




Rhythmic Notation

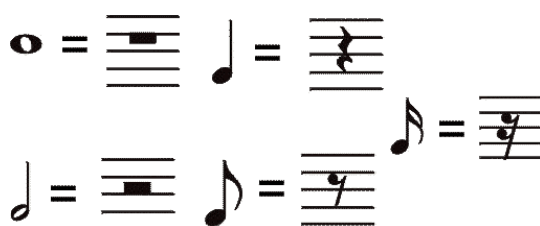
Pulse is the heartbeat of music. Just as with an animal or human, music cannot survive without it. There is pulse in the world around us, giving us a natural regular beat- such as day and night, seasons, tides and our own heartbeat, or 'pulse'. All of these are constant (always the same), except our heartbeat, which can change at any time depending on activity. Music usually has a regular beat, or pulse, which we can clap or tap along to.

Rhythm is a pattern that we fit into the pulse. Read a poem to yourself and see how the pulse differs to the rhythm. Rhythm is the length of the notes that are played or heard.

Below are the names of the most common types of note or rest. As popular music theory is dominated by its Jazz roots, I have included the US names for the notation as well as the classical terms.

Note	Rest	Name	Nickname	Length	USA Name
		Semi-breve	---	4 beats	Whole
		Minim	---	2 beats	Half
		Crotchet	Tea	1 beat	Quarter
		Quaver	Cof-fee	½ a beat each	Eighth
		Semi-Quaver	Drin-king Choc-'late	¼ a beat each	Sixteenth

Rests are used to describe to the musician when not to play and their placement on the staff is considered quite important.



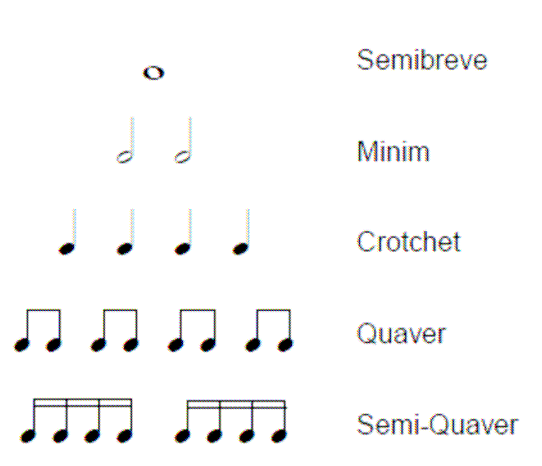
In particular notice the difference between the minim and semibreve.

A single quaver (eighth note), can be written like either of these:



The tail or 'flag' on a quaver is always written to the right of the stem, regardless of whether the stem goes up or down.

The diagram below shows the relative value of each type of note, where each line adds up to four beats:



Excercise 1:

Practice drawing ten of each type of rest covered so far.

Semibreve:	
Minim:	
Crotchet:	
Quaver:	
Semi-quaver:	

Quavers/ Eighth Notes

A quaver/ eighth note lasts for half the duration of a crotchet/ quarter note. It can be played when the beat starts in 4/4 (see *Time Signatures*), and halfway through the beat.

Quavers played when the beat starts – ‘on beat’ – are written:



Quavers begun halfway through the beat – ‘off beat’ – are written:



Grouping of Notes and Rests in 4/4

In 4/4 time, each bar must add up to the equivalent of four crotchets/ quarter note beats, whatever the combination of note and rest values.

There are certain rules about how combinations of these notes can be written. These rules exist in music notation so that all four beats of the bar can be clearly identified, and consequently the written music is easier to read.

Rule 1:

Notes shorter than a crotchet are grouped together to form a beat.

For example, you can beam together two eighth notes that start on a beat, but you should not beam together two eighth notes that belong to two different beats.

This is correct:



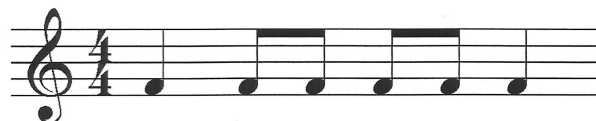
This is incorrect:



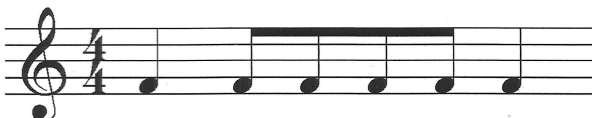
There is an exception to this rule:

You can beam together four quavers that are in the first half of the bar (beats 1 and 2) or in the second half of the bar (beats 3 and 4). However, you should not beam together quavers in the middle of a bar (beats 2 and 3), instead you should use two pairs of beamed quavers.

This is correct:



This is incorrect:



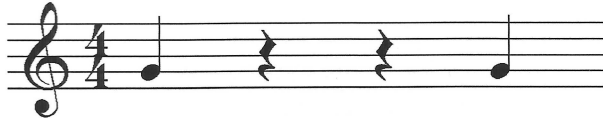
Rule 2:

Unless there is a whole bar rest, each crotchet beat should have a separate rest.

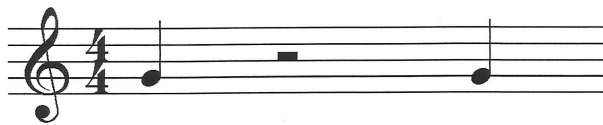
There is an exception to this rule:

You can write a minim rest in the first half of the bar (beats 1 and 2), or in the second half of the bar (beats 3 and 4). However, you should not write a minim rest in the middle of the bar (beats 2 and 3), instead you should use two crotchet rests.

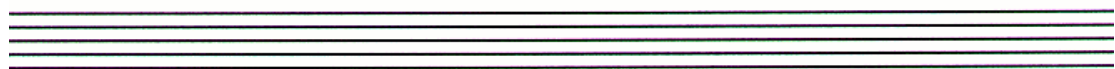
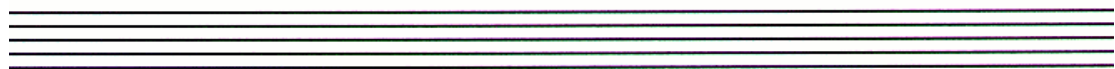
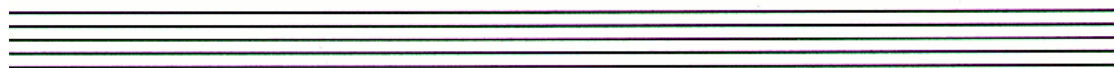
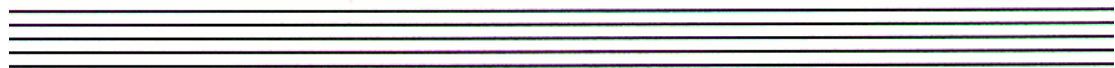
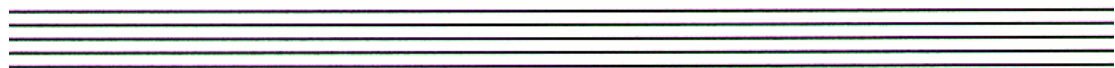
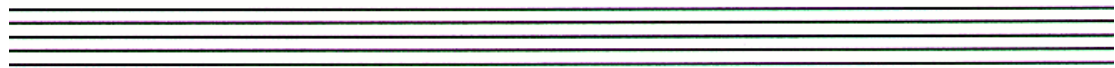
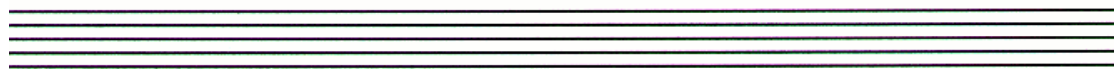
This is correct:



This is incorrect:

**Exercise 2:**

Try making up random rhythms and writing them with the correct note groupings. Then try playing them if you can!



Grouping of Notes and Rests (Simple Time Signatures)

Quavers and notes shorter than quavers are beamed together when they belong to one beat. For example:



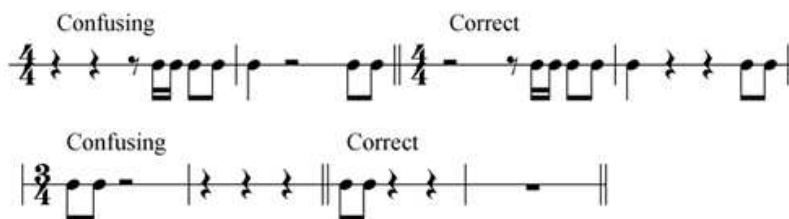
Exceptions:

1. In a bar of 2/2 or 4/4 time, you can beam together all eighth and sixteenth notes that are in the first half of a bar (beats one and two), or in the second half of the bar (beats three and four). However, you should not beam together notes across the middle of the bar (beats two and three).
2. In 2/4 or 3/4 time you can beam together all eighth and sixteenth notes within a bar.

For example:



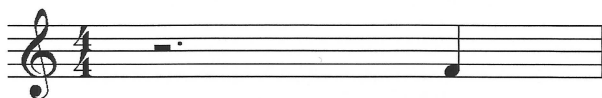
When you write rests, each beat and each half beat must be completed with the appropriate rests. This is because it is much easier to read music if you can clearly see where each beat and each half beat starts. For example:



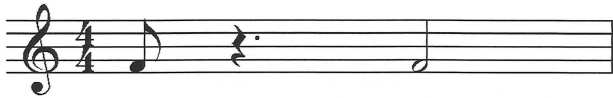
Exceptions:

1. In a bar of 4/4 time you can write a minim rest in the first half of the bar (beats one and two), or in the second half of the bar (beats three and four). However, you should not write a minim rest in the middle of the bar (beats two and three) – instead you should use two crotchet rests.
2. The semibreve rest (also known as the 'whole bar' rest), indicates a whole bar rest in all popular time signatures including 2/4 and 3/4. Consequently, dotted minim rests are not used in 3/4; a whole bar rest is used instead.
3. Although it is normally easier to see all the main beats if you write rests out in full (with each beat having a rest of its own where needed), you can use dotted rests in certain places (such as the start of a bar in 4/4 time).

For example both of these are acceptable:



This bar is incorrect because the rest starts midway through beat 1:



Grouping of Notes and Rests (Compound Time Signatures)

Notes shorter than a dotted crotchet should be grouped together when they belong to one beat. This helps to clarify where the underlying dotted quarter note beat is.

For example, in 6/8 time the first three quavers (including any combination of quavers and semi-quavers) should be beamed together. Similarly, the last three quavers should be beamed together.

This is correct:



This bar is incorrect because, although it contains the same order of notes as the example above, the notes are grouped as though in 3/4 time.



The same rule for writing rests in simple time – that each beat must be completed with the appropriate rests – applies in compound time. When you write rests in compound time you must remember that each beat is equivalent to a dotted quarter note.

This is correct:



This is incorrect because it is written as though in 3/4 time.



Exception:

The semibreve rest indicates a whole bar rest in all popular time signatures, including compound time signatures. Consequently, dotted minim rests are not used in 6/8 time as a whole bar rest is used instead.

There are specific additional rules about how the rests within each beat can be written. Remember, a beat in compound time lasts for a dotted crotchet note.

If the first two quavers are silent, a single crotchet rest should be used.

If the last two quaver notes of a beat are silent then two quaver note rests (rather than a single crotchet) should be used.

This is correct:



This is incorrect:



Distinguishing between 6/8 and $\frac{3}{4}$

As both 6/8 and $\frac{3}{4}$ time can contain six quavers, it is important to group them correctly. In 6/8 time there should always be a split between the 3rd and 4th quaver notes (because in 6/8 the beat is divided into two groups of three quavers).

Both lines of music below have the same note values, but notice how the grouping changes according to the time signature used:

