Grade Five Music Theory - Lesson 1: Good Notation

What is Notation?

Notation is the system of symbols we use in order to write down music so that other people can play it.

Notation consists of the stave, notes, rests, bar lines, markings for tempo, dynamics and phrasing, clefs, indications of key and time, ornaments and other indications which can be for specific instruments, like how to use a bow, pedal or mute.

For your grade 5 theory exam, you'll need to understand all of the common notation symbols, and you need to be able to **handwrite** music in a clear and readable way. Not only will you lose marks in the exam if you make notation mistakes, but you may also lose marks if your writing is too messy to read easily.
You probably already know most of the common symbols, as you'll have come across them in the music you've been playing or singing up to now. This lesson is a collection of all the symbols you need to know- try testing yourself to make sure there aren't any gaps in your knowledge before you take your exam!

Some items need more detailed study, and there are complete lessons available on them. Just follow the links on this page.

You'll find foreign language terms in the next lesson Grade 5 - Musical Terms.

Tip! When handwriting music, always use a pencil. Choose one which is dark and easy to rub out, and make sure it is sharpened!

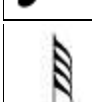
Note Values

Each different shape of note has a name and a value. There are two name systems in use- one is used in the UK and the other in the USA.

The Grade 5 Theory exam papers always use both systems. Here are the main note values in order, and their names, starting with the longest note value:

Each note is worth half the value of the note before it in the list. So, a crotchet/quarter note is worth 2 quavers/eighth notes, and a minim/half note is worth 4 quavers/eighth notes.

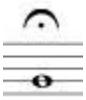
	UK Note Name	US Note Name
	Breve	Double whole
	Semibreve	Whole

	Minim	Half
	Crotchet	Quarter
	Quaver	Eighth
	Semiquaver	Sixteenth
	Demisemiquaver	Thirty-second
	Hemidemisemiquaver	Sixty-fourth

Dotted Notes and Pauses

Notes can have one or two dots placed after them. A dot increases the value of the note by 50%. So, a dotted crotchet/quarter note is equal to 1.5 crotchets/quarter notes (or three quavers/eighth notes), and a dotted minim/half note is 1.5 minims/half notes (or three crotchets/quarter notes). A second dot increases the value of the note by 50% again. So, a double dotted crotchet/quarter note is worth 1.75 (or one and three-quarters) crotchets/quarter notes.

Notes can be **tied** together, with a small curved line. The values of tied notes should be added together and played without a break.
Any note value can be increased by a short but indefinite amount of time with the use of the **pause** (or "fermata") symbol:



The pause may be placed above or below the stave. Below the stave, it is drawn the other way up:



For Grade 5 Theory, you need to know all the names, (either UK or US- you don't need to learn both systems), and the values each note represents. You'll need to be able to calculate the values of several different notes added together.

Rests

Rests work just like notes in notation, except of course you don't have to play anything when there is a rest! Here are the rests, in the same order as the notes were written in point 2 above.

	UK Rest Name	US Rest Name
	Breve	Double whole
	Semibreve	Whole
	Minim	Half
	Crotchet	Quarter
	Quaver	Eighth
	Semiquaver	Sixteenth
	Demisemiquaver	Thirty-second
	Hemidemisemiquaver	Sixty-fourth

Rests can be dotted in exactly the same way as notes can.

If you find it difficult to draw a crotchet/quarter rest, you might find it easier to use the "handwritten" version, which is a **backwards** quaver/eighth rest:



If you can't remember whether minim/half rests hang off or sit on the line, try to remember it this way: "4 is higher than 2"- so a 4 beat rest is higher up the stave than a 2 beat rest. Whole/semibreve rests hang off the second line from the top, while half/minim rests sit on the middle line.

All other rests should be placed more or less centrally on the stave, (except where you have multiple parts on one stave- see Lesson 9.)

The semibreve/whole rest can be used to show a complete bar of rest in **any** time signature (except 4/2 which needs 2 of them). The whole bar rest is placed in the middle of a bar.

Barlines and Navigating through a Piece of Music

Barlines help you when you're reading music because they break the music up into small chunks which take up the same length of time.

Barlines are also used to divide longer music up into sections, and to show you which bars to repeat, if any.

Symbol	Explanation
	Single, thin barline. Used as a general divider into bars.
	Double thin barline. Shows the end of a section, or when there is a key signature change.
	Repeat barlines. On reaching the left-facing (second) pair of dots, the music should be repeated from the right-facing (first) pair of dots. If there are no right-facing dots, the music should be repeated from the beginning.
	Double barline, thin + thick. Only used at the very end of a piece.

Other symbols are used to help you navigate your way through the score. You need to know that "Da" and "Dal" mean **from** (the), and "Al" means **to** (the).

D.C.	D.C. stands for Da Capo, which means "from the head"; or in other words, go back to the beginning.
D.S.	D.S. stands for Dal Segno (pronounced SEN-yo), which means "from the sign"; or go back to the sign.
	This is the "sign" referred to by D.S.
al Coda	Play until you see the Coda sign.
	Coda sign. Jump from here to the Coda (at the end of the piece), which will also be marked with this sign.
al Fine	Play until the end.

The symbols above are used together to create precise instructions. You might see "Dal segno al fine" (go back to the sign and then play till the end), or "Da capo al coda" (go back to the beginning, play until you see the coda sign, then jump to the coda at the end of the piece). You can see that using the Italian abbreviations is much shorter than the English!

Clefs

You need to know about the treble, bass, alto and tenor clefs for Grade 5 Theory. I'm guessing that you're fairly comfortable with reading the treble clef already! If you're not sure about the bass clef, have a look at the extra lesson Learn the Bass Clef. The alto and tenor clefs are covered in Lesson 4 – Clefs.

Key Signatures and Time Signatures

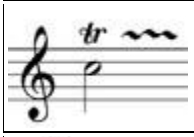
Key and time signatures are a big deal, and there's quite a lot to learn about them. You can find a whole lesson on key signatures > Lesson 5 – Key Signatures, and on time signatures > Lesson 3 – Time Signatures.

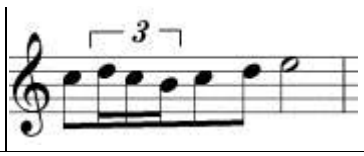
Ornaments

Ornaments are special symbols written into music to make it sound more decorated. They occur mostly in music from the Baroque, Classical and Romantic eras.

(In the old days of Grade 5 Theory, you used to have to know how to write out the exact notes represented by an ornament, but luckily these days all you have to do is recognise the ornaments by name or how they are written out!)

Here's a summary, with a notated example of how they are played.

Symbol	Name	Execution
	Trill	
	Appoggiatura (a-po-ja-TU-ra)	
	Upper mordent (play the note and the note above)	
	Lower mordent (play the note and the note below)	
	Acciaccatura (a-cha-ka-TU-ra)	

	Turn	

Ornaments are always written **above** the stave.

Tempo

The tempo (or speed) of a piece of music is indicated at the beginning of the piece, and changes might occur during the piece. Tempo can be indicated with words (see Lesson 2 – Musical Terms for the grade 5 terms), or symbols. Using symbols, tempo is indicated with a note value and the metronome marking it requires, for example like this:



A metronome marking of 60 means 60 clicks per minute (or one every second). If you write a tempo using a metronome marking, be sure to use a number which actually exists on a traditional metronome. Check an online metronome if you don't have one at home.

Dynamics

Dynamics (or volume) can be indicated either in words (see Lesson 2 – Musical Terms for all the terms you need to know for grade five), with abbreviations of those words, or with symbols.
Immediate changes in dynamics are usually indicated with abbreviations:

Abbreviation	Term	Meaning
ppp	Pianississimo	Very very quiet
pp	Pianissimo	Very quiet
p	Piano	Quiet
mp	Mezzo piano	Moderately quiet
mf	Mezzo forte	Moderately loud
f	Forte	Loud
ff	Fortissimo	Very loud
fff	Fortississimo	Very very loud

In addition, you might see sf which stands for "sforzando" and means play one note very loudly, and fp which means play loudly, but then immediately make the note quiet.

Gradual changes in dynamics are often indicated with hairpins like this:

 Gradually get louder



Gradually get quieter

Hairpins are more precise than words because they can show more exactly where the change in dynamic starts and finishes.

Phrasing and Articulation

Music for all instruments can be **phrased** . Phrase marks are curved lines which group together notes which belong in one phrase, like this:



Individual notes can be played in a huge number of ways, and so there are several “articulation” indications to show what you need to do. Some articulation indications only apply to certain instruments, while others are pretty much universal.

Here are the main articulation markings:

Symbol	Term	Meaning
	Staccato	Detached (distinctly separate from the next note), and short.
	Staccatissimo	Extremely detached and short.
	Tenuto	Hold the note for its full length.
	Accent	Attack the note with extra force.
	Marcato	Detach the note, but don’t shorten it.

When a note has no specific articulation marking on it at all, its articulation depends on the instrument. No markings for a wind or brass instrument means the note should be "tongued", and for a string player it means "bowed".

Pedals, Bows and Mutes.

Many instruments employ extra bits and pieces to further the range of sounds they can produce. Pianos have got either 2 or 3 pedals, brass and string instruments can use mutes, and most string instruments can be played with either a bow or the fingers.

Pedal Marks

All pianos have a left and a right pedal.

On a grand piano, the left pedal reduces the volume by causing only one string to be hit instead of the normal three, and is called “una corda”, meaning “one string” (think of “one cord”).

On an upright piano the mechanics are a little different, but the overall effect is similar. This pedal is often referred to as the "soft pedal".

The right pedal is called the “damper” or "sustain" pedal, and causes the strings to continue vibrating after the keys have been released. (Some people call this the “loud” pedal, but that’s not the right name for it!)



Grand pianos have a third pedal, called the “sostenuto” pedal (don't confuse this with "sustain" pedal!)

This enables the player to let the sound continue on some notes, but for other notes to be unaffected.

There is no standard way to mark pedal indications for the piano, but here are some accepted methods, all of which are written below the grand staff:

Symbol	Meaning
Ped.	Press the damper (right) pedal.
✱	Release the damper pedal.
P	Press the damper pedal at ‘P’, hold, release at the end.
	Press the damper pedal, hold, press again, hold, release.
Una corda / u.c.	Press the *una corda* pedal.
Tre corde / t.c.	Release the *una corda* pedal (literally, this means “three strings”).
Sos.	Press the *sostenuto* pedal, hold, release.

Bowing Marks



Bowing marks are, of course, vitally important for all string players to know, and there are many! You can find a comprehensive list here, http://beststudentviolins.com/terms.html.

For Grade 5 Theory, all you need to know are the most common markings:

V	Up bow. Start playing with an upward movement of the bow.
⊓	Down bow. Start playing with a downward movement of the bow.
Pizz.	"Pizzicato"- pluck the string with your fingers.
Arco	Play with the bow (after a pizzicato marking).

To remember the up and down bow markings, notice that the **up** bow symbol starts raised but the **down** bow starts low.

You won't have to use these markings when writing out music in the exam, but you might be asked to recognise and name them.

Mutes

Mutes are devices which the player can use to soften or quieten the sound of the instrument. Mutes are generally only used on string and brass instruments.



Here's a picture of a trumpet and a selection of mutes which all produce different sound effects.

The directions you need to learn are:

Con sordino/Con sord. = Use the mute

Senza sordino/Senza sord. = Stop using the mute

How to Write Neat Music

Writing good, clear notation is really important. You'll lose marks if your handwritten music is messy, difficult to read or contains errors.

Follow these guidelines to help you write beautiful manuscript:

- All notes have a head, most have a stem, and some have a tail.
- Breves (double whole notes) and semibreves (whole notes) only have a head.
- Minims (half notes) and crotchets (quarter notes) have a head and a stem.
- Quavers (eighth notes) and all smaller notes have a head, a stem and a tail.
- Note heads are **not** perfectly round- they should look like these (but smaller!) 
- Make the stems of your notes the **same** length. As a rough guide, a note written in the bottom space should have a stem which reaches up to the top line:

- Notes on ledger lines should have stems which reach to the **middle** line of the stave.
- Crotchets (quarter notes) and minims (half notes) written below the middle line should have stems **up**, written above the middle line should have stems **down**. If they are written on the middle line itself, they should follow the stem direction of the notes next to them.
- Tails on quavers (eighth notes) and smaller notes are on the **right** side of the stem.
- Sharps, flats and naturals (accidentals) are always written immediately to the left of the note they affect. Accidentals need only be written once within a single bar.
- Use a ruler to draw stems and beam lines neatly.
- Leave a slight space after the barline before placing your first note. Don't put a barline on the far left edge of a single stave.
- Far left bar lines are only used when two or more staves are bound together, for example in piano music.
- Space out your notes relatively to one another. Give a minim (half note) more space than crotchet (quarter note), and so on.
- Spacing is good. The minim (half note) has about twice as much space as the crotchet (quarter note):

- Spacing is wrong. The minims (half notes) and crotchets (quarter notes) have been given the same space and the quavers (eighth notes) have **more** space than the longer notes:

  The minims (half notes) should have a big space after them, the crotchets (quarter notes) should have a medium space, and the quavers (eighth notes) should have the smallest space after each one.

Time Signature Numbers: What do they mean?

The time signature tells you **how many** main beats there are in one bar, and **how long** each main beat is.

A time signature is made up of 2 numbers, one written above the other.

For example, like this:

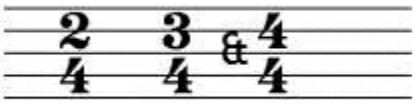


or this



The Lower Number

The lower number represents of a **type of note to count** in each bar:



For example, the lower number 4 tells you that the kind of note we must count is a **crotchet (quarter note)** because the number **4** (in the lower position) stands for crotchet (quarter note).

The numbers you can find in the lower position are:

2= Minim (Half note) count 

4= Crotchet (quarter note) count 

8= Quaver (8th note) count 

16= Semiquaver (16th note) count 

(You might also see a lower number 32 used in pieces that you play, but this doesn't normally come up in the Grade 5 Theory Exam.)

The Upper Number

The upper number tells you **how many** of these notes you need to count. So,

 means we count **2** crotchets (quarter notes) per bar

 means we count **6** quavers (eighth notes) per bar, and

 means we count **4** minims (half notes) per bar.

Where should you write the time signature?

The time signature must appear at the **beginning** of a piece of music, after the clef and the key signature.
The order that these 3 symbols must be written is always **C**lef-**K**ey-**T**ime. This is easy to remember, as the letters **CKT** must be in alphabetical order!



***c**lef - **k**ey - **t**ime*

Although the clef and key signatures must be repeated on every new line of music, the time signature is **not repeated**:



Time Signatures and Beats

Time signatures don't only tell you how many notes there are in a bar. They also give you some very important information:

They tell you **how many main beats per bar there are.**

This is a really important point to grasp, and one that is new to many students at this level. What am I talking about exactly? Take a look at this bar:



How many beats do you think there are in that bar?

If you thought "six", you'd be wrong.

In fact, without the time signature, we can't tell how many beats there are, but we can be sure there aren't six!

Regular and Irregular Time

All time signatures are either **regular** or **irregular.**
Regular time signatures have **2**, **3** or **4** beats per bar. (No other number!)
Irregular time signatures have any number of beats per bar **which is not divisible by 2, 3 or 4.**
In the bar above, you can count six crotchets (quarter notes). Six is divisible by 2 or 3, so it will be a **regular** time signature. There could be either 2 or 3 beats per bar, **depending on the time signature.**
In this bar though, there are 5 crotchets' (quarter notes') worth. 5 is not divisible by 2, 3 or 4, so this will be be an **irregular** time signature.



Irregular time signatures are straightforward: here we have 5 crotchets (quarter notes), so the time signature is 5/4. Remember that the top number tells you how many to count, and the lower number tells you the type of note.
Regular time signatures are a little more tricky. Each regular time signature can be further described as duple, triple or quadruple, and as either simple or compound.

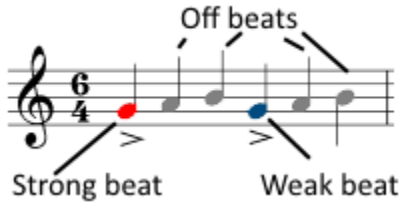
Duple, Triple and Quadruple Time

When there are 2 main beats per bar, the music is in **duple time**. **Triple time** means there are 3 main beats per bar, and **quadruple time** means there are 4.

The first beat of bar receives a stronger stress or accent than the other main beats. The other main beats receive a slightly stronger stress than the "off-beats". This gives us three

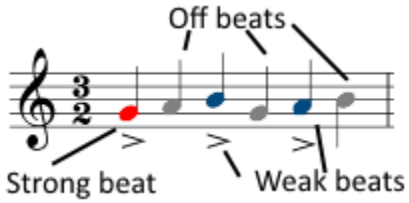
types of beat: strong beat, weak beat, off-beat. When we talk about the "main beats", we mean the "strong and weak beats", and not the off-beats.

Imagine that the above bar with six crotchets (quarter notes) was played with a slight stress on the 1st and 4th notes:



As you can see, this would give us **two main beats per bar**. This means the music is in **duple time**.

On the other hand, we could play it a different way, so that the 1st, 3rd and 5th notes are slightly stressed:



This would give us a total of **three main beats per bar**, so the music is in **triple time**.

Simple and Compound Time

Look again at the 6/4 bar above. What note values would you use if you wanted to write just one note for each of the two main beats?

Each main beat is equal to three crotchets (quarter notes). Three crotchets (quarter notes) written as one single note is a dotted minim (dotted half note).



Look at the 3/2 bar, and do the same thing. What note value is equal to one main beat?

Each main beat is equal to two crotchets (quarter notes). Two crotchets (quarter notes) written as one single note is a minim (half note).



Whenever the main beat splits into three, like in 6/4, the music is in **compound time**.
Whenever the main beat splits into two, like in 3/2, the music is in **simple time**.
Simple time signatures use 2, 3 and 4 as the top number.
Compound time signatures use 6, 9 and 12 as the top number.

This is how you can tell the difference between simple and compound time: the top number of the time signature tells you, and the rhythms in the bar tell you too.

The lower number depends on the top number of course. If you use "6" on the top, because the beat splits into 3, then you use "4" below, because there are six **crotchets** (quarter notes). If you use a "3" on top, because the beat splits into 2, then you use "2" below, because there are 3 **minims** (half notes).
All irregular time signatures are **simple**, because the main beat is always split into 2, not 3.

Clues in the Rhythm

When you need to work out a time signature, or when you are writing a melody yourself, you should understand that the **way** a rhythm is written is dependent on the time signature. The note values should always make it clear **where the main beats are**.

Look again at this 6/4 bar. The two notes fall precisely where the two main beats of 6/4 fall:



But what if we wanted to write that rhythm in a 3/2 bar? Would this be correct?



The answer is "no", because we cannot see where the 2nd or 3rd beats are supposed to be, and the 2nd G falls on an **off beat** (see the diagram above!) Writing the rhythm like this makes it more confusing for the player to understand where the beats are supposed to be.

To write this rhythm correctly in 3/2, first we need to work out where the main beats lie. Currently, the 3rd beat starts somewhere in the middle of the 2nd dotted note. We need to rewrite it, so that the 3rd beat is evident. We can do this by breaking the dotted note up, and using a tie instead.



Now it is easy to see where the 3rd beat starts.

Ties are very useful when you need to work out what a time signature is. The 2nd note of the tie will always **start a new main beat**.

Another very useful clue can be found in **beams**. Beams are those horizontal lines that join together fast notes like quavers (eighth notes) and semiquavers (16th notes).
Generally, notes are beamed together to **make complete beats**. How would you beam together 12 quavers (eighth notes) in 3/2 and in 6/4? Try and work it out for yourself first,

then check below (hover your mouse over the image to see the answer (tap on mobile devices)).





In 3/2, the notes are beamed to the value of a minim (half note), but in 6/4 they are beamed to the value of a dotted minim (dotted half note). This also helps you to see that 3/2 is triple time, and 6/4 is duple.

Summary of Time Signatures

Simple Time

- Top number is 2 (duple), 3 (triple) or 4 (quadruple)
- Main beat is split into 2
- Main beat is not a dotted note

Compound Time

- Top number is 6 (duple), 9 (triple) or 12 (quadruple)
- Main beat is split into 3
- Main beat is a dotted note

What kind of time signature questions are there in Grade 5 Theory?

There are 4 types of question:

- Putting bar lines in an extract with a given time signature.
- Putting a time signature in an extract with given bar lines.
- Rewriting music in a new time signature without changing the rhythmic effect.
- General knowledge questions about the technical names of time signatures.

You won't get every type of question in your exam, but any of them can come up, so be prepared for all of them!

Adding Bar Lines to a Melody

In this type of question, you are given a short melody with the time signature. You need to work out where the bar lines should go, and draw them in neatly. You will be told whether

the melody starts on the first beat of the bar. Here's a typical question (which starts on the first beat of the bar):



1. Look at the **lower** number in the time signature. This tells you the kind of note to count:

$\bar{2}$ = count minims (half notes)

$\bar{4}$ = count crotchets (quarter notes)

$\bar{8}$ = count quavers (eighth notes)

$\bar{16}$ = count semiquavers (16th notes)

2. Next look at the upper number. This tells you **how many** of those notes there need to be in each bar.

3. Count out the required number of notes, then, using a ruler and a sharp pencil, draw a bar line. Repeat, until you get to the end.

In the above melody, the time signature is 4/8. This means each bar needs to have the equivalent of four quavers (eighth notes). Pay attention to the way the notes are beamed - you will **never** draw a bar line through a beamed group. Also pay attention to the **triplet**. Remember that a triplet means there are 3 notes in the space of 2, so the triplet here is worth the same as **two semiquavers** (two 16th notes). (A triplet always consists of three notes, so the quaver G (eighth note G) which is part of the beamed group is **not** part of the triplet).

Have a go at putting the bar lines in place in the above melody, then hover your mouse over the stave to reveal the answer (or tap if you have a mobile device).

Working Out the Time Signature

In this type of question, you are given one or more bars and have to work out what the time signature(s) is (or are). The question could look like this:

The following melody requires a different time signature in each bar. Add the correct time signatures.



1. Work out what value of note is used for the **main beat.** Use clues to help you:

- Look for **beamed notes**. Notes are generally beamed together to add up to **one main beat**. A new main beat **cannot** begin in the middle of a beamed group.
- Look for **tied notes**. The 2nd tied note of a pair will show you where a new main beat falls.
- Look at where longer notes are placed in the bar. A long note (crotchet (quarter note) or longer) will always fall **on the beat**. (Look again at the diagram above, if you need to remember which are the off beats.)
- Look for **triplets**. Triplets are only used in **simple** time signatures.
- Look for **duplets**. Duplets are only used in **compound** time signatures.

The type of note used for the main beat will give you the lower number of the time signature. Remember, this can only be 2, 4, 8 or 16. (16 is very rare and unlikely to come up in the exam).

2. When you have worked out what the main beat is, count up how many times it is used in the bar. This will give you the top number. Remember that if the main beat is an **undotted note**, the time signature will be **simple**, so the top number can only be 2, 3 or 4, (regular time) or a number which doesn't divide into 2, 3 or 4 (irregular time). If the beat is a **dotted note**, the time signature will be **compound**, and the top number can only be 6, 9 or 12.

Use the following table to help you:

	Duple	**Triple**	**Quadruple**
Simple	2/4, 2/2	3/8, 3/4, 3/2	4/8, 4/4, 4/2
Compound	6/8, 6/4	9/8, 9/4	12/8, 12/4

Let's work through the above question.

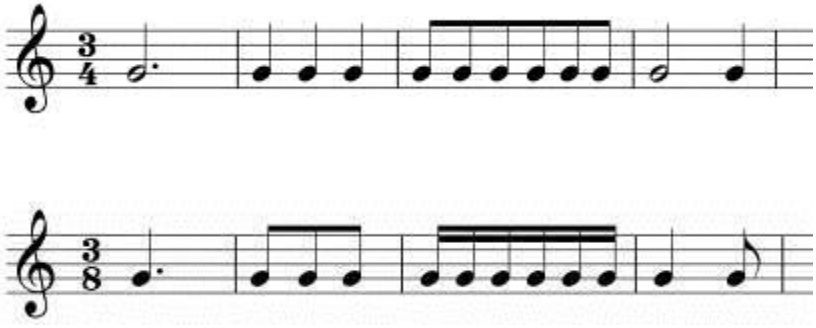
Bar 1. Look at the beamed notes, and add them up. These notes add up to the value of one dotted crotchet (dotted quarter note). This value is likely to be the main beat. Next, see what is left: the crotchet+quaver (quarter note + eighth note) add up to the same value, so the beamed group is equal to half a bar. There are therefore two main beats per bar (duple time), and the main beat is a **dotted note** (compound time). In compound duple time, the top number is 6. We have a total of 6 quavers (eighth notes), so the time signature is 6/8.
Bar 2. The beamed notes add up to one crotchet (quarter note). The other notes are of the same value. The Ab, C and Bb should all fall on the beat, so there are three beats in the bar, and they are crotchet (quarter note) beats. This means the time signature is 3/4.
Bar 3. All the notes are beamed. (It is common to beam notes across a whole bar). There cannot only be **one** beat per bar though, because the minimum number is 2 (duple). Here we have the equivalent of three quavers (eighth notes), so it is simple triple time, with a quaver beat (eighth note beat). The time signature is 3/8. (Notice that 3/8 is simple time, not compound, even though the lower number is 8. Don't forget that it is only the **top** number of a time signature which can distinguish between simple and compound time.)

Bar 4. The quaver (eighth note) triplet is worth one crotchet (quarter note). There are four more beats of the same value, making five in total. Five doesn't divide into 2, 3 or 4, so this bar is irregular. The time signature is 5/4 because there are five crotchets (quarter notes) in the bar.

Rewriting a Melody in a New Time Signature

In this type of question, you are asked to rewrite a short excerpt using a different time signature ***without changing the rhythmic effect.***

This is easy if both the old and new time signatures are simple time. (The grade 4 course explains this in more detail).
Notice how the note values change when **3/4** becomes **3/8**:



Each note value is halved; for example, a minim (half note) becomes a crotchet (quarter note) and a dotted minim (dotted half note) becomes a dotted crotchet (dotted quarter note).

Compound to Simple (and Vice Versa)

The task is more complicated when you are moving from simple time to compound time or vice versa, and when you also have to work out what the new time signature is!

The first step is to look at the given time signature and remind yourself **what kind** of beat and **how many** beats it represents.

Let's say you have an extract in 12/8, to rewrite in simple time. What does 12/8 actually mean?

12/8= 4 **dotted crotchet** (dotted quarter note) beats per bar.
The equivalent **simple** time signature will use the same value of note **without the dot**.
Which time signature uses four undotted crotchets (quarter notes) per bar?

4/4

Each **dotted main beat** in compound time should be written as an **undotted** note in simple:



Now think about how each main beat is divided into sub-beats:

12/8: 1 dotted crotchet (dotted quarter note) =3 quavers (eighth notes) 

4/4: 1 crotchet (quarter note) =2 quavers (eighth notes) 

In order to keep the rhythmic effect when re-writing the rhythm, you might need to use **duplets** or **triplets**.

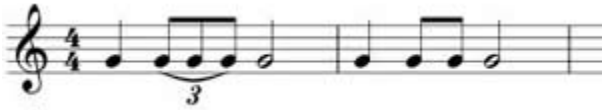
- Duplets are used in **compound** time (3 becomes 2)
- Triplets are used in **simple** time (2 becomes 3)

Let's look at an example.

Duplets are used in compound time, when you need 2 notes instead of 3.



Triplets are used in simple time, when you need 3 notes instead of 2.



Triplets can be made with any note value - not just quavers (eighth notes).

Here is a rhythm in 9/8. How would you rewrite it in a simple time signature? (Hover your mouse over the lightbulb (or tap on a mobile device) to reveal the answers, but try to answer them yourself first!)



What does the time signature 9/8 actually mean? 💡
What is the equivalent **simple** time signature? 💡

The first note F is a dotted crotchet (dotted quarter note). What should this be in the new time signature? 💡
The second main beat is a crotchet+quaver (quarter note + 8th). How should this be written in the new time signature? 💡

The third main beat is the same rhythm as the second main beat (minus the tie).

Here is the whole bar rewritten:



Common Mistakes In Rewriting Time Signatures

The most common mistake I find among students tackling this question, is failing to work out what the new time signature is supposed to be. Often, a student will assume that a bar in 6/8 ought to be rewritten in 3/4, because they contain the same number of quavers (eighth notes) per bar. This is a mistake! 6/8 is duple time, and 3/4 is triple time, so it is impossible to rewrite a rhythm in that way without *changing the rhythmic effect*. Always keep the same number of main beats per bar: duple time **stays** as duple time, and so on.

Rests sometimes make the exercise look more difficult, but you should think about them in exactly the same way as you think about notes.

A common mistake, (especially with compound times), is to forget that a rest sometimes makes up a whole beat with the note **before** it.

In this bar, the 9/8 time signature might make you think that you should group quavers (8th notes) into threes, so you might think the second beat of the bar starts with the quaver (8th) rest:



Look more closely, and you'll see that the first complete beat, (which must be a dotted crotchet (dotted quarter note) beat), is the G **plus** the rest. The second beat is the duplet B - D, and the third beat is C sharp - A.

Rests can be included in duplets and triplets in the same way that notes can. Here's an example:



For a complete table of time signatures, take a look at the chart in our reference section. It includes all time signatures, with examples of rhythms written in those time signatures.

Grade Five Music Theory Lesson 4: Clefs

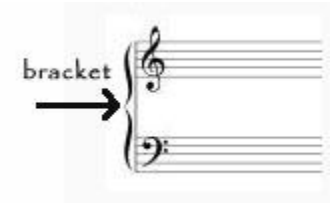
Clefs

To study this lesson you need to be able to read the treble (or 'G') clef and bass (or 'F') clef without difficulty.
If you're not sure about reading the bass clef, you might want to study "Learn the Bass Clef" before you start this lesson.

The Stave, and the Grand Staff

When we write music on a single group of 5 lines, this group is referred to as a stave.

Sometimes we need to use two (or more) **staves,** because the range of an instrument is particularly wide, (for example, the piano or harp.) The staves are connected together on the left-hand side by a bracket, like so:



This is also known as the **grand staff**. The grand staff uses the treble clef and the bass clef.

The Two Main clefs

The most frequently used clefs are **treble clef** and **bass clef**.
The treble clef is also called the 'G' clef, because it encircles the line of music where we find G (**above** middle C):


= G

In the same way, the bass clef encircles the line where we find F (**below** middle C), so it's also called the 'F' clef:

 = F

Historically, these symbols started out as the actual letters 'G' and 'F', but became more stylised over time. Make sure you can draw them correctly!

Octave Clefs

A small "8" hanging below a clef is used to show that the music actually sounds an **octave** lower than indicated.



1: C **above** middle C

2: Middle C



3: Middle C

4: C **below** middle C

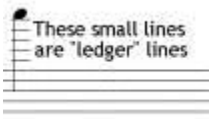
This clef is most often seen in a tenor voice part.

Alto and Tenor Clefs (or "C" Clefs)

Smaller instruments, which play notes mainly above middle C, only use the treble clef. These include the violin, flute, clarinet, oboe and trumpet.

But some bigger, lower-pitched instruments, like the bassoon, trombone or cello, have a range which is partly above and partly below middle C. If we only used the treble or bass clefs for these instruments, we would end up using a lot of ledger lines:

Ledger lines are quite difficult to read, so the **clef is changed to suit the pitch** of the music at any particular point.



These bigger instruments use '**C**' clefs: clefs which tell the player where **middle C** is, (as well as bass clef and treble clef where necessary).
There are two main 'C' clefs, both of which you need know for Grade 5 Theory:



Alto clef – **third** line is middle C



Tenor clef – **fourth** line from bottom is middle C

As you can see, the alto and tenor clefs are the **same** shape. This is because they are both 'C' clefs - they tell you which line **C** is found on.

The pointed central part of the C clef tells you where middle C lies. If you look carefully, you'll see that the tenor clef sits a little higher up than the alto clef.

When you know where middle C is, you can work out where the other notes are.

Look at two chromatic scales using alto and tenor clefs:

Alto clef:



Tenor clef:



Which instruments use the alto clef?



These days, the only instrument which uses the alto clef is the **viola**.

Sometimes it is called the “viola clef” for this reason.

(Historically, it was used in vocal music, by the oboe and by other instruments.)

Which instruments use the tenor clef?

The bassoon, cello and trombone all use the tenor clef.

Grade 5 Questions

In Grade 5 Theory, you need to be able to **transpose** music between anyof the clefs.
Normall you have to keep the pitch exactly the same (but read the question carefully!)
Usually, you’re only asked to transpose about one bar into a new clef.

You might be asked questions about the clefs which certain instruments use.

Transposing to a New Clef

Usually, you’ll have to transpose from a common clef (treble or bass) to a less common C clef, but you should be prepared for anything.

Follow these steps, and you should succeed every time.

(Click here if you'd like to print some manuscript paper.)

In this piece, which is for flute (top stave) and piano (lower two staves), your task is to transpose the left hand piano part in bars 3 and 4 into the tenor clef, without changing the pitch. The bars you need to transpose are marked with a bracket.



First, double check the current clef (1). This is the bass clef.

Next, look at the first note you have to transpose (2) and work out whether it is **above or below middle C**.
This note is Bb **below middle C.**

Now look at the new clef and remind yourself where middle C is located (it is the red line here:)



Our first note is one step lower than middle C, so write it in on the space below, then continue with the rest of the notes, including any accidentals if necessary.

You will probably have to change the stem directions on some notes - be careful! Notes which are above the middle line have stems pointing down, and vice versa. Notes on the middle line are correct in either position. In these two bars, we had to change the stem direction on the third note, F. The last note, A, is on the middle line, so the stem can go either way.



You don’t need to work out every note name. Count lines and spaces only, e.g. next space down, two lines up etc.

Key signatures in the alto and tenor clefs are covered in the next lesson.

Grade Five Music Theory - Lesson 4b: Bass Clef

The Bass Clef

*This lesson is for Grade 5 Theory students who need an extra bit of help with the **bass (F) clef**, but who are already comfortable with the treble (G) clef. You can safely skip this lesson if you can already read the bass clef!*

Although if you don't play an instrument which uses the bass clef, (like the piano, bassoon or trombone), you don't need to be able to read the bass clef **fluently**, it's really worthwhile taking a bit of time to get used to reading music written in the bass clef. If you're a fast bass clef reader you'll also save yourself a lot of time in the Grade 5 Theory Exam! The bass clef is the second most common clef used in written music.

The Bass Clef Symbol

The symbol for bass clef looks like this:

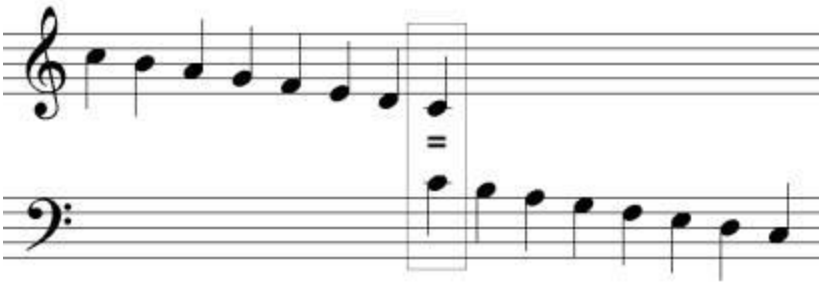


It's actually a very arty, stylised capital **F**. The two horizontal short lines on the capital F are represented by the two dots on the right hand side. Can you see it? The line between the two dots is the line where we find the note **F below middle C**.

What and Where is Middle C?

Many people think of middle C as the C closest to the middle of the piano keyboard (often near the keyhole!)

Middle C is also right in the middle of the staves if you put a treble clef stave together with a bass clef stave, as is usually done in piano music. Here's a two-octave descending scale of C major which crosses from treble clef to bass clef. Middle C is in the box:

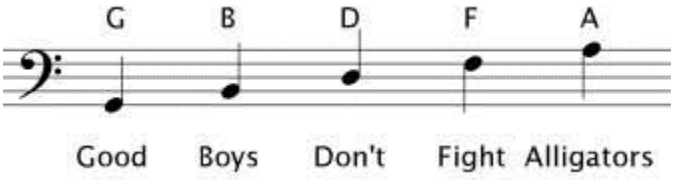


Notice that middle C always sits on one ledger line. In the treble clef it sits *below* the stave, but in bass clef it sits *above* it .

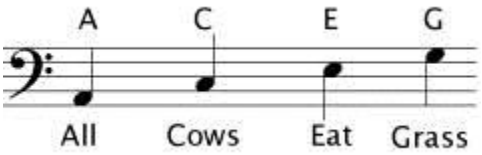
Notes in the Bass Clef

You might find it helpful to memorise a short phrase to remember where the notes lie in the bass clef.

For the notes on lines, try this one:



And here's one for the spaces:



If you feel that you still need more practice, why not take a look at the grade 1 lesson here.

Key Signatures in the Bass Clef

The position of key signatures in all clefs is covered in Lesson 5 - Key Signatures.

What are key signatures and why do they exist?

Take a look at the mymusictheory.com video on Key Signatures, then read on for a detailed explanation.

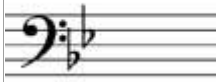
In your ABRSM Grade 5 Theory exam, all the musical examples are based on **tonal** music. Every piece of tonal music is in a certain **key,** which will be either major or minor.

The key signature tells you what that key is. Key signatures are used in order to make it unnecessary to fill up the staves with flats and sharps on many notes. Also, without a key signature, you would have to do some detective work to find out what key a piece is actually in.

Each key signature represents **two** keys: one minor key and one major key. Here are some examples, with the keys they represent:



G Major
E Minor



Bb Major
G Minor



Eb Major
C Minor



E Major
C# Minor



B major
G# Minor



Gb Major
Eb minor

How do I write a key signature?

You must write key signatures very carefully. There are two important things to remember about writing them:

- The position on the stave
- The order of the sharps or flats

You will need to know how to write **any** key signature up to six sharps/flats in **any** clef for Grade 5 Theory!

The **sharps** are written in this order: F#, C#, G#, D#, A#, E#.

G major -F#;

D major - F#, C#;

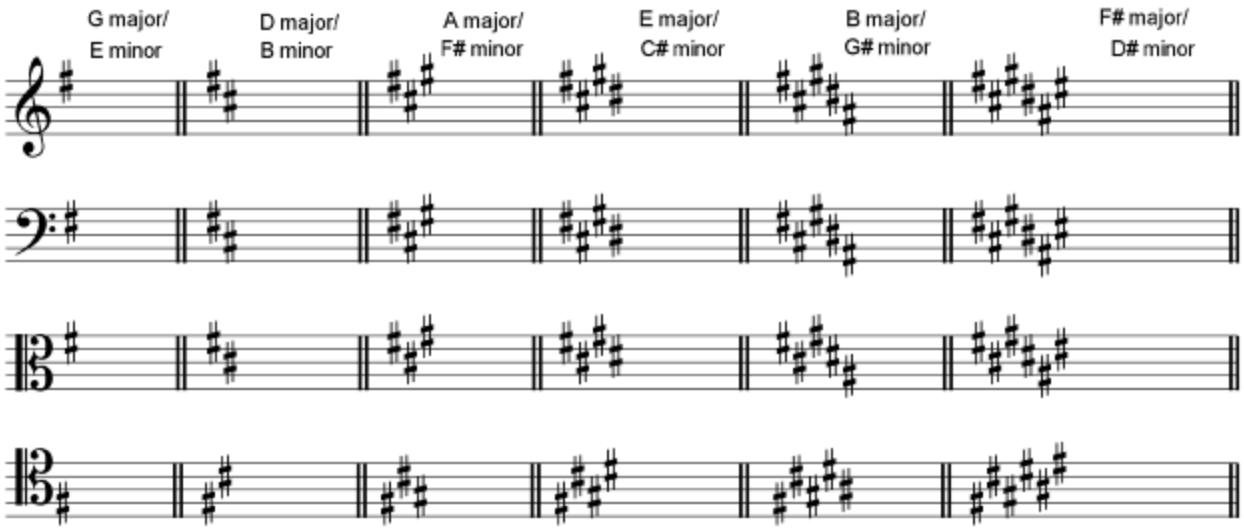
A major - F#, C#, G#;

E major- F#, C#, G#, D#;

B major- F#, C#, G#, D#, A#;

F sharp major- F#, C#, G#, D#, A#, E#

in these positions on the staff (Treble, Bass, Alto then Tenor clef):



The **flats** are written in this order:

Bb, Eb, Ab, Db, Gb, Cb

F major- Bb;

Bb major- Bb, Eb;

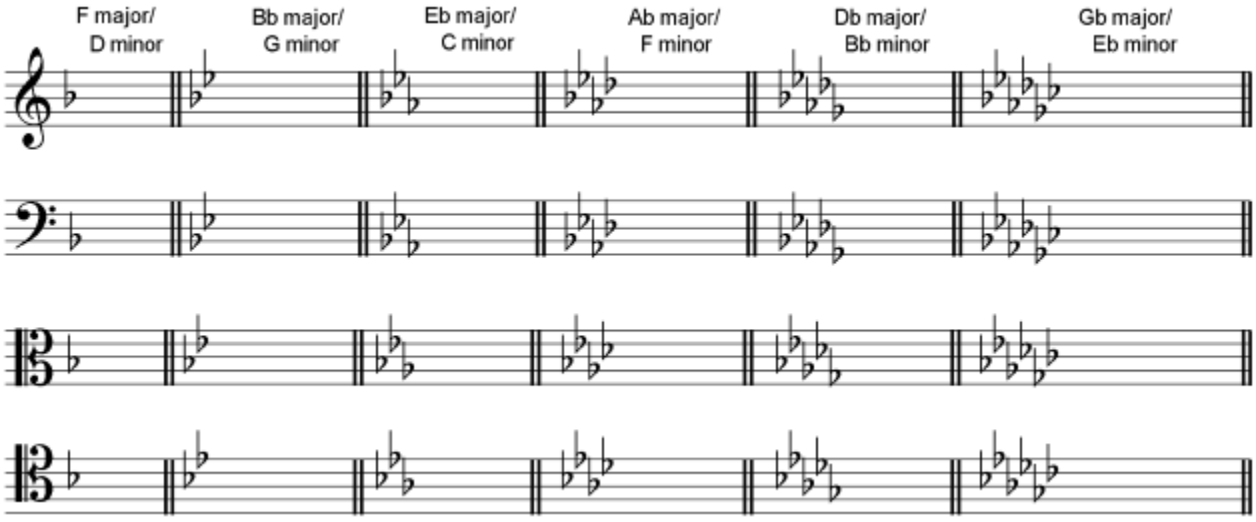
Eb major- Bb, Eb, Ab;

Ab major- Bb, Eb, Ab, Db;

Db major- Bb, Eb, Ab, Db, Gb;

Gb major- Bb, Eb, Ab, Db, Gb, Cb;

in these positions:



How can I learn all these different key signatures?

1. Position on the Stave

Learning how to write key signatures correctly isn't as hard as you might think.

With the sharp keys, the general "up-down" pattern is the same for treble, bass and alto clef. However, **tenor** clef is quite different and has to be learnt separately.
With the flat keys, **all** the clefs follow the same basic "up-down" pattern. Try to memorise the patterns.

Look again at the examples above, and notice where the pattern is the same and where it is different.

Make sure you never write a sharp/flat on a ledger line in a key signature!

2. Order of Flats and Sharps

To remember the order of the sharps, start at F (#) and then count **5** notes forward: F-G-A-B- **C**. The next sharp is **C#**. Repeat the process to find the next sharp: C-D-E-F- **G**, so the next sharp is **G#**, and so on.
To remember the order of the flats, starting at B(b) , count **4** notes forward: B-C-D- **E**, so the next flat is **Eb** . Repeat the process to find the next flat: E- F- G- **A** , so the next flat is **Ab** , and so on.

Remember that you count **5** for sharps- the word "sharp" has **5** letters!
Remember that you count **4** for flats- the word "flat" has **4** letters!

Another method is to learn a phrase like this:

Father **- C**hristmas **- G**ave **- D**addy **- A**n **- E**mpty **- B**ox

The first letter of each word gives you the order of sharps. F-C-G-D-A-E-B. Write the letters backwards to find the order of flats B-E-A-D-G-C-F! (This phrase has seven sharps and flats, but you only need to learn up to six for grade 5 theory!)

How do I work out a major key from a key signature?

Sharps

If you have a sharp key signature, look at the **last sharp** in the pattern. This is the **leading note,** which is the 7th note in the scale. The next semitone up will be the **tonic**, or 1st note in the scale, and will be the major key.

For example, look at the following key signature:



The **last sharp** in the pattern is G#. The next semitone up is A, so this key signature represents A Major.

Flats
If you have a flat key signature, you'll first have to remember that F major uses 1 flat (Bb). For all key signatures with 2 or more flats, the **last but one** flat in the pattern represents the major key.

For example, look at the following key signature:



The **last but one** flat in the pattern is **Db**, so this key signature represents **Db** major.

How do I work out a minor key from a key signature?

The minor key represented by a key signature is always that of the 6th note of the scale in the major key (also called the sub-mediant). For example, in C major, which has no flats or sharps, the 6th note is **A**:



So, **A minor** also has no flats or sharps. We say that A minor is the "relative minor" of C major.

Use the same method for flat and sharp key signatures:



A major => F# minor



Ab major => F minor

For an example of how relative major/minor keys can be combined in a real composition, read Eric Strom's post on relative key in the song "Mirrors" by Justin Timberlake.

Grade Five Music Theory - Lesson 6: Scales

Scales

A scale is a series of notes going up (ascending) or down (descending). For Grade 5 Music Theory, you need to know about *diatonic* scales and *chromatic* scales.

Diatonic Scales

A *diatonic* scale has 7 notes and each of those notes is given different letter name, A-G. There are 3 main types: major, minor harmonic, and minor melodic. (There is also another type of minor - "natural minor", but you won't be tested on this).

Diatonic scales are usually played and written in groups of 8 notes, so that they sound finished. The 8th note is the same as the 1st note, but an octave higher or lower.

So,



A, B, C, D, E, F, G#, A1 is a correct scale, but



A, B, C, D, E, F, Ab, A natural is **not** a correct scale, because the letter name A has been used twice: once as A flat and once as A natural. (Even though you might think that G# and Ab are the same note, they aren't!)

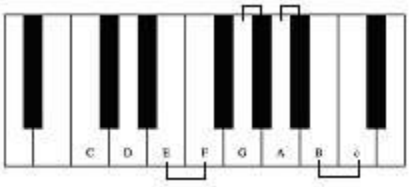
We talk about *diatonic* scales as being in a certain key, for example, in "C Major". Most of the scales you will have played up to now will have been *diatonic* scales. They are the most common type of scale in Western classical music.

You need to know how to write all the major, minor harmonic and minor melodic scales, with up to 6 sharps or flats in the key signature. You are asked to write scales starting on the tonic, which is the technical name for the first note of the scale.

Tones and Semitones

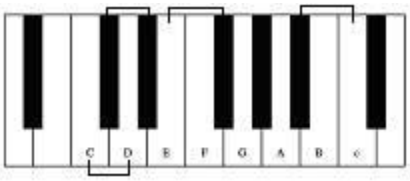
All diatonic scales have something in common; they have a defined pattern of *tones* (whole steps) and *semitones* (half steps).

Imagine a piano keyboard: two neighbouring keys (whatever colour) are semitones:



E to F is a semitone and B to C is a semitone. A to B flat is one too, and so is G to G sharp .

If you take two notes with one note between them, you'll have found a **tone**:



C to D is a tone, as are E to F sharp , D to E and B flat to C.

Major Scales

All major scales are made up with the following pattern, where T=tone and S=semitone:

T-T-S-T-T-T-S

Here are two examples:

G Major



and F# Major



If you've ever wondered why we need notes like "E sharp" when "F" seems to be the same note, you'll see that we need them in keys like F sharp major! (Remember, you can only use each letter name once per octave).

If you write a major scale with a key signature, there are ***no*** accidentals to add.

Minor Harmonic Scales

All minor harmonic scales have the following pattern, where **3S**=three semitones:
T-S-T-T-S-**3S**-S

For example:

D Minor Harmonic



and F Minor Harmonic



Minor harmonic scales use the **same** notes on the way down.

If you write a harmonic scale with a key signature, you always have to add ***one*** accidental. This accidental must **raise** the 7th note by a **semitone (half step)**.
In an ascending scale it is the 7th note, in a descending scale it is the 2nd. It could be a natural, sharp or double sharp sign, but is ***never*** a flat sign.



Here is F minor harmonic written with a key signature.

Minor Melodic Scales

Minor melodic scales are a little more difficult, because they have one pattern on the way up and **different** pattern on the way down:
Minor melodic ascending: **T-S-T-T-T-T-S**
Minor melodic descending: **T-T-S-T-T-S-T**

For example, here is a scale of C Melodic Minor:



Notice that on the way up we have A natural and B natural, but on the way down we have A flat and B flat.

If you write an *ascending* melodic scale with a key signature, you always have to add ***two*** accidentals, (natural, sharp or double sharp signs), to the 6th and 7th notes. These accidentals must **raise** each note by a **semitone (half step)**.



F minor melodic ascending, with 2 accidentals.

If you write a *descending* melodic scale with a key signature, there are ***no*** accidentals to add.



F minor melodic descending, with no accidentals.

Technical Names

We use “technical” names to talk about each note of the diatonic scale, instead of saying “first note”, “third note” and so on. You need to learn these technical names because there are often general knowledge questions about them in Grade 5 Theory!

1st note	Tonic
2nd note	Supertonic
3rd note	Mediant
4th note	Sub-dominant
5th note	Dominant
6th note	Sub-mediant
7th note	Leading note

Technical names are worked out from *ascending* scales.

For example, in C major ascending, the second note we write is D, so D is the supertonic in C major.

If we write out the scale of C major *descending,* the second note we write is B. But B is *not* the supertonic. The supertonic is still D; B is the leading note, because it is the 7th note in the *ascending* scale.

Chromatic Scales

A chromatic scale has 12 notes, and each step of the scale is a semitone, (see above for more about semitones). If you start on a C and play every available note until you arrive at the next C, you have played a chromatic scale. We don’t talk about chromatic scales as being in a particular key; we just talk about the note they start on - and they can start on any note.

Here is an ascending chromatic scale starting on C:



You need to be able to recognise and write chromatic scales, and might have to find a section of a chromatic scale within a piece of music, or write one out.

To find a section of a chromatic scale, look for a series of notes that are all one semitone apart.

How to Write Scales

First, read the instructions very carefully, and underline the keywords about whether the scale should be:

- **ascending or descending**
- **major, minor harmonic or minor melodic**,
- whether should use a **key signature** or not.

Next, pay attention to the **clef**! (All this may sound obvious, but many students lose points when writing scales simply because they mis-read the question!)

Here's an example question:

*Using semibreves (whole notes), write one octave of the ascending G# harmonic minor scale. **Do not use a key signature**, but add any necessary accidentals.*

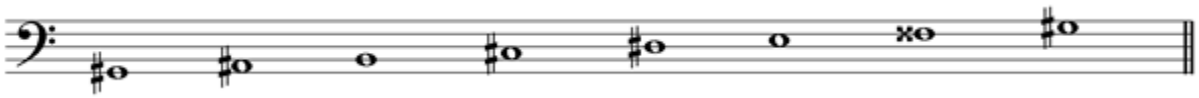


First, write in eight notes, starting with the tonic and finishing on another tonic. You can write the accidental on to the tonics (top and bottom) but don't add any other accidentals yet. Make sure that you write only **one** note per letter name: **one note on each line and space**.



Next, using the pattern for ascending harmonic minor scales (**T-S-T-T-S-3S-S**), add the necessary accidentals. You can sketch a piano keyboard out if it helps.

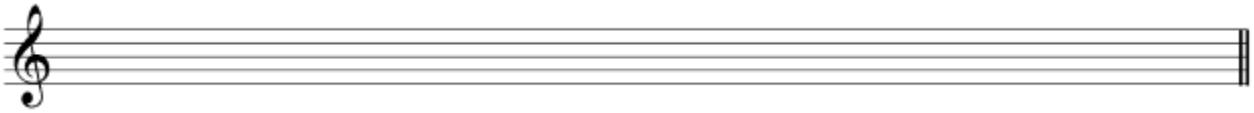
For example, the first step is a tone (whole step), so we add a sharp to the A to get G#-A#. The next step is a semitone (half step), and A#-B is already a semitone, so there is nothing to add to the B. Continue for the rest of the scale.



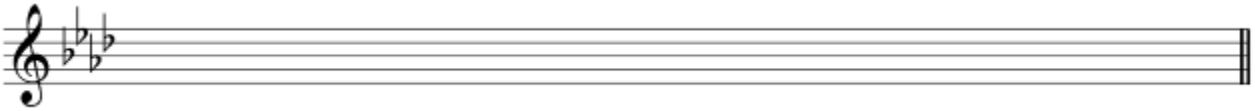
Notice that we needed an F## (double sharp) on the 7th note. F## is an enharmonic equivalent of G natural, but G natural would not be correct here, since we already use the letter name G for the tonic note.

Here's another question.

Write one octave of the descending F minor harmonic scale using semibreves (whole notes). Use a key signature and add any other necessary accidentals.



This time, we need to add a key signature, so that is the first thing to put in. The key signature for F minor has four flats. (See Lesson 5 on Key Signatures).



Next, write out eight notes from F to F, using each letter name once. Look again at the scale direction before you start: this will be a **descending** scale.



Finally, add any necessary accidentals. When you use a key signature, you only ever need to add accidentals to

- a minor harmonic scale, or
- an *ascending* minor melodic scale.

This is F minor **harmonic**, so we need to raise the 7th degree of the scale by a semitone (half step).
Remember that the 7th degree of the scale is based on the ascending scale, so it is the note E in this case (count up 7 notes from the bottom F). Next, look again at the **key signature**: does it affect this note? In this case, yes it does. The 7th degree of the scale is actually **E flat**. We need to raise this by a semitone, so it will become **E natural**. Put in the accidental, and the scale is finished.



Don't forget, an ascending *melodic* minor scale will need both the 6th and 7th degrees raising by a semitone.

Common Errors

If you're learning an instrument, you've probably played all these scales already, but you might have learnt to play them without thinking about the actual notes, (your fingers do the thinking!)

In Grade 5 Theory, you might be asked to write any scale, ascending or descending, either with a key signature or using accidentals. Here are some common *mistakes*: make sure you don't make them!

- Not noticing a **bass clef**.
- Not using a **different** letter name for each note.
- Not noticing whether the question asks for a **key signature** or **accidentals**.
- Writing accidentals/key signatures on the **wrong space** or **line.**
- Writing an **ascending** scale when the question asks for a **descending** one, and vice versa. (Remember "**D**" for "**D**own" and "**D**escending").
- Writing a **harmonic** instead of a **melodic** scale, or vice versa.
- Using the wrong note value - usually you are asked to use **semibreves** (whole notes).
- Forgetting to add an accidental to the last note of a scale, if necessary. Remember, an accidental on the first note of the scale (e.g. Bb) will NOT affect the same note an octave higher!

Grade Five Music Theory Lesson 7: Intervals

Intervals

An "interval" is the distance between any two notes. Each interval has a **number** and a **quality**, which you have to know for Grade 5 Music Theory.
"Melodic intervals" are read horizontally and are found in melodies, whereas "harmonic intervals**"** are read vertically, and are found in chords.

They are described in the same way.

B-D as a melodic (horizontal) interval:



B-D as a harmonic (vertical) interval:



Interval Numbers

To find the number of an interval, first find the note names of the two notes, (ignore any sharps and flats for now), and count the letter names, starting with the **lower note on the stave.**

Some examples:

Letter Names (start with lower note)	No. of Notes	Interval Number	Example
F-G	2	a second	
B-D	3	a third	
B-D sharp	3	a third	
E-A	4	a fourth	
C sharp - G sharp	5	a fifth	
C-G sharp	5	a fifth	
D-B flat	6	a sixth	

A-G	7	a seventh	

If the letter name is the same, the interval will be either **"unison"** (the same note), or **"octave"** (the next one up or down).



G-G is a unison



G-G1 is an octave

Starting on the Higher Note - a Very Common Mistake!

What happens if you try to calculate an interval by starting with the higher note on the stave? You will get the wrong answer! This is a common mistake, so let's look at an example of what can go wrong. What is the following melodic interval?



☺First, the correct way: starting on the **lower** note (C), we count letter names to the higher note, (G), C-D-E-F-G =5, which gives us a 5th. This is the right answer!

☹Now the wrong way. Starting on the **first note** (G), we count the letter names to the second note (C), G-A-B-C =4, which gives us a 4th**. This is the wrong answer!**

Interval Qualities

Each interval has quality name which goes before it, for example "**major**sixth".
There are 5 quality names which are: **perfect, major, minor, augmented** and **diminished**.

We will look at each of these interval qualities in more detail.

Major and Perfect Intervals

If you take a **major scale**, all the intervals which are built from the **tonic** of that scale are either **major** or **perfect**. You can think of "major and perfect" as the kind of "default intervals". Here's an example. Look at the scale of G major, where G is the tonic (keynote).



If the lower note of an interval is G, and the upper note is one which exists in the G major scale, its quality will be either **major** or **perfect**.
Major intervals are the 2nd, 3rd, 6th and 7th, and **perfect** intervals are the unison, 4th, 5th and octave. (Notice that there are four of each kind).



The same is true of any major scale. So, in order to understand intervals, it is essential that you are confident in your scales!

If the upper note in an interval is **not** part of the major scale built from the lower note, then the interval cannot be major or perfect. Instead, it will be **augmented, minor or diminished**.

Augmented Intervals

When an interval is **wider by one semitone** (half step) than the one found in the major scale, then the interval is **augmented**.

Here's an example:

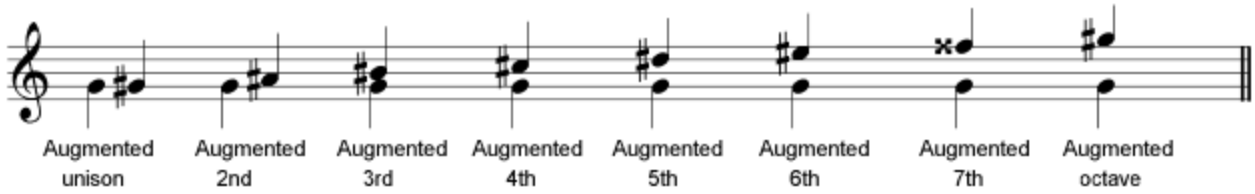


First, work out the interval number: count up the letter names (ignore any accidentals). G-A-B-C-D = 5 notes = a 5th.

Next look at the 5th in the G major scale: the note is D natural.

In this interval, we have D sharp instead. The D# means that this interval is one semitone wider than the one found in the major scale.

Therefore, this interval is an **augmented 5th**.
In fact, if you raise **each note** of the major scale by a semitone (**without changing the letter names of the notes*),** you will make all the intervals augmented:



* I.e. change G to G# and not to Ab.

Notice that in order to raise the F# by a semitone, we need to use a double sharp.

Minor Intervals

A minor interval is **one semitone** (half step) **smaller than a major interval**.

Remember, the quality "major" applies only to the 2nd, 3rd, 6th and 7th interval numbers.



This interval is a 6th. In the G major scale, the 6th is E natural. E flat makes the interval smaller by one semitone, so this is a **minor 6th**.

(Don't fall into the trap of thinking that minor intervals occur in minor scales, and major intervals in major scales: this is only half true! While major scales don't contain any minor intervals (built from the tonic), minor scales DO contain major intervals.)

Minor intervals only apply to 2nds, 3rds, 6ths and 7ths. You can't have a "minor 5th", for example.

Diminished Intervals

A diminished interval is **one semitone** (half step) **smaller** than a **minor** or **perfect** interval.
A diminished interval is **one tone** (whole step) **smaller** than a **major** interval.



G to C natural is a perfect 4th. C flat makes the interval one semitone narrower, so this is a diminished 4th.



G to F# is a major 7th.

G to F natural is one semitone smaller, so it's a minor 7th.

G to F flat is two semitones smaller (than a major 7th), so it's a diminished 7th.

Tricky Intervals

This system for working out intervals is easy when you know your major scales. However, some major scales are more awkward than others, and some don't even really exist!



In the first case here, you'd need to know the scale of C# major (awkward, but does exist), and in the second case, you'd need the G## major scale (does not really exist!)

In cases like these, it is usually a good idea to **simplify** the interval. To do this, you need to

- move both notes
- by the same amount
- in the same direction
- without changing the letter name

In the first case, C# major is an awkward scale, but C major is easy. To change C# to C natural, you need to move it **down** by **one semitone.** You need to move the upper note in the same way, down one semitone. This means A# will become A natural.



Now work out the interval as before: the note A is part of the C major scale, so this is a **major 6th**. The original interval, C#-A# is also a major 6th. (And so is Cb-Ab, of course!)

Let's do the same with the second tricky interval. The lower note is G##, but G natural would make things a lot simpler.

G## is **two semitones** (half steps) higher than G natural, so you need to lower G## by a tone (whole step) to get to G natural. Do the same to the upper note: move D# down by two semitones, without changing the letter name. You will arrive at Db.



Now compare this interval to the one found in G major. G-D is a perfect 5th, and this is one semitone smaller, so it's a diminished 5th, and therefore, so is G##-D#.

Compound Intervals

Intervals which are larger than one octave are called **compound intervals**. There are two ways to describe compound interval numbers:

- by the actual number of notes you count
- by using the word "compound", plus the interval an octave lower.

You can use whichever you prefer.

Compound intervals need to be **qualified** with the word major/minor/perfect/diminished/augmented, in the same way as non-compound intervals.

Here is a compound interval:



There are 9 letter names between E and high F, so you can call this a 9th. Alternatively, you can call it a "compound 2nd", because E to F is a second plus an octave.

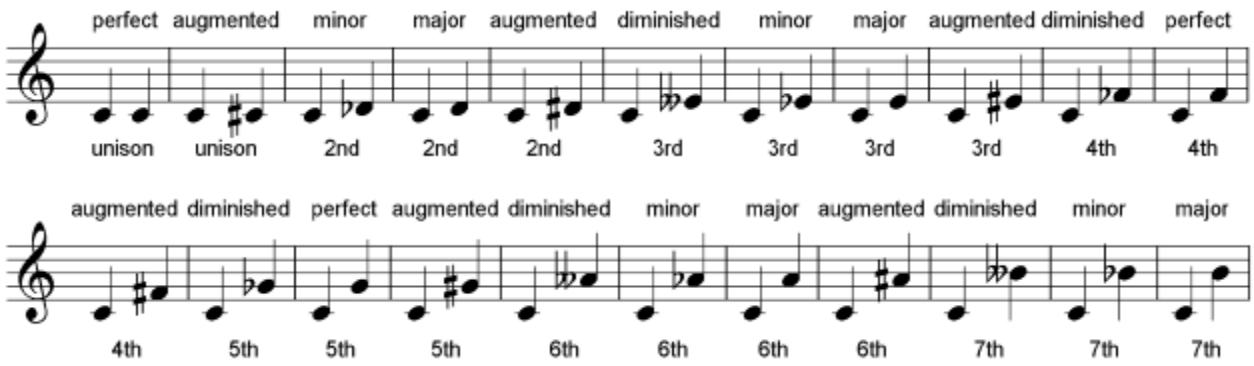
What is the interval's quality? Mouse over the interval to check if you were right (tap on mobile devices)!

Summary of Intervals:

Here's a summary of the technical interval names, in order of size, starting with the smallest, with an example of each, up to a 7th.

Octave intervals are the same as unisons, but the upper note is an octave higher. 9ths are the same as 2nds, and so on.

One interval is missing. What do you think the interval of C to high Cb is? 💡



Intervals in a Score

In a music theory exam, you might find yourself presented with a real musical score, and get some questions about finding or naming intervals in that score.

There are a few extra things to consider, when you're looking at a real piece of music.

First of all, you need to make sure you know what **clef** is being used. Often, the clef will be the one which you can see right at the beginning of the piece, but it's possible, especially in a piano piece, for the clef to **change** during the piece of music.

In this excerpt for piano, the interval to name is in the box.



Notice that the left hand starts in the bass clef, but then changes to the treble clef in the 2nd bar, so the lower note in this bracketed interval is actually the D just **above** middle C.

When the two interval notes are on different staves, it can be helpful to pencil in the upper note above the lower one, on its stave. This will help you to count up the letter names.

This interval is a minor 7th.

The second thing to watch out for in scores is **accidentals**. You should always check out the **key signature** before starting, of course, but you also need to be on the look-out for accidentals which were written **earlier in the bar**, but still apply.

In this excerpt, the boxed interval doesn't contain any accidentals, but if you look earlier in the bar, you'll find there was a C# which will still apply to this note.



This treble clef note is C# just **above** middle C, and the bass clef note is the 2nd E **below** middle C. This is a compound major 6th, or a major 13th.

Grade Five Music Theory - Lesson 8: Transposing

Transposing Instruments

What note do you hear when you play this note on the piano?



You hear a middle C, of course. But if you play the same note on a clarinet, horn or trumpet you will hear a **different** note.
Clarinets, horns, trumpets and a few other instruments are “transposing” instruments, which means that the note the player ***reads*** is different from the note which their instrument ***produces***.

For example, if a trumpeter reads and plays the following:



the notes you actually hear are



Most clarinettists start off learning on a “B flat” clarinet. Trumpets are also in B flat. This means that when the player reads a note which looks like a ***C***, the note produced by their instrument is actually a ***B flat***. Every note that the player reads actually sounds a tone (whole step) lower.

Some instruments tranpose at the octave, which means that this note



would sound as a C, but not ***middle*** C. It could be an octave higher (for the piccolo, for example), or lower (e.g. for the double bass).

Why are there transposing instruments?

There are many different reasons why we have transposing instruments, and most of them are very interesting. However, you don't need to know **why** for Grade 5 Theory! If you're interested and would like to find out, read about them here: http://en.wikipedia.org/wiki/Transposing_instrument

Common Transposing Instruments

These are the transposing instruments you need to know about for grade 5 theory:

- Clarinet- in B flat and A
- Trumpet- in B flat
- Horn and cor Anglais - in F

In each case, the key of the instrument is the note which is produced when the player reads a **C**.

Grade 5 Theory Question Types

As well as having to transpose extracts of music (see below), you might also need to know a bit of general knowledge about all the common orchestral instruments and which octaves they play in. Often you are asked to choose one instrument (from four) which could play a given extract, so that it sounds at the **same pitch**.
So, you need to learn which instruments can play each other's music because the **clef** is the same and there is no change in **pitch**. Try to memorise the following groups of instruments, which might appear in the grade 5 theory exam:

Transposition/Clef	Instruments
Non-transposing, treble clef.	Flute, Oboe, Violin
Non-transposing, bass clef.	Bassoon, Cello, Trombone, Tuba
Octave-down transposing, bass clef.	Double Bass
In B flat, treble clef	Clarinet, Trumpet
In F, treble clef	Horn
Non-transposing, in alto clef	Viola

Sometimes you will see drum-type instruments included in the choices, "timpani", for example. Drums are only tuned to one note, which means they can't play a melody - they will never be the right answer to the question!

What is “concert pitch”?

The term “concert pitch” means the ***real*** sound of a note, as you would get on the piano. (On the piano if you read/play a C, you hear a C, if you read/play an F sharp you hear an F sharp, and so on).
Players of transposing instruments look at notes in two ways - the name they give to a note is not the same as the way it sounds. A trumpet player reads/fingers/plays a C, but the note he plays is a **concert pitch** B flat, because that note corresponds to a B flat on the piano (or any other non-transposing instrument).
When an orchestra tunes up, all the players play **concert pitch** A. This means that clarinettists and trumpet players finger a B, and horn players finger an E.

Transposing a Melody for a Transposing Instrument

You might have to transpose a melody into (or out of) concert pitch. In Grade 5 Theory, you will always be told which **direction** you have to transpose in (up or down), and by what **interval** (major 2nd, perfect 4th etc.) (You don’t have to work out from scratch how to write out a piece of clarinet music so that it sounds at concert pitch, for example!)
You will need to understand **intervals** properly before you can begin. (Have a look at “Lesson 7 – Intervals” if you need to). Sometimes you are asked to use a key signature, and sometimes not. Read the question carefully!

Transposing with a Key Signature

If you have been asked to include a key signature, start by carefully transposing it and writing the new key signature on the stave.

For example, if the key signature is **A major** (3 sharps) and you have been asked to transpose **down a major 2nd**, you will need to write the key signature for **G major** (1 sharp), because G is a major 2nd lower than A.

(You don't need to work out whether the piece is in a major or minor key - just assume it is in a major one, then transpose the key signature. If the piece below, with 3 sharps in the key signature, was actually in F# minor, then to transpose the key signature you would bring it down by a major 2nd to E minor. E minor also has one sharp, the same as G major - so it makes no difference!)

Don’t forget to add the time signature (this doesn’t change, of course).

Let's transpose this melody down a major 2nd, using a key signature.



It starts off as:



Next, transpose each note in turn. Be careful when you come across accidentals - in the above extract the first accidental is **E sharp**. Transpose E sharp down a major second, and you get **D sharp**.

(If you think that E sharp on a piano keyboard is the same as F, you might think the correct transposition would be E flat - but you would be wrong: E sharp - E flat is actually an interval of a double-augmented unison!)

Here is the finished transposition:



When you transpose with a key signature, the accidentals always fall in the same place as in the original melody. There were three accidentals in the above melody, and there are three in the transposition. (In this case, the natural is a “courtesy” accidental and is there as a reminder). They might, however, be different accidentals, for example a sharp might change into a natural.

For example, if you had a C# written as an accidental in G major, and you transposed everything down a major 2nd, the new key would be F major, and the C# would become B **natural**. Sketch out a piano keyboard to help you, if necessary.



Transposing Without a Key Signature

If you are asked to transpose without using a key signature, you will need to be very careful. Check each note as you write it, making sure that the intervals are exactly correct.

Here is a melody which needs to be transposed **upwards by a minor 3rd, without using a key signature.**

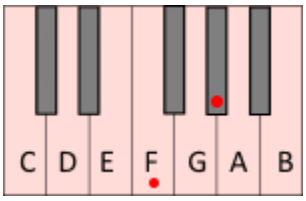


First, write in all the notes, one third higher. Concentrate on putting the notes in the correct spaces/lines. We will add the accidentals in a moment. You might need to change the stem direction of some notes.



Which note stems had to change direction? 💡
Next, check **each note in turn**. Keep an eye on the key signature and any accidentals in the original. Sketch out a mini-piano keyboard, if it helps!

The first note is F. Put that up a minor third, and you get Ab, so put a flat on the left-hand side of the first A.





Use the keyboard sketch to make sure that you have the same number of semitones (half steps) between each original and transposed note (3 semitones, in this case).

Continue in the same way, adding all necessary accidentals. Don't forget: when an accidental is placed in bar, it also affects all other notes of the same pitch in that bar.

Here is the rest of the transposition.



Avoiding Mistakes

Lightly pencil (in the margin of your exam paper) a list of the letter names from the extract and what they will *become*. When you've finished, carefully double check each note. (You can also make sure you've transposed to the right key signature using this list). Your list could look something like this:

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

Erase the list before you hand in your exam paper!

If you are told that the melody was written, for example, for "clarinet in Bb", don't fall into the trap of thinking the key of music is Bb - you need to check the **key signature** to work out the key. "Clarinet in Bb" simply means that the instrument plays concert pitch Bb when the note C is read.

Neat Notation

Does it matter how neatly you write your answers? Yes! Here are some tips:

- Try to space out your notes as they are in the original extract.
- Don't draw in the stems and beams of quavers or smaller notes until you've placed the whole group - you might have to put the stems the other way up.
- Write accidentals **before** you draw the note-head, to make sure you have enough space. Remember that accidentals are always placed on the **left** side of the note they affect.
- Make sure you have copied all the barlines, phrasing, articulation and tempo marks, ties, dynamics, ornaments, dots, rests and anything else which is written in the original.
- Check out "Lesson 1 – Good Notation" for more ideas.

Grade Five Music Theory - Lesson 9: SATB Writing for Voices

SATB



"SATB" is a quick way of referring to the four main voices that make up a choir, which are **Soprano**, **Alto**, **Tenor** and **Bass**.

Soprano and alto are women's voices, whereas tenor and bass are men's voices.

Soprano is the highest voice and bass is the lowest.

Grade 5 Questions

In the ABRSM Grade 5 Theory exam, you might have to re-write a short extract for SATB voices.

You will either have to change an **open score** into a **short score** or vice-versa.

Open Score and Short Score

Vocal music for SATB is either written on 4 staves with one for each voice, like this:



This is called "**open score**". The voices are always in this order: soprano (top), alto, tenor then bass (bottom).

Or it's written on two staves, with two voices on each stave, like this:



This is called "**short score**". Soprano and alto share the treble clef, and tenor and bass share the bass clef stave.

Open Score v. Short Score

Here are some of the main differences between open and short scores:

Clefs

In open score, the tenor voice uses a treble "octave" clef with a small 8 hanging off the tail-



This means that the music actually sounds an **octave lower** than written.
In short score, the tenor voice uses a **bass** clef.

Stems

In open score, the stems of the notes follow the shape of the melody.

In short score, soprano and tenor parts always have stems ***up***, and alto and bass parts always have stems ***down***.

We write:



We **don’t** write:



Ties

In open score, ties are always written on the opposite side of the note to the stem.



In short score, the ties on the soprano and tenor parts curve upwards, but the ties on the alto and bass parts always curve downwards.

Notice how the ties on the two soprano A's and the two bass G's have changed their shape:



Rests

In short score, rests are written near the ***top*** of the stave in the soprano and tenor parts, and near the ***bottom*** of the stave in the alto and bass parts. In open score, rests are placed in the *middle* of the stave. Here are some rests written in short score:



Unisons and Seconds

Sometimes, two parts can sing an identical note or a "unison". In a short score, you need to show that the note belongs to **both** parts, and you do this by writing one note-head with two stems. One step points up, and the other points downwards.

Look at the soprano and alto parts in this open score: they are singing the same G.



In the short score, you will write one G, with two stems:



When two voices sing notes which are an interval of a 2nd apart, you won't be able to write them one above the other. Instead, you will need to move the **lower** note slightly to the **right** of the higher note, so that both can be clearly seen.

In this open score, the soprano has a G, and the alto has the F directly below it:



In a short score, the alto F needs to be moved slightly to the right, so that both notes can be seen:



If you try to align the G and F vertically, you will end up with an ugly blob like this!



Neat Writing

Does it matter how neat my writing is?

Yes! For general tips, look at “Lesson 1 - Good Notation”.

How to Rewrite in Open Score

Let's try to rewrite these short score bars in open score.

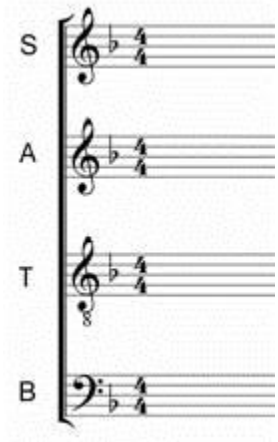


Start by placing the clefs on each of the four staves, like this:

Don’t forget the **little 8** on the tenor clef, and remember this means that the pitch of all the tenor notes is actually an octave **lower** than in the "normal" treble clef.



Copy the key signature and time signature onto *each* stave.



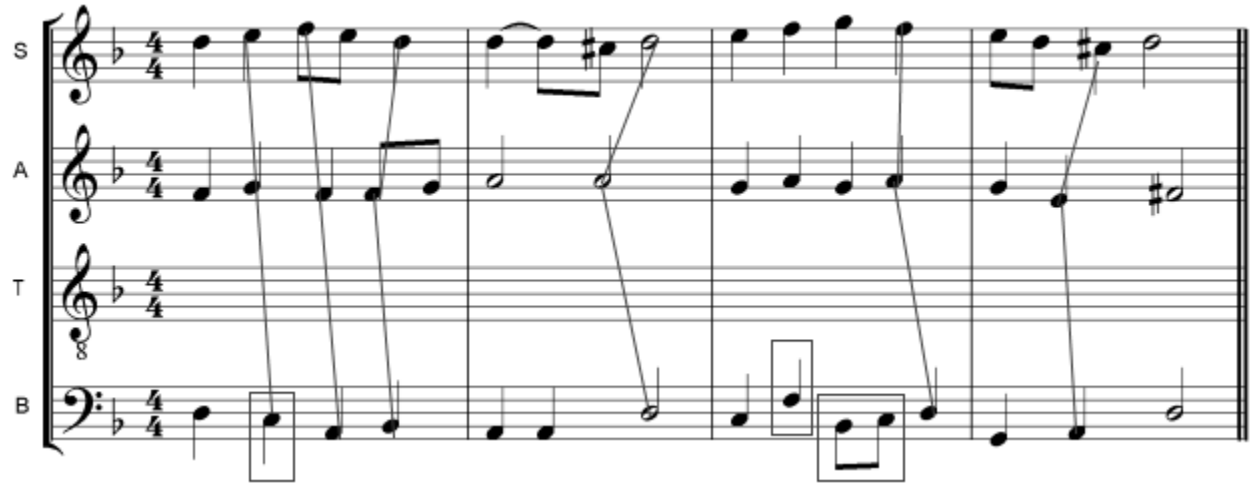
Copy the soprano, alto and bass lines note-for-note, but don't write the tenor line just yet.

Make sure you change the **stem direction** if necessary: remember that notes below the middle line have stems up, and notes above the middle line have stems down. Notes on the middle line follow the notes next to them.
Be sure to **line up the notes vertically** in exactly the same way as they are in the original.

This is the right way to do it: notice the stem direction and how the notes are aligned.



And this is the **wrong** way to do it! The grey lines show notes which should be in a straight line vertically, (because they sound at exactly the same time). The boxes show notes where the stems are pointing in the wrong direction.



Now rewrite the tenor part in the **treble-octave clef**.
Remember that this clef sounds an octave **lower** than normal treble clef, so you will need to work out the exact pitch of the notes in the short score, then put them **up an octave in the open score**.

Middle C in bass clef is  but in treble-octave clef is 

Make sure all the notes are aligned properly, and the stem directions are correct in the tenor part too.

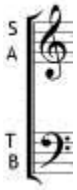
Here is the finished re-writing:



Finally, make sure you've added any dots, ties and accidentals in the same way as in the original melody.

How to Rewrite in Short Score

Start by placing a treble and a bass clef, like this:



Copy the key signature and time signature onto each stave.

Using a ruler to keep the notes aligned vertically, copy the soprano, alto and bass lines, making sure that the **stem direction** is correct (soprano and tenor=up, alto and bass=down).

Rewrite the tenor part in bass clef. Remember where middle C lies:

in treble (octave) clef it's  in bass clef it's 

Make sure you've added all dots, ties and accidentals.

Grade Five Music Theory - Lesson 10: Describing Chords

Chords

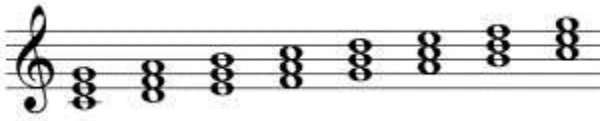
A chord is a group of notes which sound at the same time.

Chords are usually made up of three basic notes, (but any of the notes can be **doubled up** without changing the nature of the chord).
To make chords, we first need to decide which **key** we are in. Let's take the key of C major as an example:



Here's the C major scale.

To make a chord, we choose one of the notes of the scale and add **another two** notes above it. The note we start on is called the **root**. The notes we add are the **third** and the **fifth**. (See "Lesson 7: Intervals" for more about intervals). This gives us seven different chords:



Here are those chords in C major.

Triads

These chords are also known as *triads*. A triad is always made up of a root, a third above the root, and a fifth above the root.
Notice that the notes of these triads are either **all** on lines, or **all** in spaces.

Types of Triad

Triads/Chords can be **major**, **minor, diminished** or **augmented**.

Here are the chords in C major with their names:



In a minor key, the chords are built from the notes of the **harmonic minor scale**. This means you always have to raise the 7th degree of the scale by a semitone (half step).

Here are the chords in A minor with their names:



Major chords are made with a **major** third and a perfect fifth above the root.
Minor chords are made with a **minor** third and a perfect fifth above the root.
Diminished chords contain a minor third and a **diminished** fifth above the root.
Augmented chords contain a major third and an **augmented** fifth. You don't need to use any augmented chords in the Grade 5 Theory exam though!

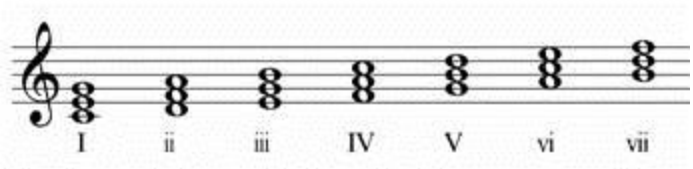
Roman Numerals

We also use **Roman numerals** to name chords. The Roman numerals 1-7 are

I, II, III, IV, V VI and VII.

(Major chords are sometimes written with capital Roman numerals, whereas minor chords are written with small letters. You can write them all with capitals in your grade 5 theory exam.)

Here are the C major chords with their Roman numeral names:



Do I have to learn all these chords for Grade 5 Theory?

No! In Grade 5 Theory, you only have to recognise chords I, II, IV and V.

In a major key, *I*, *IV* and *V* are major chords but *ii* is a minor chord.
In a minor key, *i* and *iv* are minor, *ii* is diminished, and *V* is major and includes an accidental (because of the raised 7th of the scale).

Inversions

In all the chords we've looked at so far, the lowest note in the chord was the **root**.
When the root is the lowest note, the chord is in **root position**.
Chords can also be **inverted** (turned upside down).
When a chord is “inverted” the position of the notes is changed around so that the **lowest** note of the chord is the **third** or the **fifth**, rather than the root.
Here are some inversions of the first (I) chord in **C** major (which you will remember contains the notes C, E and G):

Lowest note is E (the third)



Lowest note is G (the fifth)

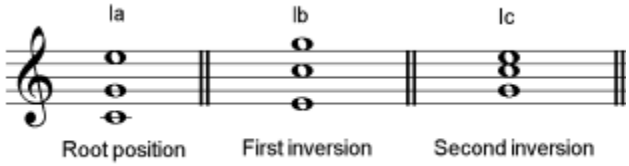


It doesn't matter what order the higher notes are in: inversions are defined by the **lowest note** of the chord. This note is also known as the **bass note**.

Naming Inversions

We use the letters **a**, **b** and **c** (written in lower case letters) to describe the **lowest** note of a chord.
When the chord is in **root position** (hasn’t been inverted), we use the letter **a**.
When the lowest note is the third, (e.g. E in C major), we use the letter **b**. This is also called **first inversion**.
When the lowest note is the fifth, (e.g. G in C major), we use the letter **c**. This is also called **second inversion**.

Here is chord I in C major, in its three possible positions:



Figured Bass

Chords are sometimes written in **figured bass**, which is a system that uses numbers to describe notes of a chord.
Each figure has two numbers in it. The numbers refer to the intervals above the **bass note** (lowest note) of the chord.

The figures below are described relating to a C major chord.

$\begin{matrix}5\\3\end{matrix}$ is used for root position (a) chords. Above the bass note (C), there is a note a 3rd higher (E), and another which is a 5th higher (G).

$\begin{matrix}6\\3\end{matrix}$ is used for first inversion (b) chords. Above the bass note (E), there is a note a 3rd higher (G), and another which is a 6th higher (C).

$\begin{matrix}6\\4\end{matrix}$

is used for second inversion (c) chords. Above the bass note (G), there is a note a 4th higher (C) and another which is a 6th higher (E).



How to Identify Chords in a Piece of Music

In the Grade 5 Theory exam, you might be asked to identify some chords within a piece of music. The question will tell you what **key** the music is in.

You need to

1. Pick out which notes make up the chord
2. Work out what the name of the chord is
3. Work out what inversion the chord is in

That's a lot to do all in one go, so we'll break it down into steps!

1. Picking Out the Notes of the Chord

Chords are often not as easy to spot as in our examples above. They can include a mix of notes of different lengths, a mix of instruments, different staves and even a combination of clefs.

Look at **all** the notes in the chord which are enclosed in the **bracket**.
There might be several notes, but there will only be **3 different note names**. If you have an extract for more than one instrument, don't forget to look in **all** the parts. You might also get a tied note from a previous bar with an accidental that is still relevant - look very carefully.
The following bar, (for cello and piano), is in F major: the chords you need to describe are in brackets, marked **A** and **B**:



Notice that chord A is split over **two** quaver (eighth note) beats, and both chords are split across all **three** staves.

Chord **A** has the notes A, C, and F
Chord **B** has the notes B flat, D and F.
Now you have picked out the notes of the chords, you are ready to *name* them.

Naming Chords

We work out the chord name by finding the **root position** (a) chord.
The root position of the chord is where the three notes are **as close together as possible**.
The three notes will be an interval of **a third** from each other.

In chord A (above), we have the notes A, C and F. The closest way of putting these together is F-A-C. (There is a third between F and A, and another third between A and C).

The first note from F-A-C is F, so this is a chord of F. The interval F-A is a **major** third, so it's an F major chord**.**

Remember that the extract is in F (major), so this is chord I.

In chord B (above), we have the notes Bb-D-F. This is the closest they can be: Bb to D is a third, and D to F is a third.

The first note from Bb-D-F is Bb, so this is a chord of Bb. Bb-D is a major third, so it's a Bb major chord.

Bb is the 4th note in the key of F major, so this is chord IV.

Working out Inversions

Finally we need to work out the **inversion.** You need to look at the **lowest** note of the chord.
If the lowest note is the **same** as the chord name itself, it will be **"a",** (root position)
if the lowest note is the **third** it will be **"b",** (first inversion)
and if it's the **fifth** it will be **"c",** (second inversion)**.**

Let's look at our above examples.



Chord **A**'s lowest note is A. The chord is F major, so the lowest note is the third. So this chord is **b**. Its full name is **Ib**. It's a first inversion chord.
Chord **B**'s lowest note is B flat and it is a chord of B flat, so it's in root position. This chord is **a**. Its full name is **IVa**.

Common Mistakes

- Don't forget to check what key the extract is in - the instructions will tell you this information.
- Check back to see if the **key signature** or any **accidentals** affect the notes you are looking at.

- Make sure you include all the notes which are sounding on the beat which is marked. Sometimes the chord will include a note that started earlier in a bar but is **still** sounding. Here are two examples:



This chord (marked in brackets) is the third beat of the bar.

However, the lowest note is the left-hand B flat, which is played on the first beat but is **still sounding**.



This chord is the second beat of the bar.

Apart from the right-hand G and left-hand B flat, the chord also includes the right-hand E flat crotchet (quarter note), which is **still sounding** from the first beat of the bar.

Grade Five Music Theory - Lesson 11: Progressions & Cadences

(Please note: you need to know about chords to understand this lesson.)

Check out the mymusictheory.com video on cadences!

What are Progressions?

In music, a "progression" happens when one chord changes to another chord.

For example, many pieces of music begin with notes that are taken from **chord I** (the tonic chord), followed by notes from **chord V** (the dominant chord).

Here is the beginning of the famous theme from Dvorak's "New World Symphony", which begins with a I-V progression.



The key of the piece is D major (we have simplified the key, as the original is in Db major!)

The notes in bar one fit with a chord of D major, which is chord I, and the notes in bar two fit with a chord of A major, which is chord V.

Notice that the melody also contains notes which are **not** part of the underlying harmony chord. In bar 1, there is an E, which isn't part of the chord of D major. And in bar 2, there are two F#s, which are not part of the chord of A major. These are **non-chord** notes. The notes which fall **on the beat** are always* **chord notes. (**Notes which fall on an **off-beat** can be either chord notes or non-chord notes: more about this later.)

In the above example, the time signature is 4/4. This means there are four crotchet (quarter note) beats per bar. The notes which are played at the start of each of those four main beats are all chord notes:



In bar one, the notes which fall on the beat are F#-A-F#-D. These are all notes in the chord of D major.

In bar two, the notes which fall on the beat are E-A-E. These are all notes in A major. (The C# is missing, but that is ok!)

You only need to know about progressions which use the chords **I, II, IV** and **V** for Grade 5 Theory.

What are Cadences?

Cadences are special kinds of progression which are used to signify that a piece, or section/phrase of a piece, has come to an **end**.

There are only three cadences that you need to know for Grade 5 Theory. Here they are:

V - I (also known as a "perfect" cadence)

IV - I (also known as a "plagal" cadence)

? - V (also known as an "imperfect" cadence)

As you can see, all cadences finish with either chord I or chord V. This is very important to remember!

In an "imperfect" cadence we have used a question mark for the first chord, because, in fact, any chord can be used before V. Most commonly, you will find II, VI or IV.

You won't be tested on the cadence names ("perfect", "plagal" or "imperfect") at Grade 5, but it's useful to know them!

Here is an example in C major. The first phrase ends with cadence 1, and the piece ends with cadence 2.



Cadence 1 progresses from a chord of D minor to G major- or **II-V** (imperfect).
Cadence 2 progresses from a chord of G major to C major- or **V-I** (perfect).

Here are the same cadences from above, but fitted to a melody line and with some added decoration in the other parts:



Cadence & Progression Questions

In Grade 5 Theory, you are given a melody line and are asked to suggest suitable chords for two or three **progressions**.
Each progression will consist of **two or three chords** and must include a standard **cadence**.
Remember, all cadences are made up of **two chords**. So, if there are three chords in the question, the first one will not be part of the cadence, but part of the progression.

The positions of the cadences are marked in the score; you have to work out which chords would best fit around the notes in the melody at the points indicated.

Let's take the melody we used above as an example. This is what the question might look like:

Suggest suitable progressions for two cadences in the following melody by indicating ONLY ONE chord (I, II, IV or V) at each of the places marked A-E. You do not have to indicate the position of the chords, or to state which note is in the bass.



First Cadence: A= ..... B= ..... C= .....
Second Cadence: D= ..... E= .....

In this case, the first **progression** has three chords: A, B and C. The **cadence** is actually chords B and C. The second progression has only two chords, so both of them also make up the cadence.

You can indicate your choice of chords either by either by

- using the Roman numeral system (e.g. **IV**) (recommended),

  or

- writing the notes of the chord directly onto the stave (more chance of making a mistake!)

You **don't** need to indicate the inversion of the chord (i.e. you don't need to say what position it is in, or which note is in the bass).

Method for Suggesting Suitable Chords

To work out the correct chords, follow these steps. More guidance is given for each step below.

1. Identify the key signature
2. Write down the notes of each of the chords I, II, IV and V in that key signature.
3. Identify which notes are enclosed by the bracket.
4. Decide which are chord notes, and which are non-chord notes.
5. Identify the possible chords and select the most likely if there seems to be a choice.

1. Identify the Key Signature

Using the key signature, work out which two keys (major and minor) it might be. E.g. if there is one sharp, it might be G major or E minor.

- If there **aren't** any sharps or naturals added, it will *probably* be in a major key.
- If there are sharps or naturals, one will usually be on the **leading note**. The semitone **after** the leading note is the tonic of the corresponding minor key. E.g. in A minor, we'd expect to find a G#.
- Sing through the melody in your head and think about whether it sounds major or minor
- Look at the first and last notes of the piece - they will normally be the tonic or dominant notes of the key the piece is in. E.g. in the example above, the piece starts and ends on the tonic of C major.

(Check Lesson 5 - Key Signatures if you need more help on this.)

2. Write Down the Chords

Write down the notes which make up the chords **I**, **II**, **IV** and **V** in the key signature of the piece (this is a good way to avoid mistakes!) You will use this for reference.

For example, if the key is D major, write:

I= D/F#/A

II= E/G/B

IV= G/B/D

V= A/C#/E

3. Identify the Bracketed Notes

Look at the first place marked in the extract. You will see a bracket which encloses 1-5 **different** notes. Write these notes down in letters, and then double check to see if there any accidentals which need to be applied. Check the key signature, tied notes and accidentals which occur earlier in the bar.

4. Identify the Chord Notes

As we mentioned at the start of this lesson, notes which fall **on the beat** are chord notes. This means that the first note in the bracketed group **must** be part of the chord, because the bracket will always start on note which is on the beat. So, the first note is always a **chord note**.

If the next note is an interval of a **2nd** away from the first note (i.e. a scale-step), it will be a **non-chord** note. If it is any other interval away, then it will be a **chord note**.

In these examples, the first note D is a chord note. The 2nd (boxed) note is sometimes a chord note, and sometimes a non-chord note.



If there is a third note (or fourth, fifth and so on!), apply the same logic: if it is a 2nd away from the last chord note, it will be a non-chord note. If it's not a 2nd away, it will be a chord note.

The notes marked with a star here are all chord notes.



In bar 1, the E is a non-chord note because it is a **2nd** away from D. The F# is a 3rd from D, so it is also a chord note.

In bar 2, the F# is a third from D, so it's a chord note. The A is a third from F# (the last chord note), so it's also a chord note.

In bar 3, the B is a third from D, so it's a chord note. The C# is a **2nd** from B (the last chord note), so it's a non-chord note.

See if you can work out the logic for bars 4 and 5 yourself.

5. Select the Chords

All the notes which you identified as **chord notes** in step 4 **must** be part of the chord you select.
Remember that all cadences end with only **chord I or chord V**: this narrows down the choice for the last chord in each progression.

If the last chord is I, then the one before it can only be V (perfect cadence) or IV (plagal cadence). V-I is much more common than IV-I.

Progressions have to **progress!** This means you cannot immediately repeat the same chord (e.g. V-V) even if the notes seem to fit.

Working Through a Question

Now let's use the method to find the chords from our original example.

The first progression is made up of chords A, B and C, and the second is chords D and E.



The key is C major, because there is no key signature and there are no accidentals, and it starts and ends on the tonic.

We'll write out the notes of the chords for easy reference:

I=C/E/G

II=D/F/A

IV=F/A/C

V=G/B/D

Next, we'll work out which are the chord notes. Chord notes are shown in square brackets at the end of each line.

Chord A: The first note is B, so this must be in the chord. C is a non-chord note (it's a 2nd from B). [B]

Chord B: The first note is A, so this is a chord note. G is a 2nd from A, so it's a non-chord note. [A]

Chord C: G is the only note! [G]

Chord D: B is the first note. A is a 2nd away. [B]

Chord E: C is the only note! [C]

Finally, select the chords. Remember, we are restricted to I and V for the last chord in each progression, so start at the ends!

Chord C: The note G fits with both I and V.

Chord B: The note A fits with II and IV.

This means that there are two possible cadences: chords B and C could be II-V (imperfect) or IV-I (plagal).

Chord A: The note B fits with only chord V.

So, for the first progression, A=V, B=II and C=V or as an alternative, A=V, B=IV and C=I.

In the second progression, again we start at the end:

Chord E: The note C fits with chord I, but not chord V.

(If chord E is I, then chord D can only be V (perfect cadence) or IV (plagal cadence).)

Chord D: The note B fits with V.

So for the second progression, D=V and E=I.

Here's another question, this time a little more complicated:



See if you can work it out for yourself, then hover your mouse (or tap on mobile devices) over each bracket to check if you (and your reasoning!) were right!

* "always" refers to "in the grade 5 music theory exam". In real life, non-chord notes sometimes also fall on the beat, but this is covered in grade 6 and above.

Grade Five Music Theory - Lesson 12: Composing a Melody - General Tips [Archived lesson]

Please note: the ABRSM Grade 5 syllabus no longer includes any questions on composition

Composing Melodies

In question 6 of the Grade 5 theory paper, you have to write a short melody. You have to choose to write it for either an instrument or a voice.

This lesson looks at the **general** techniques needed for composing a short melody. (Lesson 13 focuses specifically on things you need to know about writing for instruments, and Lesson 14 is about setting music to words).

More help can also be found on the mymusictheory blog:

- Blog posts about composing for grade five music theory

Instrument or Voice?

Choosing whether to compose for an instrument or a voice will depend on several things:

- If English isn't your first language, you may have some extra difficulties writing effectively to a text. (You will need to understand what all the words mean, and also how they are pronounced).
- If you don't know much about either of the instruments offered, you might do better to choose the voice question.
- If you're a singer, you might find the voice question easier.

In the instrumental question, you are given two bars of melody and have to write another six. In the voice question, you are given two lines of text which you need to set to music.

Some people think the voice question is easier, because they assume you can write whatever you want, you can choose the key and time signature, and the total number of bars is flexible. However, in my experience as a teacher, I have generally found that students get higher marks by doing the instrumental question. This is because many people find it difficult to set words to music correctly, and they don't realise that their composition has to be structured and follow the "grammar rules" of music. Whereas with the instrumental question, there is less to write and you are expected to adapt something, rather than think something up from scratch.

In any case, you should practise both types of question before you take the exam. You will soon find out if one type of question is more difficult for you. Here's a little more information about each question type:

Writing for an Instrument

You'll be given the first two bars of a melody, with the key and time signature. (It could be in treble clef or bass clef).

The instructions will ask you to choose from two instruments and to continue writing the melody for the instrument you've chosen.

The choice of instruments will be from different families, for example the violin and oboe, or the bassoon and cello. (There is no wrong answer - choose the instrument you are most comfortable with.)

Here's an example question:

Compose a complete melody for unaccompanied violin or flute, using the given opening. Indicate the tempo and other performance directions, including any that might be particularly required for the instrument chosen. The complete melody should be eight bars long.
Instrument for which the melody is written: .....



Writing for Voice

You'll be given the first two lines of text, taken from poetry, and two blank staves. The instructions will ask you to write a **complete** melody for solo voice to fit the words of the text: you can choose whichever voice (soprano, alto, tenor or bass) you prefer.
You don't have to say which voice you've chosen, but you will have to keep the melody within the normal **range** of one voice, and use the appropriate **clefs**.

Here's an example question:

Compose a complete melody to the following words for a solo voice. Write each syllable under the note or notes to which it is to be sung. Also indicate the tempo and other performance directions as appropriate.

The river glares in the sun

Like a torrent of molten glass.

Effective Composing

You might think that writing a melody without being able to hear it is impossible - but did you know that Beethoven wrote most of his great music when he was completely deaf?! Luckily, no one is asking you to write a 4-movement symphony - you only have to write a single melody line for 8 bars. But where do you start?

Every piece of music has two vital elements - **rhythm** and **melody**. On top of that, the **harmonic structure** of your composition will give shape to the melody, and should also be considered when composing. Also important are **performance directions**, which are words or symbols that help the musician interpret the notes they are reading. We'll look at each of these in turn.

Balance is also important: your melody should usually be 8 bars long, so you should break it down into two parts or "phrases", (this is called *binary form*). The first phrase will be bars 1-4, and the second phrase will be bars 5-8. If you like, you can then divide each phrase into 2, giving you four short 2-bar phrases. We can call these four phrases 1a, 1b, 2a and 2b.

Let's look at **rhythm**, **melody**, **harmonic structure and performance directions** in more detail.

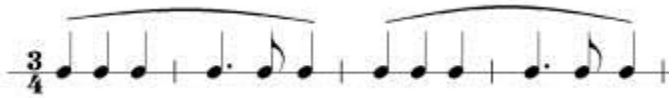
(These examples are based on an 8-bar melody. If you choose the voice question, you can write it for as many bars as you think appropriate, but eight is an **excellent** choice, because it is the most balanced. If you don't choose eight bars, then write it for four. Don't choose any other number!)

Rhythm

I want you to forget about melody for now, so in the following examples I'm going to use a one-line stave, so that we can focus on rhythm only.

Here are the opening bars (phrase 1a and 1b) of some well-known tunes, notated in rhythm only:

1. British National Anthem:



2. Beethoven Symphony no.5, 1st movement



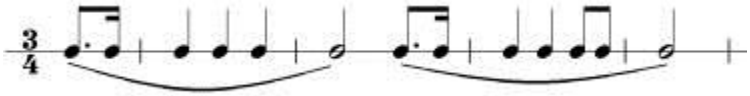
3. Happy Birthday to You/Star Spangled Banner



What do they all have in common?

They each have a rhythmic **phrase** which is **repeated** to create phrase 1b.
You **shouldn't** write your second phrase with **exactly** the same rhythm as the first (because your composition will be too short), but it must be quite **similar**.

Look at how I've altered the second phrase of those three extracts, (tap out the rhythms on the table as you read them!)

1. 
2. 
3. 

What kind of changes did I make?

Extract 1: I swapped around the rhythm in bars 3 and 4.

Extract 2: I changed 2 quavers (eighth notes) into 4 semiquavers (sixteenth notes).

Extract 3: I changed a crotchet (quarter note) into a quaver (eighth note).

You can change the rhythm of phrase 1a in any number of ways; the important thing is **not** to change it **too much**!

The same guidelines apply when you create phrases 2a and 2b - keep the rhythms similar, but make small changes, and make sure that phrase 2 is not identical to phrase 1.

There are not many rules about how you should adapt the rhythm, except that there must be some **connection** and some **similarity**between the rhythms - don't write a completely different rhythm for each of your four phrases, and it must not be too **repetitive**.

When you write your composition, be sure to use rhythms and groupings which are correct for the time signature. The rhythms used in 3/4 are not the same as those used in 6/8, for example! Read the lesson on time signatures again, if necessary.

If the composition starts with an up beat (or "anacrusis" or "pick-up"), the last bar of the melody needs to compensate. Bar 1 is always the **first complete bar.**
For example, if you have a crotchet (quarter note) up beat in 3/4 time, then bar 8 will contain only **two crotchets** (two quarter notes), because the first and last bars added together total one complete bar.



Melody

Just like rhythms, melodies sound good if they contain repeated **sequences**. Do you know this children's song? (It's called *Frere Jacques*.)



This song simply repeats both the rhythm and melody in bars 1 and 3 to create bars 2 and 4.

But if you look more closely, you'll see that the melody in 1b (E-F-G) is the same as the first three notes of the melody in 1a (C-D-E)- but a third higher. In both cases, the melody rises twice by step.

This is an example of a **melodic sequence**: a section of melody which is repeated but starting on a different step of the scale.
However, *Frere Jacques* is probably not the most interesting song in the world, so let's look at another example!
This is the "Gloria" chorus from the Christmas carol *Ding Dong Merrily on High!*:



The rhythm of each bar is the same, but the melody is in sequences, with each bar starting *one step down* in the key of G major, starting on the dominant note, then C (bar 2) then B (bar 3).

There are several types of sequence which you can use to generate new melodic phrases, so let's look at them in more detail.

Sequences



This is the bar we're going to sequence.

Type of Sequence	**Example**	**Notes**
Melodic Sequence Change the starting note but keep all the relative intervals the same:		This sequence starts a 2nd higher.
		This one starts a 5th higher
Inversion Turn the melody upside down:		
Retrograde Write the melody back to front:		
Retrograde Inversion Upside down **and** back to front:		

You can also combine any of the above types of sequence.

Your new melody should be a **mix** of your own ideas and some imitation of what's already there - your new ideas need to be **linked** to the two bars you've already been given. Be inventive, but don't stray too far away!

(By the way, don't worry about remembering all the names of the different types of sequences; you won't be tested on them!)

In the instrumental question, you are given an opening to adapt and create the rest of the composition from. In the vocal question, you will have to invent your own opening, but you will then need to adapt it to create the rest of the melody.

Harmonic Structure

(See Lesson 11 for basic information about progressions and cadences.)

Although you are only writing a single line of music, you should keep in mind the chords that could accompany your melody.

Your piece should be constructed in two halves of exactly the same length. At the end of each half, you need to use notes which fit an appropriate **cadence.**

- In a short, 8-bar tune, the end of the first phrase sounds best if it ends on an **imperfect cadence**. This means that the end of the phrase would sound good if it was played with chord **V.** The chord which comes before **V** is up to you, but common imperfect cadences are **I-V, II-V, IV-V** and **VI-V**. Make sure that the notes which end your first phrase fit into one of these cadence chords.
- The end of the second phrase should ideally end with a **perfect** cadence. A perfect cadence is **V - I**. You should always end your composition with a **tonic** note, with the value of at least a crotchet (quarter note).

Make sure the notes you have chosen for your melody **fit** the cadences at these points. (Don't forget that your non-chord notes don't count).
For the rest of your composition, you will write something that sounds **great** if your harmonic structure is good. Each bar of your composition should fit with a chord which exists in the key of your piece. (Work out which are chord notes and non-chord notes in exactly the same way as you do when working out cadences.)

A good harmonic structure is one which uses:

- Chords I, IV and V at least half of the time
- Chords II and VI occasionally
- A different chord on each beat, or in each bar. Don't use the same harmony for more than one bar's worth: keep it moving.

Chords I and V should be used at the start of a composition. In the instrumental composition, you will be given the opening, so you don't need to worry about this. However, if you choose the vocal composition you should remember to use I and V straight away.

Chord III is not used very often.

Chord VII works the same way as chord V, because it fools our ears into thinking it is V7 (V with an added 7th e.g. G-B-D-F in the key of C major).

In a minor key, you need to base your chords on the **harmonic** minor scale. This means that chord V is always a major chord (e.g. E major in the key of A minor). Chord III must be avoided (because it is C-E-G# (for example, in A minor), which is an **augmented** chord, which is nasty). Chord VII also uses the raised leading note in a minor key (e.g. G#-B-D in A minor).
Here's a summary of the **recommended chords** to use in a major and minor key:



Here is an example of a composition with a strong harmonic structure. The key is B minor. The melody begins with chords I and V, the first phrase ends with an imperfect (IV-V) cadence, and the end of the piece uses a perfect (V-I) cadence. The rest of the piece mainly uses chords I, IV and V, with a II and VI also used occasionally. Non-chords notes are marked with an X (remember, non-chords notes are an interval of a 2nd away from the previous chord note: see the lesson on progressions for more info.) The harmony changes at least every bar, sometimes it changes with each beat of the bar (e.g. bar 5).



Performance Directions

Whatever instrument/voice you're writing for, you will need to include performance directions for the player/singer.

You ***must*** include:

- **Tempo** (speed). Use the accepted Italian terms.
- **Dynamics** (volume). Indicate a starting dynamic, and indicate gradual increase/decrease of volume with hairpins.
- **Articulation** (instrumental music=attack). Adding the right articulation indications will increase the marks you get for this question - but make sure you use them in the right places and don't overdo it. (See the next lesson for more on this.)

Top Tips

My best tip is to keep in your mind that a little goes a long way. Adapt the opening melody without changing it drastically add just a few performance directions to the player - but be sparing.

Take a look at some of the music you're playing right now- just how many directions can you find in the space of 8 bars? Not many, I'd guess!

If you try to write something very complicated, you're more likely to get into a mess. Keep it clean and simple, but make sure you do add **some** directions, which are both **relevant** and **meaningful**.

How can I learn to hear my compositions in my head?

Get into the **habit** of hearing music in your head. You'll find this question much easier if you can accurately pinpoint the notes you're writing, (you won't be able to sing them out loud in the exam room!)

Everyone can hear music in their head (sometimes you get a tune going round and round in there that you can't get rid of), but learning to hear in your head what your **eyes** are seeing is a little harder. Take some music which you haven't studied yet and try to **read it without playing/singing it**. Don't panic - the more you practice, the easier it will get.

Start off with just 2-4 bars, and build it up as you become more confident. Choose music that moves in small steps, not in big intervals, and without lots of accidentals. Check what was in your head by playing the bars on your instrument. Were they the same?

Gradually move on to more complicated music- with difficult key signatures, tricky rhythms and huge leaps. Learning the skill of hearing music in your head also helps your sightreading a lot!

You might find it easier if you make some kind of physical reaction as you read - if you can sing, you might feel your voice-box subconsciously changing as you change notes; if you play an instrument it might help if let your fingers move on an imaginary instrument.

Composer's Checklist

Here's a checklist to use while you're doing practice questions. (See Lessons 13 and 14 for more details).

Click here to print a copy of the table.

All	Tempo	
	Dynamics	
	Phrasing	
	Double bar at end	
	Range of notes fits	
	Cadences (1st=?-V, 2nd=V-I)	
	Sequences	
	Long tonic note at end	
Wind Instruments	Articulation	
	Range fits the instrument	
String Instruments	Articulation	
	Range fits the instrument	
Voice	Breathing (phrasing)	
	Clef, Key and Time	

	Syllables ok	
	Word Painting	
	Style consistent	

Grade Five Music Theory - Lesson 13: Composing a Melody - Instruments [Archive lesson]

Please note: the ABRSM Grade 5 syllabus no longer includes any questions on composition

- Please note: I recommend you read Lesson 12: General Composition Tips before reading this lesson.
- Voice composition will be covered in detail in the next lesson.

The Grade Five Music Theory Instrumental Composition Question

In your Grade Five Music Theory exam, you'll be given the first two bars of a melody, with the key and time signatures. (It could be in treble clef or bass clef.)

The instructions will ask you to choose from two instruments and to continue writing the melody for the instrument you've chosen.

(There is no wrong answer- choose the instrument you are most comfortable with).

The choice of instruments will be from different families, for example the violin and oboe, or the bassoon and cello.

You will never have to write for an instrument on which we usually play several notes at the same time, like the piano, harp or organ.

Here's an example question:
Compose a melody for solo violin or oboe, using the given opening. Include tempo and other performance directions, and any that might be specially needed for the instrument you've chosen. The finished melody should be eight bars long.



Choosing an Instrument

It's a good idea to choose an instrument that you know something about! If you play the clarinet and you have the choice of bassoon or cello, you'll probably write a better melody for the bassoon, as it is also a wind instrument.

Whichever instrument you choose, you will need to know its **range**, i.e. what its lowest and highest notes are.

As long as you don't start using lots of ledger lines you should stay within the range required, but don't forget that some instruments are less/more effective in different registers.

For example, although the flute can play from middle C, the very lowest notes are quite weak and much less bright than octave above.

Complete details about the ranges of all the standard orchestral instruments can be found in the reference section of this site.

Don't forget to write which instrument you have chosen on your exam paper!

Melody Length

The melody should be 8 bars in total. You usually get around 2 bars to start you off, so you will have to write 6.

Notice whether the melody starts with a **complete** bar or not - if it starts with an incomplete bar, then your last bar should make up the beats, (so you'll finish up with 7 complete bars and 2 incomplete bars).

Here, for example, the first note is an up beat. The last bar and the first bar added together make one complete bar.



You don't need to add bar numbers, but you might find it useful to do so.

Only the first and last bars can be "incomplete". You will probably need to use two staves to write your whole composition out, so make sure the first bar on the second stave is **complete**: don't split a bar across two staves.

Don't forget to finish with a double barline!

Performance Directions

Whatever instrument you're writing for, you will need to include performance directions for the player.

You **must** include:

Tempo (speed)

- Use the accepted Italian or German musical terms. You won't get extra marks for using an obscure term, so it's a good idea to play it safe and use a common term such as "Moderato".
- If you pick a very fast or very slow tempo, you might make the composition particularly awkward to play for the chosen instrument, so unless you are 100% sure, use "Moderato" or "Andante", which are both moderate tempos.
- You can use a metronome marking if you prefer, e.g. 

, but be sure to use a number which is actually found on a metronome (you couldn't use the number 59, for example!) Also, make sure you use the value of note which is indicated by the time

signature. If the time signature is 4/4, you would use a crotchet (quarter note), because the time signature means "count crotchets". If the time signature is 6/8 though, you would have to use a dotted crotchet (dotted quarter note), because 6/8 is a compound time signature.

Dynamics (volume)

- The player needs to know what dynamic the piece begins at, so be sure to add a starting dynamic (e.g. "mf"), **directly under the first note**.
- You should also indicate some gradual increases/decreases of volume with hairpins e.g. . Make sure that the beginning and end of the hairpin is accurately placed under specific notes.
- Make sure that all the dynamics you write are logical. If you write "mp < pp" it is very confusing, since you have indicated a crescendo which gets quieter!
- It's a good idea to make the loudest part of the melody happen somewhere around bars 6-8, as this is where we expect to hear a musical climax.

Articulation (attack)

- Adding the right articulation indications will increase the marks you get for this question.
- If there are no articulation markings, a wind player (woodwind and brass) has to attack each and every note with the tongue, and a string player has to change the bow direction with every note. This is not only tiring for the player, but it makes the music sound rather jagged and unlyrical.
- The **legato** marking (or "slur")  is used to show that wind players should play a group of notes with one breath, or that string players should play a group of notes with one sweep of the bow. Be sure to use legato markings in your composition. You can slur all the notes in one bar, or half bars, or groups of faster notes, like quavers (eighth notes). Don't slur more than one bar though - a wind player is likely to run out of breath, and a string player will run out of bow! Slurs should be written on the opposite side of the note to the stem, but it's ok to write them on the other side if there isn't enough space. Here are some different ways you could slur the same melody, slurring the whole bar, the half bar, and the pairs of quick notes:



- You can also use other types of articulation, such as staccato, accents and tenuto, but these are optional.

- Whatever articulation you use, try to be **consistent** throughout the melody. For example, you slurred each half bar from bars 1-4, then you should do the same in bars 5-8. If you put staccato on the semiquavers (16th notes) in bar 2 (for example), then do the same for any similar notes/rhythms in the rest of the piece.

Tempo, dynamics are articulation are the only performance directions that you **must** add. There are some other markings which are optional:

Breathing

Wind players will need somewhere to breathe. You may indicate places where the player can grab a quick intake of air by using a small comma - above the stave.

,

Although you don't have to put breathing marks in, you do have to make sure that your melody is playable by a human player! If you slurred all the notes across four bars and put a tempo of "molto adagio", you would end up with a dead flautist. Think about what you are writing!

Pauses

It can be nice to add a pause symbol on the last note of your piece.

Bowing Directions

String parts sometimes include special symbols which tell the player whether to play a note with their bow moving upwards or downwards.

However, bowing directions are normally only used a) in beginner's study books to help them out or b) when the direction of the bow is not what the string player would expect.

What does a string player expect? A "down bow" is used on a "down beat". A "down beat" is another word for a strong beat; the first beat of a bar is always a "down beat". (It gets this name because a conductor moves his/her hand downwards to show the first beat of each bar). An "up beat" occurs before a down beat, and the player uses an "up bow". So, if your composition begins with an up beat (or "anacrusis" or "pick up"), then a competent string player would automatically play it with an "up bow" and then use a "down bow" for the first beat of bar 1, and so on.

For this reason, it's completely unnecessary to cover your 8-bar string melody with bowing directions. You won't get extra marks for them, and you might end up losing marks if they don't make logical sense.

If, on the other hand, you happen to be a advanced string player and are confident that you know how to use bowing directions for good effect, then by all means use them. Here are the symbols: you should learn them in any case, as you may be tested on them in other parts of the exam paper.


Up-bow marking

 Down-bow marking

Special Effects

String instruments are capable of playing more than one note at the same time (this is called "double-stopping"). A whole range of sounds can be produced by striking the strings in different ways, such as "pizzicato" (plucking the strings with the fingers), "tremolo" (shimmering the bow rapidly up and down) or "spiccato" (using the wooden part of the bow instead of the hairy part).

Wind instruments can produce effects such as "flutter-tonguing".

Both wind and string instruments can play "vibrato", and brass/string instruments can play with a mute.

None of these special effects are necessary for your exam composition, and we would strongly recommend **avoiding** them. The examiner is not looking for fireworks: they are are looking for a balanced, well-constructed composition. You can read up on the ABRSM's marking criteria here.

Grade Five Music Theory - Lesson 14: Composing a Melody - Voices [Archive lesson]

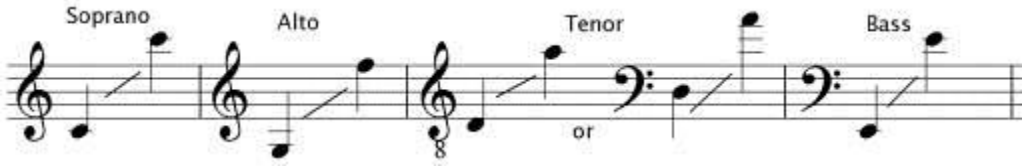
Please note: the ABRSM Grade 5 syllabus no longer includes any questions on composition

This lesson explains how to tackle the voice composition question in the ABRSM Grade 5 Music Theory exam. You should read Lesson 12: General Tips for Composition first. The composition question gives you a choice of either an instrumental or a vocal composition. Instrumental compositions are covered in lesson 13.

The Voice Composition Question

In the Grade 5 Theory voice composition question you'll be given two lines of text, usually taken from poetry, and two blank staves.

The instructions will ask you to write a **complete** melody for solo voice to fit the words of the text: you can choose whichever voice (soprano, alto, tenor or bass) you prefer.
You don't have to write which voice you've chosen, but you will have to keep the melody within the normal **range** of one voice. You can use either the treble or bass clef, whichever you are more comfortable with.



Try to avoid extreme highs and lows of the range.

Melody Length

The length of the melody is up to you, but a well-balanced melody will normally last for **4** or **8** complete bars: each line of text should fit into 2 or 4 bars.

Often the melody will need to start with an up beat (which means an incomplete bar), in which case your last bar should make up the beats in the last bar. Don't forget to finish on the tonic note, with a double barline!

Writing the Melody

The voice composition question is assessed in quite a few different ways. You will need to work out a rhythm which fits the **stress** of the words, and a melody which suits the **meaning** of the words. It's a good idea to begin by sorting out the rhythm, then add a melody to the rhythm when you've worked it out.
Each individual syllable of the text needs to be set to at least one note. To make a good rhythm, you need to work out where the **stressed syllables** are in the given words, and place the stressed syllables on the **strong beats of the bar.**

Then you need to construct the entire rhythm of the piece and pick a suitable time signature. Next, you need to decide on the mood of the piece (based on the meaning of the words), and create a melody which fits the rhythm and mood.

Finally, you should add performance directions to your composition.

Write in the words as you write each musical note, so that you have enough space for both. When you have finished, check that the way the words are written for each note has been done correctly - this is known as the "verbal underlay" (explained below!) If you write all the melody first, you'll find that you haven't got enough space to write the words neatly. If you write all the text first, you will probably get the relative spacing of the notes wrong!

So here are the steps:

1. Work out the stressed syllables
2. Write a rhythm and choose a time signature
3. Choose a mood and key, and write the melody/words underneath
4. Add performance directions
5. Check the verbal underlay

1. Work out the stressed syllables

Look at your first line of text and decide which syllables you think should be **stressed** - these words will be sung naturally on the first beat of the bar.

How easy this is depends on the words you've got. Here are some examples.

Old castles on the cliffs arise,
Proudly towering in the skies.

Here are the stressed syllables in red:

Old castles on the cliffs arise,

Proudly towering in the skies.

How did I work out the stresses?

Try saying the words aloud and clapping or stamping your foot in time. If you seem to be clapping on every word, try clapping at **half** the speed (but carry on speaking at the same speed). Say the lines aloud several times without stopping, and you should start to instinctively start clapping on **four** accented words.

(If you find this very difficult to do, you should probably choose the question on writing for an instrument, rather than for voice.)

Here's another example, which is a bit harder:

The river glares in the sun
Like a torrent of molten glass

Try the same clapping exercise. Again, halve the speed of your clapping if you seem to be clapping all the time. You should end up clapping at these points:

The river glares in the sun
Like a torrent of molten glass

2. Write the rhythm

Now take your pencil again, and sketch in a rhythm above each line of text. You can either choose a time signature before you start, or "see how it goes" and select one at the end.

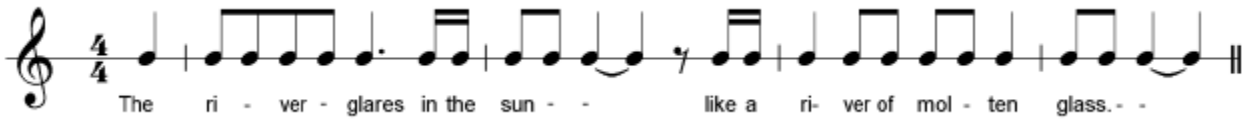
Most texts will fit into a variety of time signatures, and there isn't one single correct answer. However, sometimes the words of the text might lead you to choose a particular time signature; for example words about a battle could suggest a marching 2/4, or romantic words often sound smoother in triple time.

Be consistent: use similar types of rhythms throughout. Don't be too repetitive though, and make sure that the first and second halves of the piece are similar but not identical. (They should be like fraternal (not identical) twins: with some similarities, but easy to see the differences!)

You need to write at least one note value per syllable. Feel free to write more than one note per syllable if you want!

Here are two possible rhythms for this text:





3. Mood and Melody

Decide whether the music should be in a **major** or **minor** key. Look at the words again and think about how they make you feel. If they are sunny, positive words, use a major key. If they are dark, sad or aggressive, use a minor key.
The words might also suggest a particular **style** to you. It could be a lullaby, a march, a love song or something else completely.
Think about **word painting**. Word painting is the technique of using notes to imitate the literal meaning of words in the text.

For example, if you have the word “low”, you use a low note, if you have the words “soaring” you write ascending high notes and so on. Other evocative words could be “climb”, “fall”, “sigh”, “stop,” "rushing" and “jump”. There won’t always be words which you can paint with, but if you can find one, do try to use it!

4. Performance Directions

You will need to add a tempo at the beginning of the piece - again, think about the mood you want to create. You also need to add dynamics. You need a dynamic for the first note, and then some changes of dynamic which follow the mood and contours of the piece. Bear in mind that it is most natural to crescendo while singing a rising melody, and decrescendo when the melody falls.

It's a good idea to write any dynamics **above** the stave, so that they don't get mixed up with the words of the text.

5. Check the Verbal Underlay

Each syllable of the text must be aligned correctly with its corresponding note.

Each syllable of a word should be **centred** underneath the note it is sung to.
When a word has **two or more syllables**, you need to break it up. Use **hyphens** (-) to link the syllables together. Break up the word so that each syllable starts with a consonant which you can sing. For example, let’s break up the word “Constantinople”. It’s got five syllables, so the correct way to break it up is like this:

Con - stan - ti - no - ple

Each new syllable starts with a consonant which you can sing.

Here are two other ways to break it up, but they are **wrong**:

Co - nsta - nti - nop - le

This is wrong because you can't sing "nsta" or "nti", and "le" isn't pronounced that way in the word.

Cons - tant - i - no - ple

This is wrong because the "st" sound should be kept together, and the third syllable should start with a consonant.

Words that have grammatical endings such as "-ing" or "-ed" or "est" etc., can be split so that the main word is joined to its ending, for example "breath-ing" (not "brea-thing").

Here's a notated example of some hyphenated words:



You can write **more than one** note to be sung to **one** syllable. Use one or more long **dashes** under each note that the syllable should be sung to, and connect the notes together with a **slur**, like the word "us" here:



Beaming

In the old days, quavers (eighth notes) and smaller were *not* supposed to be beamed together in vocal music. You were supposed to write



and not



These days though, it's preferable to beam the notes together. You may well come across old vocal scores which use this old notation style. If you do, look more closely and see if you can identify any other changes in the way music is now written down!

Breathing

Don’t forget that singers need to breathe, especially if your tempo is slow! You don’t need to notate breathing points, but keep in mind that it’s easier to grab a quick breath at the end of a minim (half note) than in between quavers (eighth notes)!

Example Composition

Here's an example of a complete composition to the text "The river glares in the sun".



I chose the time signature of 3/4 because I feel that triple time feels more flowing and therefore more "river-like". I decided to make the word "river" meander around a bit, whereas the word "glass" would be flat and still (word painting). Notice that the word "glass" doesn't need a hyphen - it's sung to a tied note, which counts as just one note.

I chose a minor key overall, because the words seem quite negative. However, I decided to write an imperfect cadence on the word "sun" in the relative major key (the notes fit the chords of G major then D major), because the word "sun" is positive. The key moves back to E minor at the end, with a perfect cadence on the syllables "-ten" and "glass" (chords of B major and E minor).

The melody begins low and gradually rises up to high E. For this reason, I started at a moderately soft dynamic, and crescendoed through to the end.

The rhythms in each bar/phrase are similar but not identical at all. The rhythm is built from standard note values (i.e **without** triplets, double-dotted notes or syncopation, etc.). Both halves of the composition use a combination of minims, dotted crotchets and quavers (half notes, dotted quarters and eighths). The last note is held on for two bars so that the entire composition becomes eight bars in total. If I had stopped in bar 7, it would have felt a little unbalanced.
The harmonic structure of the melody is strong (see lesson 12). The chords used are (in E minor) V, I, VI, (in G major) I, V (in E minor) IV, I, II, V, I. There is a good variety, with chords I and V being used more often.