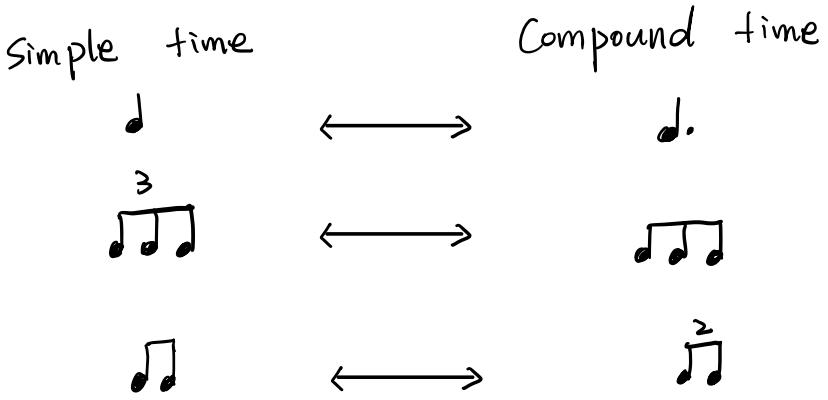
Rhythm 节奏



当一小节不能被平分成 2 拍或 3 拍，称为 irregular 不规则

常见的不规则拍号 (irregular time signature) 有

5拍 quintuple time

$\frac{5}{4}$ = 一个小节有5个 ♩

$\frac{5}{8}$ = 一个小节有5个 ♪

7拍 Septuple time

$\frac{7}{4}$ = 一个小节有7个 ♩

$\frac{7}{8}$ = 一个小节有7个 ♪

Irregular time signature 音符组合规则

与 duple , triple , quadruple 类似

但是对于不规则拍号每小节拍子数量无法被均分

所以在不规则拍号拍子有超过一种分法.

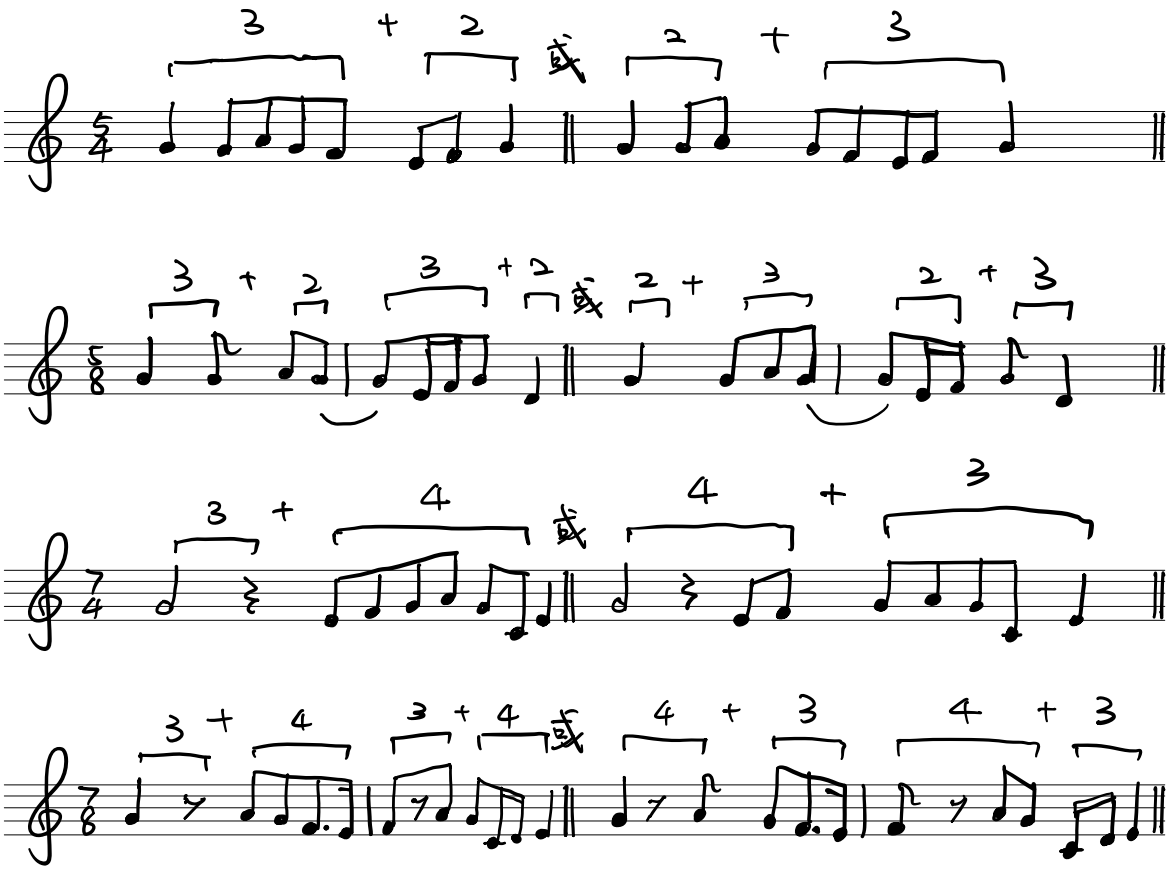
如

quintuple time 五拍子 —— 3+2 / 2+3

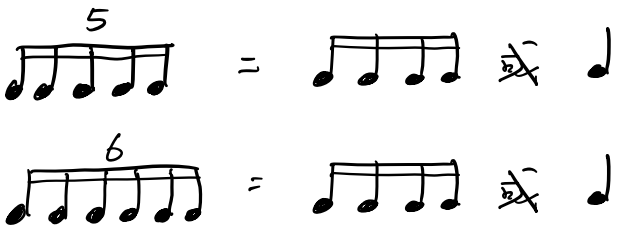
septuple time 七拍子 —— 3+4 / 4+3

3+2+2 / 2+3+3

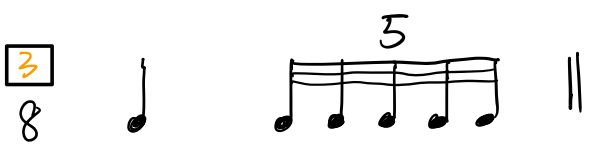
相同音符时值，不同组合方式



Quintuplets 五连音 and sextuplets 六连音



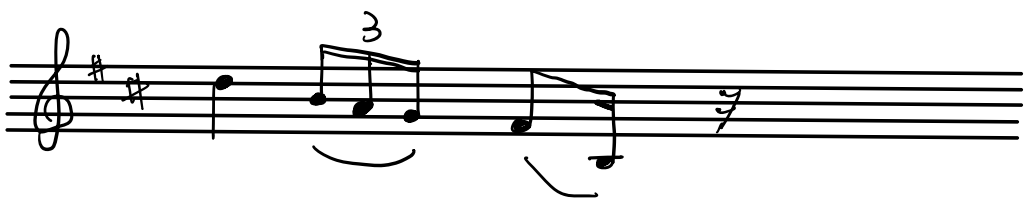
TEST 填写对应的拍号和节拍



Beats : 1 2 3

Beats : 1 2

选择对应的拍号

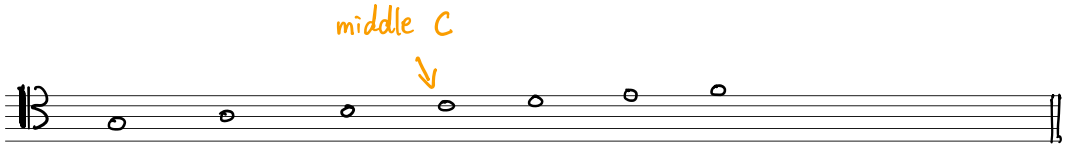


3/4　　4/4　　5/8

pitch

tenor clef 次中音谱号

常用于 cello 大提琴. bassoon 大管 和 trombone 长号



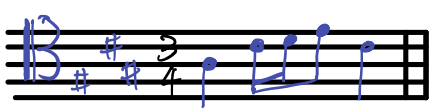
同一个音可以以不同的方式写 — enharmonic equivalents 同音异名

同一个音

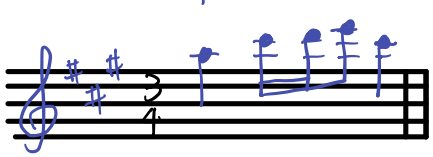
A double sharp　　B　　C flat

判断 melody 2 是否比 melody 1 高一个八度

1.



2.



correct ☐

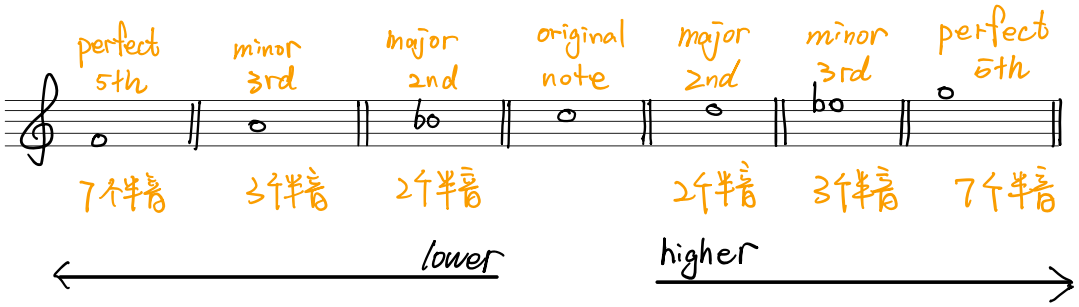
incorrect ☑

C 个 G

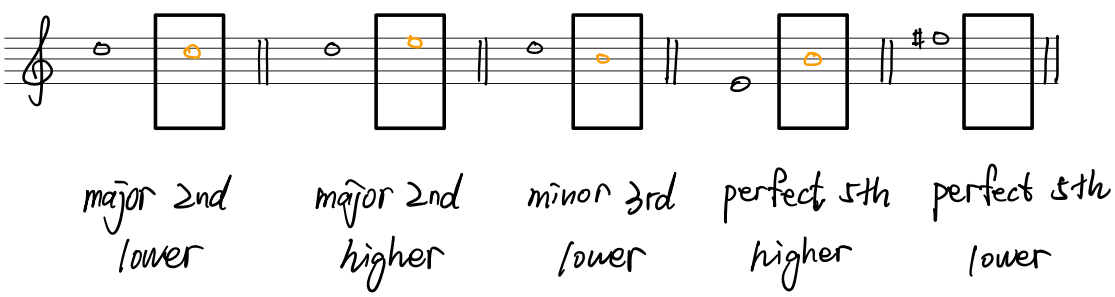
Transpose 移调

如将原有的旋律提高八度或低八度.

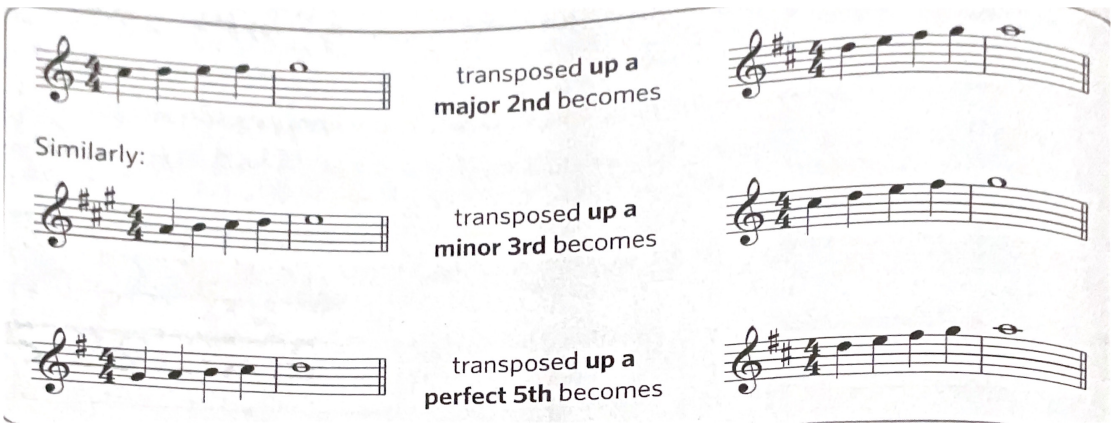
现在学习如何将旋律改写高/低 大二度、小三度和完全5度



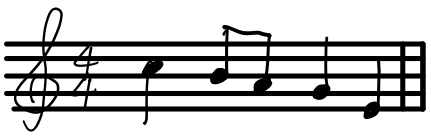
TEST 移调下列音符



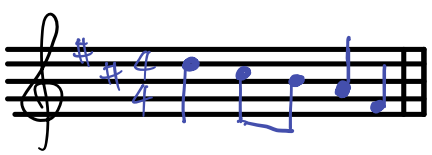
当 C major 移调 major 2nd higher 之后，原本的 C major 会变成 D major 移调不会改变原本的旋律的音程关系，所以大调移调之后还是大调，小调移调之后还是小调. (major or minor tonality stays the same)



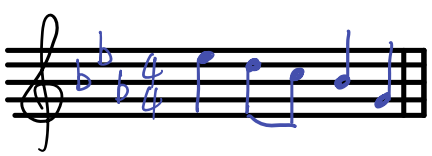
TEST 移調下列旋律



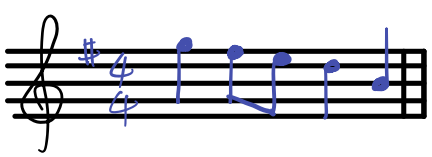
up a major 2nd



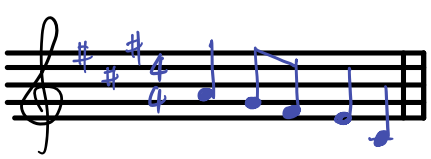
up a minor 3rd



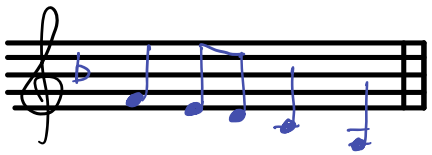
up a perfect 5th



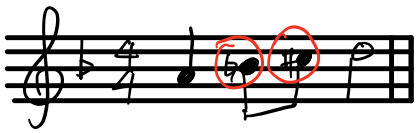
Down a minor 3rd



Down a perfect 5th



Transposing melodies with accidentals.



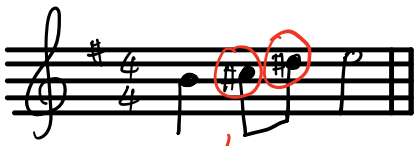
up major 2nd

↳ F major or D minor

+ major 2nd

⇓

G major or E minor



一定是C#而不是Db. 因为是 major 2nd

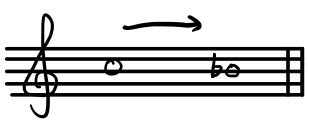
而不是diminished 3rd.

Transposing instruments 移调乐器:

乐谱记载的音高与实际发出声音的音高不同的乐器

乐谱 

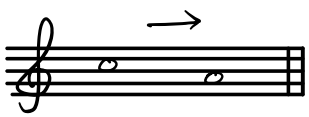
实际发出声音是Bb的乐器



Clarinet in Bb 降B调单簧管 a major 2nd lower

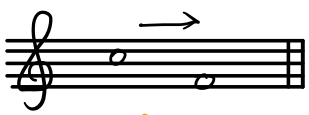
Trumpet 小号

实际发出声音是A的乐器



Clarinet in A A调单簧管 a minor 3rd lower

实际发出声音是F的乐器

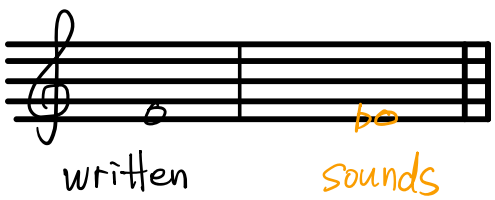


horn in F F调圆号 a perfect 5th lower

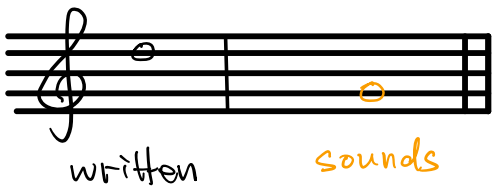
the cor anglais 英国号

TEST

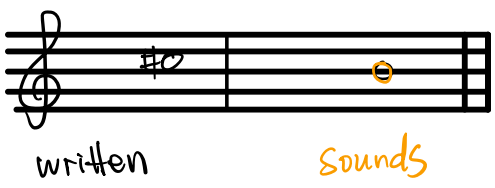
Clarinet in Bb



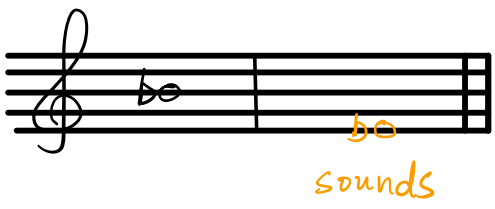
Horn in F



Trumpet in Bb



Cor anglais



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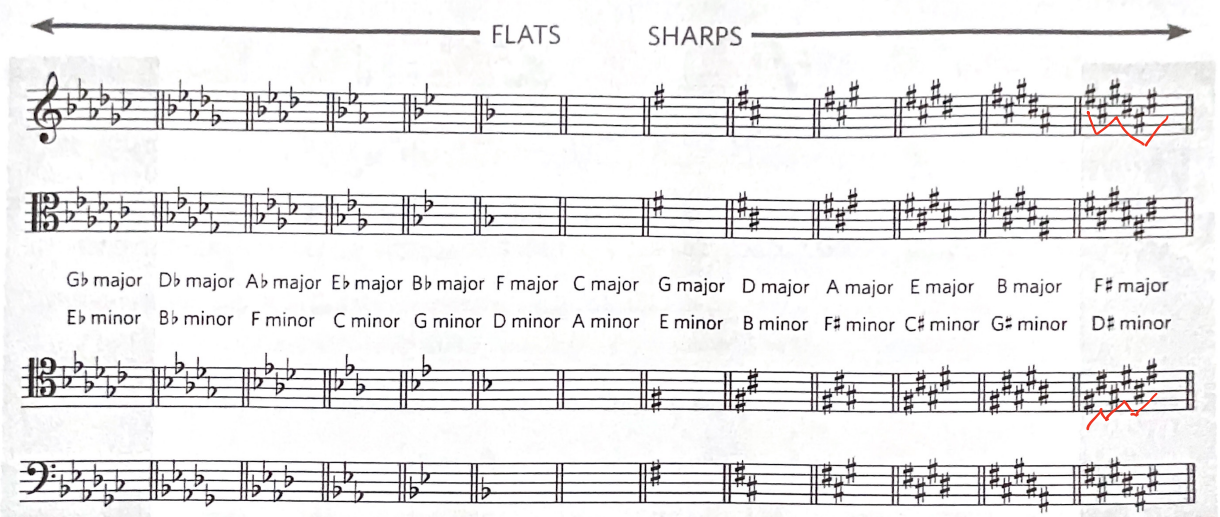
keys & Scales 调号和音阶

Here are the key signatures for all the keys, major and minor, in the treble, bass, alto and tenor clefs:



Notice that the pattern of sharps in the tenor clef is different from the other clefs.

F# major (6个升号) 与 Gb major (6个降号) 是同音异名

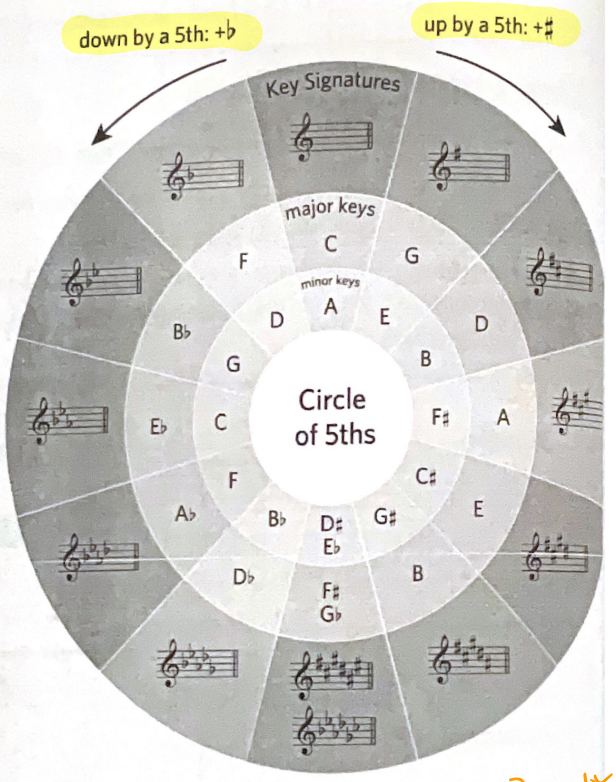
对应的 D# minor 与 Eb minor 也是同音异名

五度圈

Helpful patterns: the circle of 5ths

There are some clear patterns between the keys as you rise up through the sharps and flats.

- If you add sharps to the key of C major, you get G major, then D major, A major, and so on. This pattern **rises in perfect 5ths.**
- If you add flats to the key of C major, you get F major, then B♭ major, E♭ major, and so on. This pattern **falls in perfect 5ths.**
- The minor keys follow the same pattern. For example, by adding a sharp, A minor becomes E minor; E minor becomes B minor, and so on.
- Amazingly, so do the key signatures! The first sharp to appear in key signatures is F♯, then C♯, G♯, and so on. The sharps rise by a 5th and the flats fall by a 5th, in exactly the same way as the keys.



(relative minor 也是一样)

C major 提高 perfect 5th ⇒ G (加一个#)

G major 提高 perfect 5th ⇒ D (再加一个#)

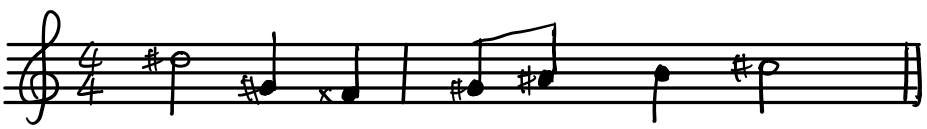
C major 降低 perfect 5th ⇒ F (加一个♭)

F major 降低 perfect 5th ⇒ B♭ (再加一个♭)

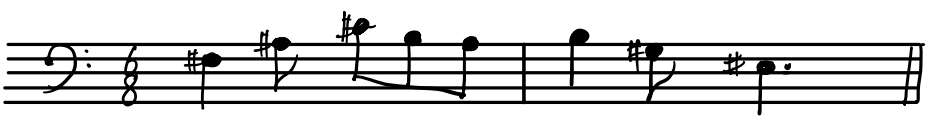
半音音阶 chromatic scale

- 每一间或线上必须至少有一个音符
- 不能有 enharmonic equivalents 同音异名
- 一共有 13 个音符
- 开始和结束的音符必须同名，不能是同音异名

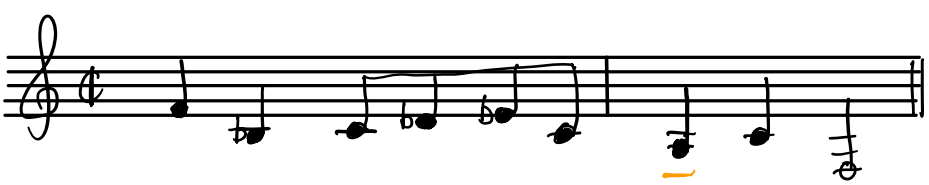
TEST 选择对应 melody 的调



B major　　G major　　G# minor　　B minor

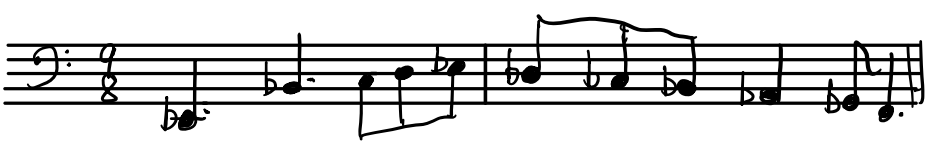


B major　　F# minor　　C# minor　　F# major



harmonic

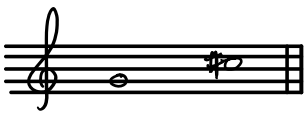
Bb major　　F minor　　Bb minor　　F major



melody

Eb minor　　D major　　Eb major　　Bb minor

音程 intervals



Augmented 4th

diminished 5th

① 先看几度

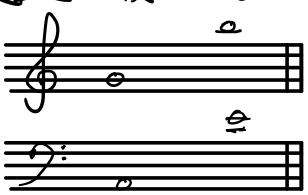
② 再算间隔几个半音

Chromatic intervals 半音音程

在 Tonic 主音 之上的音程 既不是 major 也不是 minor

Compound intervals 复合音程

超过八度的音程 有2种命名方式



Coumpound major 3rd

或 major 10th

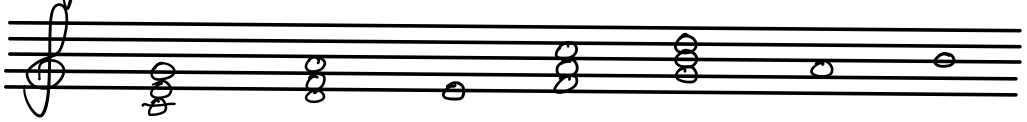
Coumpound perfect 5th or perfect 12th

Chords 和弦

primary chord 正和弦包括 major 或 minor 里 1st, 4th 和 5th 度的和弦

supertonic chord 上音和弦是最低音是音阶的 2nd 度的和弦

C major



I II IV V

tonic 主和弦 supertonic 上音和弦 subdominant 下属和弦 dominant 属和弦

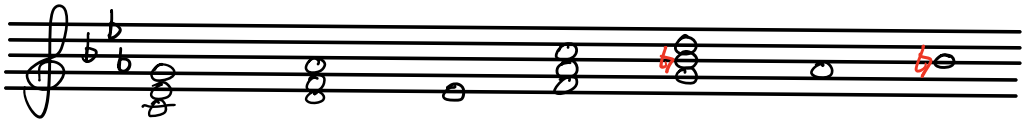
I IV V major chord

II minor chord

harmonic minor scale

leading note + semitone

C minor



I II IV V

tonic 主和弦 supertonic 上音和弦 subdominant 下属和弦 dominant 属和弦

I IV : minor chord . V major chord

II diminished chord.

Cadences 终止式

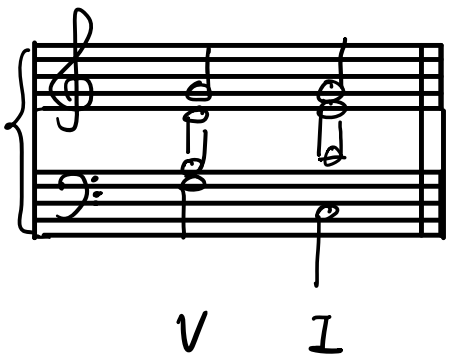
Nice chord 这和弦有一部影片讲解.

Cadences 可以让一段音乐听起来是完整的 finished 或不完整的 unfinished. 它就像一个乐句里的标点符号.

完整结束

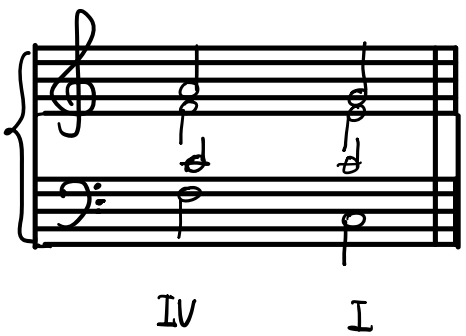
perfect V - I

完全终止式/正格终止式



plagal IV - I

变格终止式

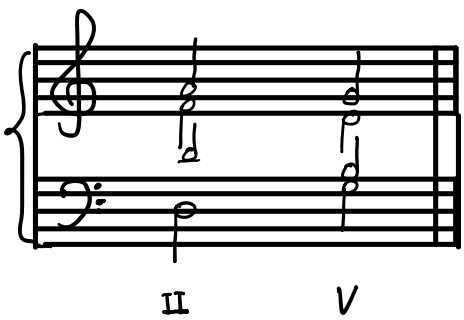


未结束, 像逗号或问号

imperfect

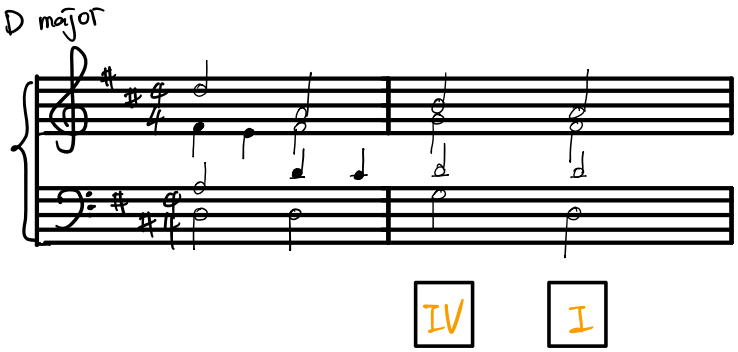
不完全终止式/半终止式

I - V
or
II - V
or
IV - V

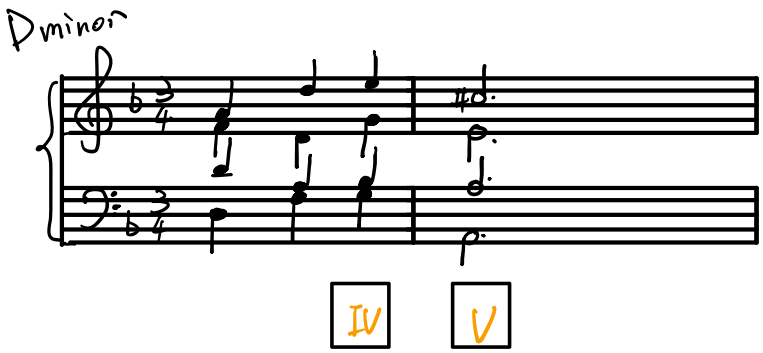


minor key 小调和弦 leading note 会升高半音. 终止式也一样

TEST 写出和弦名称并判断其终止式类型

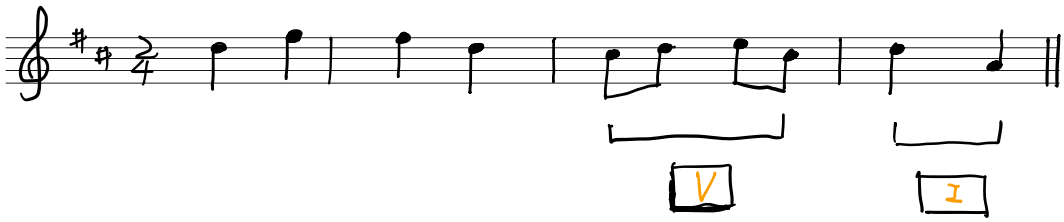


perfect
plagal
imperfect



perfect
plagal
imperfect

选择适合的和弦



① 先看是什么 key — D major (因为 B minor 的 leading note A 没有上升半音，所以不是 B minor)

② 写出如下表

	a	b	c
I	D	F♯	A
II	E	G	B
IV	G	B	D
V	A	C♯	E

← 主和弦包含 D F A 音

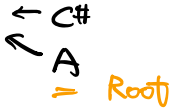
③ 看旋律里大部分音符与哪个和弦最为匹配，就选择哪个音符。若有一旋律与2个和弦同等匹配程度，则选择可以凑成终止式的和弦。

bar 3. 属和弦含有 C# 和 E， V.

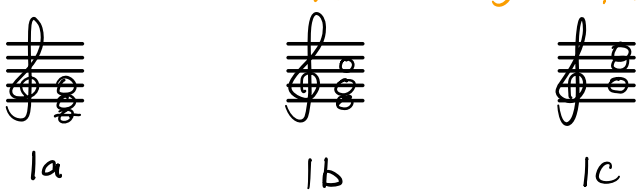
bar 4 主和弦含有 D 和 A I.

④ 写出终止式类型。 perfect cadence

Inversions 转位

root 是和弦的根音。如 D major 的属和弦 dominant chord 是 

但有时，根音并不一定是最低音，这时候就叫转位 (inversion)。



I 代表是主和弦

a 代表最低音是根音，即为原位，可省略

b 代表第一转位 (1st inversion) 将和弦的三度音放在最低音

c 代表第二转位 (2nd inversion) 将和弦的五度音放在最低音

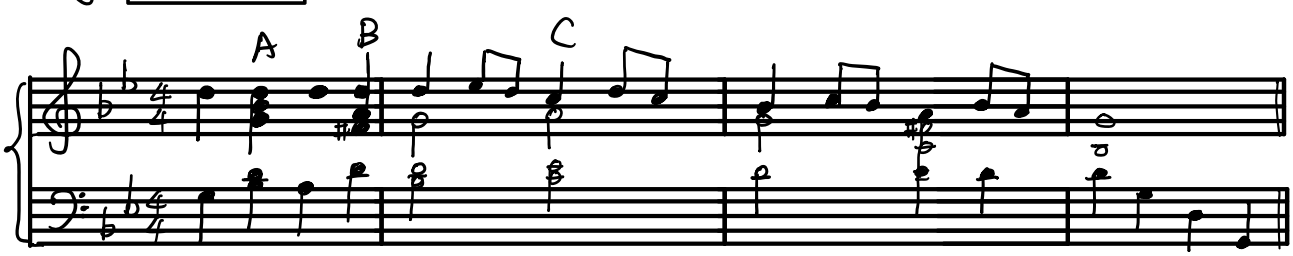
回到D major的和弦辅助表

	a	b	c
I	D	F#	A
II	E	G	B
IV	G	B	D
V	A	C#	E

当主和弦最低音是F#时，根据表格可得是第一转位.

TEST 写出对应的key和选择正确的和弦转位名称.

key: G minor



chord A: Ib ☑ Ia ☐ Va ☐ Vb ☐

chord B: Vb ☐ Va ☑ IVb ☐ IVc ☐

chord C: IIa ☐ IVb ☐ IVa ☐ IIb ☑

Terms, Signs & Instruments

strings 弦乐

- Violin 小提琴
- Viola 中提琴
- Cello 大提琴
- Double bass 低音提琴
- Harp 竖琴

Woodwind 木管乐器

- piccolo 短笛
- Flute 长笛
- Oboe 双簧管
- Cor anglais 英国管
- Clarinet 单簧管
- Bassoon 巴松管. 大管 低音管

Brass 铜管乐器

- Trumpet 小号
- Horn 圆号
- Trombone 长号
- Tuba 低音号 大号

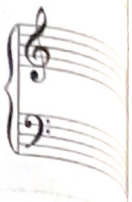
Percussion 打击乐器

- Timpani 定音鼓
- Tubular bells 管鼓
- Xylophone 木琴
- Marimba 马林巴琴
- Glockenspiel 钢片琴. 高音铁琴
- Vibraphone 电颤琴. 铁琴
- Celesta 钟琴
- Side drum 小鼓
- Bass drum 大鼓
- Cymbals 铜钹
- Tambourine 铃鼓
- Castanets 响板
- Tam-tam 锣
- Triangle 三角铁

Oboe, Cor anglais, Bassoon 使用双簧片 double reed

Clarinet 使用单簧片 single reed.

More about the new instruments



Strings

Harp — Plays from music arranged on two staves, like piano music. The strings on the harp are plucked and pedals or levers are used to change the pitch of the strings

Woodwind

Piccolo — A small type of flute. It uses the **treble clef** and sounds an **octave higher** than its written notes

Cor anglais — Also known as the **English horn**, it is closely related to the oboe. It uses the **treble clef** and is a **transposing instrument** – we will look at this in more detail later in this chapter

Percussion

Along with the timpani, the following instruments play notes of **definite pitch**. This means that they can play specific pitches (e.g. C, D, etc.).

Tubular bells — Vertical metal bars struck with one or two small hammers

Xylophone — Horizontal wooden bars arranged like a piano keyboard and usually struck with hard beaters

Marimba — Like the xylophone but larger with a more mellow sound – usually struck with softer beaters

Glockenspiel — Horizontal metal bars arranged like a piano and struck by beaters

Vibraphone — Similar to a glockenspiel, it produces a softer sound when the metal bars are struck. It contains a motor to add vibration to the sound

Celesta — Looks like a piano but contains metal bars rather than strings. It produces a bell-like sound

Along with the side drum, bass drum and cymbals, the following instruments play notes of **indefinite pitch**. This means they make sounds that are not at a specific pitch.

Tambourine — Hit or shaken by the hand, with small cymbal-like discs around its outer edge. Sometimes has a 'skin' or membrane

Castanets — Two small discs of wood hit together with the fingers. Originates from Spain

Tam-tam — A large gong hit with a beater

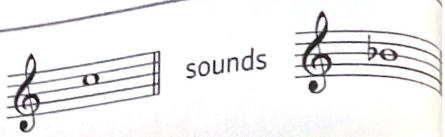
Triangle — Triangular metal instrument hit with a metal beater

Transposing instruments

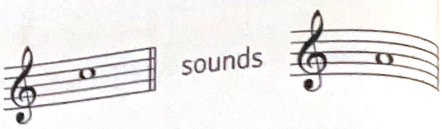
We discovered in Chapter 3 that some instruments are **transposing instruments**. This means that the sound they make is different in pitch from the notes written in their music.

The notes written in their music are described as the **written pitch** and the notes that are produced when they are played are described as the **sounding pitch** or **concert pitch**.

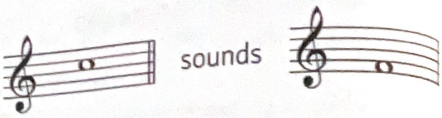
- The **trumpet** and **clarinet** are usually in B♭. They sound a **major 2nd lower** than written.



- Another type of clarinet is the **clarinet in A**. It sounds a **minor 3rd lower** than written.



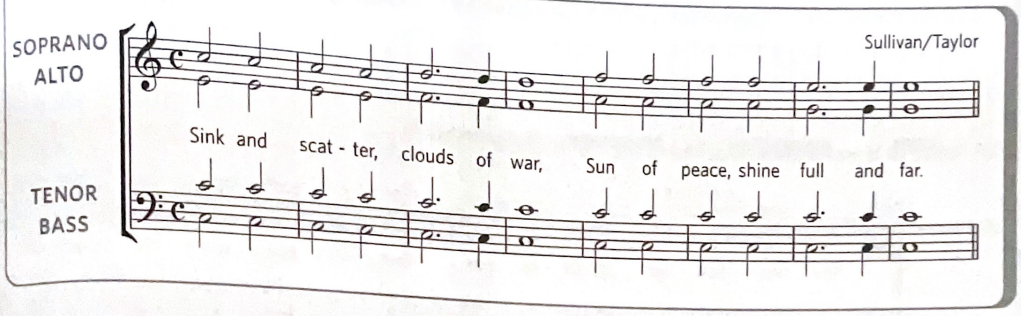
- The **horn** and **cor anglais** are in **F**. They sound a **perfect 5th lower** than written.



- The **piccolo** sounds an **octave higher** than written, and the **double bass** sounds an **octave lower** than written. All other instruments that we have met so far are non-transposing.

Voice types and their ranges

Most choral music is written for up to four different types of voice – **soprano**, **alto**, **tenor** and **bass**, sometimes abbreviated to **SATB**. This choral extract shows these four types of voices. They are arranged across the staves in order of range, from highest (soprano) to lowest (bass).



Additionally, there are voices called **mezzo-soprano** and **baritone** that are often used in solo vocal music. Here are all six voice types, arranged from highest to lowest:

HIGHEST
Soprano
Mezzo-soprano
Alto
Tenor
Baritone
LOWEST
Bass

eory in sound

n to music written for different voice types, such
operatic solo for a soprano or baritone. Mozart's

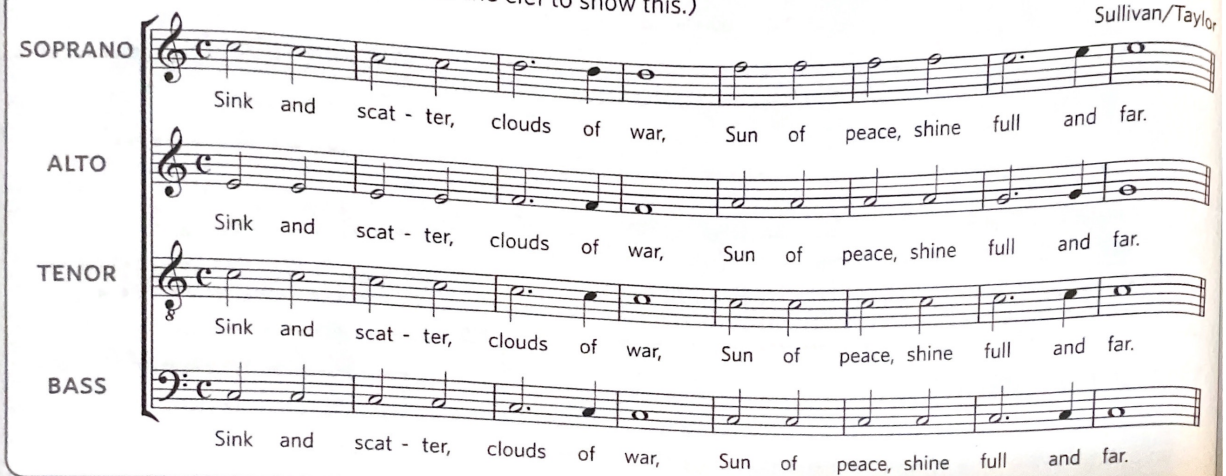
Did you know?

SATB choral music can be written in two ways:

- On four staves (called **open score**), with each part written on its own stave.
- On two staves (called **short score**), where the soprano and alto parts share a treble stave and the tenor and bass parts share a bass stave.

You can see an example of short score on page 65, and here is the same piece written in open score. Notice that the tenor part is written in the treble clef, but the tenors should sing an octave lower than written. (A small '8' is sometimes attached to the clef to show this.)

Sullivan/Taylor



New Italian terms

Here are some new Italian terms you need to know at Grade 5:

	Italian term	Meaning
Dynamics:	*a niente*	to nothing
	morendo	dying away
	perdendosi	dying away
	rinforzando (rinf., rf, rfz)	reinforcing
	smorzando (smorz.)	dying away
	sotto voce	in an undertone (literally 'under the voice')
Tempo:	*largamente*	broadly
Expression:	*cantando*	singing
	con dolore	with grief
	con spirito	with spirit
	doloroso	sorrowful
	sonoro	resonant, with rich tone (like the word 'sonorous')
General:	*ad libitum (ad lib.)*	at choice
	attacca	go straight on (to the next part of the music)
	quasi	as if, resembling

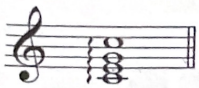
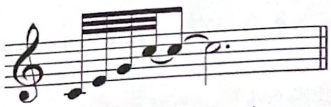
German terms

Composers often use German terms in their music. Here are the ones you need to know for Grade 5, along with similar Italian and French terms we've already encountered:

German term	Meaning	Similar Italian	Similar French
langsam	slow	*adagio/lento*	*lent*
lebhaft	lively	*vivace*	
mässig	at a moderate speed	*moderato*	*modéré*
ruhig	peaceful	*tranquillo*	
schnell	fast	*allegro/presto*	*vite*
traurig	sad	*mesto*	

The piano: terms and signs

In addition to the terms and signs covered so far, there are a small number relating to piano music that you need to learn at Grade 5. These are:

Ped. ✱ *Ped.* ⌐¬	press the right pedal (the sustain pedal); release it at ✱ or the vertical line
con pedale	with the right pedal
senza pedale	without the right pedal
una corda	press the left pedal
tre corde	release the left pedal
mano sinistra (m.s.)	with the left hand
mano destra (m.d.)	with the right hand
	Spread the chord from the bottom.
	Played 
	Also appears in harp music