

Theory Workbook

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Units 6-10



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Theory Workbook

Unit Six

Triads

1. The Triad

The **triad** is a **3** note chord.

2. The 4 different Triad types

There are 4 different chord types that are written as triads.

These are:

- **major**
- **minor**
- **augmented**
- **diminished**

3. Major Triad

The formula for a **major triad** is:

- **1, 3, 5** of the major scale.

Ex 1.

- Build a **major** triad on each of the root notes given below.

=====

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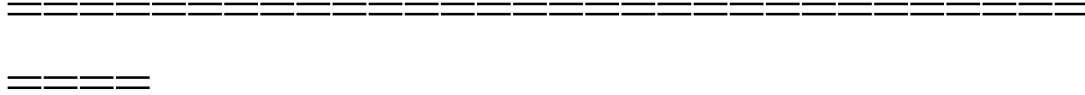
4. The Minor Triad

The formula for the *minor triad* is:

- **1, b3, 5** of the major scale.

Ex 2.

- Build a *minor* triad on each of the given root notes.



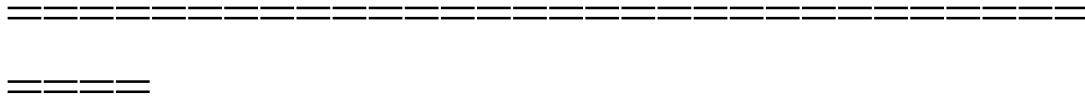
5. The Augmented Triad

The formula for the *augmented triad* is:

- **1, 3, #5** of the major scale.

Ex. 3

- Build *augmented triads* on the following root notes.



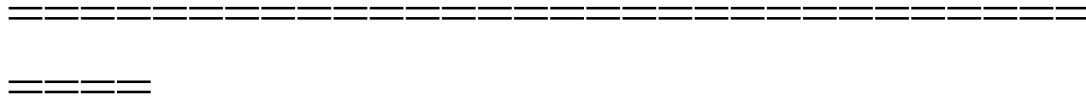
6. The Diminished Triad

The formula for the *diminished triad* is:

- **1, b3, b5** of the major scale.

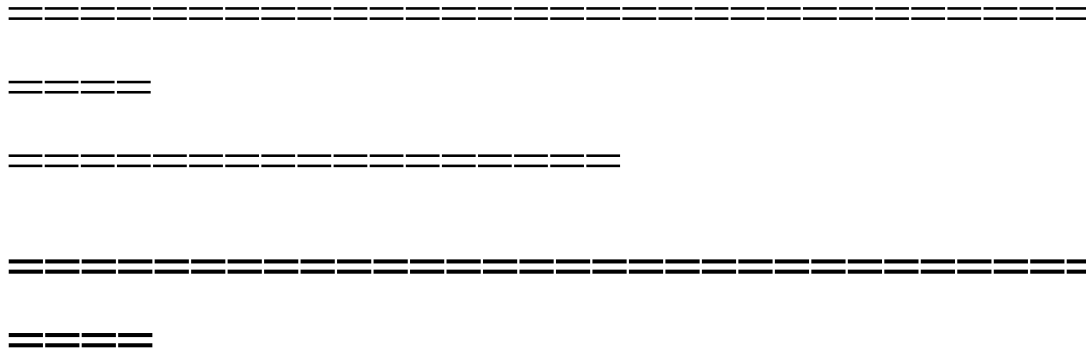
Ex 4.

- Build *diminished triads* from the given root notes.



Ex 5.

- Name the triads on the staff below.



Ex. 6

- Spell out the triads on the chart below by filling in the blanks.

Triad	D mi	E	C	Gm	Ab	B aug	Cm	F
1	D							
3	F		E					A
5	A	B				G	G	

Triad	Bb	D	Am	G dim	A aug	Eb	Em	F#
1	Bb							
3							G	A#
5			E	Db	F			

Triad	Bm	Db	Bb dim	E aug	Fm	D aug	A	G
1								
3		F				F#	C#	
5				C				D

Objectives for Unit 6:

- Be able to identify triads written on the staff.
- Be able to construct any of the four triad types.
- Memorize the formulas for the major, minor, augmented and diminished triads construction.

Unit Seven

Harmonizing the Major scale in Triads

1. Harmonizing the Scale

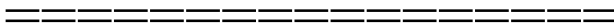
The process of **harmonizing the scale** is actually a very simple one. The major scale can have triads built from each **step of** the scale, using only **notes within that scale**.

For example;

C major scale is harmonized only using notes from the C major scale.
G major scale is harmonized only using notes from the G major scale.

Ex 7.

- Write a C major scale on the staff below.
- Number the scale steps (degrees) 1-8.
- Above the note C write the 3rd and 5th notes of the scale.
- What **type** of triad have you formed?
Major, minor, diminished, or augmented.
- Write the name below the triad.
- Follow this same process with the other scale steps, in each case put a 3rd and 5th above the scale tone.



Ex 8.

- Which of the triads on the staff above are **major** in quality? Write the scale degree number. _____
- Which triads are **minor** in quality? _____
- Which triad is **diminished** in quality? _____

2. Tonal Harmony

The chords that result from this process form the basis of **tonal harmony**. Many chord progressions, (and melodies) in music revolve around a central tonality, or key centre.

In fact, many songs use only chords from a single harmonized scale.

An understanding of this simple process, (and the practical workings of it), are the key elements in understanding chord/scale (melody/harmony) relationships.

3. Formula of Major Scale Triad Qualities

1	2	3	4	5	6	7
ma	mi	mi	ma	ma	mi	dim

Ex 9.

- Using the formula above, write out the names of the triads in each key listed in the following table.

	1	2	3	4	5	6	7
C ma	C ma	Dm	Emi	F ma	Gma	Am	Bdim
F ma							
Bb ma							
Eb ma							
Ab ma							
Db ma							
Gb ma							
G ma							
D ma							
A ma							
E ma							
B ma							
F# ma							
C# ma							

Ex 10.

- The following questions relate to the information on the previous page.
- **Do not refer to it**, but work the answers out from your knowledge of the **major scales** and the **formula of major scale triad qualities**.
- Name the **"5" chord** in each of these keys.

Key	"5" chord
C	G
A	
F#	
E_b	
D	
B	
A_b	
F	
E	
D_b	
B_b	
G	

- Name the **"3" chord** in each of the following keys.

Key	"3" chord
C	Em
A	
F#	
E_b	
D	
B	
A_b	
F	
E	
C#	
B_b	
G	

- Fill in the blanks.

Key	"6" chord
C	Am
	Bm
F	
	F#m
Ab	
	Ebm
Bb	
	Em
Db	
	C#m
Eb	
	G#m

- Fill in the blanks.

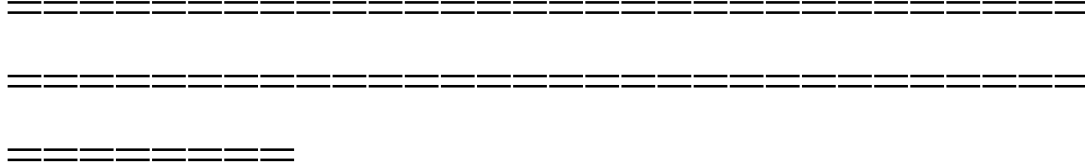
Key	"4" chord
	C
	A
	Gb
	Eb
	D
	Cb
	Ab
	F
	E
	Db
	Bb
	G

- Fill in the blanks.

Key	"2" chord
	Cm
A	
Gb	
	Ebm
D	
	Bm
Ab	
F	
	Em
Db	
	Bbm
	Gm

Ex 11.

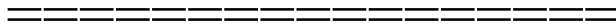
- On the staff below are some chord progressions.
- Write in **scale step numbers** for each one.



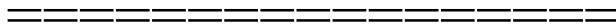
Ex 12.

- Write the **chord names** for the scale step numbers as indicated.

Key of G



Key of D



Key of A

=====

Key of E

=====

Key of B

=====

Key of F

=====

Key of Bb

=====

Key of Eb

=====

Key of Ab

=====

Key of Db

=====

Ex 13.

- Translate the chord names into scale step numbers and **then transpose** each one into the **key of G major**.

Original

=====

=====

Transposed into key of G

=====

=====

Ex 14.

Triad Review

- Name the 5th of each triad.

Triad	5th of triad	Triad	5th of triad
C	G	Em	
Ddim		G	
Dbmi		D	

A aug		G aug	
Bb		C dim	
F		Eb dim	
Dm		B	
Am		B aug	
Abdim		B dim	
Gm		Bm	
Fm		Ab	
C aug		Gbm	
Abm		F#m	
A		E	

Objectives for Unit 7:

- Be able to spell **any** triad.
- Be able to name the triads of the major scale in any key.

Unit Eight

The Minor Scale

1. Minor Scales

To avoid confusion regarding the minor scales it is important to cover each one thoroughly.

Some important tips to remember are:

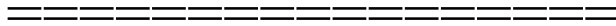
- There is more than one scale that produces a “minor” sound.
- Each major scale has a relative minor scale that shares the same key signature.
- The minor scales may be harmonized in the same way as the major scales.

(a) The Natural Minor Scale

The easiest minor scale to begin studying is the **natural minor scale**.

Ex 15.

- On the staff below draw a scale from A up to the A note that is one octave higher. (No flats or sharps)
- Number the steps 1-8.
- Draw a **bracket** between the notes that are one **whole step** apart.
- Draw a “V” between notes that are one **half-step** apart.
- The scale you have constructed is the **A natural minor scale**.
- Where do the half-steps occur? _____
- Where do the whole steps occur? _____



(1) Interval Formula for the Natural Minor Scale

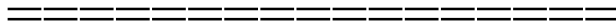
The numbers below represent the distance, (in half-steps), between the notes in a natural minor scale.

2 1 2 2 1 2 2

(2) Process to Build the Natural Minor Scale

Ex 16.

- Choose a root note and write it on the staff below. (Use an E note)
- Write the notes from E up to the E that is an octave higher.
- Number the notes 1-8.
- Compare the intervals to those in the formula for the natural minor scale.
- Adjust the notes where necessary to form the correct interval formula.
- Gather the accidental notes (sharps or flats) next to the clef sign to form the key signature.
- Use the chromatic scale to help you, if required.

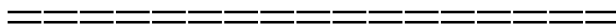


A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

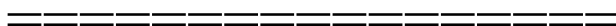
Ex 17.

- Build **natural minor scales** using the root notes indicated.
- These will require only sharps.
- Write the key signatures next to the clef sign.

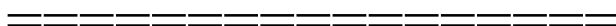
Key of E minor



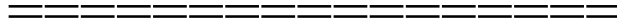
Key of B minor



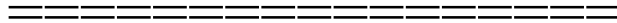
Key of F# minor



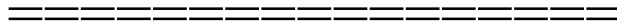
Key of C# minor



Key of G#minor



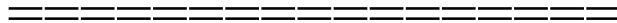
Key of D#minor



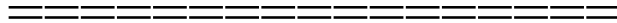
Ex 18.

- Build the natural minor scales in the keys indicated.
- These require the use of flats only.
- Write the key signature next to the clef sign.

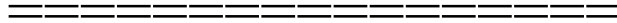
Key of D minor



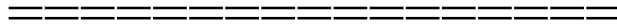
Key of Gminor

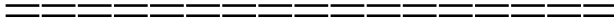
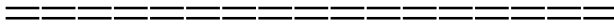


Key of Cminor



Key of Fminor

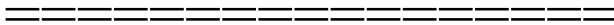


Key of Bbminor**Key of Ebminor****2. Minor Key Signatures****Ex 19.**

- Write the key signature for the scales listed below.
- Take note of the position and order of the sharps or flats.

(a) Sharp Keys

Am Em Bm F#m C#m G#m D#m

(b) Flat Keys

Am Dm Gm Cm Fm Bbm Ebm

3. Relative Major and Minor Keys

When we compare the **minor key** signatures above with those of the **major keys**, we can see that the order and position of the sharps and flats are identical.

The names of the keys are different.

- Major and minor keys that **share the same key signature** are called **relative keys**.
- Every **major** key has a **relative minor** key.
- Every **minor** key has a **relative major** key.

4. How to find the Relative Minor Key.

To find the **relative minor** of a **major key**, simply think of the note that is the **6th of the major scale** in question.

For example;

- Find the **relative minor** of the key of A major. (same key signature)
- Count up **6 scale steps** from the A note (**remember the key signature**).
- The note is **F#**.
- Therefore the **relative minor** of A major is F# minor.

Ex 20.

- Name the **relative minor key** of those listed.

Major key	Relative minor key
C	
G	
D	
A	
E	
B	
F#	
F	
Bb	
Eb	
Ab	
Db	
Gb	

5. How to find the Relative Major Key.

To find the **relative major** of a **minor key**, simply think of the note that is the **3rd of the minor scale** in question.

For example;

- Find the **relative major** of the key of A minor. (same key signature)
- Count up **3 scale steps** from the A note (**remember the key signature**).
- The note is **C**.
- Therefore the **relative major** of A minor is C major.

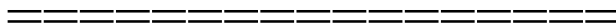
Ex 21.

- Name the **relative major key** of those listed.

Major key	Relative minor key
	Cm
	Gm
	Dm
	Am
	Em
	Bm
	F#m
	C#m
	G#m
	D#m
	Bbm
	Ebm
	Fm

(b) The Harmonic Minor Scale**Ex 22.**

- On the staff below draw a scale from A up to the A note that is one octave higher. (No flats or sharps)
- Number the steps 1-8.
- Draw a **bracket** between the notes that are one **whole step** apart.
- Draw a "V" between notes that are one **half-step** apart.
- Raise** the pitch of the **7th scale note** by 1 semitone.
- The scale you have constructed is the **A harmonic minor scale**.
- Where do the half-steps occur? _____
- Where do the whole steps occur? _____

**(1) Interval Formula for the Harmonic Minor Scale**

The numbers below represent the distance, (in half-steps), between the notes in a harmonic minor scale.

2 1 2 2 1 3 1

(2) Process to Build the Harmonic Minor Scale

Ex 23.

- Choose a root note and write it on the staff below. (Use an E note)
- Write the notes from E up to the E that is an octave higher.
- Number the notes 1-8.
- Compare the intervals to those in the formula for the harmonic minor scale.
- Adjust the notes where necessary to form the correct interval formula.
- The key signature remains the same as for the natural minor.
- The alteration to the 7th step **does not** affect the key signature, but is written next to the 7th note.
- Use the chromatic scale to help you, if required.

=====

A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

Ex 24.

- Build **harmonic minor scales** using the root notes indicated.
- Write the key signatures next to the clef sign.

Key of E minor

=====

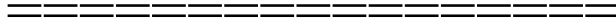
Key of B minor

=====

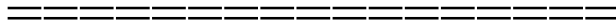
Key of F# minor

=====

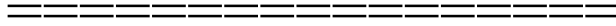
Key of C#minor



Key of G#minor



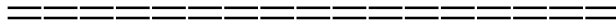
Key of D#minor



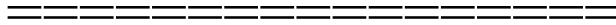
Ex 25.

- Build the harmonic minor scales in the keys indicated.
- Write the key signature next to the clef sign.

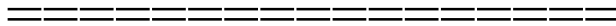
Key of D minor



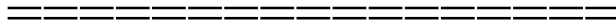
Key of G minor



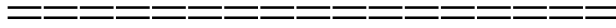
Key of C minor



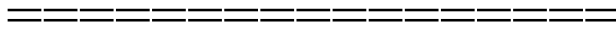
Key of F minor



Key of Bbminor



Key of Ebminor

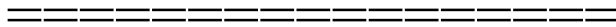


(c) The Jazz Minor Scale (ascending Melodic Minor Scale)

The **jazz minor scale** is a natural minor scale where the 6th **and** 7th steps are raised by one semitone.

Ex 26.

- On the staff below draw a scale from A up to the A note that is one octave higher. (No flats or sharps)
- Number the steps 1-8.
- Draw a **bracket** between the notes that are one **whole step** apart.
- Draw a "V" between notes that are one **half-step** apart.
- **Raise** the pitch of the **6th scale note** by 1 semitone.
- **Raise** the pitch of the **7th scale note** by 1 semitone.
- The scale you have constructed is the **A jazz minor scale**.
- Where do the half-steps occur? _____
- Where do the whole steps occur? _____



(1) Interval Formula for the Jazz Minor Scale

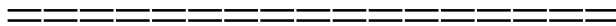
The numbers below represent the distance, (in half-steps), between the notes in a jazz minor scale.

2 1 2 2 2 2 1

(2) Process to Build the Jazz Minor Scale

Ex 27.

- Choose a root note and write it on the staff below. (Use an E note)
- Write the notes from E up to the E that is an octave higher.
- Number the notes 1-8.
- Compare the intervals to those in the formula for the jazz minor scale.
- Adjust the notes where necessary to form the correct interval formula.
- The key signature remains the same as for the natural minor.
- The alterations to the **6th** and **7th** steps **do not** affect the key signature.
- Use the chromatic scale to help you, if required.

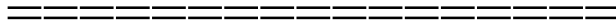


A	A#	B	C	C#	D	D#	E	F	F#	G	G#
	Bb			Db		Eb			Gb		Ab

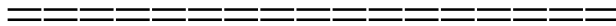
Ex 28.

- Build **jazz minor scales** using the root notes indicated.
- Write the key signatures next to the clef sign.

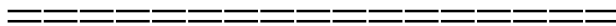
Key of E minor



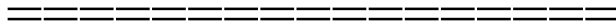
Key of B minor



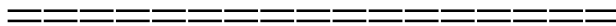
Key of F# minor



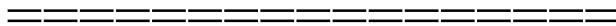
Key of C# minor



Key of G# minor



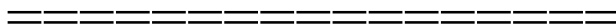
Key of D# minor



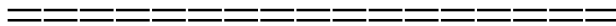
Ex 29.

- Build the **jazz minor scales** in the keys indicated.
- Write the key signature next to the clef sign.

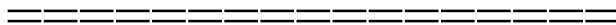
Key of D minor



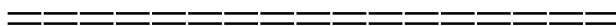
Key of G minor



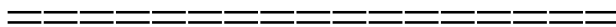
Key of C minor



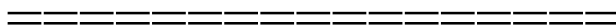
Key of F minor



Key of Bb minor



Key of Eb minor



Objectives for Unit 8:

- Be able to construct a **natural minor scale** from any root note.
- Be able to construct a **harmonic minor scale** from any root note.
- Be able to construct a **jazz minor scale** from any root note.
- Be able to look at a key signature and name the **major** and **relative minor** keys that share that key signature.

Unit Nine

Sevenths and Key Centres

The triads are again put to good use in this unit as we explore the **seventh chord** and **key centres**.

1. Seventh Chord Types

(a) The Major Seventh Chord

- The **major seventh chord** (Ma7) formula is:

1 3 5 7

(b) The Minor Seventh Chord

- The **minor seventh chord** (mi7) formula is:

1 b3 5 b7

(c) The Dominant Seventh Chord

- The **dominant seventh chord** (7) formula is:

1 3 5 b7

(d) The Minor Seven Flat Five Chord

- The **minor seven flat five chord** (m7b5) formula is:

1 b3 b5 b7

Ex 30.

- Write each of the seventh chords on the staff below based on a C root note.

dom7
mi7b5
Ma7
mi7

In most music situations the dominant seventh chord is shortened, (for convenience) to seventh (7).

Ex 31.

- Build the chords as required on the staff below.
- Remember the scale being used is always the major scale.

=====
 =====
 =====
 =====

Ex 32.

- Fill in the blanks as you spell the seventh chord on the table below.

Chord	1	3	5	7	Chord	1	3	5	7
F7		A			Abm7			Eb	
Am7			E		Db7		F		
Bbm7b5		Db			Gb Ma7		Bb		
D Ma7		F#			B Ma7		D#		
E7	E			D	C#m7b5		E		
Eb Ma7				D	Bm7b5	B			
Bm7		D			E7	E			
A Ma7			E		Eb7		G		
G7					Dm7			A	
Gm7b5		Bb			Db7			Ab	
Cm7				Bb	G Ma7			D	
Ab Ma7		C			D Ma7				C#
D7				C	F m7				Eb
Am7b5		C			A7			E	
C7	C				F#7		A#		
Gb7				Fb	Em7b5		G		
Dm7b5			Ab		Bm7		D		
B7		D#			Am7				G
Em7		G			E Ma7			B	

2. Harmonizing the Major Scale with Seventh Chords

Ex 33.

- On the staff below, write the C major scale.
- Build triads from the root notes using only scale tones.
- Number the scale steps 1-8.
- Add the seventh note of the scale to the triad built on the 1st scale step (C major).
- Write the name of the resulting chord below it on the staff.
- Continue to add the seventh (scale tones only) for the remaining triads and name the resulting chord.



Ex 34.

- Which scale steps have **major 7 chords** built on them? _____
- Which scale steps have **minor 7 chords** built on them? _____
- Which scale step has a **dominant 7 chord** built on it? _____
- Which scale step has a **minor 7 flat 5 chord** built on it? _____

3. The Formula for Seventh Chords in Each Key

In Unit 7, we learned that there is an order of chord types, (or qualities), for the **triads** in the major scale.

There is also an order of seventh chords which we can break down into a formula which can then be used for any major key.

- **The formula is:**

Ima7 **II**mi7 **III**mi7 **IV**ma7 **V**7 **VI**mi7 **VII**mi7b5

Ex 35.

- Using the formula from the previous page, fill in the **seventh chords** in each of the following keys on the table below.

Keys	Chords						
	I	II	III	IV	V	VI	VII
C	Cma7	Dm7	Em7	Fma7	G7	Am7	Bm7b5
D				Gma7			
E					B7		
F			Am7				
G							
A				Dma7			
B							
Bb			Dm7				
Eb		Fm7					Dm7b5
Ab					Eb7		
Db							
Gb							
F#			A#m7		C#7		
C#		D#m7					

- This table is one of the most widely used tools of the beginning improviser as it places scale/chord relationships in an easy to understand format.
- This concept will be explored further in **Key Centres**.

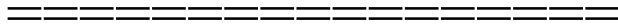
4. Key Centres

- Musicians are often required to figure out the **key centre** of a piece of music from the chords alone.
- This is a very useful skill in improvising as the key can tell you which scale/s to play for a given series of chords.
- Musicians may also develop this skill simply from listening, although this is not always possible in a playing situation.
- Find which key, (harmonized scale), contains the chords in the given progression.

5. Process for Finding the Key Centre**Ex 36.**

- Look at the first chord in the progression that follows.
- Refer to the chart completed in Ex 35 and establish which keys the chord could belong to.
- Write these possible keys under the first chord.
- Do the same process for the rest of the chords in the progression.
- Which of the chords belongs to only one key? _____
- Do all of the chords have a key that is common? _____
- Number the scale steps accordingly.
- You have now located the key centre of the chord sequence.

- Write the key centre here. _____

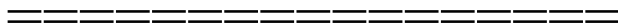


A general guideline here is:

Always find the key that the dominant chord belongs to first.

Ex 37.

- What is the key centre of the following progression? _____
- Write the scale step numbers under each of the chords.



Song progressions occasionally modulate (change key) a few times. As this happens some chords may end up being in two keys at one time.

While this may cause confusion at first, the ultimate judge of this is your ear.

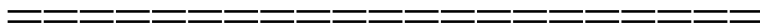
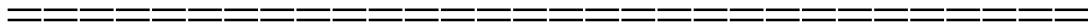
If something sounds right then that is OK.

We are dealing here with an inexact science rather than a set of hard and fast rules.

Ex 38.

The following chord sequence contains several keys which would **not** be indicated by a change in the key signature.

- Establish the scale position (function) of each chord and write it below the chord.
- Write the key centres above the appropriate group of chords.
- **Remember** to look for the **dominant 7 chord** to give you a clue to the key.



It is important at this point to note that this view of harmony will **not** cover all possibilities in music.

For example:

A blues in the Key of G has the following chords in it:

G7 C7 D7

Key Centres

C major	Fmajor	Gmajor
G7	C7	D7
V chord	V chord	V chord

- Our previous studies have shown us that G7 is the dominant7 chord in the key of **C major**.
- C7 is the dominant7 chord in the key of **F major**.
- D7 is the dominant7 chord in the key of **G major**.

This may be a somewhat misleading way to view this chord progression as it does not "**sound**" like a V V V chord sequence.

It **sounds** like a I IV V progression with the 7th note added to the chord for extra colour.

- Theory of music is simply an attempt to explain and categorize the "sound" we hear when we listen to music **as musicians**.

Despite the obvious inadequacies of the system it **does**, however, provide us with a useful "skeleton" to hang many musical concepts on.

As you progress further with your playing and listening, you will find an increase in your ability to **look** at a series of chords and "hear" the sound of them in your head.

Objectives for Unit 9:

- Be able to build a **major7, minor7, dominant7 and minor7b5** chord from any root note.
- To know the formulas of the seventh chords.
- To know the chord types in each major scale when it is harmonized.
- To be able to find the **key centre** of a simple chord progression based on the chords in each key.

Unit Ten

Inversions and Harmonizing the Minor Scale

1. Inversions

An **inversion** is simply the notes of a chord arranged in a particular order.

A chord is not always played or written from the root note upwards.

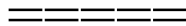
The main reason chords are played in different inversions is to allow for smooth and connected **voice leading**.

Voice leading will be covered in Units 11-15.

(a) Root Position

When the chord is written (or played) with the **root note** as it's lowest note it is said to be in **root position**.

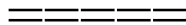
Example:



(b) 1st Inversion

When the chord is written (or played) with the **3rd** as the lowest note it is in **1st inversion**.

Example:



(c) 2nd Inversion

When the chord is written (or played) with the **5th** as the lowest note it is in **2nd inversion**.

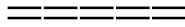
Example:



(d) 3rd Inversion

When the chord is written (or played) with the **7th** as the lowest note it is in **3rd inversion**.

Example:



2. Slash Chords

It has become popular in recent times to notate inversions with **slash chords**. This enables the player to immediately associate the chord name with the bass note required.

The slash chord **always** has the **chord name on the left** and the **bass note on the right** side of the diagonal slash.

Example:

Cma7/E = **Cmajor7th** chord with an **E note** as the **lowest pitch** in the chord.

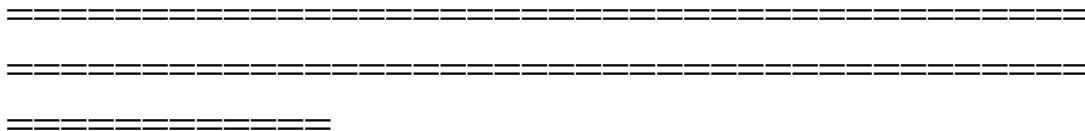
Dm7/A = **Dminor7th** chord with an **A bass note**.

The slash chord is a vital part of much of today's music, (regardless of style), as it enables us to write a fairly specific chord sound without resorting to the sometimes cumbersome music notation.

It is not always necessary for the guitarist or pianist to play the bass note as well as the chord as the bass note is often played by the bass player.

Ex 39.

- Name the chords on the staff below as **slash** chords.
- Remember that the chord name is written to the left of the slash and the bass note to the right hand side of the slash.
- If the chord is in root position there is no need to write a separate bass note.



Ex 40.

The notes in the boxes below that are marked 'notes' form a chord.

- Write the chord name in the box marked 'chord' or;
- Write the notes in the boxes to complete the chord spelling.

Fill in the blanks.

Chord	=	Note (1)	Note	Note	Note
	=	Bb	G	D	F
Am7	=		C	G	A
	=	D	C	F#	A

Chord	=	Note (1)	Note	Note	Note
Bm7b5	=	B		D	
A7	=	C#	G		
	=	F	D	C	A

	=										
	=	A	D#	F#	B	Dm7	=	F	C		
Cm7	=		Eb	G	C	F#m7b5	=		C	A	
	=	G#	D	B	E	Bb7	=		D	F	Bt
	=	F	C	E	A	Ab7	=	Ab			
Dma7	=	F#	C#	D		Cma7	=		E	B	
	=	Ab	D	F	Bb	C#m7	=		E	B	

Ex 41.

- Rewrite the chord names from the above chart using the note marked in column (1) as the bass note.
- This will usually result in a slash chord notation.

3. Harmonizing the Harmonic Minor Scale

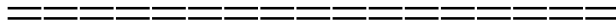
The process of **harmonizing the minor scale** is actually a very simple one. The minor scale can have triads built from each **step of** the scale, using only **notes within that scale**.

For example;

C minor scale is harmonized only using notes from the C minor scale.
G minor scale is harmonized only using notes from the G minor scale.

Ex 42.

- (a) Write an A harmonic scale on the staff below.
- (b) Number the scale steps (degrees) 1-8.
- (c) Above the note A write the 3rd and 5th notes of the scale.
- (d) What **type** of triad have you formed?
Major, minor, diminished, or augmented.
- (e) Write the name below the triad.
- (f) Follow this same process with the other scale steps, in each case put a 3rd and 5th above the scale tone.



Ex 43.

- Which of the triads on the staff above are **major** in quality? Write the scale degree number. _____
- Which triads are **minor** in quality? _____
- Which triad is **diminished** in quality? _____

4. Minor Harmony

The chords that result from this process form the basis of **tonal harmony**. Many chord progressions, (and melodies) in music revolve around a central tonality, or key centre.

In fact, many songs use only chords from a single harmonized scale.

An understanding of this simple process, (and the practical workings of it), are the key elements in understanding chord/scale (melody/harmony) relationships.

5. Formula of Minor Scale Triad Qualities

1	2	3	4	5	6	7
mi	dim	ma	mi	ma	ma	dim

Ex 44.

- Using the formula above, write out the names of the triads in each key listed in the following table.

	1	2	3	4	5	6	7
C mi	C mi	Ddim	Ebma	F mi	Gma	Abma	Bdim
F mi							
Bb mi							
Eb mi							
G# mi							
C# mi							
F# mi							
G mi							
D mi							
A mi							
E mi							
B mi							

Ex 45.

- The following questions relate to the information on the previous table.
- Do not refer to it**, but work the answers out from your knowledge of the *minor scales* and the *formula of minor scale triad qualities*.
- Name the **"5" chord** in each of these keys.

Key	"5" chord
Cmi	Gma
Ami	
F#mi	
Ebmi	
Dmi	
Bmi	
G#mi	
Fmi	
Emi	
C#mi	
Bbmi	
Gmi	

- Name the **"3" chord** in each of the following keys.

Key	"3" chord
Cmi	Eb
Ami	
F#mi	
Ebmi	
Dmi	
Bmi	
G#mi	
Fmi	
Emi	
C#mi	
Bbmi	
Gmi	

- Fill in the blanks.

Key	"6" chord
Cmi	Ab
	Bb
Fmi	
	F
G#mi	
	Eb
Bbmi	
	E
C#mi	
	Db
Ebmi	
	Ab

- Fill in the blanks.

Key	"4" chord
	Cmi
	Ami
	F#mi
	Ebmi
	Dmi
	Bmi
	Abmi
	Fmi
	Emi
	C#mi
	Bbmi
	Gmi

- Fill in the blanks.

Key	"2" chord
	Cdim
Am	
F#m	
	D#dim
Dm	
	Bdim
G#m	
Fm	
	Edim
C#m	
	A#dim
	Gdim

Objectives for Unit 10:

- Be able to name an inversion of any seventh chord either as a position or as a slash chord.
- Know the triads in each minor key based on the **harmonic minor scale**.

This concludes the Theory Workbook Units 6-10

Remember that a working knowledge of the various elements of music theory and harmony presented here take practice and review.

With this in mind I have prepared a theory test based on the work covered in this module.

You should aim to complete it in the shortest time possible, thereby training your mind to think clearly and accurately in musical terms with no instrument.

On successful completion of the theory test, you should proceed immediately to Theory Workbook Units 11-15.