples

See the following five pages for examples of some of the chords that can be built using the major scale.

## Major 7th and 6th Chords

C Ma. 7
C Ma. $7 / 3$
C Ma. 7
C Ma. 7
C Ma. 7


C 6
C 6/3
C 6
C 6
C 6


## Major 9th and $6{ }^{9}$ Chords

C Ma. 9
C Ma. 9/3
C Ma. 9
C Ma. 9
C Ma. 9

*When a Major 7 th is added to a $6^{9}$ chord, a Major 13 chord is the result.

## Minor 7th and Minor 9th Chords

Ami. 7
A mi. $7 / b 3^{*}$
Ami. 7
A mi. 7
Ami. 7


* Yes, C 6 and $A$ minor 7 look and are the same.



## 7th and 9th Chords

G7
G 7
G7
G7
G7/3


*When a 6 th is added to a 9 th chord, a 13th chord is the result.

## Minor 7th ${ }^{\text {b }} 5$


*B minor 7 ( ${ }^{*} 5$ ) and $D$ minor 6 are the same.

## 7 The Major Scale Patterns

## The Major Scale Patterns

This is an introduction to the major scale patterns and how they relate to the pentatonic scale patterns.

Again, the fretboard is divided into five areas to produce five different fingerings of the same scale. They will be numbered one through five.

Notice that each major scale pattern contains three pentatonic scale patterns. Each pattern relates to the I, IV, V chord, and in turn, the substitutes for these chords.

On paper it looks like this:

## "C" Major Scale

C
D
E
F
G
A
B
C
I II III IV VII
I = "C" Pentatonic Scale

| C | D | E | $*$ | G | A | ${ }^{*}$ | C |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I | II | III |  | V | VI |  | I |

## IV = "F" Pentatonic Scale

| F | G | A | $*$ | C | D | $*$ | F |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| I | II | III |  | V | VI |  | I |

V = "G" Pentatonic Scale

| G | A | B | $*$ | D | E | $*$ | G |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| I | II | III | V | VI |
| :--- | :--- | :--- | :--- | :--- | :--- |

* The pentatonic scales contain no 4th or 7ths! That is what gives them their sound. It is the half step intervals (the 4th and 7th) that produce the tension as well as the specific identity of a chord or scale.


## Major Scale Patterns in "C"

Pattern \#1


## Pattern \#2



## Major Scale Patterns in "C"

## Pattern \#3



## Pattern \#4



## Major Scale Patterns in "C"

## Pattern \#5



## Root Positions of Major Scale Patterns

## Pattern \#1


(Ionian Mode)

(Locrian Mode)

* The real scale for mi. 7 (b5) chords is the melodic minor from the 6th degree.
$D$ mel. mi. produces $B$ mi. 7 (b5), B mi. 9 (b5), B mi. 11 (b5), B mi. 11 (b13).


## Root Positions of Major Scale Patterns

## Pattern \#2

## II mi. 7

$$
\text { D mi. } 7
$$

D mi. 6
D mi. 9
D mi. 11




(Dorian Mode)

Pattern \#3

$\mathrm{E}+7$ (b9)

III mi 7 or Altered Dominant
$E+7$



No 9th!

In a pinch, the phrygian mode can be used with altered dominant chords just remember that it isn't the true source of these chords.

## Root Positions of Major Scale Patterns

## Pattern \#3

IV Ma. 7

(Lydian Mode)

## Pattern \#4

V7

(Mixolydian Mode)

## Root Positions of Major Scale Patterns

## Pattern \#5

VI mi. 7

(Aeolian Mode)

## 8 Song Analysis, Example I

## Song Analysis

To aid in the familiarization and understanding of song charts, three different examples are presented in this and the following two sections. Included in the examples are charts for each song, followed by several pages of chord possibilities, and then a detailed breakdown and analysis of the charts themselves.

## Example I: Julla

Notice on the following chart of Julia that it sticks very closely to the Major scale in the Key of "E".

Such tunes are often referred to as "diatonic," referring to the use of only the eight tones of a standard major or minor scale without (chromatic) deviations.

## Julia



## Chords for Julia



Bars 1, 3, 9,
11, \& 21

Bars 2, 4, 10, $12, \& 22$
$F^{\#}$ mi. 11


A $\binom{$ add }{9}


Bar 5


Bar 6

A/3


Bar 7

Bar 8


F" mi. 7


Bar 13

B13


Bar 14

EMa. 9
E


Both in Bar 15

## More Chords for Julia



B7 $(9 / 3)^{*}$
B $(9 / 3)^{*}$
B7 sus. 4
B7


Both in Bar 19


Both in Bar 20

.

## Still More Chords for Julia




Bars 25 \& 27

A/B
A/B


Bar 28


Sub for Bar 28



## Song Analysis: Julla

The following is a bar-by-bar breakdown of the Julia chord chart. Notice that each bar has a circled number.

The symbols $\mathbf{A}, \mathbf{B}$, \& $\mathbf{C}$ are just for reference; they are sometimes called "rehearsal letters."

Bar (1)
$\|:$ means repeat.
"E Pedal" means play a low "E" note under the chords until further notice.
$T$ refers to time only - usually called a "push," here it means push the " ${ }^{\#}$ mi. 11."

Bar (2) "E Pedal" continues under "F" mi. 11."

Bars $\quad \%$ means repeat the previous two bars.
(3)\&(4) Notice the modal effect of the first four bars - this is basically the Ionian mode.

Bar © "A Pedal" indicates to play a low " $A$ " note under the chords until further notice.
"( $\underset{9}{\operatorname{add}}$ )" means the chord has no 7th.
p means push the " $B\binom{$ add }{11} ."
Bar © "B $\binom{$ add }{11} " means the chord has no 7 th or 9 th.

Bar © " $A / 3$ " is an " $A$ " with a " $C$ " on the bottom.

Bar (8) The same as bar $\bigcirc, " B / 3 "=" B$ " with " $D$ "" on the bottom.
Again notice the modal sound with the "A"pedal; this is the sound of the Lydian mode.

Bars (9) Back to the "E" pedal, push "F\# mi. 11."
(11), (11), \& (12)

Bar (13)
"No Pedal" means cancel the previous instruction to play the pedal notes.
"F" mi. 7" is the "II mi. 7 " chord.

Bar (14) "B13" is the "V7" chord.

Bar (15) "E Ma. 9" is the "I Ma.7" chord.

Bar (16) "A" is the "IV Ma. 7" chord.

Bar (17) "G" mi. 7" is the "III mi.7" chord. (It cannot have a 9 th or 13 th!)

Bar (18) "C"mi.7" is the "VI mi. 7" chord.

Bar (1) "B sus." is the "V 7" chord.

Bar (20) "9/3" means the 3rd has been replaced by the 9th, sometimes called a "sus. 2."

Bars The same as bars (1) and (2).
(2) \& (2)

Bar (3) " $G^{\#}+7(+9)$ " is a " $G$ \# 7 " with a raised 5 th (" $E$ ") and a raised 9 th (" $B$ ").
The " $G$ " "triad contains " $C$ ", which is not in the " $E$ " major scale. In other words, it is chromatic to the key of " $E$ " major. However, the +5 , the $\underline{b}$, and the +9 , are all found in the Phrygian mode of the major scale.

Bar (2) "A6" could be "A Ma. 13."

Bar (2) Two beats per chord.

Bar (28) "A6" could be "A Ma. $7(+11)$ " - it's Lydian.

Bar (2)

Bar © "A/ B " is an " A " chord ("IV" chord) with "B" ("V") in the bass - it is a variation of "B7 sus. 4."
$: \mid$ means repeat back to the top of the chart.

## C)Song Analysis, Example II

## Example II: Freddie the Freeloader

Freddie the Freeloader, by Miles Davis, is a good illustration of an elementary I, IV, V Blues progression, with the added twist of a ${ }^{6}$ VII7 chord. Although the tune is simple, the analysis of the scale applications for improvisation reveals many possibilities.

It is easy to modify the basic chords to accommodate the melody, therefore diagrams of those chords are provided.

It may be found that the addition of the ${ }^{\mathrm{b}} \mathrm{VII} 7$ chord (" $\mathrm{A} \downarrow 7$ ") forces the player to focus instead of routinely playing through the usual I, IV, V Blues progression.

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Freddie the Freeloader
Miles Davis


## Freddie the Freeloader

(Med. Slow)


## Chord Melody for Freddie the Freeloader


1.
$B^{b} 13$
B ${ }^{b} 9$
B ${ }^{b} 7$


Bars $7 \& 8$, and the repeat (Bars 19 \& 20)
After the first ending, the chart jumps from here to Bar 21, the second ending.

## Chord Melody for Freddie the Freeloader-Continued



[^0]
## The Dominant Pentatonic Scale



By changing the 6th Degree to a " 7 th" (raising the 6 th by one fret),
the Pentatonic scale is changed to one that specifically fits Dominant 7th chords, "G6" to "G7."

## Freddie the Freeloader

Miles Davis


## 10 Song Analysis, Example III

## Example III: The Low Down

The Low Down is a tune that combines elements of the Blues with the major scale-type chord progressions. The key is basically "C" Major, but liberties have been taken.

Here is a look at how the normal members of the major scale chord family have been modified; as well as the new scale sources from which these chords are built:

\[

\]

## Modified

"C7"
"D7"
"E7"
"F7"
"G+7"
(not)
(not used here)
bVII = "Bb7"

Scale Source
"F" Major scale
"G" Major scale
"A" Major scale
"B $b$ " Major scale
"G" Whole tone
"C" Major scale
(could be sub for "G7")
"E ${ }^{b "}$ Major scale

Also several passing chords are used:

$$
\begin{aligned}
+\mathrm{IV} & =\mathrm{F}^{\sharp 0} 7 & \mathrm{~F}^{\ddagger} \text { Diminished scale } \\
\mathrm{VII} & =\mathrm{B} &
\end{aligned}
$$

They move by so quickly that they do not have much effect on the key center of the song.

## The Low Down

MM70 12/8 Feel

$\begin{array}{llllllllll}\text { (verse) } & \mathrm{C} & \mathrm{E} & \mathrm{F} & \mathrm{B}^{\text {b7 }} & \mathrm{C} 6 & \text { A mi.7 } & \mathrm{D} 9 & \mathrm{G7} & \mathrm{G}+7\end{array}$



## Chords for The Low Down



Bar 1
$\diamond$

F7


Bar 2
$\diamond$

C

K


Bar 3
/

C/E


1
$F^{\# 7} 7$


Bar 3
1

C/G
G+7

//

Bar 4
/ $/$


I

C


Bar 5

//

Time notation: $\diamond=$ four beats

$$
I=\text { one beat }
$$

## Chords for The Low Down



## Chords for The Low Down



B section starts here.

## Chords for The Low Down



## Chords for The Low Down




Bar 20
/ /


F

//
$F^{\# 0} 7$

/1


Bar 21


Bar 21
//
(C) refrain starts here.

## Chords for The Low Down



## Chords for The Low Down


** This leads into the last chorus.

## Chord Chart Analysis: The Low Down

How the chart breaks down:

MM70 Set metronome at MM70.
$12 / 8$ Feel Count: " $\mathbf{1}, 2,3 ; \underline{\mathbf{2}}, 2,3 ; \underline{\mathbf{3}}, 2,3 ; \underline{\mathbf{4}}, 2,3$ " beats per bar.

Bar $1 \quad 4 \quad 4$ means four beats per bar. "on cue" indicates that someone in the band will direct the changes.
" $\boldsymbol{O}$ " is a whole note; hit the chord once and let it ring.
" $>$ " is a hard accent.
"G7" is V7 in "C".

Bar 2 "F7" is IV7; the "B" Major scale is the source.

Bar $3 \quad$ "C", "C/E", "F", $\mathrm{F}^{\# 7} 7$ " form an ascending bass line (isolate and learn).

Bar 4 "C/G" (second inversion); "G" note in bass completes ascending line. " $\mathrm{G}+7$ " has an augmented 5 th (" $\mathrm{D}^{\# ")}$, which leads into a "C" chord.

| $\mathbf{A}$ | Bar $5 \quad$ : repeat mark. |
| :--- | :--- |

"C" is I7; the "F" Major scale is the source.
" $E$ " is III7; the "A" Major scale is the source.

Bar 6 "F Ma.7" or "Ma.9" is IV Ma. 7; the "C" Major scale is the source. " $\mathrm{B} b 7^{\prime}$ " is ${ }^{b} \mathrm{VII} 7$; the " E " Major scale is the source.

Bar 7 "C6" is I Ma.7; Diatonic to the "C" Major scale.
"A mi. 7 " is VI mi. 7; Diatonic to the " C " Major scale.

Bar 8 "D9" is II7; the "G" Major scale is the source.
"G7" and "G+7"* are V7; the "C" Major scale is the source for "G7."

Bar 9 "C" is I7; the " $F$ " Major scale is the source.
"E7" is III7; the "A" Major scale is the source.

Bar 10 "F Ma. 9" is IV Ma. 7; the "C" Major scale is the source. "Bb13" is ${ }^{\text {bVII7 }}$; the "Eb" Major scale is the source.

Bar 11 "C6" is I Ma. 7; Diatonic to the "C" Major scale.
"A mi. 9" is VI mi. 7; Diatonic to the "C" Major scale.

Bar 12 "D13" is II7; the "G" Major scale is the source. " G 7 " and " $\mathrm{G}+7$ "* are V 7 ; the "C" Major scale is the source for " G 7 ."

* The possible scale sources and substitutes for " $\mathrm{G}+7$ " are:

"G" 8 Note Dominant scale $=G 7(b 9), G 7(+9), G 7\binom{+11}{+9}$
Mode VII of "A ${ }^{2}$ " Melodic Minor scale $=\mathrm{G}+7(\mathrm{~b} 9), \mathrm{G}+7(+9), \mathrm{G}+7\left(\begin{array}{c}\binom{+11}{+9}\end{array}\right.$
Mode III (Phrygian) of "E ${ }^{b>}$ " Major scale $=G 7(b 9), G 7(+9), G 7\binom{(13}{$\hline 9}
(Contains no Major 3rd, but works in a pinch.)

B Bar 13 "C" is I Ma. 7.
"C9" is I7 (helps set up move to " $F$ ").

Bar 14 " $F$ " is IV Ma 7.
" $\mathrm{F}^{\sharp 0} 7$ " is + IV dim. 7. $\}$ First part of ascending bass line.

Bar 15 "C/G" (second inversion).
"E/G\#" (first inversion). \} More chromatic ascending line.

Bar 16 "A mi. 7" is VI mi. 7; "end of the line."
"F7" is IV7.

Bar 17 " $\mathrm{C} / \mathrm{E}$ " is descending line from " F ."
"A mi." is beginning of descending 4th bass line.

Bar $\left.18 \begin{array}{l}\text { "D9" } \\ \\ \text { "G13" }\end{array}\right\}$ More 4th bass movement.

Bar 19* "C" is I.
" $B / D$ " and " $B / D$ " are the beginning of another ascending bass line.

Bar $20^{*} \quad$ " $\mathrm{C} / \mathrm{E}$ " \& "C sus./ F "; chromatic ascending bass line. "C/G" and "C7"; 4th movement.

One single chord inverted to produce a bass line.

* Isolate and learn Bars 19 and 20 as a "chord lick."

C

## Refrain.

Bar 21 " $F$ " is IV Ma 7.
" $\mathrm{F}^{\sharp \circ} 7^{\circ}$ " is +IV dim. 7. $\}$ This section leads off with a IV to I movement.

Bar 22 " C " is I Ma. 7.
"C9" is I7.

Bar 23 " $F$ " is IV Ma 7.
"F ${ }^{\# 0} 7$ " is +IV dim. 7 .

Bar 24 "C" is I Ma. 7.
"C9" is I7.

Bar 25 " $F$ " is IV Ma 7.
" $F^{\# \circ} 7$ " is +IV dim. 7

Bar 26 "C/E" \} Substitute for "C" \& "C9" (like Bar 22), but has softer "A mi." $\int$ effect and different bass line.

Bar 27 " $\mathrm{D} 9 / \mathrm{F}$ " (first inversion). "G9/F" (third inversion). \}Chromatic descending bass line.

Bar 28 " $\mathrm{C} / \mathrm{E}$ " is last of descending bass line.
"G7" \& "G +7"; raised 5th ("D"), lifts back to Bar 5, 29 for second verse.

1. This is referred to as a "first ending."
:||Repeat back, in this case to $\mathbf{A}$, to the top of the verse section.
Play $\mathbf{A}, \mathbf{B}$, and $\mathbf{C}$ again (Bars 29 through 51), skip the first ending, jump to the second ending $\quad 2 . \quad$ (Bar 52) and then play to the end of the tune.

Bar 52 " C ", " $\mathrm{B} / \mathrm{D}$ ", "B/D\#, "C/E" are similar to Bars 19 and 20 - "lifts" into C (Refrain).

## 11 The "D" Tuning

## The "D" Tuning

The " D " tuning changes the open-string voicing of the guitar to a " D " major chord, it's sound is identical to an "E" shaped bar chord.

Although the tuning is beautiful-sounding, it presents the player with some real challenges.

The primary difficulty arises from correlating the unique voicings to the outside world and vice-versa.

As a point of departure, diagrams of the diatonic-chord voicings from the three major scales that contain the " D " Major chord will be provided.

$$
\begin{aligned}
& \text { "D" = I Major in "D" Major scale } \\
& \text { "D" = IV Major in "A" Major scale } \\
& \text { "D" = V7 in "G" Major scale }
\end{aligned}
$$

## "D" Tuning Diatonic Chords

## When "D" is a I Chord ("D" Major Scale)








## "D" Tuning Diatonic Chords

When "D" is a IV Chord ("A" Major Scale)






III mi. 7

D Ma. 7


## "D" Tuning Diatonic Chords

When "D" is a V Chord ("G" Major Scale)


II mi. 7


B mi. $7\binom{$ add }{13}
C Ma. 13


III mi. 7


IV Ma. 7

C Ma. 9


IV Ma. 7

C Ma. 9 (+11)


IV Ma. $7(+11)$

## Basic Minor Chords in the "D" Tuning



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## 12 Beyond the Major Scale

## Line Progressions

It is possible to create moving lines by changing one note in a given chord. Two of the most common are:

A major chord where the 5th ascends.
A minor chord where the root descends.

In the following example the notes move chromatically; pay careful attention to the fact that each time the note moves the chord name changes.

Major Chord with Ascending 5th
(Rt.)

| "C" | "E" | "G" | $=$ | "C" |
| :--- | :--- | :--- | :--- | :--- |
| "C" | "E" | "G" | $=$ | "C+" Augmented |
| "C" | "E" | "A" | $=$ | $" C 6 "$ |
| "C" | "E" | "B $b$ | $=$ | $" C 7 "$ |

Minor Chord with Descending Root


The following four pages contain chord charts diagramming the previous examples.

On the chord charts the labels "High Position, "Mid Position" and "Low Position" or "Hi-Po", "Mi-Po" and "Lo-Po", are used to designate the following:

$$
\begin{array}{ll}
\text { "High Position" } & =" D, \text { " "G," "B," and "E" strings (top four strings) } \\
\text { "Mid Position" } & =" A, " \text { " } D \text {," " } G \text { " and " } B \text { " strings (middle four strings) } \\
\text { "Low Position" }=\text { " } \mathrm{E} \text {, "A," "D," and "G" strings (bottom four strings) }
\end{array}
$$

## Line Progressions



Chord's 3 rd is on the " D" string. "Hi-Po"

## Line Progressions

C
C+
C6
C7
or
C7


Root on " $E$ " string.
"Lo-Po"
C


C+
C6
C7





Root on " $A$ " string. "Mi-Po"

## Line Progressions

A mi.
A mi. Ma. 7
A mi. 7
A mi. 6 or
D9


## Root on " $E$ " string. <br> "Lo-Po"

A mi.
A mi. Ma. 7
A mi. 7
A mi. 6 or
D9


## Root on " $A$ " string. "Mi-Po"

## Line Progressions

A mi.
A mi. Ma. 7
A mi. 7
A mi. 6 or
D9/3



$$
\frac{\text { Root on "D" string. }}{\text { "Hi-Po" }}
$$

## Passing Chords

On the following four pages are passing chords that fit between the regular chords of the major scale.

There is always more than one choice - ascending progressions lend themselves to using different passing chords from descending progressions.

## Ascending Passing Chords in Major Keys

C Ma. 7
C ${ }^{\sharp 1} 7$
D mi. 7
$\mathrm{D}^{\text {º }} 7$
Emi. 7 or


$C / E \quad$ and $\quad C+/ E$



## Ascending Passing Chords in Major Keys



C Ma. 7


## Descending Passing Chords in Major Keys

C Ma. 7
B mi. 7 ( ${ }^{(b 5)}$ or $\quad$ B mi. 7
$\mathrm{B}^{b}$ Ma. 7 or $\quad \mathrm{B}^{b} 7$


A mi. 7
$A^{b}$ Ma. 7 or $\quad A b 7$
G7
$\mathrm{D} / \mathrm{F} \#$


VI mi. 7


$$
\begin{array}{lllll}
x & \times & \text { Rt. } & 5 \quad b 7 & 3 \\
& V 7
\end{array}
$$



## Descending Passing Chords in Major Keys

F Ma. 7
Emi. $7 \quad$ or $\quad \mathrm{C} / \mathrm{E}$
$\mathrm{E}^{b} \mathrm{Ma}$.7 or $\quad \mathrm{E}^{b} 7$


D mi. 7
$\mathrm{D}^{b}$ Ma. 7 or
D ${ }^{\text {b }}$
or $\quad D^{b} 9+11$
C Ma. 7

II mi. 7



$\begin{array}{lllllll}\text { (b5) Rt. } & 5 & b_{7} & 3 & +11\end{array}$

## Contrasting Major and Minor

When exploring the minor tonalities, it may help to compare the Definitive chords with those of the major scale:

$$
\begin{array}{cc}
\text { Major } & \underline{\text { Minor }} \\
\text { I Ma. } 7 & \text { I mi. } 6 \text { or I mi. Ma 7 } \\
\text { II mi. } 7 & \text { II mi. } 7\left(b_{5}\right) \\
\text { III mi. } 7 & \text { bIII Ma. } 7+5 \\
\text { IV Ma. } 7 & \text { IV mi. } 6 \\
\text { V7 } & \text { V7 }(+9) \text { or any alterations } \\
\text { VI mi. } 7 & \text { VI mi. } 7(b 5) \\
\text { VII mi. } 7(b 5) & \text { VII }^{\circ} 7(\text { Diminished } 7 \text { th })
\end{array}
$$

The Roman numerals behave the same way, more or less, in minor progressions and chord substitutions as they do in major:

I mi. 6 and VI mi 7 ( 65 ) can be swapped

I mi. Ma. 7 and ${ }^{\text {bIII Ma. }} 7$ (+5) can be swapped

II mi. 7 (b5) and IV mi. 6 can be swapped

V7 (+9) and $\mathrm{VII}^{\circ} 7$ can be swapped

## Playing Minor Progressions

On pages 122 and 123 are some basic minor progressions. Playing them will teach the ability to hear and recognize these "colors."

Try all of the combinations shown.

Major and minor tonalities are often mixed:

$$
\text { II mi. } 7 \quad \text { V7 }+9 \quad \text { I Ma. } 7
$$

In the above example the V chord is from minor, the II and the I chord are from major.

$$
\text { II mi. } 7(b 5) \quad \text { V9 } \quad \text { Imi. } 6
$$

The second example above is reversed from the first, II and I are from minor and the V chord is from major.

These basic progressions are the building blocks of all our modern western music.

## Basic Minor Progressions



A mi. 7 (b5) or C mi.Ma. 7 or $\mathrm{E}^{b} \mathrm{Ma}$.7 (+5)


## Basic Minor Progressions



Ami. 7 (b5) or Cmi.Ma. 7 or $\mathrm{E}^{b} \mathrm{Ma}$.7 (+5)



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$$
\begin{aligned}
& \mathrm{P} \quad \mathrm{~A} \mathrm{II}^{\mathrm{R}} \mathrm{~T}^{\mathrm{T}} .
\end{aligned}
$$

Fretboard Harmony
Workbook

## Sharps, Flats and Enharmonics

Fill in the missing notes and their enharmonic equivalents.

|  | Flat | Given Note | Sharp |
| :---: | :---: | :---: | :---: |
|  | 1/2 step below |  | 1/2 step above |
| 1. | $\left(C^{b}\right)$ or B | C | $\mathrm{C}^{\sharp}$ or ( $\mathrm{D}^{\text {b }}$ ) |
| 2. |  | F |  |
| 3. |  | $B^{\text {b }}$ |  |
| 4. |  | $\mathrm{E}^{\text {b }}$ |  |
| 5. |  | $A^{b}$ |  |
| 6. |  | $\mathrm{D}^{\text {b }}$ |  |
| 7. |  | $\mathrm{G}^{\text {b }}$ |  |
| 8. | $\left(A^{\sharp}\right)$ or $B^{b}$ | $C^{b}$ | $C^{4}$ or ( $\mathrm{B}^{\sharp}$ ) |
| 9. |  | E |  |
| 10. |  | A |  |
| 11. |  | D |  |
| 12. |  | G |  |
| 13. |  | $\mathrm{D}^{\#}$ |  |
| 14. |  | $\mathrm{G}^{\#}$ |  |
| 15. |  | $C^{\#}$ |  |
| 16. |  | B |  |
| 17. |  | $F^{\#}$ |  |
| 18. |  | $A^{\#}$ |  |

## Sharps, Flats and Enharmonics

Fill in the missing notes and their enharmonic equivalents.

## Flat

1/2 step below

| 1. | ( $\mathrm{E}^{\text {b }}$ ) or $\mathrm{D}^{\#}$ | E | F or ( $\mathrm{E}^{\#}$ ) |
| :---: | :---: | :---: | :---: |
| 2. |  | A |  |
| 3. |  | D |  |
| 4. |  | G |  |
| 5. |  | D ${ }^{\text {\# }}$ |  |
| 6. |  | $\mathrm{G}^{\#}$ |  |
| 7. |  | $\mathrm{C}^{\#}$ |  |
| 8. |  | B |  |
| 9. |  | $\mathrm{F}^{\#}$ |  |
| 10. | A ${ }^{\text {a }}$ | $\mathrm{A}^{\#}$ | B or ( $C^{\text {b }}$ ) |
| 11. |  | C |  |
| 12. |  | F |  |
| 13. |  | $\mathrm{B}^{\text {b }}$ |  |
| 14. |  | $\mathrm{E}^{\text {b }}$ |  |
| 15. |  | $A^{\text {b }}$ |  |
| 16. |  | $\mathrm{D}^{\text {b }}$ |  |
| 17. |  | $\mathrm{G}^{\text {b }}$ |  |
| 18. |  | $C^{b}$ |  |

## Sharps, Flats and Enharmonics

Fill in the missing notes and their enharmonic equivalents.

## Flat

1/2 step below
Given Note

| 1. | $A^{\#}$ |
| :---: | :---: |
| 2. | $F^{\text {\# }}$ |
| 3. $\left(\mathrm{A}^{\sharp}\right)$ or $\mathrm{B}^{b}$ | B $\quad \mathrm{Cor}\left(\mathrm{B}^{*}\right)$ |
| 4. | $\mathrm{C}^{\#}$ |
| 5. | $\mathrm{G}^{\#}$ |
| 6. | $\mathrm{D}^{\#}$ |
| 7. | G |
| 8. | D |
| 9. | A |
| 10. | E |
| 11. | $C^{b}$ |
| 12. Fq | $\mathrm{G}^{b} \quad \mathrm{G}^{\natural}$ |
| 13. | $\mathrm{D}^{\text {b }}$ |
| 14. | $A^{\text {b }}$ |
| 15. | $\mathrm{E}^{\text {b }}$ |
| 16. | B ${ }^{\text {b }}$ |
| 17. | F |
| 18. | C |

C

## Sharps, Flats and Enharmonics

Fill in the missing notes and their enharmonic equivalents.

## Flat

1/2 step below

| 1. G | $\mathrm{A}^{\text {b }}$ ( ${ }^{\text {a }}$ |
| :---: | :---: |
| 2. | C |
| 3. | $\mathrm{E}^{\text {b }}$ |
| 4. | G ${ }^{\text {b }}$ |
| 5. | A |
| 6. | $\mathrm{C}^{\#}$ |
| 7. | F |
| 8. | $B^{\text {b }}$ |
| 9. $\mathrm{G}^{\natural}$ | $\mathrm{G}^{\#}$ Ag |
| 10. | E |
| 11. | $\mathrm{F}^{\#}$ |
| 12. | B |
| 13. | D |
| 14. | $\mathrm{D}^{6}$ |
| 15. | $C^{b}$ |
| 16. | $\mathrm{D}^{\#}$ |
| 17. | G |
| 18. | $\mathrm{A}^{\ddagger}$ |

## The Chromatic Scale

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

|  | Go Flat | Start here | Go Sharp |
| :---: | :---: | :---: | :---: |
| 1. | C, $D^{b}, D, E^{b}, E, F, G^{b}, G, A^{b}, A, B^{b}, B$ | C | $C^{\ddagger}, \mathrm{D}, \mathrm{D}^{\ddagger}, \mathrm{E}, \mathrm{F}, \mathrm{F}^{\ddagger}, \mathrm{G}, \mathrm{G}^{\ddagger}, \mathrm{A}, \mathrm{A}^{\ddagger}, \mathrm{B}, \mathrm{C}$ |
| 2. |  | F |  |
| 3. |  | $B^{b}$ |  |
| 4. |  | $\mathrm{E}^{\text {b }}$ |  |
| 5. |  | $A^{\text {b }}$ |  |
| 6. |  | $\mathrm{D}^{\text {b }}$ |  |
| 7. |  | $\mathrm{G}^{\text {b }}$ |  |
| 8. | $\mathrm{C}, \mathrm{D}^{\mathrm{b}}, \mathrm{D}, \mathrm{E}, \mathrm{E}, \mathrm{F}, \mathrm{G}^{\text {b }}, \mathrm{G}, \mathrm{A}^{b}, \mathrm{~A}, \mathrm{~B}^{\text {b }}$ | $\mathrm{C}^{\text {b }}$ | $\mathrm{C}^{\ddagger}, \mathrm{C}^{\ddagger}, \mathrm{D}, \mathrm{D}^{\ddagger}, \mathrm{E}, \mathrm{F}, \mathrm{F}^{\ddagger}, \mathrm{G}, \mathrm{G}^{\ddagger}, \mathrm{A}, \mathrm{A}^{\ddagger}, \mathrm{B}, \mathrm{C}$ |
| 9. |  | E |  |
| 10. |  | A |  |
| 11. |  | D |  |
| 12. |  | G |  |
| 13. |  | $\mathrm{D}^{\#}$ |  |
| 14. |  | $\mathrm{G}^{\#}$ |  |
| 15. |  | $\mathrm{C}^{\#}$ |  |
| 16. |  | B |  |
| 17. |  | $F^{\#}$ |  |
| 18. |  | $A^{\#}$ |  |

## The Chromatic Scale

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

| $\leftarrow$ | Go Flat | Start here | Go Sharp |
| :---: | :---: | :---: | :---: |
|  |  | $\downarrow$ |  |
| 1. | $E, F, G^{b}, G, A^{b}, A, B^{b}, B, C, D^{b}, D, E^{b}$ | E | F, $F^{\ddagger}, \mathrm{G}, \mathrm{G}^{\ddagger}, \mathrm{A}, \mathrm{A}^{\ddagger}, \mathrm{B}, \mathrm{C}, \mathrm{C}^{\ddagger}, \mathrm{D}, \mathrm{D}^{\ddagger}, \mathrm{E}$ |
| 2. |  | A |  |
| 3. |  | D |  |
| 4. |  | G |  |
| 5. |  | $\mathrm{D}^{\#}$ |  |
| 6. |  | $\mathrm{G}^{\#}$ |  |
| 7. |  | $\mathrm{C}^{\#}$ |  |
| 8. |  | B |  |
| 9. |  | F ${ }^{\text {\# }}$ |  |
| 10. |  | $A^{\#}$ |  |
| 11. |  | C |  |
| 12. |  | F |  |
| 13. |  | B ${ }^{\text {b }}$ |  |
| 14. |  | $\mathrm{E}^{\text {b }}$ |  |
| 15. |  | $A^{\text {b }}$ |  |
| 16. |  | $\mathrm{D}^{\text {b }}$ |  |
| 17. |  | $\mathrm{G}^{\text {b }}$ |  |
| 18. |  | $C^{b}$ |  |

## The Chromatic Scale

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.

|  | Go Flat | Start here | Go Sharp |
| :---: | :---: | :---: | :---: |
|  |  | $\downarrow$ |  |
| 1. | $\mathrm{B}^{b}, \mathrm{~B}, \mathrm{C}, \mathrm{D}^{\mathrm{b}}, \mathrm{D}, \mathrm{E}^{b}, \mathrm{E}, \mathrm{F}, \mathrm{G}^{b}, \mathrm{G}, \mathrm{A}^{b}, \mathrm{~A}^{\natural}$ | $\mathrm{A}^{\ddagger}$ | B, C, C ${ }^{\ddagger}, \mathrm{D}, \mathrm{D}^{\ddagger}, \mathrm{E}, \mathrm{F}, \mathrm{F}^{\ddagger}, \mathrm{G}, \mathrm{G}^{\ddagger}, \mathrm{A}, \mathrm{A}^{\ddagger}$ |
| 2. |  | $F^{\#}$ |  |
| 3. |  | B |  |
| 4. |  | $\mathrm{C}^{\#}$ |  |
| 5. |  | $\mathrm{G}^{\#}$ |  |
| 6. |  | $\mathrm{D}^{\#}$ |  |
| 7. |  | G |  |
| 8. |  | D |  |
| 9. |  | A |  |
| 10. |  | E |  |
| 11. |  | $C^{b}$ |  |
| 12. |  | $\mathrm{G}^{\text {b }}$ |  |
| 13. |  | $\mathrm{D}^{\text {b }}$ |  |
| 14. |  | $A^{\text {b }}$ |  |
| 15. |  | $\mathrm{E}^{\text {b }}$ |  |
| 16. |  | B ${ }^{\text {b }}$ |  |
| 17. |  | F |  |
| 18. |  | C |  |

## The Chromatic Scale

Complete these ascending and descending Chromatic Scales, working forward on the ascending and backward on the descending.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Symmetrical Scales

Draw the Symmetrical Scales, including fingering notation.


## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of "A" Major



This is an expample of the following exercises. Use the "E" and "A" shaped bar chords to help locate the proper fret numbers.

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of "C"Major


AEO - PENT
"G" Shaped

IO - PENT
"E" Shaped

DORI - PENT "D" Shaped

LYDI - PENT
"C" Shaped

MIXO - PENT
"A" Shaped

Hint: An "E" shaped "C" chord lies at fret number eight.
An "A" shaped "C" chord lies at fret number three.

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of"B"Major


AEO - PENT
"G" Shaped

IO - PENT
"E"Shaped

DORI - PENT "D" Shaped


LYDI - PENT "C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## $\underline{\text { Key of "F"" Major }}$


AEO - PENT
"G" Shaped

IO - PENT
"E" Shaped


DORI - PENT "D"Shaped


LYDI - PENT
"C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of"C"" Major


AEO - PENT
"G" Shaped

IO - PENT
"E"Shaped

DORI - PENT "D" Shaped

LYDI - PENT "C" Shaped

MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of"D" Major




IO - PENT
"E" Shaped

$$
\begin{aligned}
& \text { MIXO - PENT } \\
& \text { "A" Shaped } \\
& \begin{array}{|l|l|l|l|l|}
\hline & & & & \\
\hline & & & & \\
\hline & & & & \\
\hline & & & & \\
\hline & & & & \\
\hline & & & \\
\hline
\end{array} \\
& \text { MIXO - PENT }
\end{aligned}
$$



LYDI - PENT
"C" Shaped
$\frac{\text { DORI - PENT }}{\text { "D" Shaped }}$
$\frac{\text { DORI - PENT }}{\text { "D" Shaped }}$


## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of "G" Major


AEO - PENT
"G" Shaped

IO - PENT
"E" Shaped

DORI - PENT "D" Shaped


LYDI - PENT "C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

Key of "E" Major


AEO - PENT
"G" Shaped


LYDI - PENT
"C" Shaped


IO - PENT "E" Shaped


MIXO - PENT "A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of "B ${ }^{b}$ " Major


AEO - PENT
"G" Shaped

IO - PENT
"E"Shaped

DORI - PENT "D" Shaped


LYDI - PENT "C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of"F"Major


AEO - PENT
"G" Shaped

IO - PENT
"E"Shaped


DORI - PENT "D"Shaped


LYDI - PENT
"C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## Key of "E ${ }^{b}$ "Major


AEO - PENT
"G" Shaped

IO - PENT
"E" Shaped

DORI - PENT "D" Shaped


LYDI - PENT "C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.
$\underline{\text { Key of "G }{ }^{b} \text { " Major }}$

AEO - PENT
"G" Shaped

IO - PENT
"E" Shaped


DORI - PENT "D" Shaped


LYDI - PENT
"C" Shaped


MIXO - PENT
"A" Shaped

## Pentatonic Scales

Draw the Pentatonic Scales, including scale shapes, bar chord shapes, fret numbers and fingering notation.

## $\underline{\text { Key of "A } \mathbf{b} \text { " Major }}$


AEO - PENT
"G" Shaped

IO - PENT
"E"Shaped

DORI - PENT "D" Shaped

LYDI - PENT "C" Shaped

MIXO - PENT
"A" Shaped

## Relative Minor

Fill in the missing chords.

Major Rel.Mi. Major Rel.Mi. Major Rel.Mi.

| C Ma. | A mi. | G Ma. | E mi. | $\mathrm{C}^{\#} \mathrm{Ma}$. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| F Ma. |  |  | A mi. |  | B mi. |
| $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. | G mi. |  | D mi. | $F^{\#} \mathrm{Ma}$. |  |
| $E^{b} \mathrm{ma}$. |  |  | G mi. |  | $A^{\#} \mathrm{mi}$. |
| $A^{\text {b }}$ Ma. |  |  | $\mathrm{D}^{\#} \mathrm{mi}$. | $\mathrm{C}^{6} \mathrm{Ma}$. |  |
| $\mathrm{D}^{\mathrm{b}} \mathrm{Ma}$. |  |  | $\mathrm{G}^{\sharp} \mathrm{mi}$. |  | $G^{b}$ mi. |
| $\mathrm{G}^{\mathrm{b}} \mathrm{Ma}$. |  | E Ma. | $\mathrm{C}^{\#} \mathrm{mi}$. | $\mathrm{D}^{\text {b }}$ Ma. |  |
| $\mathrm{C}^{\text {b Ma. }}$ |  |  | B mi. |  | $A^{b} \mathrm{mi}$. |
| E Ma. |  |  | $\mathrm{F}^{\#} \mathrm{mi}$. | $\mathrm{E}^{\mathrm{b}} \mathrm{Ma}$. |  |
| A Ma. |  |  | $\mathrm{A}^{\sharp} \mathrm{mi}$. |  | $B^{b} \mathrm{mi}$. |
| D Ma. | B mi. |  | $C^{b} \mathrm{mi}$. | F Ma. |  |
| G Ma. |  |  | $\mathrm{G}^{\mathrm{b}} \mathrm{mi}$. |  | C mi. |
| $\mathrm{D}^{\#} \mathrm{Ma}$. |  |  | $\mathrm{D}^{\mathrm{b}} \mathrm{mi}$. | EMa. |  |
| $\mathrm{G}^{\#} \mathrm{Ma}$. |  |  | $A^{\text {b }}$ mi. |  | A mi. |
| $\mathrm{C}^{\#} \mathrm{Ma}$. |  |  | $\mathrm{E}^{\text {b mi. }}$ | D Ma. |  |
| B Ma. |  |  | $\mathrm{B}^{\mathrm{b}} \mathrm{mi}$. |  | G mi. |
| $\mathrm{F}^{\#} \mathrm{Ma}$. |  |  | F mi. | $\mathrm{D}^{\#} \mathrm{Ma}$. |  |
| $\mathrm{A}^{\sharp} \mathrm{Ma}$. |  |  | C mi. |  | $\mathrm{G}^{\sharp} \mathrm{mi}$. |

## Relative Minor

Fill in the missing chords.

Major Rel.Mi. Major Rel.Mi. Major Rel.Mi.

|  | $A^{\#} \mathrm{mi}$. | C Ma. |  | $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $F^{\#} \mathrm{Ma}$. |  | F Ma. |  |  | $F^{\#} \mathrm{mi}$. |
|  | B mi. | $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. |  | B Ma. |  |
| $\mathrm{C}^{\#} \mathrm{Ma}$. |  |  | $E^{b} \mathrm{mi}$. |  | $\mathrm{C}^{\ddagger} \mathrm{mi}$. |
| $\mathrm{G}^{\sharp} \mathrm{Ma}$. |  |  | $\mathrm{A}^{\text {b mi }}$. |  | $\mathrm{G}^{\ddagger} \mathrm{mi}$. |
|  | $\mathrm{D}^{\ddagger} \mathrm{mi}$. |  | $\mathrm{D}^{\mathrm{b}} \mathrm{mi}$. | $\mathrm{D}^{\#} \mathrm{Ma}$. |  |
|  | G mi. | $\mathrm{G}^{\mathrm{b}} \mathrm{Ma}$. |  | G Ma. |  |
| D Ma. |  | $\mathrm{C}^{\text {b Ma. }}$ |  |  | D mi. |
|  | A mi. | EMa. |  | A Ma. |  |
| EMa. |  |  | A mi. |  | E mi. |
|  | $\mathrm{C}^{\text {b mi }}$. |  | D mi. | $\mathrm{C}^{\text {b }} \mathrm{Ma}$. |  |
| $\mathrm{G}^{\mathrm{b}} \mathrm{Ma}$. |  |  | G mi. |  | $\mathrm{G}^{\mathrm{b}} \mathrm{mi}$. |
|  | $D^{\text {b }} \mathrm{mi}$. | $\mathrm{E}^{\text {b }} \mathrm{Ma}$. |  | $\mathrm{D}^{\mathrm{b}} \mathrm{Ma}$. |  |
| $\mathrm{A}^{\mathrm{b}} \mathrm{Ma}$. |  | $\mathrm{G}^{\#} \mathrm{Ma}$. |  |  | $A^{b} \mathrm{mi}$. |
|  | $E^{\text {b mi. }}$ | $\mathrm{C}^{\#} \mathrm{Ma}$. |  | $\mathrm{E}^{\mathrm{b}} \mathrm{Ma}$. |  |
| $B^{b} \mathrm{Ma}$. |  |  | B mi. |  | $\mathrm{B}^{\mathrm{b}} \mathrm{mi}$. |
|  | F mi. |  | $\mathrm{F}^{\#} \mathrm{mi}$. | F Ma. |  |
| C Ma. |  |  | $A^{\#} \mathrm{mi}$. |  | C mi. |

## Relative Minor

Fill in the missing chords.

Major Rel.Mi. Major Rel.Mi. Major Rel.Mi.

|  | C mi. |  | C mi. | C Ma. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{E}^{\mathrm{b}} \mathrm{Ma}$. |  |  | F mi. |  | $E^{b} \mathrm{mi}$. |
|  | F mi. |  | $\mathrm{B}^{\text {b mi. }}$ | F Ma. |  |
| $\mathrm{A}^{\mathrm{b}} \mathrm{Ma}$. |  | $\mathrm{E}^{\text {b Ma. }}$ |  |  | $A^{b} \mathrm{mi}$. |
|  | $\mathrm{B}^{\text {b mi. }}$ | $\mathrm{A}^{\text {b }} \mathrm{Ma}$. |  | $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. |  |
| $\mathrm{D}^{\text {b }} \mathrm{Ma}$. |  | $\mathrm{D}^{\mathrm{b}} \mathrm{Ma}$. |  |  | $\mathrm{D}^{\mathrm{b}} \mathrm{mi}$. |
|  | $G^{\text {b mi. }}$ |  | $\mathrm{G}^{\text {b mi. }}$ | $\mathrm{G}^{\mathrm{b}} \mathrm{Ma}$. |  |
| A Ma. |  |  | $\mathrm{C}^{\text {b mi. }}$ |  | A mi. |
|  | $C^{b} \mathrm{mi}$. |  | Emi. | $\mathrm{C}^{\text {b }} \mathrm{Ma}$. |  |
| D Ma. |  | A Ma. |  |  | D mi. |
|  | E mi. | D Ma. |  | E Ma. |  |
| G Ma. |  | G Ma. |  |  | G mi. |
|  | $\mathrm{D}^{\ddagger} \mathrm{mi}$. |  | $\mathrm{D}^{\ddagger} \mathrm{mi}$. | $\mathrm{E}^{\mathrm{b}} \mathrm{Ma}$. |  |
| B Ma. |  |  | $\mathrm{G}^{\#} \mathrm{mi}$. |  | B mi. |
|  | $\mathrm{G}^{\ddagger} \mathrm{mi}$. |  | $\mathrm{C}^{\#} \mathrm{mi}$. | $\mathrm{A}^{\text {b }}$ Ma. |  |
| $\mathrm{F}^{\#} \mathrm{Ma}$. |  | B Ma. |  |  | $\mathrm{F}^{\#} \mathrm{mi}$. |
|  | $C^{\#} \mathrm{mi}$. | $\mathrm{F}^{\#} \mathrm{Ma}$. |  | $\mathrm{C}^{\#} \mathrm{Ma}$. |  |
| $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. |  | $\mathrm{B}^{\mathrm{b}} \mathrm{Ma}$. |  |  | $A^{\#} \mathrm{mi}$. |

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing $\underline{3 \text { rd }}$.

"E" Shaped

"E" mi. Shaped
"A" Shaped

"A" mi. Shaped
"C" Shaped


"C" mi. Shaped

"D" Shaped

"D" mi. Shaped

"G" Shaped

"G" mi. Shaped

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3 rd.

"E" Shaped

"E" mi. Shaped

"D" Shaped

"A" Shaped

"A" mi. Shaped

"C" Shaped

"C" mi. Shaped

"D" mi. Shaped

"G" Shaped

"G" mi. Shaped

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing $\underline{3 \text { rd }}$.

"E" Shaped

"E" mi. Shaped
"A" Shaped

"A" mi. Shaped
"C" Shaped


"C" mi. Shaped

"D" Shaped

"D" mi. Shaped

"G" Shaped

"G" mi. Shaped

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3 rd.

"E" Shaped

"E" mi. Shaped

"D" Shaped

"A" Shaped

"A" mi. Shaped

"C" Shaped

"C" mi. Shaped

"D" mi. Shaped

"G" Shaped

"G" mi. Shaped

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing 3 rd.

"E" Shaped

"E" mi. Shaped
"A" Shaped

"A" mi. Shaped
"C" Shaped



"D" mi. Shaped
"C" mi. Shaped

"D" Shaped

"G" Shaped


"G" mi. Shaped

## Changing Major to Minor

Complete the following diagrams, changing the five basic chord shapes from major to minor, indicating the changing $\underline{3 \text { rd }}$.

"E" Shaped

"E" mi. Shaped

"D" Shaped

"A" Shaped

"A" mi. Shaped

"C" Shaped

"C" mi. Shaped

"D" mi. Shaped

"G" Shaped

"G" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of " $F$ "" Minor, relative to "A" Major



This is an example of the following exercises. Use the " E " and " A " minor shapes to help locate the proper fret numbers.

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "C" Minor, relative to "E ${ }^{\text {b" Major }}$



AEO - PENT
"E" mi. Shaped


LYDI - PENT "A" mi. Shaped


IO - PENT
"D" mi. Shaped


MIXO - PENT
"G" mi. Shaped

Hint: An " $E$ " minor-shaped " $C$ " minor chord lies at fret number eight. An "A" minor-shaped "C" minor chord lies at fret number three.

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of"F" Minor, relative to "A ${ }^{b}$ " Major


AEO - PENT
"E" mi. Shaped

IO - PENT
"D" mi. Shaped

DORI - PENT "C" mi. Shaped


LYDI-PENT
$\frac{\text { LYDI - PENT }}{\text { "A" mi. Shaped }}$


MIXO - PENT
"G" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.
Key of "B"" Minor, relative to "D'" Major


AEO - PENT
"E" mi. Shaped


LYDI - PENT "A" mi. Shaped


IO - PENT
"D" mi. Shaped


MIXO - PENT
"G" mi. Shaped



DORI - PENT
"C" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

$$
\text { Key of " } E^{b "} \text { Minor, relative to " } G^{b} \text { " Major }
$$


AEO - PENT
"E" mi. Shaped

IO - PENT
"D" mi. Shaped

DORI - PENT "C" mi. Shaped


LYDI - PENT
$\frac{\text { LYDI - PEN }}{\text { "A" mi. Shaped }}$


MIXO - PENT
"G" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "A" Minor, relative to "C" Major


AEO - PENT
"E" mi. Shaped


LYDI - PENT
"A" mi. Shaped


IO - PENT
"D" mi. Shaped


MIXO - PENT
"G" mi. Shaped


DORI - PENT
"C" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "D" Minor, relative to "F" Major


AEO - PENT
"E" mi. Shaped

IO - PENT
"D" mi. Shaped

DORI - PENT "C" mi. Shaped

$\frac{\text { LYDI - PENT }}{\text { "A" mi. Shaped }}$
$\frac{\text { LYDI - PENT }}{\text { "A" mi. Shaped }}$


MIXO - PENT
"G" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

Key of "G" Minor, relative to "B ${ }^{\text {b" Major }}$


AEO - PENT
"E" mi. Shaped


LYDI - PENT
"A" mi. Shaped


IO - PENT
"D" mi. Shaped

$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$
$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$


DORI - PENT
"C" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "E" Minor, relative to "G" Major


AEO - PENT
"E" mi. Shaped

DORI - PENT "C" mi. Shaped


LYDI - PENT "A" mi. Shaped

$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$
$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$


## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "B" Minor, relative to "D" Major



AEO - PENT
"E" mi. Shaped


LYDI - PENT "A" mi. Shaped


IO - PENT
"D" mi. Shaped


MIXO - PENT
"G" mi. Shaped


DORI - PENT
"C" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "C"" Minor, relative to "E" Major


AEO - PENT
"E" mi. Shaped

DORI - PENT "C" mi. Shaped


LYDI - PENT "A" mi. Shaped

$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$
$\frac{\text { MIXO - PENT }}{\text { "G" mi. Shaped }}$


IO - PENT
"D" mi. Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.
Key of "A"" Minor, relative to "C"" Major



LYDI - PENT
"A mi." Shaped


IO - PENT
"D mi." Shaped


MIXO - PENT
$\frac{\text { MIXO - PENT }}{\text { "G mi." Shaped }}$


DORI - PENT
"C mi." Shaped

## Relative Minor Pentatonic Scales

Draw the relative minor Pentatonic Scales, including scale shapes, minor bar chord shapes, fret numbers and fingering notation.

## Key of "G"" Minor, relative to "B" Major


AEO - PENT
"E" mi. Shaped

IO - PENT
"D" mi. Shaped

DORI - PENT "C" mi. Shaped


LYDI-PENT
$\frac{\text { LYDI - PENT }}{\text { "A" mi. Shaped }}$


MIXO - PENT
"G" mi. Shaped

## I, IV, V Progressions

Fill in the blanks as shown in the example.

| I |
| :--- | $\mathbf{I V}$ IV $\mathbf{V}$

$$
\begin{array}{lllllllllllllll}
\text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \mathrm{V} & \text { I }
\end{array}
$$

| $\mathrm{A}^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{A}^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |  |
|  |  | $\mathrm{A}^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |

V IV

| $\mathrm{D}^{\sharp}$ |  |  | G |  |  | D |  |  | A |  |  | E |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{D}^{\sharp}$ |  |  | G |  |  | D |  |  | A |  |  | E |  |
|  |  | $\mathrm{D}^{\sharp}$ |  |  | G |  |  | D |  |  | A |  |  | E |

## I, IV, V Progressions

Fill in the blanks as shown in the example.
$\begin{array}{lllllllllllllll}\text { I } & \text { IV } & V & \text { I } & \text { IV } & V & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V }\end{array}$

| $\mathrm{G}^{\#}$ | C | $\mathrm{D}^{\#}$ | $\mathrm{C}^{\text {\# }}$ |  |  | B |  |  | F* |  |  | $\mathrm{A}^{\#}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{D}^{\#}$ | $\mathrm{G}^{\text {\# }}$ | $\mathrm{A}^{\#}$ |  | C |  |  | B |  |  | F* |  |  | $\mathrm{A}^{\#}$ |  |
| C ${ }^{\#}$ | F | $\mathrm{G}^{\#}$ |  |  | C |  |  | B |  |  | F* |  |  | $\mathrm{A}^{\#}$ |

$$
\begin{array}{lllllllllllllll}
\text { IV } & V & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I }
\end{array}
$$

| $\mathrm{A}^{\mathrm{b}}$ |  |  | $\mathrm{E}^{b}$ |  |  | $\mathrm{~B}^{b}$ |  |  | F |  |  | C |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{A}^{b}$ |  |  | $\mathrm{E}^{b}$ |  |  | $\mathrm{~B}^{b}$ |  |  | F |  |  | C |  |
|  |  | $\mathrm{A}^{b}$ |  |  | $\mathrm{E}^{b}$ |  |  | $\mathrm{~B}^{b}$ |  |  | F |  |  | C |

$\mathbf{V}$ IV

| E |  |  | A |  |  | D |  |  | G |  |  | $\mathrm{D}^{\sharp}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | E |  |  | A |  |  | D |  |  | G |  |  | $\mathrm{D}^{\sharp}$ |  |
|  |  | E |  |  | A |  |  | D |  |  | G |  |  | $\mathrm{D}^{\sharp}$ |

## I, IV, V Progressions

Fill in the blanks as shown in the example.

| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{D}^{\text {\# }}$ | $\mathrm{G}^{\#}$ | $A^{\#}$ | G |  |  | D |  |  | A |  |  | E |  |  |
| $\mathrm{A}^{\sharp}$ | D ${ }^{\text {\# }}$ |  |  | G |  |  | D |  |  | A |  |  | E |  |
| $\mathrm{G}^{\#}$ | C | D ${ }^{\text {² }}$ |  |  | G |  |  | D |  |  | A |  |  | E |

$$
\begin{array}{lllllllllllllll}
\text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \mathrm{V} & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \mathrm{V} & \text { I }
\end{array}
$$

| $\mathrm{A}^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\mathrm{A}^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |  |
|  |  | $A^{\sharp}$ |  |  | $\mathrm{F}^{\sharp}$ |  |  | B |  |  | $\mathrm{C}^{\sharp}$ |  |  | $\mathrm{G}^{\sharp}$ |

$\mathbf{V}$ IV

| C |  |  | F |  |  | $B^{b}$ |  |  | $E^{b}$ |  |  | $A^{b}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | C |  |  | F |  |  | $B^{b}$ |  |  | $E^{b}$ |  |  | $A^{b}$ |  |
|  |  | C |  |  | F |  |  | $B^{b}$ |  |  | $E^{b}$ |  |  | $A^{b}$ |

## Pattern Movement in I, IV, V Progressions

Follow this example to fill out the remaining exercises, working from left to right.

| Key of "A" Major |  |  | Key of "G" Major |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{I}=\mathbf{A}$ | $\mathrm{IV}=\mathrm{D}$ | $\mathbf{V}=\mathbf{E}$ | $\mathbf{I}=\mathbf{G}$ | $\mathrm{IV}=\mathrm{C}$ | $\mathbf{V}=\mathbf{D}$ |
| AEO at fret2 | LYDI at fret 2 | DORI at fret 2 | 10 atfret 3 | MIXO atfret 3 | LYDI at fret 3 |
| IO at fret 5 | MIXO at fret 5 | LYDI at fret 4 | DORI at fret 5 | AEO at fret 5 | MIXO at fret 5 |
| DORIat fret 7 | AEO at fret 7 | MIXO at fret 7 | LYDI at fret 7 | 10 atfret 8 | AEO at fret 7 |
| LYDI at fret9 | IO at fret 10 | AEO at fret 9 | MIXO at fret 10 | DORI at fret 10 | IO at fret 10 |
| MIXO at fret 12 | DORI at fret 12 | IO at fret 12 | AEO at fret 12 | LYDIat fret 12 | DORI at fret 12 |


| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | Mix0 | LYDI | DORI | AEO | mixo | LYDI | IO | AEO | Mix0 | DORI | 10 | AEO | LYDI | DORI |
| LYDI | 10 | AEO | MIX0 | DORI | 10 | AEO | LYDI | DORI | 10 | MIX0 | LYDI | DORI | AEO | Mix0 |
| mixo | DORI | 10 | aeo | LYDI | DORI | IO | mixo | LYDI | DORI | AEO | MIXO | LYDI | 10 | AEO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions

Fill in the blanks, working from left to right.

| Key of "A" Major |  |  | Key of "G" Major |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | atfret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  |
|  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |
|  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions

Fill in the blanks, working from left to right.

| Key of "E" Major |  |  | Key of "C"Major |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  |
|  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |
|  |  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions

Fill in the blanks, working from left to right.

| Key of "B" Major |  |  | Key of "F" Major |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| I | IV | $\mathbf{V}$ | I | IV | $\mathbf{V}$ | I | IV | $\mathbf{V}$ | I | IV | $\mathbf{V}$ | I | IV | $\mathbf{V}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  |
|  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |
|  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions

Fill in the blanks, working from left to right.

Key of "Ab"Major
Key of "Eb"Major

| $\mathrm{I}=$ | IV = | $\mathbf{V}=$ | $\mathrm{I}=$ | $\mathrm{V}=$ | $\mathrm{V}=$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { I } & \text { IV } & V & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & V & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V }\end{array}$

| DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |
|  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions

Fill in the blanks, working from left to right.

| Key of "B'"Major |  |  | Key of "D" Major |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathbf{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | atfret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  |
|  | LYDI |  |  | MIXO |  |  | AEO |  |  | I0 |  |  | DORI |  |
|  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions in Minor

Follow this example to fill out the remaining exercises, working from left to right.

Key of "A" Minor
I = A mi. $\quad I V=D \mathrm{mi} . \quad V=E \mathrm{mi} . \quad I=G \mathrm{mi} . \quad I V=C \mathrm{mi} . \quad V=\mathrm{D} \mathrm{mi}$.

| MIXO at fret 3 | DORI at fret 3 | 10 atfret 3 | MIXO at fret 1 | DORI at fret 1 | IO at fret 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AEO atfret 5 | LYDIat fret 5 | DORI at fret 5 | AEO at fret 3 | LYDI at fret 3 | DORIat fret 3 |
| IO at fret 8 | MIXO at fret 8 | LYDI at fret 7 | IO atfret 6 | MIXO at fre | LYDI at fret 5 |
| DORI at fret 10 | AEO at fret 10 | MIXO at fret 10 | DORI at fret | AEO at fret 8 | MIXO at free 8 |
| LYDI at fret 12 | IO at fret 13/1 | AEO at fret 12 | LYDI at fret 10 | IOat fret 11 | AEO at fret 10 |


| $\underset{\text { mi. }}{\text { I }}$ | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\underset{\mathrm{mi} .}{\mathrm{V}}$ | $\underset{\mathbf{m i} .}{\text { I }}$ | IV | $\underset{\mathbf{m i}}{\mathbf{V}}$ | $\underset{\mathbf{m i}}{\text { I }}$ | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\begin{gathered} \mathrm{V} \\ \mathrm{mi} . \end{gathered}$ | $\underset{\mathbf{m i}}{\mathbf{I}}$ | IV | $\begin{gathered} \mathrm{V} \\ \mathrm{mi} . \end{gathered}$ | $\underset{\mathbf{m i}}{\mathbf{I}}$ | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\underset{\mathrm{mi}}{\mathrm{~V}}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| MIX0 | DORI | IO | AEO | LYDI | DORI | 10 | MIXO | LYDI | DORI | AEO | MIXO | LYDI | 10 | AEO |
| IO | MIX0 | LYDI | DORI | AEO | MIXO | LYDI | IO | AEO | MIXO | DORI | IO | AEO | LYDI | DORI |
| DORI | AEO | MIXO | LYDI | IO | AEO | MIXO | DORI | I0 | AEO | LYDI | DORI | IO | MIXO | LYDI |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions in Minor

Fill in the blanks, working from left to right.

| Key of "C" Minor |  |  | Key of"E"Minor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I }\end{array}$ mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi.

| AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |
|  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions in Minor

Fill in the blanks, working from left to right.

| Key of "B" Minor |  |  | Key of"F" Minor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | $\mathrm{IV}=$ | $\mathbf{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| I | IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi.


| DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |  |
|  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  | IO |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions in Minor

Fill in the blanks, working from left to right.

| Key of " $A$ " M Minor |  |  | Key of "E ${ }^{\text {b }}$ " Minor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V }\end{array}$ mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi.

| MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |  |
|  |  | MIXO |  |  | AEO |  |  | IO |  |  | DORI |  |  | LYDI |

Use a guitar or bass to verify the answers.

## Pattern Movement in I, IV, V Progressions in Minor

Fill in the blanks, working from left to right.

| Key of "Bb" Minor |  |  | Key of"D"Minor |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathrm{I}=$ | IV = | $\mathrm{V}=$ | $\mathrm{I}=$ | IV = | $\mathrm{V}=$ |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |


| IV | V | I | IV | V | I | IV | V | I | IV | V | I | IV | V | I |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi. mi.


| IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |  |
|  |  | IO |  |  | DORI |  |  | LYDI |  |  | MIXO |  |  | AEO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Follow this example to fill out the remaining exercises, working from left to right.

## Key of"A" Mixed

Key of"G" Mixed
Imi. $=$ Ami. IVmi $=$ Dmi. VMa $=$ EMa.$\quad$ Imi.$=$ Gmi. $\quad$ Vmi $=$ Cmi. $V M a=D M a$.

| MIXO at fret 3 | DORIat fret 3 | DORI at fre | AEO at fret 3 | LYDIat fret 3 | YDI atfret 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AEO at fret 5 | LYDI at fret | LYDI at fret | IO at free 6 | MIXO at fret 6 | MIXO at fret 5 |
| Oatfet | MIXO at fret 8 | MixOatret | DORI atfret 8 | Ondfet | AEO at fret 7 |
| DORI a fret 10 | AEO at fret 10 | AEO at fret9 | LYDIat fret 10 | IOat fret 11 | IO at fret 10 |
| LYDI at fret 12 | IO at fret 13 | IO at fret 12 | MIXO at fret 13 | DORI at fret 13 | DORI at fret 12 |


| $\underset{\mathrm{mi}}{\mathrm{I}}$ | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\mathbf{V}$ | mi. | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\underset{\text { Ma. }}{\stackrel{\mathrm{V}}{2}}$ | mi. | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | $\begin{gathered} \mathbf{V} \\ \mathbf{M a} . \end{gathered}$ | mi. | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ | Ma. | mi. | $\begin{aligned} & \text { IV } \\ & \text { mi. } \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| I0 | MIXO | $\left\|\begin{array}{c} \mathrm{MIXO} \\ -1 \mathrm{fret} \end{array}\right\|$ | LYDI | IO | $\underset{-1 \text { fret }}{10}$ | AEO | LYDI | $\left\|\begin{array}{c\|} \hline \text { LYDI } \\ -1 \text { fret } \end{array}\right\|$ | DORI | AEO | $\begin{gathered} \mathrm{AEO} \\ -1 \text { fret } \end{gathered}$ | MIX0 | DORI | $\begin{gathered} \text { DORI } \\ -1 \text { fret } \end{gathered}$ |
| LYDI | I0 | $\begin{array}{\|c\|} \hline 10 \\ -1 \text { fret } \end{array}$ | AEO | LYDI | $\begin{gathered} \text { LYDI } \\ -1 \text { fret } \end{gathered}$ | DORI | AEO | $\begin{gathered} \mathrm{AEO} \\ -1 \mathrm{fret} \end{gathered}$ | MIXO | DORI | $\left\|\begin{array}{c} \text { DORI } \\ -1 / \text { fret } \end{array}\right\|$ | IO | MIXO | $\left\|\begin{array}{c} \text { MIXO } \\ -1 \text { fret } \end{array}\right\|$ |
| LYDI | IO | $\left\|\begin{array}{c} \mathrm{IO} \\ -1 \mathrm{fret} \end{array}\right\|$ | AEO | LYDI | $\underset{-1}{\operatorname{LYDI}}$ | DORI | AEO | $\left.\begin{gathered} \mathrm{AEO} \\ -1 \text { fret } \end{gathered} \right\rvert\,$ | MIXO | DORI | $\left\lvert\, \begin{gathered} \text { DORI } \\ -1 \text { fret } \end{gathered}\right.$ | IO | MIXO | $\begin{gathered} \text { MIXO } \\ -1 \text { fret } \end{gathered}$ |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

## Key of "A" Mixed

## Key of"G" Mixed

Imi. $=\mathbf{c}$ IVmi. $=$

| VMa. $=$ | Imi. $=$ | IVmi. $=$ | VMa. $=$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at free | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V }\end{array}$ mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma.

| IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |
|  |  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

## Key of "C"Mixed

## Key of"E" Mixed

| IVmi. $=$ | VMa. $=$ | IMa. = | IVmi $=$ | VMa. $=$ | IMa. = |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I }\end{array}$ mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma.

| LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |
|  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

## Key of "B" Mixed

Key of "F" Mixed

| VMa. $=$ | IVMa= | Imi. $=$ | VMa. $=$ | IVMa= | Imi. = |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I }\end{array}$ Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi.

| AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |  | LYDI |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |  | LYDI |  |
|  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |  | LYDI |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

Key of " $A$ b" Mixed Key of "E ${ }^{b}$ " Mixed
IVmi $=\quad$ VMa $=\quad$ Imi. $=\quad$ IVmi $=\quad$ VMa. $=\quad$ Imi. $=$

| at fret | at fret | at fret | at fret | at fret | at fret |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I }\end{array}$ mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi.

| DORI |  |  | MIXO |  |  | IO |  |  | LYDI |  |  | AEO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | DORI |  |  | MIXO |  |  | IO |  |  | LYDI |  |  | AEO |  |
|  |  | DORI |  |  | MIXO |  |  | IO |  |  | LYDI |  |  | AEO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

Key of "B""Mixed
Key of"D" Mixed
Vmi. $=\mathbf{c}$ IVMa=

| IMa. $=$ | Vmi. $=$ | IVMa= | IMa. $=$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I } & \text { V } & \text { IV } & \text { I }\end{array}$ mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma. mi. Ma. Ma.

| MIXO |  |  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | MIXO |  |  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |
|  |  | MIXO |  |  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

Key of " $D^{b}$ " Mixed
IVMa $=\quad$ Vmi $=\quad$ Imi $=\quad$ IVMa $=\quad$ Vmi $=\quad$ Imi. $=$

| at fret | at fret | at fret | at fret | at fret | at fret |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |

$\begin{array}{lllllllllllllll}\text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I }\end{array}$ Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi.

| IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |
|  |  | IO |  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Fill in the blanks, working from left to right.

Key of"C"" Mixed
$\underline{\text { Key of "F"" Mixed }}$
IMa. $=\quad$ IVmi $=\quad$ Vmi $=\quad$ IMa. $=\quad$ IVmi $=\quad$ Vmi $=$

| at fret | at fret | at fret | at fret | at fret | at fret |
| :---: | :---: | :---: | :---: | :---: | :---: |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | at fret | at fret |
| at fret | at fret | at fret | at fret | af fret | at fret |

$\begin{array}{lllllllllllllll}\text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V } & \text { I } & \text { IV } & \text { V }\end{array}$ Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi. Ma. mi. mi.

| LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |  |
|  |  | LYDI |  |  | AEO |  |  | DORI |  |  | MIXO |  |  | IO |

Use a guitar or bass to verify the answers.

## Pattern Movement in Mixed I, IV, V Progressions

Use the previous exercises as a guide for completing the following Pattern Movement Circles exercises.

The circle pattern creates a visual image that mirrors the movement of the patterns on the fretboard.

Playing the patterns next to one another produces I, IV, V movement, while remaining in the same area of the neck.

Clockwise movement in the circle produces physical movement up the neck.

Counterclockwise movement in the circle produces physical movement down the neck.

Imagine a five-story building (the five pentatonic patterns) with three rooms (the I, IV, V progressions) on each floor - and a "magic" elevator (the pattern movement circles). This elevator enables the rider to go from floor to floor, and room to room, in any order, at any time!

## Pattern Movement Circles

I, IV, V in the Key of"A" Major/"F"" Minor


## Pattern Movement Circles

## I, IV, V in the Key of"G"Major/"E"Minor



## Pattern Movement Circles

## I, IV, V in the Key of"E" Major/"C"" Minor



## Pattern Movement Circles

## I, IV, V in the Key of "C"Major/"A" Minor



## Pattern Movement Circles

## I, IV, V in the Key of "B" Major/"G" Minor



## Pattern Movement Circles

## I, IV, V in the Key of"F"Major/"D" Minor



## Pattern Movement Circles



## Pattern Movement Circles

## I, IV, V in the Key of "E ${ }^{b}$ " Major/"C" Minor



## Pattern Movement Circles

## I, IV, V in the Key of "B ${ }^{\text {b" Major/"G" Minor }}$



## Pattern Movement Circles

## I, IV, V in the Key of "D" Major/"B" Minor



## Pattern Movement Circles



## Pattern Movement Circles



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "A"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "C"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "G"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of"E"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of"D"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "F"



## Pattern Movement Circles



## Pattern Movement Circles

## Mixed I, IV, V in the Key of " $E^{\text {b" }}$



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "A"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "C"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "G"



## Pattern Movement Circles

## Mixed I, IV, V in the Key of "E"



## INTERVALS

Fill in the blanks.
bu
Root


## INTERVALS

Fill in the blanks.
Root P.4th Root Dim.5th Root P.5th

| A | D | F | B | $B^{b}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C |  | D |  | $\mathrm{E}^{\text {b }}$ |  |
| E |  | B |  | $A^{\text {b }}$ |  |
| G |  | G |  | $\mathrm{G}^{\#}$ |  |
| B |  | E | $B^{b}$ | $F^{\#}$ | $C^{\#}$ |
| D |  | C |  | $\mathrm{G}^{\text {b }}$ |  |
| F |  | A |  | $C^{b}$ | b |
| $A^{\text {b }}$ |  | $\mathrm{D}^{\text {b }}$ | $\mathrm{G}^{\natural}$ | $\mathrm{A}^{\#}$ | \# or |
| $C^{b}$ |  | $B^{b}$ |  | $\mathrm{C}^{\#}$ |  |
| $\mathrm{E}^{\text {b }}$ |  | $\mathrm{G}^{\text {b }}$ |  | F |  |
| $\mathrm{G}^{\text {b }}$ | $\mathrm{C}^{\text {b }}$ or B | $E^{b}$ |  | B |  |
| $B^{\text {b }}$ |  | $C^{b}$ |  | E |  |
| $\mathrm{D}^{\text {b }}$ |  | $A^{\text {b }}$ |  | A |  |
| F ${ }^{\#}$ |  | $A^{\#}$ | 4 | D |  |
| C |  | $\mathrm{G}^{\#}$ |  | G |  |
| G ${ }^{\#}$ |  | $\mathrm{C}^{\#}$ |  | C |  |
| $A^{\#}$ |  | $F^{\#}$ | q | $\mathrm{D}^{\text {b }}$ |  |
|  |  |  |  |  |  |

## INTERVALS

Fill in the blanks.

|  | +5 |  |  |  | ${ }^{7}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Root | Aug. 5th | $\underline{\text { Root }}$ | Ma. 6th | Root | Mi. 7th |


| A | $\mathrm{E}^{\#}$ or F | F | D | $\mathrm{B}^{\text {b }}$ | $A^{\text {b }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| C | $\mathrm{G}^{\sharp}$ | D |  | $\mathrm{E}^{\text {b }}$ |  |
| E |  | B | $\mathrm{G}^{\#}$ | $\mathrm{A}^{\text {b }}$ |  |
| G |  | G |  | $\mathrm{G}^{\sharp}$ | F ${ }^{\text {\# }}$ |
| B | $\mathrm{G}^{\natural}$ | E |  | $\mathrm{F}^{\text {\# }}$ |  |
| D |  | C |  | $\mathrm{G}^{\text {b }}$ |  |
| F |  | A |  | $C^{b}$ | A 9 |
| $A^{\text {b }}$ | Et | $\mathrm{D}^{\text {b }}$ | $B^{\text {b }}$ | $\mathrm{A}^{\#}$ |  |
| $C^{b}$ |  | $B^{\text {b }}$ |  | $C^{\#}$ |  |
| $\mathrm{E}^{\text {b }}$ | B | $\mathrm{G}^{\text {b }}$ |  | F |  |
| $\mathrm{G}^{\text {b }}$ |  | $E^{b}$ |  | B |  |
| $\mathrm{B}^{\text {b }}$ |  | $C^{\text {b }}$ |  | E |  |
| $\mathrm{D}^{\text {b }}$ |  | $A^{\text {b }}$ |  | A |  |
| $\mathrm{F}^{\#}$ |  | $\mathrm{A}^{\#}$ | G | D |  |
| $C^{\#}$ |  | $\mathrm{G}^{\#}$ |  | G |  |
| $\mathrm{G}^{\#}$ |  | $\mathrm{C}^{\#}$ |  | C |  |
| $A^{\#}$ |  | $\mathrm{F}^{\#}$ |  | $\mathrm{D}^{\text {b }}$ | $C^{\text {b or B }}$ |
|  |  |  |  |  |  |

## INTERVALS

Fill in the blanks.
bs
Root Mi.3rd P.5th Root Ma.3rd P.5th Root P.4th P.5th


## INTERVALS

Fill in the blanks.
b3
b3
Mi.3rd P.5th Root P.5th Root Mi.3rd Ma.3rd P.5th Root

| A | $\mathrm{C}^{\#} \mathrm{orD}^{\text {b }}$ | $\mathrm{F}^{*}$ orG ${ }^{\text {b }}$ | A | D | F | A | C | F |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| C |  |  | C |  |  | C |  |  |
| E |  |  | E |  |  | E | G | C |
| G |  |  | G |  |  | G |  |  |
| B |  |  | B | E | G | B |  |  |
| D |  |  | D |  |  | D |  |  |
| F |  |  | F |  |  | F |  |  |
| $\mathrm{A}^{\text {b }}$ | C | F | $\mathrm{A}^{\text {b }}$ |  |  | $\mathrm{A}^{\text {b org }}{ }^{*}$ | $\mathrm{C}^{\text {bor }} \mathrm{B}$ | $\mathrm{F}^{\text {b }}$ or E |
| $\mathrm{C}^{\text {b }}$ |  |  | $\mathrm{C}^{\text {b }}$ | Fb | G ${ }^{\text {¢ }}$ | $C^{b}$ |  |  |
| $\mathrm{E}^{\text {b }}$ |  |  | $\mathrm{E}^{\text {b }}$ |  |  | $\mathrm{E}^{\text {b }}$ |  |  |
| $\mathrm{G}^{\text {b }}$ |  |  | G ${ }^{\text {b }}$ |  |  | $\mathrm{G}^{\text {b }}$ |  |  |
| $B^{b}$ |  |  | $\mathrm{B}^{\text {b }}$ |  |  | $B^{\text {b }}$ |  |  |
| $\mathrm{D}^{\text {b }}$ |  |  | $\mathrm{D}^{\text {b }}$ |  |  | $\mathrm{D}^{\text {b }}$ |  |  |
| F |  |  | $\mathrm{F}^{\text {\# }}$ |  |  | F |  |  |
| $\mathrm{C}^{\text {\# }}$ |  |  | $\mathrm{C}^{\#}$ | F ${ }^{\#}$ | A ${ }^{\text {a }}$ | $\mathrm{C}^{\text {\# }}$ |  |  |
| $\mathrm{G}^{\text {\# }}$ | Cor $\mathrm{B}^{\text {\# }}$ | F or $\mathrm{E}^{\#}$ | $\mathrm{G}^{\#}$ |  |  | $\mathrm{G}^{\#}$ |  |  |
| $\mathrm{A}^{\#}$ | D | G | $\mathrm{A}^{\#}$ |  |  | $\mathrm{A}^{\sharp}$ |  |  |
|  |  |  |  |  |  |  |  |  |
| Minor Triads (First Inversion) |  |  | Major Triads (Second Inversion) |  |  | Major Triads (First Inversion) |  |  |

## INTERVALS

Fill in the blanks.


| F | $B^{6}$ | D | $B^{b}$ | $F^{\#}$ or $\mathrm{G}^{\text {b }}$ | D | A | $E^{b}$ | C |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| D |  |  | E ${ }^{\text {b }}$ |  |  | C |  |  |
| B |  |  | $A^{b}$ |  |  | E |  |  |
| G |  |  | $\mathrm{G}^{\#}$ |  |  | G |  |  |
| E | A | $C^{\#}$ | $F^{\#}$ | D | $A^{\#}$ | B |  |  |
| C |  |  | $\mathrm{G}^{6}$ |  |  | D |  |  |
| A |  |  | $\mathrm{C}^{\text {b }}$ |  |  | F |  |  |
| $\mathrm{D}^{b}$ |  |  | $A^{\#}$ | $\mathrm{F}^{\#}$ | D | $A^{\text {b }}$ |  |  |
| $B^{b}$ |  |  | $\mathrm{C}^{\#}$ |  |  | $C^{b}$ |  |  |
| $\mathrm{G}^{b}$ |  |  | F |  |  | $\mathrm{E}^{\text {b }}$ |  |  |
| $E^{b}$ |  |  | B |  |  | $\mathrm{G}^{b}$ |  |  |
| $C^{b}$ |  |  | E |  |  | $B^{6}$ |  |  |
| $A^{b}$ | $\mathrm{D}^{b}$ | F | A |  |  | $\mathrm{D}^{6}$ |  |  |
| $A^{\#}$ |  |  | D |  |  | $\mathrm{F}^{\#}$ |  |  |
| $\mathrm{G}^{\#}$ |  |  | G |  |  | $C^{\#}$ |  |  |
| $C^{\#}$ |  |  | C |  |  | $\mathrm{G}^{\#}$ |  |  |
| $\mathrm{F}^{\#}$ |  |  | $\mathrm{D}^{b}$ |  |  | $A^{\#}$ |  |  |
|  |  |  |  |  |  |  |  |  |

Major Triads (Second Inversion)

Augmented Triads
(Always Major)

## INTERVALS

Fill in the blanks by adding or subtracting seven.

## Original Up byone Original Up byone Original Upbyone Interval Octave Interval Octave Interval Octave

| Ma.2nd | Ma. 9th | 2 | 9 | 13 |
| :---: | :---: | :---: | :---: | :---: |
| mi. 3rd | mi. 10 | b3 | ${ }^{\text {b }} 10$ | 11 |
| Ma.3rd | Ma. 10th | 3 | 10 | 9 |
| P. 4th | P. 11th | 4 | 11 | 10 |
| dim. 5th | dim. 12th | $b_{5}$ | ${ }^{\text {b }} 12$ | 12 |
| P. 5th | P. 12th | 5 | 12 | +12 or ${ }^{\text {b }} 13$ |
| Aug. 5th | Aug. 12th | +5 | +12 or ${ }^{\text {b }} 13$ | 15 |
| Ma. 6th | Ma. 13th | 6 | 13 | b10 |
| mi. 7 th | mi. 14th | b7 | ${ }^{\text {b }} 14$ | b14 |
| Ma. 7 th | Ma. 14th | 7 | 14 | 10 |
| 8th Octave 15th |  | 8 | 15 | 13 |
|  |  |  |  | ${ }^{\text {b }} 13$ or +12 |
|  |  |  |  | 15 |
|  |  |  |  | 14 |
|  |  |  |  | 10 |
|  |  |  |  | 12 |
|  |  |  |  | ${ }^{\text {b }} 12$ |
|  |  |  |  | ${ }^{\text {b }} 14$ |

## Interval Geometry

To draw the interval shapes, refer to the indicated roots, then fill in the remaining notes. Hints are provided under the correct strings; just locate the correct fret.

(2nds are almost always called 9ths when they appear in chords.)

## Interval Geometry

Draw the interval shapes.

Mi. 3

Mi. 10


Ma. 9th


Remember, a 9 th is just a 2nd up an octave.
Mi. 3

Mi. 10


Ma. 9th

Mi. 10


Ma. 9th


Mi. 3



A 10th is just a 3rd up an octave.

## Interval Geometry

Draw the interval shapes.



Ma.3rd


Ma. 3rd
Ma. 3rd



Ma. 10th


Ma. 10th


Ma. 10th


Perfect 4th

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | $\boxed{R}$ |  |
|  |  |  |  |  |

When a $3 r d$ is replaced with a 4 th it is known as a suspended 4th.

## Interval Geometry

Draw the interval shapes.


11 ths and major 3rds never appear in the same chord as do minor 3rds and 11 tbs.
Dim. 5



Dim. 5
Dim. 5
Dim. 5




For the guitarist, ${ }^{\circ} 5$ and +11 are basically the same, the 5 th is just lowered by one fret.
$+11$

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| R |  |  |  |  |
|  |  |  |  |  |


|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| R |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |





## Interval Geometry

Draw the interval shapes.


Not enough fingers to play a chord? Lower the 5th to a 4 th or 3 rd, or raise it to a 6 th (13th) or 7 th. Perfect 12th

## Perfect 12th







Remember, when dealing with guitar chords, a 12th is called a 5th. A 5th up an octave is a 12th.

Aug. 5


Aug. 5
Aug. 5
Aug. 5


Aug. 5


There is no such thing as a minor chord with an augmented Sth. C mi. +5 ? No, it's really Ab ma.

## Interval Geometry

Draw the interval shapes.





When ${ }^{b} 13$ is in a chord symbol, think of it as +5 . Also, +12 is never seen in chord symbols.


(6) 6

Need a 6 th more than a root? Lower the root by three frets. Ma. 13th


Ma. 6th
Ma. 6th



Ma. 13th





A 13th is just a 6 th up an octave.

## Interval Geometry

Draw the interval shapes.
Mi. 7

Mi. 14

Mi. 7


Need ${ }^{b} 7$ more than a root? Lower the root by two frets. Mi. 14

(R)

${ }^{\mathrm{b}} 14$ is never seen in chord symbols; it is always shown as ${ }^{b} 7$.
Ma. 7th


Ma. 7th
Ma.7th


Ma. 14th



Ma. 14th

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
|  | R |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

Major 14th is always shown in chord symbols as major 7th.


[^0]:    * Melody notes

