

# **Class Notes for Music Theory**

**ABRSM  
Music Theory Examination**

**Grades 1 to 5**

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*First published in 1996*

*Second edition in 1997*

*Third edition in 1998*

*Fourth edition in 2004*

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# Chapter 1 ----- Rhythm & Tempo

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## Time value/ Note value:

NOTE SYMBLES	BRITISH SYSTEM	AMERICAN SYSTEM
	Breve	
	Semibreve	Whole note
	Minim	Half note
	Crotchet	Quarter note
	Quaver	Eighth note
	Semiquaver	Sixteenth note
	Demisemiquaver	Thirty-second note
	Hemidemisemiquaver	Sixty-fourth note

## Time signature:

*Definition:* They are numbers showing how many beats in one

bar. The upper number is the total beat in a bar. The lower number is the unit of beat.

e.g.  $\frac{2}{4}$  means that there are 2 crotchets in every bar, or notes which together last as long as 2 crotchets.

### Tempo:

It is a speed of beats.

e.g. Although the followings have different time signatures, they sound exactly the same.

a) 

b) 

### Vocabulary:

1) Time signature ----- 拍子记号

## Chapter 2 ----- Pitch

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### Notation:

- 1) Sharp: a semitone higher
- 2) Flat: a semitone lower
- 3) Natural: it can *raise* or *drop* semitone, in order to restore the name in C major [white note only]

### Major scale:

It is a series of notes with the following interval:

Tone, Tone, Semitone, Tone, Tone, Tone, Semitone (TTS-TTTS)

e.g. D major: D, E, F#, G, A, B, C#, D, where D is called the **first degree or key-note**.

### Accidentals:













They are sharps, flats or naturals that appear in the music but not included in key signature. They are *only effective within one bar and on the same line* (p. 14).

### Vocabulary:

- 1) Octave ----- 八度
- 2) Stave ----- 五线谱
- 3) Treble clef, G clef ----- 高音谱号
- 4) Bass clef, F clef ----- 低音谱号
- 5) Ledger lines ----- 加线
- 6) Enharmonic equivalent ----- 同等音

## Chapter 3 ----- Continue with Rhythm

### Rest:

NAME	NOTE SYMBLE	REST SYMBLE
Breve rest	o	
Semibreve rest	o	
Minim rest		
Crotchet rest		
Quaver rest		
Semiquaver rest		
Demisemiquaver rest		

An entirely silent bar in all time signatures is shown by a *semibreve rest*, except in  $\frac{4}{2}$  time which is shown by a *breve rest* (p. 15).





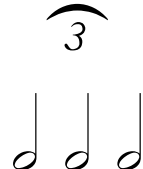


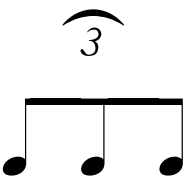


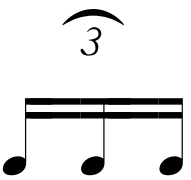
## Tie:

It is only used to link the same note to produce *one* sound.

## Dot:

It is used to lengthen the note before the dot as long as half of that note. It can be used in rests too (p. 17). Furthermore, “double-dot” is also possible (p.18).

## Triplet:

NOTE VALUE	DIVIDED INTO TWO	DIVIDED INTO THREE
		
		
		

In the triplet group, we can simply find out the exact time by counting 2 of them [evenly divided] (p. 19).

## Simple/ Compound time:

1) Simple time:

Every beat in a bar can be divided into 2, 4, or 8...

2) Compound time:

Every beat in a bar can be divided into 3, 6...

**Vocabulary:**

- 1) duple-----two
- 2) triple-----three
- 3) quadruple-----four
- 4) quintuple-----five
- 5) sextuplet-----six
- 6) septuplet-----seven

## Chapter 4 ----- Scale

### Major scales and the circle of fifths:

1) The first five keys with sharps:

NO. OF SHARPS	1	2	3	4	5
KEY	Go (G)	Down (D)	And (A)	Eat (E)	Breakfast (B)

### How to find the key with sharps?

- Start with C major
- Count up *five* degree (it's G major with **ONE** sharp)
- Continue to count up five degree to get a desire key with the no. of sharps.

e.g. E major: C → G → D → A → E (with 4 sharps)

### How I know the key with what sharps?

- Start with G major (it's F#)
- Count up *five* degree
- Continue to count up five degree to get a desire key with the no. of sharps.

e.g. B major: F# → C# → G# → D# → A# (with 5 sharps)

2) The first five keys with flats:

NO. OF FLATS	1	2	3	4	5
KEY	Fat (F)	Boy (Bb)	Eat (Eb)	All (Ab)	Day (Db)

### How to find the key with flats?

- Start with C major
- Count up *four* degree (it's F major with **ONE** flat)
- Continue to count up four degree to get a desire key with the

no. of flats

e.g. Ab major: C→F→Bb→Eb→Ab (with 4 flats)

### **How I know the key with what flats?**

- a) Start with F major (it's Bb)
- b) Count up *four* degree
- c) Continue to count up four degree to get a desire key with the no. of flats.

e.g. Db major: Bb→Eb→Ab→Db→Gb (with 5 flats)

### **Minor scale and keys:**

1) Melodic minor:

ascending: sharpen the 6<sup>th</sup> and 7<sup>th</sup> degrees

descending: natural the 6<sup>th</sup> and 7<sup>th</sup> degrees

e.g. a minor

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

2) Harmonic minor:

**BOTH** ascending and descending: *sharpen the 7<sup>th</sup> degree only*

e.g. a minor

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

### **Relative major/minor keys:**

1) To find relative minor in major key:

By counting up six degrees or down three degrees (to the 6<sup>th</sup> degree--- submediant), it is the key-note of the relative minor.

e.g. E major, up 6 degrees or down 3 degrees to get C# <submediant>, it is C# minor, E major's relative minor.

2) To find relative major in minor key:

By counting up three degrees or down six degrees (to the 3<sup>rd</sup> degree---mediant), it is the key-note of the relative major. e.g. B

minor, up 3 degrees, or down 6 degrees to get D <mediant>, it is D major, B minor's relative major.

*Read p.27 carefully, it shows all 24 keys (12 majors and 12 minors).*

**Name of scale degrees:**

1 <sup>st</sup> degree	tonic
2 <sup>nd</sup> degree	supertonic
3 <sup>rd</sup> degree	mediant
4 <sup>th</sup> degree	subdominant
5 <sup>th</sup> degree	dominant
6 <sup>th</sup> degree	submediant
7 <sup>th</sup> degree	leading note
8 <sup>th</sup> degree	tonic

**The chromatic scale/ C clefs**

Read pp. 30-32

**Vocabulary:**

- 1) circle of fifths
- 2) relative major
- 3) relative minor

## Chapter 5 ----- Grouping of Notes and Rests

*Read all the examples in this chapter carefully (pp. 33-40)!!!*

### Note groupings in simple ( ) and compound ( ) time:

#### SIMPLE TIME

- 1) The aim of notes grouping is to *avoid ties* where possible.
- 2) Quavers should be beamed together in beat or up to a bar but cannot be beamed across the middle of bar.
- 3) Note shorter than quavers are beamed together in beats.
- 4) Demisemi-quavers can also be grouped in half-beats.

#### COMPOUND TIME

- 1) Ties are usually used to show the beat clearly.

### Rest groupings in simple ( ) and compound ( ) time:

#### SIMPLE TIME

- 1) To group the rests in a beat.

#### COMPOUND TIME

- 1) Dotted rests can be used.

### Groupings in other time signatures:

- 1) 5 beats in a bar  
2 + 3 or 3 + 2
- 2) 7 beats in a bar  
4 + 3 or 3 + 4, where 4 can be grouped as 2 + 2

## **Duplets:**

It is used in compound time only since every beat can only be divided into 3 parts, so by using duplets, a beat can be divided into 2 or 4. (p. 38)

## **Other irregular time divisions:**

- 1) 5,6,7 notes in a beat--- count any 4
- 2) 9 notes in a beat--- count any 8

*# Provided that notes are evenly divided*

## **Vocabulary:**

- 1) duplet----- 二连音
- 2) quintuplet----- 五连音
- 3) sextuplet----- 六连音
- 4) septuplet----- 七连音

*Read the examples in the book carefully!!!*

# Chapter 6 ----- Syncopation

## Rhythmic notation of words:

*(Read p. 41)*

## Setting word rhythms to music:

*(Read p. 42)*

## Syncopation:

*Definition:* the shifting of strong beat (重拍移位)

*(Read the example on pp. 44-45)*

The syncopation may be reinforced by  $>$  , *sf* and *sfz*.

# Chapter 7 ----- Interval

## Interval:

- 1) Harmonic interval---two notes played together
- 2) Melodic interval---two note comes after the other

## Interval in Major key:

Sol-fa-name	Interval
d d	perfect unison
d r	major 2 <sup>nd</sup>
d m	major 3 <sup>rd</sup>
d f	perfect 4 <sup>th</sup>
d s	perfect 5 <sup>th</sup>
d l	major 6 <sup>th</sup>
d t	major 7 <sup>th</sup>
d d'	perfect 8ve

## Interval in Minor key:

Sol-fa-name	Interval
l l	perfect unison
l t	major 2 <sup>nd</sup>
l d'	minor 3 <sup>rd</sup>
l r'	perfect 4 <sup>th</sup>
l m'	perfect 5 <sup>th</sup>
l f'	minor 6 <sup>th</sup>
l f#'	major 6 <sup>th</sup>
l s#'	major 7 <sup>th</sup>
l l'	perfect 8ve

## Method to count the intervals:

- 1) Count semitones between two notes. It is one of the easiest methods but counting mistakes are usually occurred.

e. g. B and C-----1 semitone-difference-----minor 2<sup>nd</sup>  
 E and F#-----2 semitone-difference-----major 2<sup>nd</sup>

Difference in semitones	Intervals
0	perfect unison
1	minor 2 <sup>nd</sup>
2	major 2 <sup>nd</sup>
3	minor 3 <sup>rd</sup>
4	major 3 <sup>rd</sup>
5	perfect 4 <sup>th</sup>
6	augmented 4 <sup>th</sup> / diminished 5 <sup>th</sup>
7	perfect 5 <sup>th</sup>
8	augmented 5 <sup>th</sup> / minor 6 <sup>th</sup>
9	major 6 <sup>th</sup>
10	minor 7 <sup>th</sup>
11	major 7 <sup>th</sup>
12	perfect 8ves

- 2) Count the degree in scale. It is a more advanced method.
- 3) Use the method in pp. 46-51.

### **Transposition:**

To set the music into different keys by using the method of counting intervals. Therefore, we can sing the *same* music in different keys.

### **Compound intervals:**

It is the interval that is greater than an octave.

e.g. C and high E-----major 10<sup>th</sup> or compound major 3<sup>rd</sup>

### **Inversion of intervals: (not in the syllabus):**

e.g. C and E is major 3<sup>rd</sup> **BUT** E and C is minor 6<sup>th</sup>

Here is the formula:

$$Y = 9 - X$$

*Then*

perfect = perfect
major => minor
minor => major
augmented => diminished
diminished => augmented

**Concord and discord:**

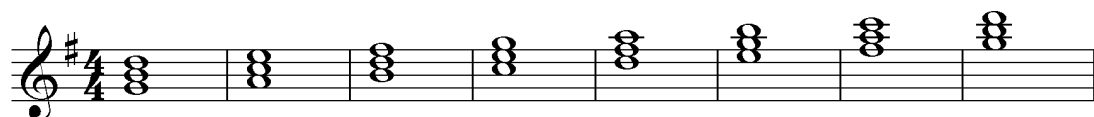
*read pp. 55-56*

# Chapter 8 ----- Triad & Chord

## Triads:

It is a combination of **three** notes sounded together. Usually, it is a **root** note plus its **3<sup>rd</sup>** and **5<sup>th</sup>** above.

e.g. all triads in G major



But in the examination, only (*usually*) I, II, IV, V chords will be used. In addition, I, IV, V chords are called **primary chords**.

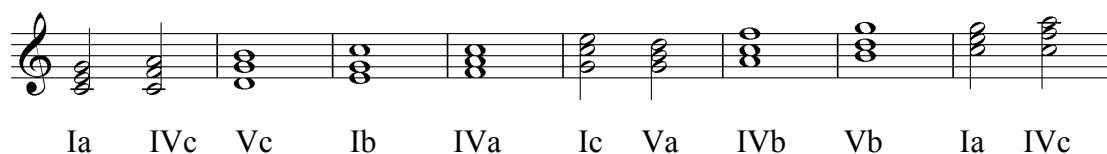
*For advance study, chords are classified into major, minor, augmented and diminished chords. (read p.57-58)*

Since triads are consisted of 3 notes, that notes can be arranged into different order. However, in this level, we **only concern which note is in the base**. If the root is put in the base, the chord is in **root position**. If the 3<sup>rd</sup> or 5<sup>th</sup> is put in the base, the chord are said to be **inverted**. Thus, when 3<sup>rd</sup> is the base note, the chord is in **first inversion**; 5<sup>th</sup> is the base note, the chord is in **second inversion**.

In short, a = root position

b = first inversion

c = second inversion



## Chords:

*(read pp. 59-61)*

## **Chord notation in jazz:**

*(not in the syllabus)*

## **Figured bass:**

It is a shorthand notation used in the *Baroque* and *early classical period*.

“  $\begin{matrix} 5 \\ 3 \end{matrix}$  ” means in root position

“  $\begin{matrix} 6 \\ 3 \end{matrix}$  ” means in first inversion

“  $\begin{matrix} 6 \\ 4 \end{matrix}$  ” means in second inversion

## **Chord layouts:**

*(read pp. 65-66)*

## **Vocabulary:**

- 1) broken chords
- 2) Alberti bass
- 3) arpeggio

# Chapter 9 ----- Cadence

## Phrase:

*(read pp. 67-69)*

## Cadences:

a) Perfect cadence (V-I)

Music that ends with *r-d*; *t-d*; *s-d*, is classified as *perfect cadence*.

b) Plagal cadence (IV-I)

Music that ends with *f-d*, is classified as *plagal cadence*.

c) Imperfect cadence (I-V; II-V; IV-V; VI-V)

d) Interrupted cadence (V-VI)

*Notes on Chapters 10-13 will not be given. Please read those chapters carefully!*

# Chapter 10 ----- Instruments

Instruments can be divided into 5 main groups:

- 1) String
- 2) Woodwind
- 3) Brass
- 4) Percussion
- 5) Keyboard

## Strings:

- 1) Violin:
  - using treble clef
  - 4 strings named as E, A, D, G
  - use bow to play but sometimes use fingers to pluck
- 2) Viola:
  - using alto clef, sometimes treble clef
  - 4 strings named as A, D, G, C
  - use bow to play but sometimes use fingers to pluck
- 3) Cello:
  - using bass; sometimes tenor and treble clefs
  - 4 strings named as A, D, G, C (an octave lower than viola)
  - use bow to play but sometimes use fingers to pluck
- 4) Double bass/ Bass:
  - using bass clefs
  - a **transposing** instrument (an octave lower than the written notes)
  - 4 or 5 strings
  - use bow to play but sometimes use fingers to pluck
- 5) Harp:
  - use fingers to pluck only
  - with 7 pedals

### Woodwind:

No reed	Single reed	Double reed
1) <i>piccolo</i> : a <b>transposing</b> instrument (an octave higher than the written notes)	1) <i>clarinet</i> : a <b>transposing</b> instrument (with many keys e.g. in B <sub>b</sub> , in A)	1) <i>oboe</i> 2) <i>cor anglais</i> ( <i>English horn</i> ): a <b>transposing</b> instrument (an perfect 5 <sup>th</sup> lower than the written notes)
2) <i>flute</i>	2) <i>bass clarinet</i> : <b>transposing</b>	3) <i>bassoon</i> 4) <i>double bassoon</i>

### Brass:

Except **trombone and tuba**, all brass instruments are transposing.

Valves	Sliding
<i>trumpet</i> : usually in B <sub>b</sub>	<i>trombone</i>
<i>horn</i> : usually in F	

### Percussion:

Pitched	Non-pitched
<i>timpani</i>	<i>side drum; bass drum</i>
<i>xylophone</i>	<i>tambourine</i>
<i>vibraphone, glockenspiel</i>	<i>cymbal, gong and triangle</i>

## Keyboard:

- 1) Organ (管风琴)
  - a) sound production: vibration of air in the pipes
  - b) the “King of the Instrument”
  
- 2) Harpsichord (古键琴)
  - a) sound production: plucking of strings using hooks
  - b) the “former” piano used frequently in Baroque and Early Classical periods
  
- 3) Fortepiano (古钢琴)
  - a) the transition instrument between Harpsichord and Modern Piano
  - b) its tone colour is different from the modern piano
  
- 4) Pianoforte (piano) (钢琴)
  - a) sound production: hitting of strings using hammers
  - b) the descendent of Harpsichord

# Chapter 11 ----- Exam Notes 1

## Signatures/Notes:

- 1) Time signatures, grouping of notes and rests, and adding bar lines.
- 2) You should consider the music whether is in simple or compound time, in regular or irregular time signature.
- 3) You should group the notes or rests as clearly as possible, e.g. *AB Guide* p. 35.
- 4) You should familiarize the time division, e.g. *AB Guide* p. 38.

## Open/Reduced scores:

- 1) Rewriting the open score into the reduced score, or vice versa.
- 2) You should write the notes as tidy as possible, as well as follow the position of the notes from the given score.
- 3) It is the MOST ESAY part in the paper!!! Therefore, you should NOT make any mistake in this question!!!
- 4) You should be careful in writing the Tenor part, the special treble clef.

## Intervals:

- 1) Intervals, major/minor keys up to Six Sharps/Flats.
- 2) 3 methods of counting the intervals:
  - a) Count the half steps. It is the most reliable one if You count *correctly*.
  - b) Count the degree of scale from the bottom note. And you should adjust the intervals by adding or minus some half steps. This method is very flexible.
  - c) Using the method suggested in *AB Guide* chapter 7.
- 3) You should familiarize the major/minor keys up to Six Sharps/Flats and know how to write these key signatures in different clefs.

### **Transposition:**

- 1) Transposition, either up or down a major 2<sup>nd</sup>, minor 3<sup>rd</sup>, perfect 5<sup>th</sup>, an octave.
- 2) You should change the key first, and transpose the melody to the particular degree, and then add the accidentals according to the meaning of Sharp, Flat and Natural. *Natural sign* means **raising or down** a semitone.
- 3) It is better for you to copy all the words and dynamics from the given music into your new key melody.
- 4) You can check it by counting the semitones, just like counting the intervals.

### **Chords:**

- 1) Naming of some chords.
- 2) I, II, IV, V chords will be used in Grade 5, as well as a, b, c, to show the inversion.
- 3) You MUST realize the key first before you do the question!!!
- 4) In the recent years, the notation of figured bass is used frequently. More information is written in AB Guide p.63.
- 5) You should know the different kinds of cadence.

### **Melodic composition:**

- 1) Melodic writing.
- 2) You should write totally 8-Bar melody, including the given part.
- 3) It is better for you to add the speed marking, phrase mark, dynamics or any articulations, e.g. *Allegro con moto*, *Adagio*, *ff*, *pp*, *<*, *>*.
- 4) If you are writing the string music, it is better to write down the bowing, (down bow  $\square$  , up bow  $\nabla$  ), slur or the staccato dots, pizzicato and arco.

## Score reading:

- 1) General exercise.
- 2) You should know the different kinds of orchestral instrument, as well as which one is the transposing instrument (T):
  - a) woodwind
    - no reed: flute, piccolo(T)
    - single reed: clarinet(T)
    - double reed: oboe, bassoon
  - b) brass
    - valves: trumpet(T), horn(T), tuba
    - sliding: trombone
  - c) string
    - violin
    - viola
    - cello
    - double bass(T)
    - harp [plucking instrument]
  - d) percussion
    - pitched: timpani, xylophone, vibraphone
    - not pitched: triangle, gong, cymbal
- 1) You should know what clef they use, it is also required in Question 6.
- 2) You are required to realize the keys, chords, the technical name (tonic, dominant, etc.), interval, genre (e.g. string quartet: 1<sup>st</sup> violin, 2<sup>nd</sup> violin, viola, cello), voices (soprano, alto, tenor and bass) and the terms in Italian, German and French (Glossary in the back of *AB Guide*), and the ornament's notation and the way of how to perform it.

## Chapter 12 ----- Exam Notes 2

### Further notes on Score reading question:

- 1) It is a general exercise with a given score.
- 2) You should realize the genre of the music, e.g.:
  - ~ Duet: a music for 2 instruments, any kinds of instruments.
  - ~ Trio: a music for 2 instruments and a piano
  - ~ Quartet: a music for 4 instruments e.g. string quartet(1<sup>st</sup> violin, 2<sup>nd</sup> violin, viola and cello)
- 3) The following are the clefs used by the instruments:
  - ~ Treble clef: violin, flute, oboe, clarinet, horn(sometimes bass clef), trumpet.
  - ~ Alto clef: viola(sometimes treble clef)
  - ~ Bass clef: cello(sometimes treble, alto or tenor clef), double bass, bassoon, trombone(sometimes tenor clef), tuba
- 4) Note that string instruments can play two notes simultaneously(or even three or four notes). Wind instruments, however, can play **only one** at a time.
- 5) You need to state the key of the music, intervals of 2 notes, full names of chords e.g. Ic, IVb, Va.
- 6) You sometimes need to give a simple description on the quoted music.
- 7) You sometimes need to transpose a quoted music into another key.
- 8) You should also familiar with the ornaments appear in the music.

### Foreign words used for performance directions:

1. a: at, to, by, in, in the style of
2. accelerando: gradually getting faster
3. adagietto: rather slow, but faster than adagio
4. ad libitum, ad lib.: at choice
5. agitato: agitated
6. allargando: broadening
7. allegretto: fairly quick

8. allegro: quick
9. amore: love
10. andante: at a walking pace
11. andantino: slightly faster than andante
12. anima: soul, spirit
13. animando: becoming more lively
14. animato: animated, lively
15. appassionato: with passion
16. arco: use bow to play
17. assai: very, extremely
18. a tempo: in time
19. brillante: brilliant
20. brio: vigour
21. cantabile: in a singing style
22. con: with
23. da capo, D.C.: from the beginning
24. dal segno, D.S.: from the sign
25. decrescendo: gradually getting softer
26. delicato: delicate
27. divisi: divided
28. dolce: sweet, soft
29. energico: energetic
30. espressione: expression
31. espressivo: expressive
32. fin, fine: end
33. flessibile: flexible
34. giocoso: playful
35. gioioso: joyful
36. glissando: slide
37. G.P.: general pause
38. grave: very slow
39. grazioso: graceful
40. langsam: slow
41. larghetto: rather slow
42. largo: slow
43. legato: smooth
44. lento: slow
45. ma: but

46. meno: less
47. mezzo: half
48. molto: very
49. mosso: with motion
50. moto: motion
51. non: not
52. pausa: a pause
53. pesante: heavy
54. pizzicato, pizz.: use finger to pluck the string
55. plus: more
56. poco: little
57. presto: fast
58. rinforzando: reinforcing
59. rubato: with some freedom of time
60. sforzando: accented, forced
61. spiritoso: spirited
62. staccato: detached
63. suss: sweet
64. tempo: speed
65. tranquillo: calm
66. tremolo: trembling
67. troppo: too much
68. un: one
69. vigoroso: vigorous, strong
70. vivace, vivo: lively, quickly
71. zu 2: 2 instruments play the same part

## Appendix ----- Range of Instruments

---

	String	Woodwind	Brass	Percussion
High	Violin, Harp	Piccolo, Flute, Oboe, Clarinet	Trumpet, Horn	Xylophone, Vibraphone, Glockenspiel
Middle	Viola, Harp	Clarinet	Trombone, Horn	Xylophone, Vibraphone,
Low	Cello, Double Bass, Harp	Bassoon Double Bassoon	Trombone, Tuba	Timpani, Xylophone, Vibraphone,