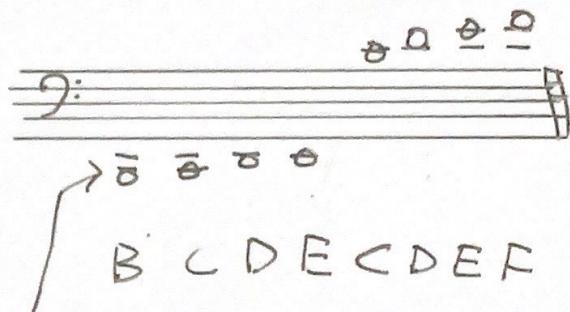
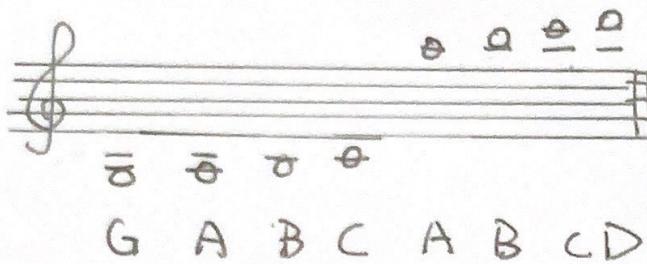


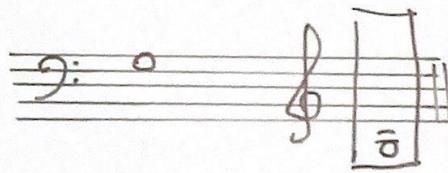
## 乐理2 整理

Pitch

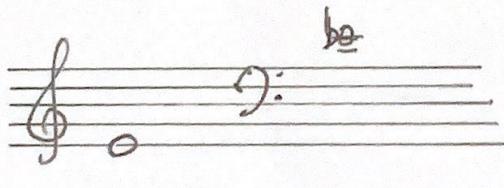


这个线叫 ledger lines (附加线)

test



两个音相同  
same pitch



higher    (lower)    same

higher    (lower)    same

第二个音比第一个音低

Second note is lower than the first note.

## 乐理整理

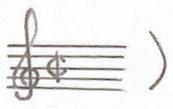
### Rhythm 节奏

$\frac{2}{4}$  = 1小节有2个d

$\frac{3}{4}$  = 1小节有3个d

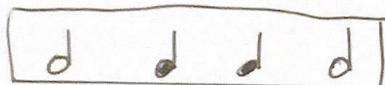
$\frac{4}{4}$  = 1小节有4个d

( $\frac{4}{4}$  拍又可以写成 C  $\Rightarrow$  

$\frac{2}{2}$  = 1小节有2个d ( $\frac{2}{2}$  拍又可以写成 4 )

$\frac{3}{2}$  = 1小节有3个d

$\frac{4}{2}$  = 1小节有4个d

  $\Rightarrow \frac{3}{2}$   
1 2 3

d d o | d d d o ||  $\Rightarrow \frac{4}{2}$   
1 2 34 | 1 2 34

$\frac{4}{4}$  d. d d d | d d d d ||  
beat p p p p | p p p p  
 $\frac{2}{2}$  d. d d d | d d d d ||  
beat p p | p p ||

虽然2个节奏一样  
但是一个小节有几拍是不一样的。

$\frac{4}{4}$  有4拍

$\frac{2}{2}$  有2拍

## 朱理二整理

## Rhythm 节奏

$\text{m}/\text{a}$  = 一小节有3个 

$\text{d.} = \text{n} \text{ n} \text{ n}$

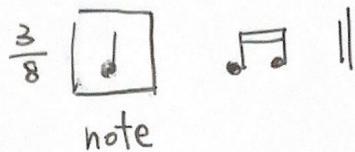
11

$$\mu = 4$$

۱۷

$$d = \underline{\hspace{1cm}}$$

test



将所有拍子加倍：

$\frac{2}{4}$  可以改写成  $\frac{2}{2}$

$\frac{3}{4}$  可以改写成  $\frac{3}{2}$

$\frac{4}{4}$  可以改写成  $\frac{4}{2}$

$\frac{3}{8}$  可以改写成  $\frac{3}{4}$

将所有拍子减半：

$\frac{2}{2}$  可以改写成  $\frac{2}{4}$

$\frac{3}{3}$  可以改写成  $\frac{3}{4}$

$\frac{4}{3}$  可以改写成  $1\frac{1}{3}$

$\frac{3}{4}$  可以改写成  $\frac{3}{8}$

例)、

A handwritten musical score on five-line staff paper. The key signature is F major (one sharp). The time signature is common time (indicated by '4'). The melody consists of quarter notes, eighth notes, and sixteenth-note patterns. The score begins with a whole note, followed by a half note, a quarter note, an eighth note, a sixteenth-note pattern, another sixteenth-note pattern, a quarter note, a sixteenth-note pattern, and a sixteenth-note pattern.

→ 全部加倍

A handwritten musical score for a single melodic line. It features a treble clef, a '4' indicating common time, and a bass clef with a '2' below it, suggesting a basso continuo part. The music consists of two measures. The first measure contains four notes: a long note followed by three shorter notes. The second measure contains five notes: a short note, a long note, a short note, a short note, and a long note.

## 乐理二 整理

### Rhythm 节奏

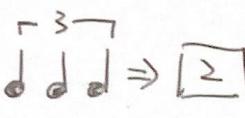
Triplets 三连音：单拍子或如  $\frac{2}{4}$  拍，原本由  构成一拍。  
改由  构成一拍

$$\begin{array}{c} \text{3} \\ \text{d} \text{ d} \text{ d} \end{array} = \text{d} \text{ d} = \text{d}$$

$$\begin{array}{c} \text{3} \\ \text{d} \text{ d} \text{ d} \end{array} = \text{d} \text{ d} = \text{d}$$

$$\begin{array}{c} \text{3} \\ \text{d} \text{ d} \text{ d} \end{array} = \text{d} \text{ d} = \text{d}$$

test

how many crotchets are equal to  ⇒

Dotted crotchet rest:  =  $\frac{3}{2}$  d beats

$$= \frac{3}{4} \text{ d beat}$$

Dotted quaver rest:  =  $\frac{3}{2}$  d beats

$$\frac{3}{4} \text{ d beat}$$

$$\underline{\text{—}} = \text{o}$$

$$\underline{\text{—}} = \text{d}$$

# 乐理 2 整理

# Rhythm

我们会根据 time signature (拍号) 去把音符组合起来使它们更容易被阅读.

br.

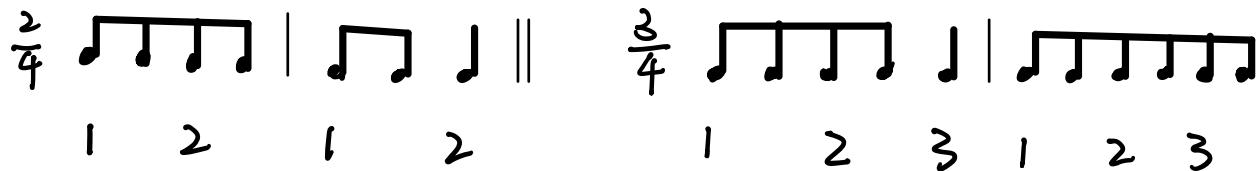
$\frac{2}{4}$ 	$\frac{3}{4}$ 
Beats : 1                    2	Beats : 1    2    3

Beats: 1 2 3 4 ||

Test. 重写下列节奏。

A musical staff consisting of two measures. The first measure is in 4/4 time, starting with a quarter note followed by eighth notes. The second measure starts with a bar line, followed by a 9/4 time signature, and then continues with quarter and eighth notes.

在 $\frac{2}{4}$ 及 $\frac{3}{4}$ 的拍号里，音符组合可以超过一拍（不跨越小节前提下）。如：



在 $\frac{4}{4}$ ，quaver 小最多可以组合4个，但不能是在小节中间

因为强弱分布，第三拍为渐强拍，不应与前面音符组合

Beats: 1 2 3 4      X 1 2 3 4

在 $\frac{3}{8}$ ，quaver 小和 semiquaver 小可以按照整个小节组合起来。因为只有一个强拍

当用一个音符就可以表示音值时，尽量避免在小节内使用连音符。

## Grouping rests (休止符组合法)

用一个休止符表示整个小节无声



✓      ✗      ↗

✓      ✗      ↗

用一个休止符表示  $\frac{1}{2}$  或  $\frac{2}{4}$  前一半或后一半的无声

✓      ✗

其它情况，使用代表一拍的休止符

✓      ✗

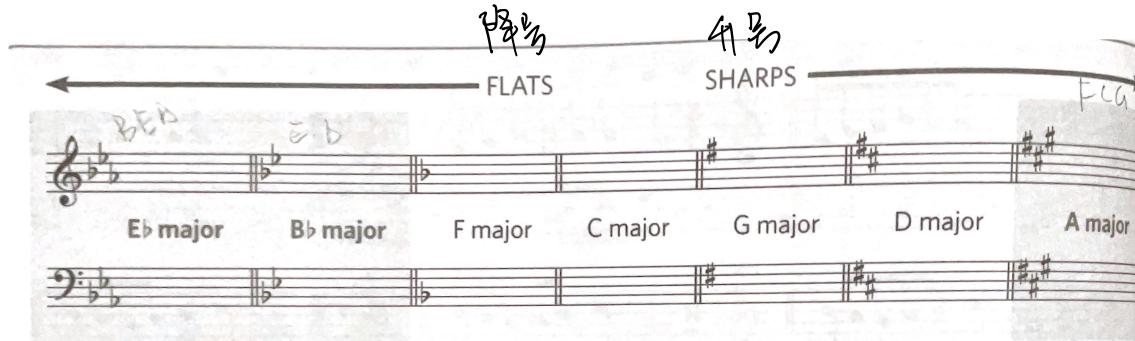
如果无声在一拍的中间，通常是使用一个新的休止符表示每个半拍。

1      2      1      2

组合法的目的都是为了让乐谱读起来容易。

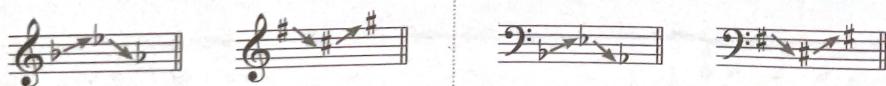
## 音阶和调式。

乐理1学了 G, D, F 大调，乐理2会自学 A, B<sub>b</sub>, E<sub>b</sub> 大调



It's important to ensure that sharps or flats in a key signature are placed in the right order and correct position on the stave. Here are some guidelines:

- Always write the sharps and flats in the same order. For sharps this is F#-C#-G# and for flats, it's B-flat-E-flat-A-flat.
- These key signatures make a zig-zag pattern on the stave: change direction every time you add another sharp or flat:



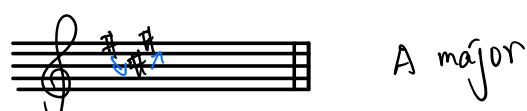
① 升降号写的排列顺序很重要。

升号顺序为 F C G D A E B

Fat Cat Get Dinner after eating bread.

降号顺序为升号的相反。B E A D G C F

② 升降号要一上一下的写法。在大调里，不会同时有升号和降号



③ 大调：T I S T T T S 全全半全全半。

小调 T S T T S T T 全半全全半全。

A. Bb. Eb 有問題



## The scales of the three new keys

### A major scale, ascending

Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



C# F# G#

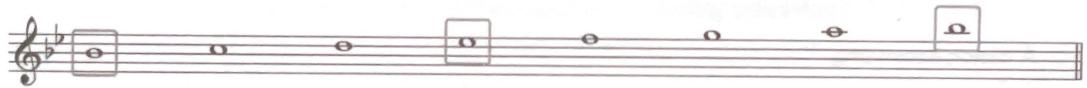
Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



C# F# G#

### Bb major scale, ascending

Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



Bb E F G Bb

Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



Bb E F G Bb

### Eb major scale, ascending

Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



Eb F G Ab Bb C D Eb

Degrees: Tonic (1st) 2nd 3rd 4th 5th 6th 7th Tonic (8th)



Eb F G Ab Bb C D Eb

TEST:



Tonic 4th



Tonic 2nd



key: [Bb] major



## 调式和音阶

每一种大调都有其相对小调，它们的调号是一样的，只是它们的排列方式不同。相对小调的主音 (Tonic) 是大调的第六度音 (6th degree) 或者是大调主音降三个半音。

Major (C)  1st T 2nd T 3rd S 4th T 5th T 6th T 7th S 8th (Tonic)	Relative minor (A)  1st 2nd 3S ↓ 3个半音
--	--

### Did you know?

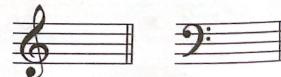
To find the relative minor key, you can also count down three semitones from the tonic of the relative major.

We are going to meet three minor keys.

- A minor is the relative minor of C major. A minor 是 C major 的相对小调

There are no sharps or flats in the key signature.

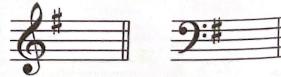
### A minor



- E minor is the relative minor of G major. E minor 是 G major 的相对小调

They both have one sharp – F# – in their key signature.

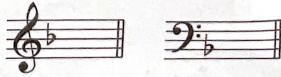
### E minor



- D minor is the relative minor of F major. D minor 是 F major 的相对小调

They both have one flat – Bb – in their key signature.

### D minor



C音降三个半音为A音



大调和小调区别是音程排列方式不同。

大调音程排列方式为：TTSTTTS

小调音程排列方式为：TSOTTSTT

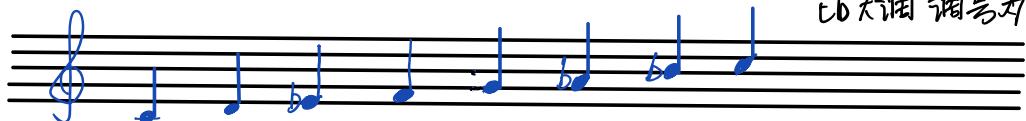
T全音, S半音  
一个八度可以分12个半音

同理，若想将C大调转为C小调

只需降低第 三、六、七 度音阶

C小调又为Eb大调

Eb大调调号为降E、A、B。



Tonic	2nd	3rd	4th	5th	6th	7th	8ve
C	D	Eb	F	G	Ab	Bb	C
T	S	T	T	S	T	T	

小调又分为三种小调。上述小调为自然小调 Natural minor scale。

小调还有和声小调 (harmonic minor scale) 和旋律小调 (melody minor scale)

reference: Nice chord 好和弦 — 小调。

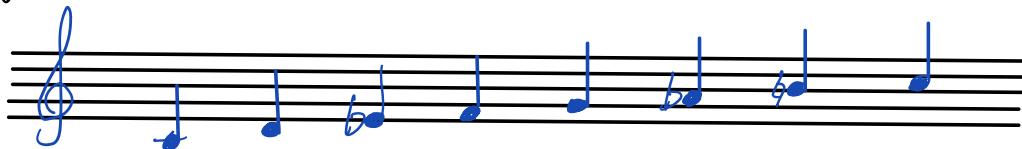
harmonic minor scale：因为五级和弦有著比较喜欢接到一级和弦的特性，

但是自然小调的五级和谐不够有解决的欲望。

所以作曲家们建立了一个规则：每当使用五级和弦或类似功能和弦的时候，就把自然小调的第

七音升高半音（在C小调中就将Bb升高/还原为B，使Gm<sup>7</sup>变为G<sup>7</sup>）来解决欲望不可多的问题。

[例]

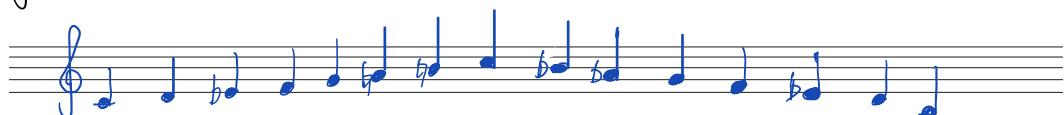


还原

\* melody minor scale : 然而，和声小调的第6音和第7音音程距离太远了，产生了增二度会有种邪门的感觉（弹起来会很象阿拉丁神灯画面，古典音乐家接受不了，所以产生了旋律小调）

在小调上行旋律中，如果第六音要接到升高的第七音，那么第六音也升高半音。而当下行旋律，第七音不需要接到主音，所第七音就不需要升高，既而第六音也不需要升高。

例.



上行升第六七音，下行不需升高第六七音。

# 音程

## Remember!

Here are the intervals above the tonic in C major.

Degrees: 1 2 1 3 1 4 1 5 1 6 1 7 1 8  
Intervals: 2nd 3rd 4th 5th 6th 7th 8ve

2度 3度 4度 5度 6度 7度 8度

音程是不看升降号的，而是看跨了几个音名。如 C-D-E 是跨 3 度。



5度

5度

5度

C G ⇒ C, D, E, F, G. ⇒ 5度

## 主音和弦 Tonic Triads

由 1、3、5 度组合成的和弦。

A minor tonic triad      主音是最低的音符。



**TEST:**

写出下列是什么主音和弦



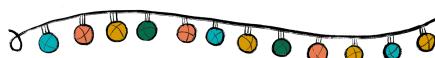
key: Eb major

key: A major



key: D minor

key: E minor



## Terms & Signs

### Sig<sup>n</sup>s

Here are the signs you need to know in addition to those you learnt at Grade 1.

Sign	Meaning
	strong accent (play the note with strong emphasis)
	slightly separated
	staccatissimo (very detached indeed)
	give the note slight pressure
<i>8va-----</i>	perform an octave higher
	rest for the number of bars indicated
	first-time bar (in a repeated section, play this bar the first time through)
	second-time bar (in a repeated section, play this bar the second time through)

加重音

	<b>Italian term</b>	<b>Meaning</b>
<b>Dynamics:</b>	<i>f<p>(fortepiano)</p></i>	loud, then immediately quiet
<b>Tempo:</b>	<i>presto</i>	fast (quicker than allegro)
	<i>vivace, vivo</i>	lively, quick
	<i>lento</i>	slow (slower than adagio)
	<i>largo</i>	slow, stately (the same as, or slower than, lento)
	<i>grave</i>	very slow, solemn
	<i>più mosso</i>	more movement, quicker
	<i>meno mosso</i>	less movement; slower
	<i>ritenuto (riten., rit.)</i>	getting slower; held back
	<i>con moto</i>	with movement
	<i>allargando</i>	broadening
	<i>dal segno (D.S.)</i>	repeat from the sign 
<b>Expression:</b>	<i>espressivo (espress.)</i>	expressive
	<i>grazioso</i>	graceful
	<i>alla marcia</i>	in the style of a march
<b>General:</b>	<i>molto</i>	very, much
	<i>non troppo</i>	not too much
	<i>poco, poco a poco</i>	a little; little by little
	<i>cal, con</i>	with
	<i>e, ed</i>	and
	<i>ma</i>	but
	<i>meno</i>	less
	<i>più</i>	more
	<i>senza</i>	without

更多术语详见：<https://www.musicca.com/zh/terms>