

PITCH

(PART 2)

In this chapter you will learn about
 Transposing by a major 2nd, minor 3rd and perfect 5th
 Finding the new key signature
 Transposing melodies with accidentals
 Transposing instruments

3

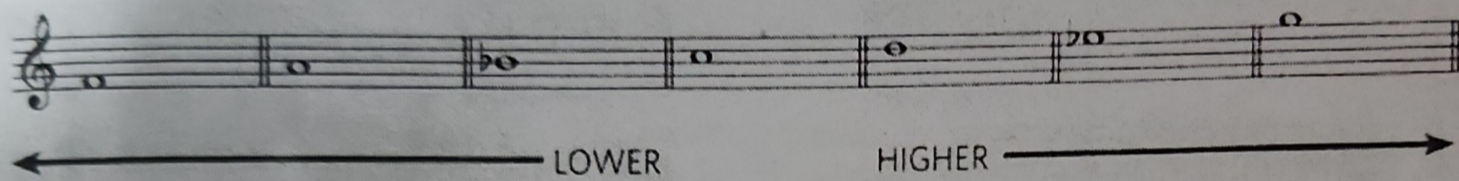
i Transposing by a major 2nd, minor 3rd and perfect 5th

At Grade 3 we learnt how to transpose music up or down an octave. Let's explore how to transpose notes so that they sound:

- a major 2nd higher or lower
- a minor 3rd higher or lower
- a perfect 5th higher or lower

This diagram shows how to transpose the note C up or down by the intervals shown.

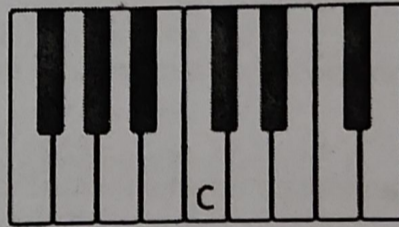
perfect 5th (7 semitones) minor 3rd (3 semitones) major 2nd (2 semitones) original note major 2nd (2 semitones) minor 3rd (3 semitones) perfect 5th (7 semitones)



Smart tip

You can work out intervals by counting up or down in semitones from the starting note.

- major 2nd = 2 semitones (1 tone)
- minor 3rd = 3 semitones
- perfect 5th = 7 semitones



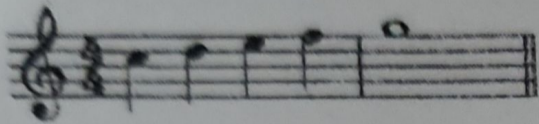
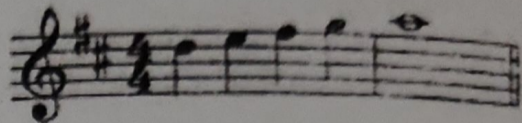
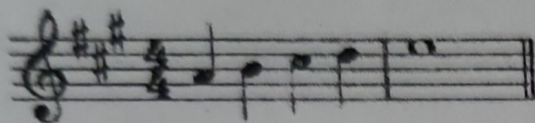
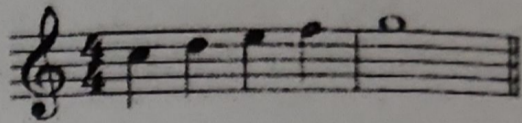
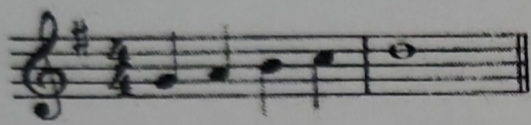
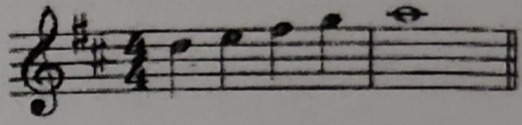
Exercise 1 Transpose these notes by the named intervals.

major 2nd lower major 2nd higher minor 3rd lower perfect 5th higher perfect 5th lower

major 2nd higher minor 3rd lower minor 3rd higher perfect 5th higher perfect 5th lower

- If we transpose the note C up a major 2nd, it becomes the note D.
- In the same way, if we transpose notes in the key of C major up a major 2nd, they become notes in the key of D major.
- The key signature of D major – the new key – is used so that we do not have to write lots of accidentals.

The major or minor tonality stays the same when a melody is transposed.

| | | |
|---|-------------------------------------|--|
|  | transposed up a major 2nd becomes |  |
| Similarly: | | |
|  | transposed up a minor 3rd becomes |  |
|  | transposed up a perfect 5th becomes |  |

Exercise 2 Circle TRUE or FALSE for each statement.

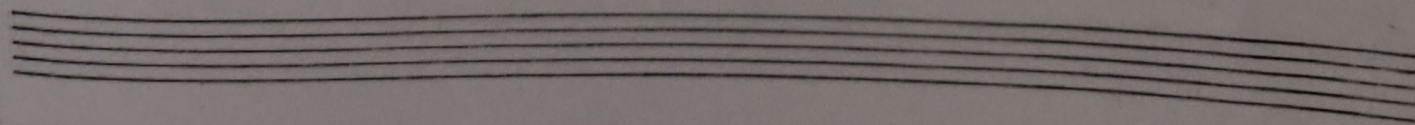
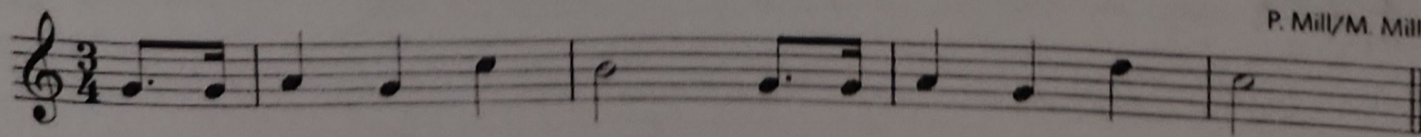
- a** The key of C major transposed up a major 2nd becomes the key of D major. TRUE FALSE
- b** The key of C minor transposed down a minor 3rd becomes the key of A minor. TRUE FALSE
- c** The key of C major transposed up a perfect 5th becomes the key of F major. TRUE FALSE
- d** The key of C major transposed down a major 2nd becomes the key of B major. TRUE FALSE
- e** The key of C major transposed up a minor 3rd becomes the key of E \flat major. TRUE FALSE
- f** The key of C minor transposed down a perfect 5th becomes the key of G minor. TRUE FALSE

Exercise 3 Complete these sentences.

- a The key of D major transposed up a major 2nd becomes the key of **E** major.
- b The key of G major transposed up a major 2nd becomes the key of **A** major.
- c The key of A major transposed up a minor 3rd becomes the key of **C** major.
- d The key of E minor transposed up a minor 3rd becomes the key of **G** minor.
- e The key of D major transposed up a perfect 5th becomes the key of **A** major.
- f The key of G major transposed up a minor 3rd becomes **B^b** major.
- g The key of E minor transposed down a major 2nd becomes the key of **D** minor.
- h The key of D minor transposed down a minor 3rd becomes the key of **B** minor.
- i The key of G major transposed down a minor 3rd becomes the key of **E** major.
- j The key of G minor transposed down a perfect 5th becomes the key of **C** minor.
- k The key of E minor transposed down a minor 3rd becomes **C[#]** minor.

Challenge!

Here is the beginning of 'Happy Birthday', written in C major. Can you sing or play it up a major 2nd, in D major? Transposing at sight is a tricky but valuable skill - you might want to write it out in D major first. (See page 21 for more on transposing melodies.)



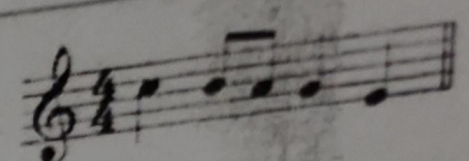
Exercise 4 Tick (✓) one box to show the correct key signature.

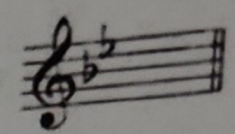
Smart tip

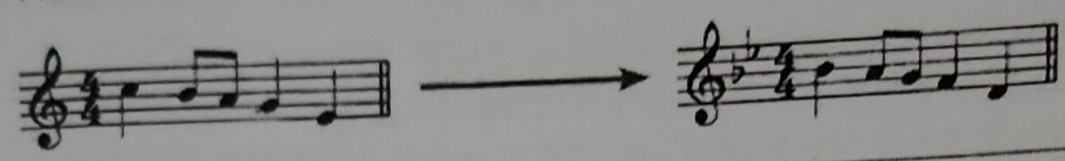
First, identify the key and tonic note of the original key signature (you can use either the major or the relative minor key). To find the new key, work out what the new tonic note would be. For example, if the tonic note C transposed up a minor 3rd becomes E♭, then the key of C major transposed up a minor 3rd becomes E♭ major.

- a** transposed up a major 2nd becomes
- b** transposed up a perfect 5th becomes
- c** transposed up a minor 3rd becomes
- d** transposed up a perfect 5th becomes
- e** transposed down a major 2nd becomes
- f** transposed down a minor 3rd becomes
- g** transposed down a major 2nd becomes
- h** transposed down a perfect 5th becomes

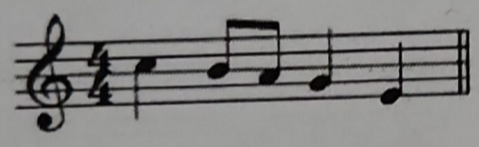
i How to transpose a melody

Let's imagine we have to transpose this melody down a major 2nd: 

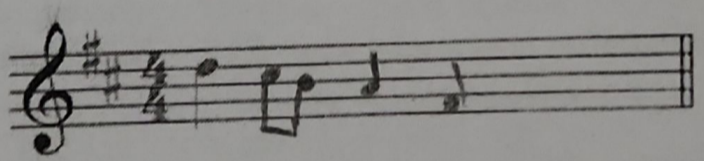
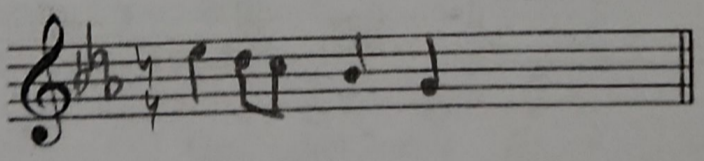
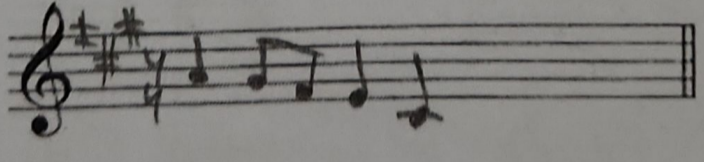
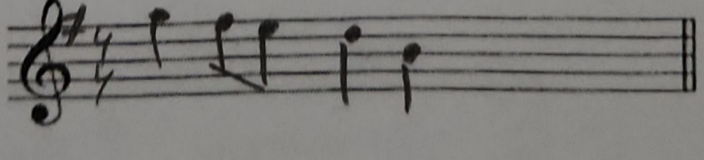
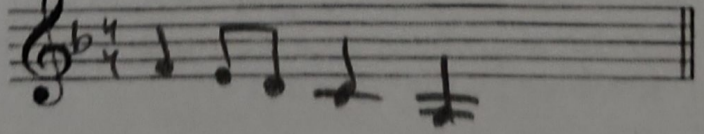
- First, we work out the new key by transposing the tonic down a major 2nd. No sharps or flats means the key is C major or A minor, so the new key will be a major 2nd lower – B♭ major or G minor.
- Of course, B♭ major and G minor have the same key signature, which will be: 
- Now we write every note a major 2nd (or a tone) lower:



Exercise 5 Transpose this melody by the named intervals. The key signature and first note are given in **a**.



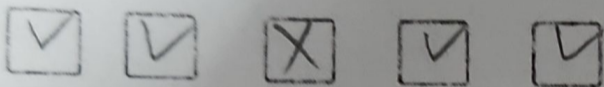
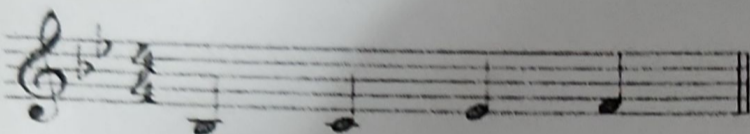
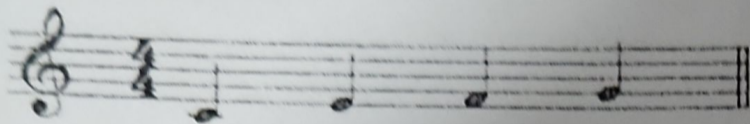
Smart tip
As well as making sure each note is transposed correctly, check that the interval between each consecutive note is the same as the original.

- a** Up a major 2nd 
- b** Up a minor 3rd 
- c** Down a minor 3rd 
- d** Up a perfect 5th 
- e** Down a perfect 5th 

Exercise 6 These bars have been transposed by the intervals shown. There are some mistakes. Put a tick (✓) or cross (✗) underneath the key signature and each note to show whether each is correct or incorrect.

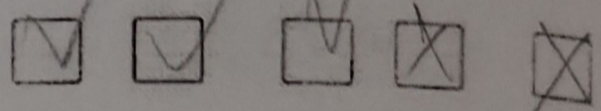
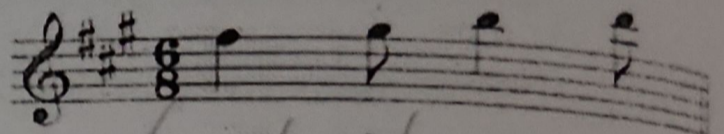
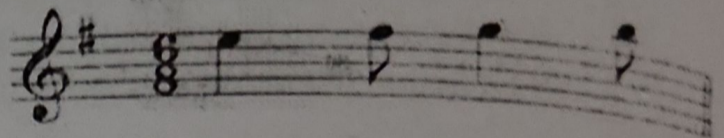
Down a major 2nd

a



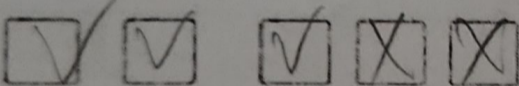
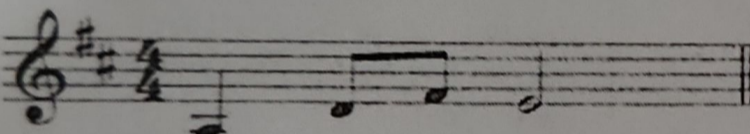
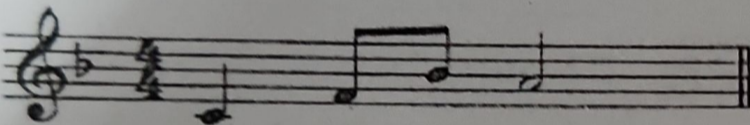
Up a major 2nd

b



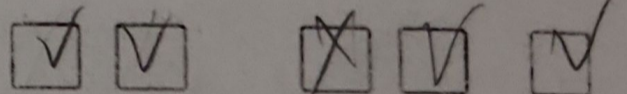
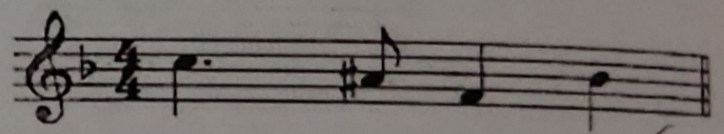
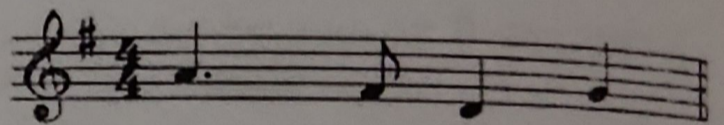
Down a minor 3rd

c



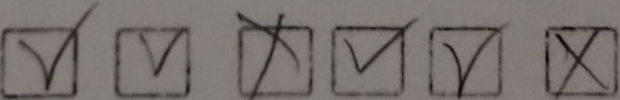
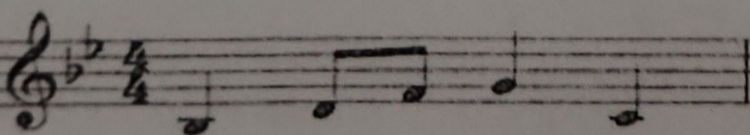
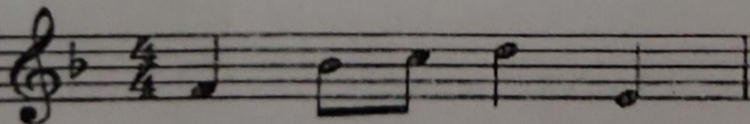
Up a minor 3rd

d



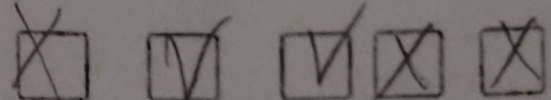
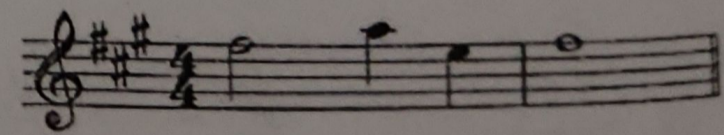
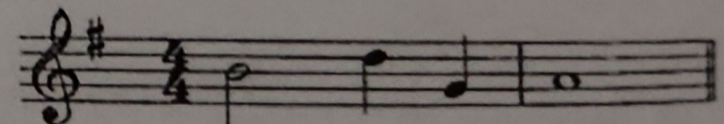
Down a perfect 5th

e



Up a perfect 5th

f

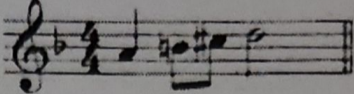


Theory in sound

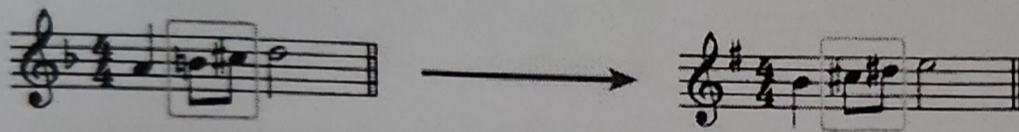
Play the phrases above on your instrument or ask someone to play them to you. Can you hear where the mistakes are? You can also check your transpositions in Exercise 5 by playing the original phrase followed by the transposed ones.

i Transposing melodies with accidentals

Some melodies, such as those in minor keys, contain notes with accidentals outside of the key signature. Let's explore how to transpose a melody that contains accidentals.

This melody needs to be transposed up a major 2nd: 

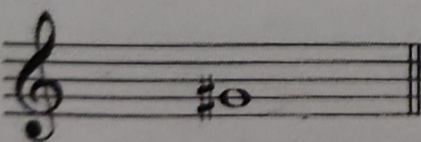
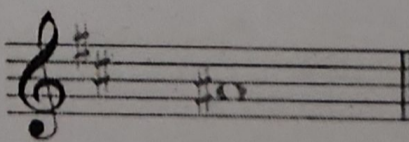
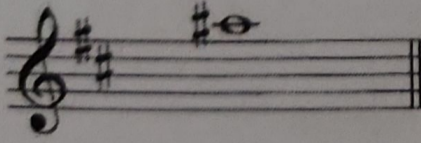
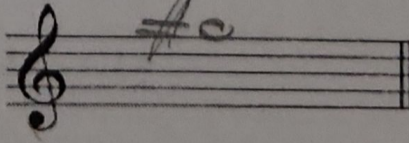
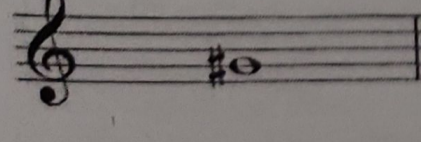
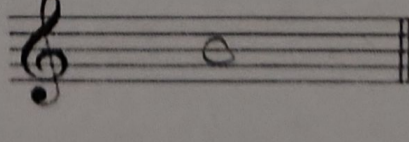
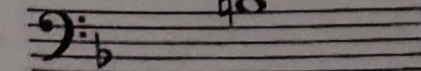
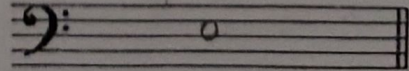
- First, we need to work out the new key and key signature. The key signature of the original melody tells us that the key is F major or D minor, so the new key will be a major 2nd higher – G major or E minor.
- Next, we write each note a major 2nd higher than the original.
- In order to make every interval a major 2nd, every note with an accidental will need one in the transposed version. However, the transposed notes might need a different accidental. In the original melody, the B \flat in the key signature has been raised by a semitone – to B \sharp . The equivalent note in the transposed melody also needs to be raised by a semitone – from C to C \sharp .



Did you know?

In the transposed version of this melody, the second note is written as a C \sharp not a D \flat , even though these are enharmonic equivalents. This is because we are transposing by a major 2nd rather than a diminished 3rd. For more information on intervals, see Chapter 5.

Exercise 7 Transpose each key and note by the named interval.

| | | | |
|----------|---|--------------------|--|
| a |  | Up a major 2nd |  |
| b |  | Down a major 2nd |  |
| c |  | Up a minor 3rd |  |
| d |  | Down a perfect 5th |  |

Exercise 8 These bars have been transposed by the intervals shown. There are some mistakes. Put a tick (✓) or cross (✗) underneath the key signature and each note to show whether each is correct or incorrect.

Up a major 2nd

a

Remember!
Every note with an accidental in the original melody will need one in the transposed melody – but the type of accidental needed may be different.

Down a minor 3rd

b

Up a major 2nd

c

Up a minor 3rd

d

Down a minor 3rd

e

Up a perfect 5th

f

Down a perfect 5th

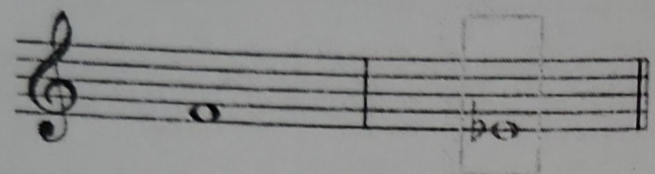
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Exercise 9 Write the sounding or written note in each example, adding accidentals where necessary

Remember!

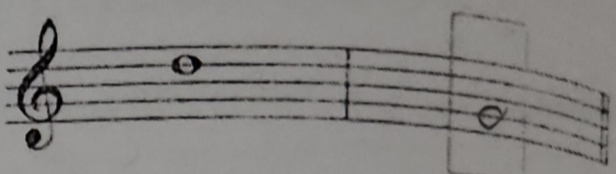
Clarinet in B \flat and trumpet in B \flat sound a **major 2nd lower**. Clarinet in A sounds a **minor 3rd lower**.
 Cor anglais and horn in F sound a **perfect 5th lower**.

Clarinet in B \flat *maj 2nd*

a 

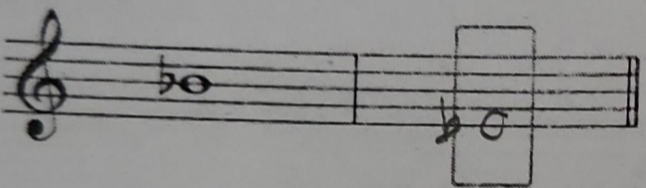
written sounds

Horn in F *95*

b 

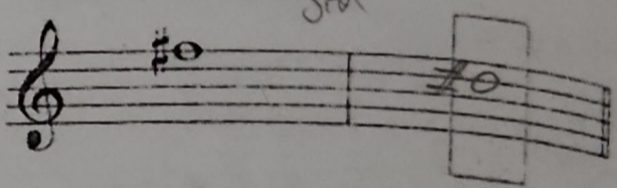
written sounds

Cor anglais

c 

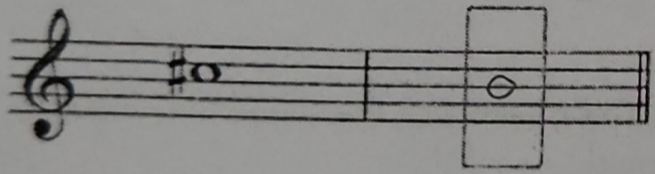
written sounds

Clarinet in A *min 3rd*

d 

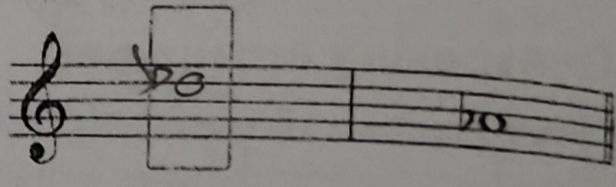
written sounds

Trumpet in B \flat

e 

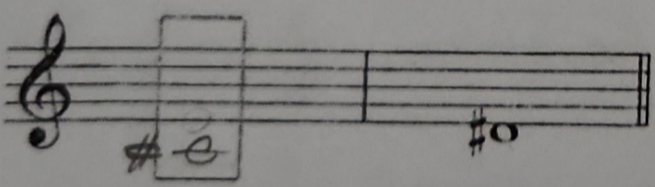
written sounds

Horn in F

f 

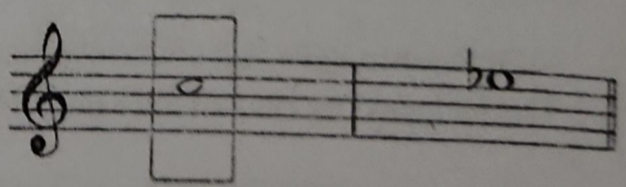
written sounds

Clarinet in B \flat

g 

written sounds

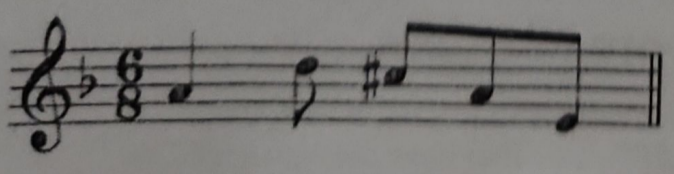
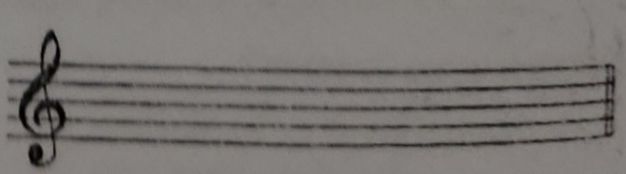
Clarinet in A

h 

written sounds

Challenge!

Here is a bar written for a clarinet in B \flat . Can you rewrite it a major 2nd lower to be at concert pitch?

Your progress

Congratulations! You've completed all the work for Grade 5 on Pitch.
 Turn to the Practice Exam Paper on page 85 if you'd like to try some sample exam questions.

6 CHORDS

In this chapter you will learn about:
 The supertonic chord (II)
 Cadences
 Choosing suitable chords for a melody
 Inversions

i The supertonic chord (II)

- At Grade 4, we explored **primary chords**: chords built on the **1st, 4th, and 5th degrees** of major and minor scales.
- The supertonic chord (II) is built on the **2nd degree** of the scale.

C major

I II IV V
 tonic supertonic subdominant dominant

C minor

I II IV V
 tonic supertonic subdominant dominant

In chord II of C minor, the top note is an A \flat because it is made up of notes from the harmonic minor scale.

Exercise 1 Add one note to complete each supertonic chord.

| | |
|---|--|
| <p>E minor</p> <p>a </p> <p>II</p> | <p>B\flat major</p> <p>b </p> <p>II</p> |
| <p>F minor</p> <p>c </p> <p>II</p> | <p>F\sharp major</p> <p>d </p> <p>II</p> |

Remember!

- We use roman numerals to identify chords. Each chord is built on a degree of the scale, which gives us the number of the chord.
- The note that a chord is built on is called its **root** – when this note is at the bottom of the chord, it is said to be in **root position**.

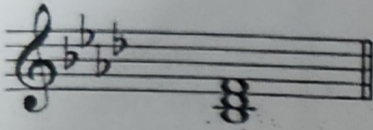
Theory in sound

Play (or ask someone to play to you) chords I, II, IV and V in C major and C minor. Listen carefully to how they sound.

- Chords I, IV and V in the major key are major chords, but chord II is minor.
- Chords I and IV in the minor key are minor chords, but chord V is major as it contains the raised leading note. Chord II in minor keys is diminished – it contains a diminished 5th between the root and the upper note.

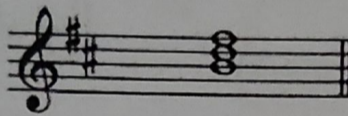
Exercise 2 Describe each chord using roman numerals (I, II, IV or V).

a A \flat major



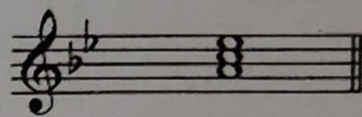
II

b B minor



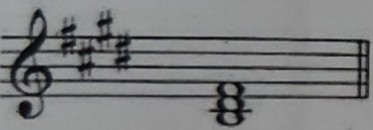
I

c G minor



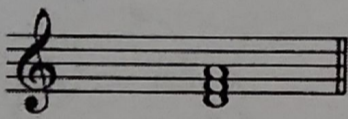
II

d E major



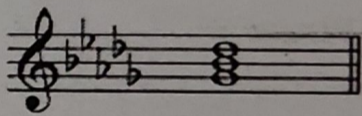
V

e C major



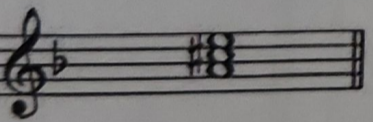
II

f D \flat major



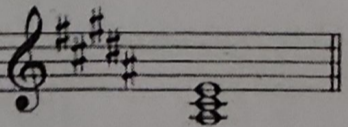
IV

g D minor



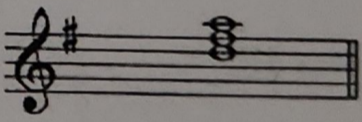
V

h G \sharp minor



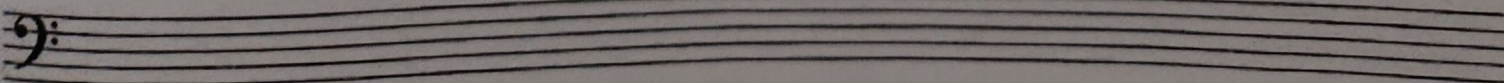
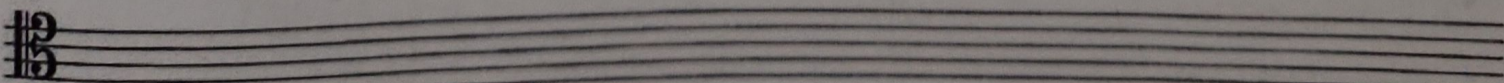
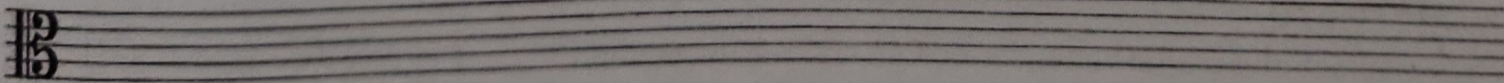
II

i G major



V

Challenge! Try writing some of the chords in Exercise 2 in the alto, tenor and bass clefs.



Exercise 3 Describe the two chords in each question using roman numerals (I, II, IV or V) and then identify the cadence.

Smart tip

- Start by working out the key from the key signature – in this exercise it will be C, G, D or F major.
- Then work out the two chords by looking at their root notes (which are at the bottom).
- If the final chord is V, the cadence is **imperfect** (I–V, II–V or IV–V). If it's I, the cadence is **perfect** (V–I) or **plagal** (IV–I).

a

Cadence:
imperfect

IV I

b

Cadence:
Perfect

II I

c

Cadence:
Plagal

IV I

d

Cadence:
Imperfect

I V

e

Cadence:
Perfect

V I

f

Cadence:
Imperfect

II V

g

Cadence:
Plagal

IV I

h

Cadence:
Perfect

V I

i Cadences in minor keys

When we write cadences in minor keys, chord V will contain the raised leading note.

Here are examples of the three cadences we have learnt, written in E minor.

The raised leading note is D#.

| Perfect | Plagal | Imperfect |
|---------|--------|-----------|
| | | |
| V I | IV I | II V |

Exercise 4 includes cadences in major or minor keys, with up to four sharps or flats in the key signature.

Exercise 4 Tick one box to name each cadence.

Smart tip
Start by identifying whether chords are I, II, IV or V in the given key.

a D major

perfect plagal imperfect

b Bb major

perfect plagal imperfect

Exercise 4 Continued.

A major

c

perfect plagal imperfect

IV V

D minor

d

perfect plagal imperfect

I I II V

C minor

e

perfect plagal imperfect

V I

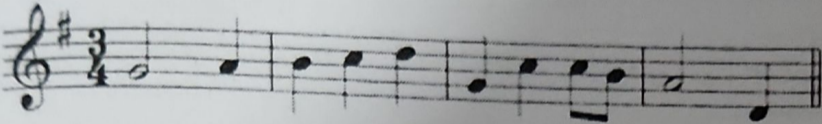
Challenge!

Rewrite Exercise 4 **a** in D minor. You'll need to change the key signature, and remember that the leading note should be raised.

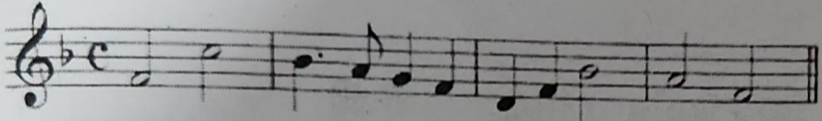
Exercise 5 Indicate suitable chords for each of the following melodies in major keys by writing I, II, IV or V in each box, and then circle the correct cadence.

Smart tip

- Choose chords that contain the majority of the melody notes within each bracket.
- Make sure that the two chords you choose form a perfect, plagal or imperfect cadence.

a  perfect plagal **imperfect**

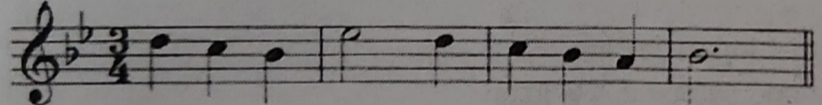
IV V

b  perfect **plagal** imperfect

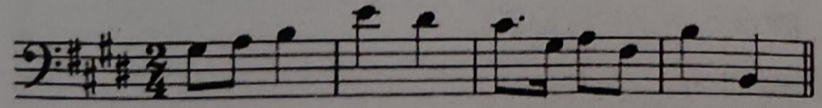
IV V

Smart tip

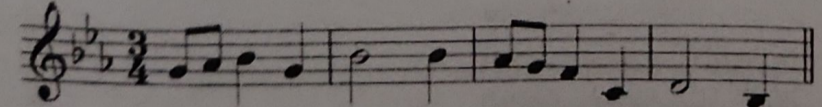
The final bar in **c** only contains one note. Make sure you choose the chord that will belong to a cadence.

c  **perfect** plagal imperfect

V I

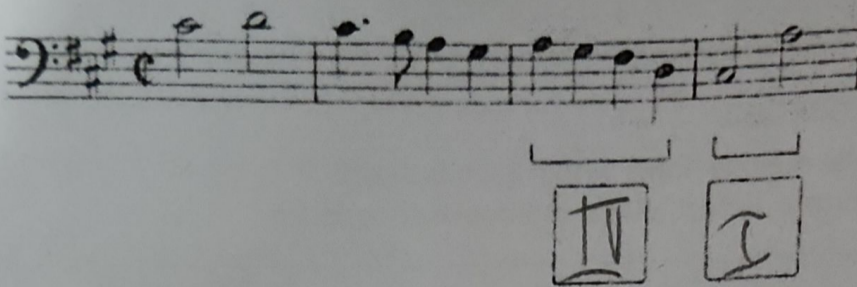
d  perfect plagal **imperfect**

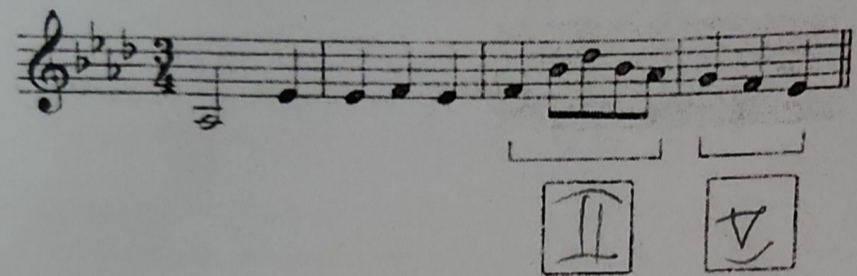
IV V

e  perfect plagal **imperfect**

II V

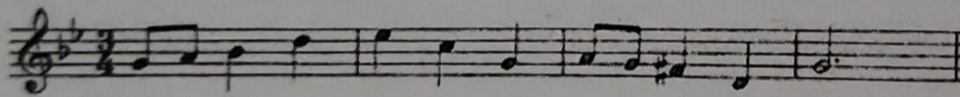
Exercise 5 Continued.

f  perfect plagal imperfect

g  perfect plagal imperfect

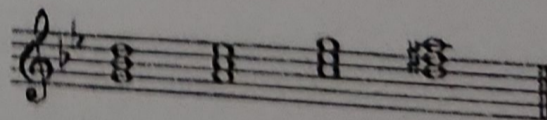
i Choosing suitable chords for a minor key melody

Let's work through an example of a melody in a minor key, following the same steps as earlier.



1. **Identify the key.** From the key signature we can see that it's either B \flat major or G minor, but the raised leading note (F \sharp) shows us that it is G minor.

2. **Work out chords I, II, IV and V in the key.** Here they are for G minor. Note that chord V has the raised leading note, F \sharp :



3. **Name the notes in the melody.**

I II IV V

4. **Choose a suitable chord for each box.**

i. The first chord (bar 2) needs to fit with the notes E \flat , C and G – and chord IV fits the bill here.

ii. Bar 3 contains the notes A, G, F \sharp and D. All of these except the G can be found in chord V.

iii. As the final bar contains only the note G, either chord I or chord IV could fit. However, in order to make a cadence, we have to choose chord I.

5. **Identify the cadence.** Check that the two chords make a perfect, imperfect or plagal cadence. The final two chords (V and I) make a perfect cadence.

Smart tip

- Exercise 6 contains melodies in major and minor keys. Look out for the raised leading note to identify melodies in minor keys. You could write the key at the start if that helps.
- Each melody contains two different cadences.

Exercise 6 Indicate suitable chords for each of the following melodies by writing I, II, IV or V in each box, and then name each cadence.

a

Cadence 1

IV V

Cadence 2

II V I

Cadence 1: Perfect

Cadence 2: Perfect

b

Cadence 1

II V

Cadence 2

I V I

Cadence 1: Imperfect

Cadence 2: Perfect

Exercise 6 Continued.

c

Cadence 1

Cadence 2

Cadence 1: *Imperfect*

Cadence 2: *Perfect*

d

Cadence 1

Cadence 2

Cadence 1: *Imperfect*

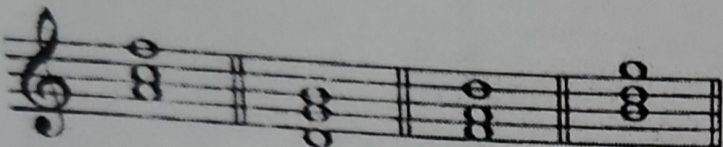
Cadence 2: *Plagal*

Exercise 7 Write b or c after each chord number to show whether the chord is in 1st or 2nd inversion.

Smart tip

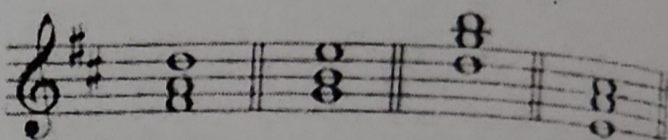
The chords in **a** to **d** are written as triads. By looking out for the interval of a perfect 4th, you can identify the inversion. If the 4th is at the top, the triad will be in 1st inversion (b); if the 4th is at the bottom it will be in 2nd inversion (c).

C major

a 

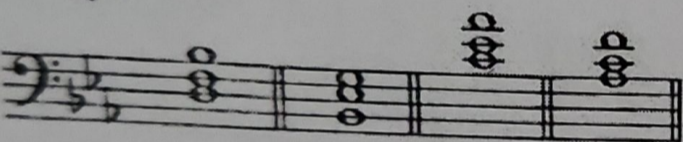
IV b V C II b V b

D major

b 

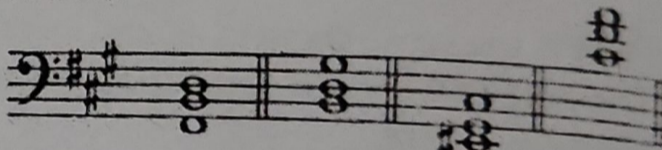
I b II b IV C V C

E \flat major

c 

V b I C IV b II b

F \sharp minor

d 

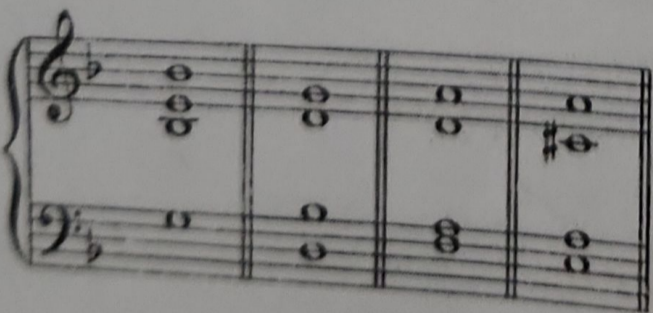
IV b II b V b I C

Remember!

In the case of four-note chords, one of the notes will appear twice. You might find it helpful to rewrite the notes in each chord as a triad.

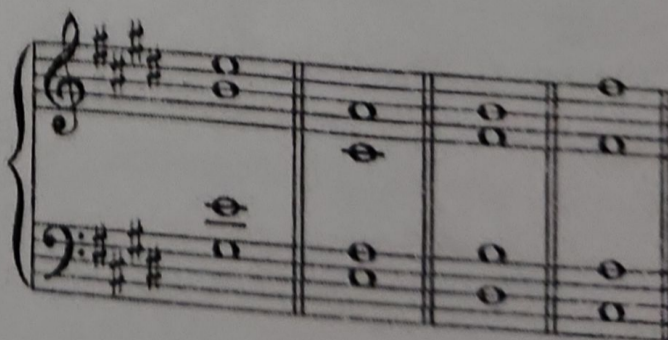
a = 3⁵
 b = 3⁶
 c = 4⁶

D minor

e 

II b IV C I b V C

E major

f 

I b IV C V b II C

i An alternative way to identify chords and inversions

You may find it helpful to write chords and their inversions as a grid. Here is a grid showing the chords and inversions in D major.

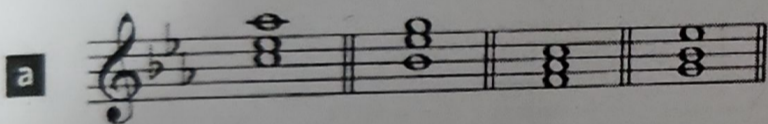
| | a | b | c | |
|----|---|----|---|---|
| I | D | F# | A | ← Each column shows the bottom note of the chord in root position (a), 1st inversion (b) and 2nd inversion (c). |
| II | E | G | B | |
| IV | G | B | D | |
| V | A | C# | E | |

Exercise 8 Write the chord number and inversion in the boxes to identify these chords.

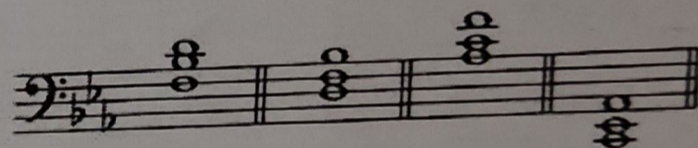
Smart tip

Work out the chord first, and then its inversion. You can write the chords out on a staff or use a 'grid' version as shown above.

E \flat major

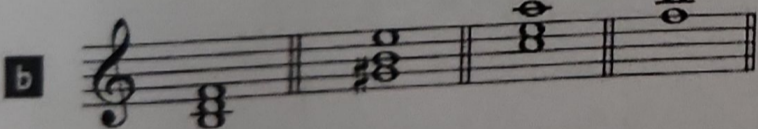


IV \flat I \flat c II \flat a I \flat b

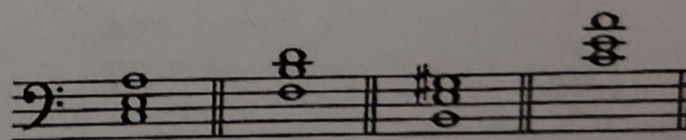


I \flat c I \flat b II \flat IV \flat b

A minor

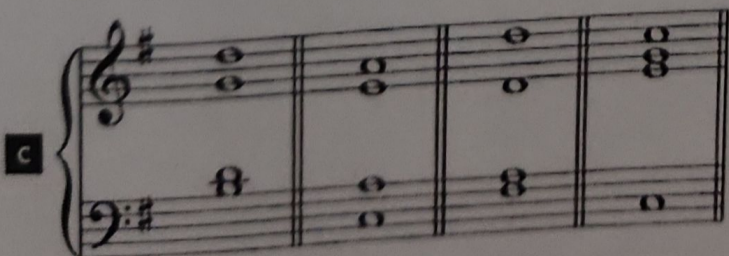


II \flat a I \flat b I \flat b I \flat c



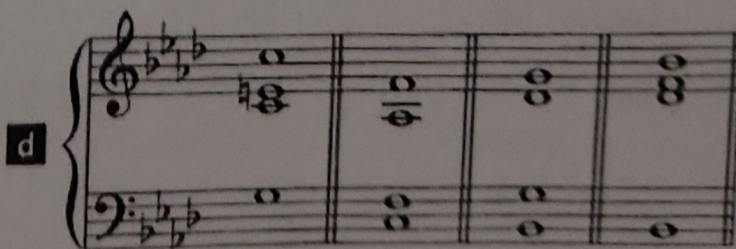
I \flat b I \flat c I \flat c I \flat b

G major



I \flat b II \flat I \flat b II \flat a

F minor



I \flat c I \flat c II \flat II \flat a

Exercise 9 Tick (✓) one box for each question to name each of the three marked chords

Smart tip

- First, check the key by looking at the key signature and any raised leading notes that would indicate the relative minor. The key is given in **a** and **b**.
- When naming each chord, make sure that all three notes of that chord are present. Remember that the bass note will not always be the root of the chord
- In a minor key, if the raised leading note is in a chord, it will be chord V.

E major

S Foster

a

- | | | | | | | | | |
|----------|----|-------------------------------------|-----|--------------------------|-----|-------------------------------------|----|-------------------------------------|
| Chord A: | Ib | <input type="checkbox"/> | Va | <input type="checkbox"/> | IVb | <input checked="" type="checkbox"/> | Va | <input type="checkbox"/> |
| Chord B: | Ib | <input checked="" type="checkbox"/> | Ic | <input type="checkbox"/> | IIb | <input type="checkbox"/> | Vb | <input type="checkbox"/> |
| Chord C: | Ic | <input type="checkbox"/> | IIa | <input type="checkbox"/> | IVb | <input type="checkbox"/> | Va | <input checked="" type="checkbox"/> |

B \flat major

Trad.

b

- | | | | | | | | | |
|----------|-----|--------------------------|-----|-------------------------------------|-----|--------------------------|-----|-------------------------------------|
| Chord A: | Ia | <input type="checkbox"/> | Ic | <input checked="" type="checkbox"/> | Vb | <input type="checkbox"/> | Va | <input type="checkbox"/> |
| Chord B: | IIb | <input type="checkbox"/> | IVb | <input checked="" type="checkbox"/> | IVa | <input type="checkbox"/> | IIa | <input type="checkbox"/> |
| Chord C: | Ib | <input type="checkbox"/> | Ic | <input type="checkbox"/> | Vb | <input type="checkbox"/> | Va | <input checked="" type="checkbox"/> |

Exercise 9 Continued.

Key: G minor

A B C Tchaikovsky

- Chord A: Ib Ia Va Vb
 Chord B: Vb Va IVb IVc
 Chord C: IIa IVb IVa IIb

Key: E♭ Major

A B C Clementi

- Chord A: Ib IVb Vb IIb
 Chord B: IIa IIb IVb IIc
 Chord C: Va IVb Ic Ib

Key: B minor

A B C J. S. Bach

- Chord A: IVa IVb IIa IIb
 Chord B: Va IVb IIa IIb
 Chord C: Va Vb Ib IVa

TERMS, SIGNS & INSTRUMENTS (PART 1)

In this chapter you will learn about
 New instruments at Grade 5
 Transposing instruments
 Voice types and their ranges

7

i New instruments at Grade 5

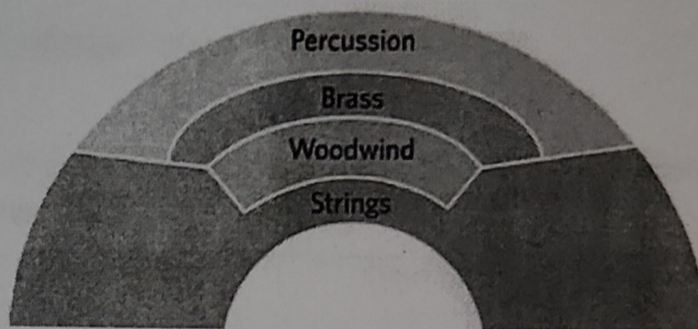
At Grade 4 we met instruments in the four families of the orchestra: strings, woodwind, brass and percussion.

Strings: Instruments with strings that are played with a bow or plucked

Woodwind: Instruments that are blown using a reed or a hole in a mouthpiece

Brass: Instruments that are blown by vibrating the lips in a mouthpiece

Percussion: Instruments that are struck



Here are all the instruments you need to know at Grade 5, including some new ones (in red):

Strings

Violin
 Viola
 Cello
 Double bass
 Harp

Woodwind

Piccolo
 Flute
 Oboe
 Cor anglais
 Clarinet
 Bassoon

Brass

Trumpet
 Horn
 Trombone
 Tuba

Percussion

Timpani
 Tubular bells
 Xylophone
 Marimba
 Glockenspiel
 Vibraphone
 Celesta
 Side drum
 Bass drum
 Cymbals
 Tambourine
 Castanets
 Tam-tam
 Triangle

Theory in sound

Listen to recordings of pieces that contain some of these new instruments, then describe the quality of the sound they produce (sharp, soft, high, smooth, sharp, etc.) Here are some suggestions:

- Mozart, *Flute and Harp Concerto in C major, K. 299/297c*: 2nd movement (harp)
- Saint-Saëns, *Carnival of the Animals*: 'Fossils' (xylophone), 'Aquarium' (glockenspiel)
- Dvořák, *Symphony No. 9 ('From the New World')*, Op. 95: 2nd movement (cor anglais)
- Tchaikovsky, *The Nutcracker*, Op. 71, 'Chinese Dance' (piccolo)

Single and double reed instruments

With the exception of the flute and piccolo, woodwind instruments use reeds to make their sound.

- The clarinet uses a single reed, which is a very thin piece of wood that vibrates against its mouthpiece.
- The oboe, cor anglais and bassoon use a double reed: two thin pieces of wood, bound together, that vibrate against each other to create the sound.



Exercise 1 Circle the correct answer for each question.

- | | | | | | |
|----------|--|----------------|-------------|-----------------|------------|
| a | Which instrument is a smaller relative of the flute? | oboe | cor anglais | <u>piccolo</u> | harp |
| b | To which instrument is the cor anglais related? | flute | <u>oboe</u> | clarinet | piccolo |
| c | To which orchestral family does the harp belong? | <u>strings</u> | woodwind | brass | percussion |
| d | Which woodwind instrument uses a single reed? | flute | oboe | <u>clarinet</u> | bassoon |

Exercise 2 For each instrument listed below, write D (definite pitch) or I (indefinite pitch) to describe their sound.

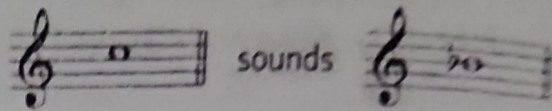
| | | | |
|-----------|---|------------|---|
| bass drum | I | side drum | I |
| triangle | I | xylophone | D |
| celesta | D | tambourine | I |
| castanets | I | timpani | D |
| marimba | D | tam-tam | I |

i Transposing instruments

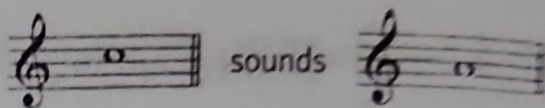
We discovered in Chapter 3 that some instruments are **transposing instruments**. This means that the sound they make is different in pitch from the notes written in their music.

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**.

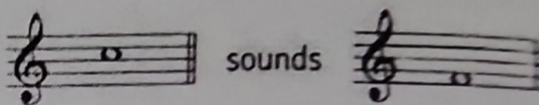
- The **trumpet** and **clarinet** are usually in **B \flat** . They sound a **major 2nd lower** than written.



- 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.

Exercise 3 For each instrument, tick (✓) one box to indicate whether it is a transposing or a non-transposing instrument.

| Instrument | Transposing | Non-transposing |
|-------------|-------------------------------------|-------------------------------------|
| violin | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| cello | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| flute | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| clarinet | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| cor anglais | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| bassoon | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| horn | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| trumpet | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| timpani | <input type="checkbox"/> | <input checked="" type="checkbox"/> |



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).

Sullivan/Taylor

SOPRANO
ALTO

TENOR
BASS

Sink and scat-ter, clouds of war, Sun of peace, shine full and far.

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

↑ ↓

LOWEST

Soprano
Mezzo-soprano
Alto
Tenor
Baritone
Bass

Theory in sound

Listen to music written for different voice types, such as an operatic solo for a soprano or baritone. Mozart's aria, 'Der Hölle rache' (For the Queen of the Night) from *The Magic Flute*, K. 620, is an example of a soprano solo; listen out for the repeated high Cs and the top F.

Exercise 4 Circle TRUE or FALSE for each statement.

- a The voice with the highest range is the alto. TRUE FALSE
- b The mezzo-soprano is lower in range than the soprano. TRUE FALSE
- c The baritone is the voice with the lowest range. TRUE FALSE
- d The bass is lower in range than the tenor. TRUE FALSE
- e The tenor is higher in range than the alto. TRUE FALSE
- f The baritone is higher in range than the bass. TRUE FALSE

Exercise 5 Circle the correct answer for each question.

- a** Which clef is most commonly used by the viola? treble alto tenor bass
- b** Which of these is a percussion instrument? viola harp cor anglais castanets
- c** To which family does the piccolo belong? strings woodwind percussion brass
- d** Which is the lowest sounding string instrument? violin viola double bass cello
- e** Which of these instruments might be played *pizzicato*? cello clarinet trombone timpani
- f** Which of these voices is higher in range than the alto? soprano tenor baritone bass

Test your progress

Create a table of all the new instruments at Grade 5.
Ask your teacher or a friend to test you on all of the details.

| Instrument name | Family | Clef(s) used | Interesting facts |
|-----------------|------------|----------------------|-------------------|
| Violin | Strings | G | non transposing |
| Viola | Strings | C | non transposing |
| Cello | Strings | C | non transposing |
| Double-Bass | Strings | C | transposing |
| Oboe | Woodwinds | F | non transposing |
| Clarinet | Woodwinds | Bb | transposing |
| Flute | Woodwinds | C | non transposing |
| Bassoon | Woodwinds | F | non transposing |
| Trumpet | Brass | F | transposing |
| Horn | Brass | F | transposing |
| Trombone | Brass | Bb | non transposing |
| Tuba | Brass | C | non transposing |
| Morimba | Percussion | C/Bb | non transposing |

Smart tip

Ornaments can be added to notes of different time values, and in different time signatures. While the shape of the ornament stays the same, the time values used when they are written out may be different from the examples opposite.

Exercise 1 Tick (✓) one box to name each of the written-out ornaments, which are marked with brackets.

a

- | | | | | | | | | |
|---|--|--------------------------|---|--|-------------------------------------|---|--|-------------------------------------|
| 1 | | <input type="checkbox"/> | 2 | | <input checked="" type="checkbox"/> | 3 | | <input type="checkbox"/> |
| 2 | | <input type="checkbox"/> | 3 | | <input type="checkbox"/> | 1 | | <input checked="" type="checkbox"/> |
| 3 | | <input type="checkbox"/> | 1 | | <input type="checkbox"/> | 2 | | <input checked="" type="checkbox"/> |

b

- | | | | | | | | | |
|---|--|-------------------------------------|---|--|-------------------------------------|---|--|-------------------------------------|
| 1 | | <input checked="" type="checkbox"/> | 2 | | <input type="checkbox"/> | 3 | | <input type="checkbox"/> |
| 2 | | <input type="checkbox"/> | 3 | | <input checked="" type="checkbox"/> | 1 | | <input type="checkbox"/> |
| 3 | | <input type="checkbox"/> | 1 | | <input type="checkbox"/> | 2 | | <input checked="" type="checkbox"/> |

c

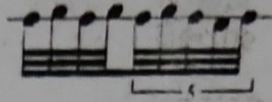
- | | | | | | | | | |
|---|--|-------------------------------------|---|--|-------------------------------------|---|--|--------------------------|
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| 2 | | <input type="checkbox"/> | 3 | | <input checked="" type="checkbox"/> | 1 | | <input type="checkbox"/> |
| 3 | | <input type="checkbox"/> | 1 | | <input checked="" type="checkbox"/> | 2 | | <input type="checkbox"/> |

Theory in sound

Have you played any pieces containing ornaments? If so, try playing them now; can you hear how the different types of ornaments create different decorative shapes?

Smart tip

Trills often end with a closing pattern that uses the notes **below** the main note.



Exercise 2 Write the names for the written-out ornaments, which are marked with brackets.

a

- 1 turn 2 Appoggiatura
3 Acciaccatura 4 tr.

b

- 1 Appoggiatura 2 Acciaccatura
3 Turn 4 Upper Mordent

Challenge!

Can you rewrite the music in parts **a** and **b** above, using the appropriate signs in place of the written-out ornaments? The first bar of each is given to get you started.

a

b

The following exercises include some terms and signs encountered in Grades 1, 2, 3, 4 and 5

Exercise 3 Answer the following questions.

- a What does *attacca* mean? *go straight on*
- b What is the Italian term for 'in an undertone'? *sotto voce*
- c What is the Italian word for 'broadly'? *Largamente*
- d What does *perdendosi* mean? *dying away*
- e What does *allegro con spirito* mean? *fast with spirit*
- f What does *largo e sonoro* mean? *slow, stately with rich tone*
- g What does *sempre cantando* mean? *always singing*
- h What is the Italian term for 'at choice'? *ad libitum*
- i What does *morendo a niente* mean? *dying away to nothing*
- j What does *quasi* mean? *as if, resembling*
- k Give another Italian word that has a similar meaning to *smorzando*. *perdendosi*
- l What does *rfz* mean? *rinforzando*
- m What is the Italian for 'singing'? *cantando*
- n What does *largamente con dolore* mean? *broadly with grief*
- o What Italian word means sorrowful? *doloroso*

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 |
|----------------|---------------------|-----------------------|----------------|
| <i>langsam</i> | slow | <i>adagio/lento</i> | <i>lent</i> |
| <i>lebhaft</i> | lively | <i>vivace</i> | |
| <i>mässig</i> | at a moderate speed | <i>moderato</i> | <i>modéré</i> |
| <i>ruhig</i> | peaceful | <i>tranquillo</i> | |
| <i>schnell</i> | fast | <i>allegro/presto</i> | <i>vite</i> |
| <i>traurig</i> | sad | <i>mesto</i> | |

Theory in sound

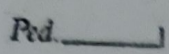
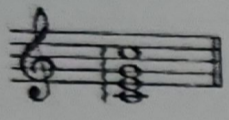
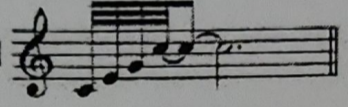
Listen to a recording of Schubert's *Wiegenlied*, D. 498, for an example of a song with the marking, *langsam*. Schubert (1797–1828) wrote over 600 songs (or *Lieder*) in his lifetime, and is well known for his expressive and lyrical style.

Exercise 4 Answer the following questions.

- a What does *langsam* mean? *slow*
- b What is the German word for 'sad'? *traurig*
- c What does *lebhaft* mean? *lively*
- d What is the German word for 'fast'? *schnell*
- e What is a similar German word to *vivace*? *lebhaft*
- f What is a similar Italian word to *ruhig*? *tranquillo*
- g What is a similar French word to *mässig*? *modéré*
- h What is a similar German word to *vite*? *schnell*

i 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:

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

Exercise 5 Tick (✓) one box for each question.

langsam means:

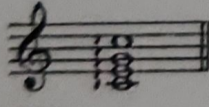
- slow
- light
- moderately
- lively

ruhig means:

- tenderly
- simple
- peaceful
- slow

morendo means:

- agitated
- playful, merry
- calm
- dying away

 means:

- spread the chord from the bottom
- press the left pedal
- spread the chord from the top
- press the right pedal

tranquillo con dolore means:

- calm and slow
- sad and slow
- sad, with grief
- calm, with grief

attacca means:

- at choice
- with determination
- go straight on
- repeat from the beginning

Exercise 5 Continued.

vite means:

- quick
- playful, joking
- gradually getting quicker
- slow

lebhaft is similar to:

- vivace*
- allegretto*
- andante*
- lento*

m.d. means:

- with pedal
- an octave higher
- with the right hand
- with the left hand

Which is fastest?

- andante*
- allegro*
- mässig*
- lent*

Which is slowest?

- modéré*
- schnell*
- langsam*
- allegro*

tre corde means:

- press the right pedal
- press the left pedal
- release the right pedal
- release the left pedal

Which word means 'sad'?

- largamente*
- lebhaft*
- traurig*
- morendo*

sonoro means:

- resonant, with rich tone
- with passion
- singing
- simple, plain

Which word means 'without'?

- con*
- schnell*
- sotto*
- senza*

Your progress

Congratulations! You've completed all the work for Grade 5 on Terms, Signs & Instruments.
Turn to the Practice Exam Paper on page 85 if you'd like to try some sample exam questions.

9 MUSIC IN CONTEXT

i Putting it all together

The last question of the Grade 5 exam is a Music in Context question, in which you will be asked some questions about the things you can see in a passage of music. All of the questions will be about topics covered in this book or in previous grades.

Exercise 1 Study this music for piano and then answer the questions that follow.

Chopin

Andante sostenuto

The musical score consists of two staves: a treble clef staff and a bass clef staff. The key signature has one flat (B-flat), and the time signature is 3/4. The tempo is marked 'Andante sostenuto'. The dynamics include piano (*p*) and fortissimo (*f*). Performance instructions include 'Ped.' (pedal) markings, a trill in measure 5, and 'poco rit.' (poco ritardando) in measure 7. Measure numbers 1 through 8 are clearly marked. The piece concludes with 'etc.'.

a Compare the following bars to bar 1 of the right-hand part, then tick (✓) the one correct statement.

A *Andante sostenuto*

B *Andante sostenuto*

Andante sostenuto

C

- A, B and C are correctly written one octave lower.
- Only A is correctly written one octave lower.
- Only A and C are correctly written one octave lower.
- Only C is correctly written one octave lower.

b Circle TRUE or FALSE for each statement.

The music begins in the key of E \flat major.

TRUE FALSE

The pedal should only be used in bar 1.

TRUE FALSE

The leading note of D minor is played in bar 5.

TRUE FALSE

The music gets a little slower in bar 7.

TRUE FALSE

Bar 7 contains a sextuplet.

TRUE FALSE

c Which instrument is best suited to play the right-hand phrase in bars 7–8 (marked) so that it sounds at the same octave? Tick (✓) one box.

trombone

cello

timpani

oboe

d How many times does the leading note of B \flat major appear in the right-hand part? Tick (✓) one box.

1

2

3

4

e Complete the following two sentences by adding a number to each.

There is an upper mordent in bar 4

The left-hand part of bar 4 has the same notes and rhythm as bar 2

Exercise 2 Study this music for piano and then answer the questions that follow.

Lent Debussy

a Compare the following bars to the right-hand part of bar 5, then tick (✓) the one correct statement.

A

B

C

A, B and C are correctly written two octaves lower.

Only A is correctly written two octaves lower.

Only B and C are correctly written two octaves lower.

Only C is correctly written two octaves lower.

b Circle TRUE or FALSE for each statement.

The music should be played slowly.

TRUE FALSE

In bar 5, the hands play the same notes two octaves apart.

TRUE FALSE

The music gets louder in bar 7.

TRUE FALSE

The final chord in bar 8 is chord IV in E major.

TRUE FALSE

c Which instrument is best suited to playing the left-hand phrase in bar 5 (marked) so that it sounds at the same octave? Tick (✓) one box.

oboe

trumpet

cello

flute

d How many times does the dominant note in the key of C# minor appear in the right-hand part of bar 5? Tick (✓) one box.

1

2

3

4

e Complete the following two sentences by adding a number to each.

There are 'spread' chords in bar 2 and bar 4

Bar 6 begins with the interval of a perfect 5th in both hands.

Exercise 3 Study this music for violin and piano and then answer the questions that follow.

Andantino Albéniz

Violin

Piano

1 2 3 4

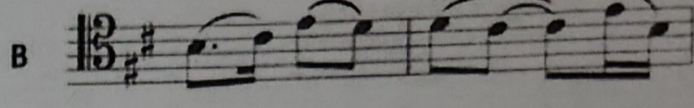
mp

5 6 7 8

9 10 etc.

a Compare the following bars to the violin part in bars 7–8, then tick (✓) the one correct statement.

A 

B 

C 

- A, B and C are correctly written two octaves lower.
- Only A is correctly written two octaves lower.
- Only B and C are correctly written two octaves lower.
- Only C is correctly written two octaves lower.

b Circle TRUE or FALSE for each statement.

- The tempo should be faster than *allegro*. TRUE ~~FALSE~~
- The violin begins with three down-bows. ~~TRUE~~ FALSE
- The right-hand piano part in bar 7 is made up entirely of major 3rds. TRUE ~~FALSE~~
- The left-hand piano part contains acciaccaturas. ~~TRUE~~ FALSE
- The highest note in the violin part is a G. TRUE ~~FALSE~~

c Which instrument is best suited to play the violin part so that it sounds at the same pitch? Tick (✓) one box.

- horn bassoon flute cello

d How many times does the submediant note in the key of D major appear in the violin part? Tick (✓) one box.

- 1 2 3 4

e Complete the following two sentences by adding a number to each.

There are upper mordents in bar 8

There is an augmented 4th in the violin part in bar

2

Exercise 4 Study this music for piano and then answer the questions that follow.

Schubert

Allegro moderato

a Compare the following bars to the left-hand part of bar 1, then tick (✓) the one correct statement.

A B C

- A, B and C are correctly written at the same pitch.
- Only A and B are correctly written at the same pitch.
- Only B and C are correctly written at the same pitch.
- Only A and C are correctly written at the same pitch.

b Circle TRUE or FALSE for each statement.

- The music should be repeated from the beginning. TRUE FALSE
- The left-hand part should always be played detached. TRUE FALSE
- The right-hand part contains major 6ths in bar 4. TRUE FALSE
- The right-hand part contains appoggiaturas. TRUE FALSE
- The key of the music is C minor. TRUE FALSE

c Which instrument is best suited to play the right-hand phrase in bar 1 so that it sounds at the same octave? Tick (✓) one box.

bassoon oboe cello tuba

d How many times does the subdominant note in the key of F minor appear in the left-hand part? Tick (✓) one box.

1 2 3 4

e Complete the following two sentences by adding a number to each.

There are accented notes in bar 2 and bar 4

Bar 3 has the same rhythm and articulation as bar 1 and bar 5

Congratulations!

You've completed all the work for ABRSM Grade 5 Music Theory. If you haven't already done so, test your knowledge and understanding with the ABRSM Practice Exam Paper on page 85.

Grade

5

Total marks (out of 100)

Practice Exam Paper

ABRSM Grade 5



1 Rhythm

1.1 Circle the correct time signature for each of these bars.

(a)

6
4

4
4

5
4

(b)

6
8

7
8

4
4

(c)

12
8

7
4

5
4

1.2 Here is a bar in simple time:

(1)

Which of the following shows the bar above correctly rewritten in compound time? Tick (✓) one box.

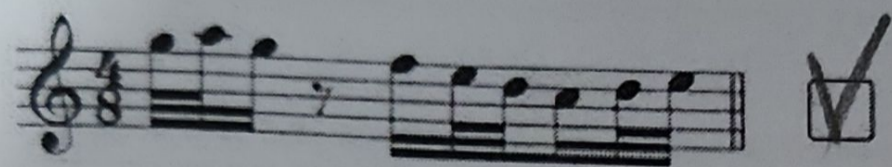
1.3 Complete the following two sentences by adding a number to each.

(a) In $\frac{12}{8}$ there are 4 dotted-quaver beats in a bar.

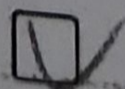
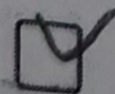
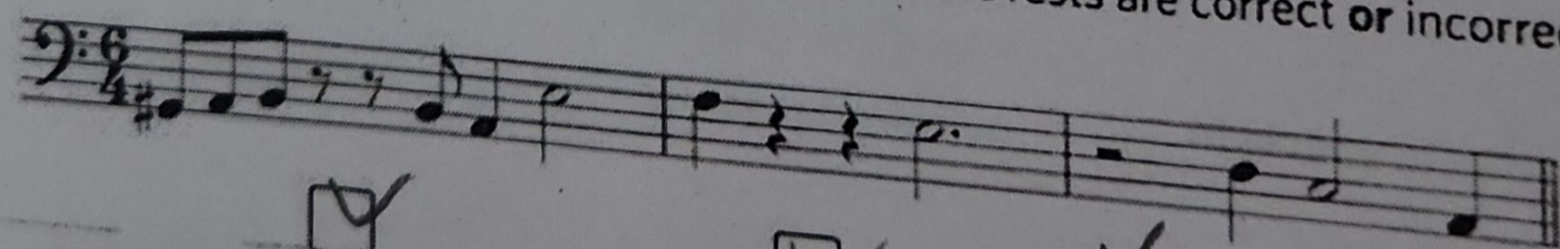
(b) A dotted-semibreve is equal to 3 minim(s).

(2)

1.4 Tick (✓) one box to show which bar is grouped correctly.

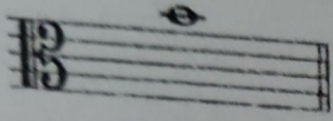


1.5 Tick (✓) or cross (X) each box to show whether the rests are correct or incorrect.



2 Pitch

2.1 Tick (✓) one box to show the name of this note.



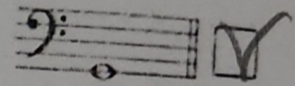
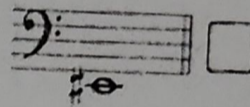
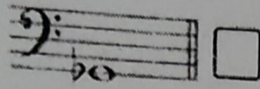
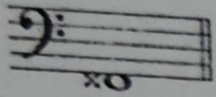
C

G

A

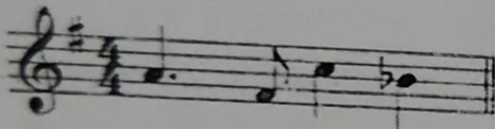
B

2.2 Tick (✓) one box to show the correct enharmonic equivalent of this note.



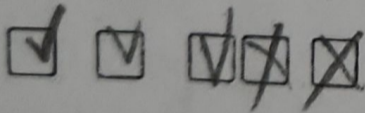
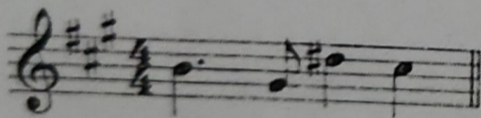
(1)

2.3 Here is a bar at sounding pitch for the trumpet in Bb.

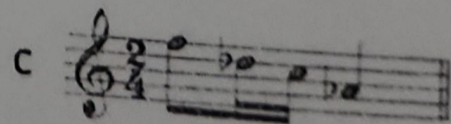
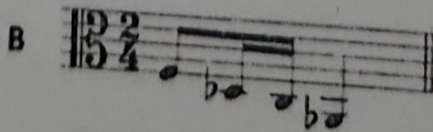
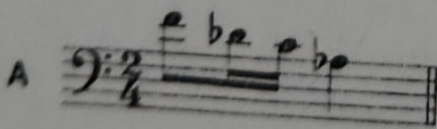


(5)

This bar has been transposed up a major 2nd to be at written pitch. There are some mistakes. Put a tick (✓) or cross (X) underneath the key signature and each note to show whether each is correct or incorrect.



2.4 Compare bars A, B and C, then circle TRUE or FALSE for each of the three statements.



(3)

(a) A and B are at the same pitch

TRUE

FALSE

(b) B is one octave lower than C

TRUE

FALSE

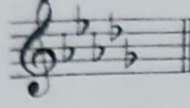
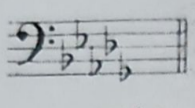
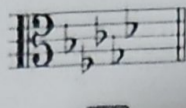
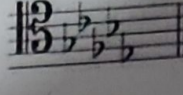
(c) C is one octave higher than A

TRUE

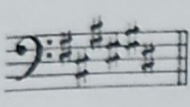
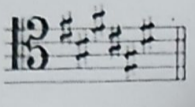
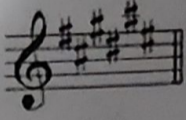
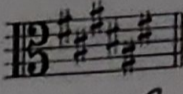
FALSE

3 Keys and Scales

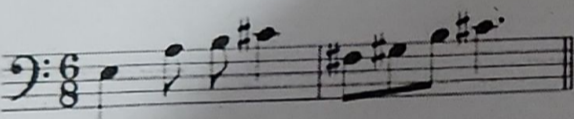
3.1 Tick (✓) one box to show the correctly written key signature of D \flat major. (1)

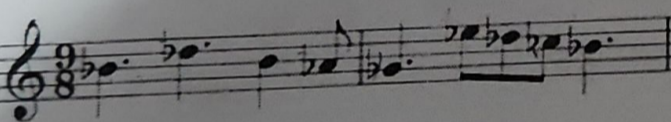





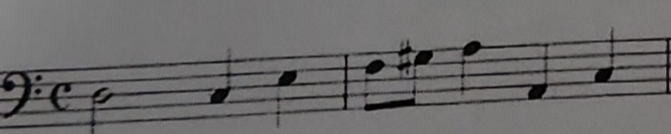
3.2 Tick (✓) one box to show the correctly written key signature of F \sharp major. (1)

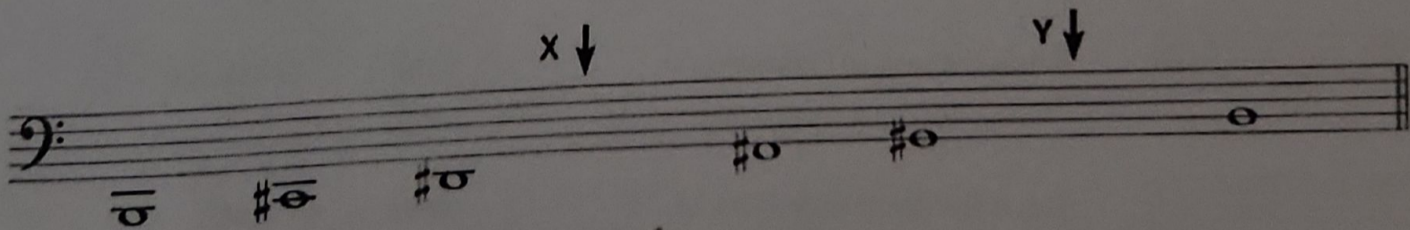
3.3 Circle the correct key of each of these three melodies. (3)

(a)  E minor B major **A major** D major

(b)  **B \flat minor** G \flat major D \flat major A \flat major

(c)  **A minor** G major D major D minor

3.4 Tick (✓) one box for X and one box for Y to show which notes are needed to complete the scale of B major. (2)



| | | | | |
|---|--|-------------------------------------|-------------------------------------|---------------------------------------|
| X | F <input type="checkbox"/> | E \times <input type="checkbox"/> | E \sharp <input type="checkbox"/> | E <input checked="" type="checkbox"/> |
| Y | A \sharp <input checked="" type="checkbox"/> | A <input type="checkbox"/> | F <input type="checkbox"/> | F \sharp <input type="checkbox"/> |

4.1 Tick (✓) one box to name each interval.

(3)

(a)

- major 10th
- compound major 2nd
- minor 9th
- augmented 2nd

(b)

- augmented 11th
- compound perfect 5th
- perfect 11th
- major 11th

(c)

- minor 7th
- major 7th
- compound major 7th
- major 6th

4.2 Circle the type of each interval.

(3)

(a)

- perfect major minor diminished augmented

(b)

- perfect major minor diminished augmented

(c)

- perfect major minor diminished augmented

4.3 Write notes to form the named intervals. Your note should be higher than the given note.

(4)

(a)
compound perfect 5th

(b)
augmented 7th

(c)
minor 13th

(d)

major 3rd

5 Chords

/10

5.1 Indicate suitable chords for the two cadences in the following melody by writing either I, II, IV or V in each of the five boxes underneath the staves.

(5)

Handwritten chord symbols for the two staves:

- Staff 1: I, V
- Staff 2: II, V, I

5.2 Tick (✓) one box to name each cadence.

(2)

D major

(a)

plagal perfect imperfect

C major

(b)

imperfect plagal perfect

5.3 Tick (✓) one box to name each of the three marked chords. The key is G major.

(3)

Chord identification options:

- (a) Chord A: Vc Ic Ib Vb
- (b) Chord B: IIa IIb IVc Va
- (c) Chord C: Ia Ic Va IVc

6 Terms, Signs and Instruments

6.1 Tick (✓) one box for each term/sign.

doloroso means:

calm

pleasant

tenderly

sorrowful

a niente means:

to nothing

less

at choice

more

cantando means:

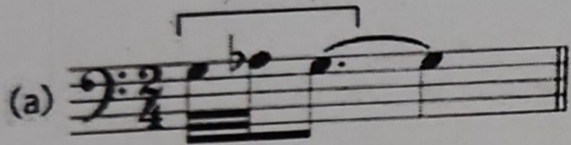
resonant

singing

dying away

rhythmically

6.2 Tick (✓) one box to name each of the **two** written-out ornaments, which are marked with brackets. (2)

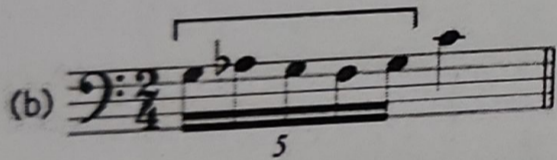


trill

upper mordent

acciaccatura

appoggiatura



trill

acciaccatura

appoggiatura

upper turn

6.3 Circle **TRUE** or **FALSE** for each of the following **five** statements. (5)

(a) The oboe uses a double reed

TRUE

FALSE

(b) The xylophone produces sounds of definite pitch

TRUE

FALSE

(c) The clarinet has a higher range than the bassoon

TRUE

FALSE

(d) The cello is the lowest-sounding string instrument

TRUE

FALSE

(e) A flute might be played 'con sord.'

TRUE

FALSE

7 Music in Context

Study this music for flute and piano and then answer the questions that follow.

Allegro scherzando

7.1 Compare the following bars to bar 1 of the flute part, then tick (✓) the **one** correct statement.

(1)

- Only **A** is correctly rewritten two octaves lower
- Only **B** and **C** are correctly rewritten two octaves lower
- A**, **B** and **C** are correctly rewritten one octave lower
- Only **B** and **C** are correctly rewritten one octave lower

extract = aunti

7.2 Circle **TRUE** or **FALSE** for each of the following **five** statements about the music.

(5)

(a) The music should be performed playfully

TRUE

FALSE

(b) All the notes in bar 1 should be played slightly separated

TRUE

FALSE

(c) The highest note in the extract is an E

TRUE

FALSE

(d) The first four notes in the left-hand part of bar 7 form part of a chromatic scale

TRUE

FALSE

(e) The flute plays an appoggiatura in bar 7

TRUE

FALSE

7.3 Which other instrument is best suited to play the flute part so that it sounds at the same pitch?
Tick (✓) **one** box.

(1)

double bass

violin

horn

tuba

7.4 How many times does the **supertonic** note in the key of C major appear in the flute part?
Tick (✓) **one** box.

(1)

2

3

5

6

7.5 Complete the following **two** sentences by adding a number to each.

(2)

(a) The note in the flute part of bar 4 is worth 24 demisemiquavers.

(b) There is an instruction to play suddenly quiet in bar 4.

End of exam

