

Chapter 7

Simple and Compound Time Signatures¹

Simple and Compound Time Signatures Simple Time Signatures

Type	Common			Uncommon	
Simple Duple	2	2	2	2	2
	2	4		8	16
Simple Triple	3	3	3	3	
	2	4	8	16	
Simple Quadruple	4	4	4	4	
	2	4	8	16	

Figure 7.1

In simple time signatures the top number represents the number of beats per measure. The bottom number indicates the type of note equal to one beat. The division of the beat is the lower number multiplied by 2. Thus, the division of the beat is grouped by twos.

Example: 4 – There are 4 beats in each measure.
4 – A quarter note equals one beat. Division of the beat is two eighth notes.

Figure 7.2

¹This content is available online at <<http://cnx.org/content/m21190/1.2/>>.

Compound Time Signatures

Type	Common		
Compound Duple	6 4	6 8	6 16
Compound Triple	9 4	9 8	9 16
Compound Quadruple	12 4	12 8	12 16

Figure 7.3

In compound time signatures the top number divided by 3 represents the number of beats per measure. The bottom number indicates the type of note that divides the beat. The division of the beat is grouped by threes.

Example: **9** – There are 3 beats per measure.
 16 – Three sixteenth notes equals 1 beat.

Figure 7.4

Hearing simple and compound time signatures

Listen carefully for the pulse or beat of the music. Do you hear divisions of two or three? A simple test is to try saying "apple" or "pineapple" to each beat. "Apple" has two syllables and will fit simple meters. "Pineapple"—having three syllables—naturally fits compound meters.

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Chapter 8

Meter in Music¹

8.1 What is Meter?

The **meter** of a piece of music is the arrangement of its rhythms in a repetitive pattern of strong and weak beats. This does not necessarily mean that the rhythms themselves are repetitive, but they do strongly suggest a repeated pattern of pulses. It is on these pulses, the beat (Section 5.1: Beats and Measures) of the music, that you tap your foot, clap your hands, dance, etc.

Some music does not have a meter. Ancient music, such as Gregorian chants; new music, such as some experimental twentieth-century art music; and Non-Western music, such as some native American flute music, may not have a strong, repetitive pattern of beats. Other types of music, such as traditional Western African drumming, may have very complex meters that can be difficult for the beginner to identify.

But most Western² music has simple, repetitive patterns of beats. This makes **meter** a very useful way to organize the music. Common notation³, for example, divides the written music into small groups of beats called measures, or bars (Section 5.1: Beats and Measures). The lines dividing each measure from the next help the musician reading the music to keep track of the rhythms (Chapter 4). A piece (or section of the piece) is assigned a time signature (Chapter 5) that tells the performer how many beats to expect in each measure, and what type of note (Chapter 1) should get one beat. (For more on reading time signatures, please see Time Signature (Chapter 5).)

Conducting⁴ also depends on the meter of the piece; conductors use different conducting patterns for the different meters. These patterns emphasize the differences between the stronger and weaker beats to help the performers keep track of where they are in the music.

But the conducting patterns depend only on the pattern of strong and weak beats. In other words, they only depend on "how many beats there are in a measure", not "what type of note gets a beat". So even though the time signature is often called the "meter" of a piece, one can talk about meter without worrying about the time signature or even being able to read music. (Teachers, note that this means that children can be introduced to the concept of meter long before they are reading music. See Meter Activities⁵ for some suggestions.)

8.2 Classifying Meters

Meters can be classified by counting the number of beats from one strong beat to the next. For example, if the meter of the music feels like "strong-weak-strong-weak", it is in **duple** meter. "strong-weak-weak-

¹This content is available online at <<http://cnx.org/content/m12405/1.12/>>.

²"What Kind of Music is That?" <<http://cnx.org/content/m11421/latest/>>

³"The Staff" <<http://cnx.org/content/m10880/latest/>>

⁴"Conducting" <<http://cnx.org/content/m12404/latest/>>

⁵"Musical Meter Activities" <<http://cnx.org/content/m13616/latest/>>

strong-weak-weak" is **triple** meter, and "strong-weak-weak-weak" is **quadruple**. (Most people don't bother classifying the more unusual meters, such as those with five beats in a measure.)

Meters can also be classified as either simple or compound. In a **simple** meter, each beat is basically divided into halves. In **compound** meters, each beat is divided into thirds.

A **borrowed division** occurs whenever the basic meter of a piece is interrupted by some beats that sound like they are "borrowed" from a different meter. One of the most common examples of this is the use of triplets (p. 15) to add some compound meter to a piece that is mostly in a simple meter. (See Dots, Ties, and Borrowed Divisions (Chapter 3) to see what borrowed divisions look like in common notation.)

8.3 Recognizing Meters

To learn to recognize meter, remember that (in most Western⁶ music) the beats and the subdivisions of beats are all equal and even. So you are basically listening for a running, even pulse underlying the rhythms of the music. For example, if it makes sense to count along with the music "ONE-and-Two-and-ONE-and-Two-and" (with all the syllables very evenly spaced) then you probably have a simple duple meter. But if it's more comfortable to count "ONE-and-a-Two-and-a-ONE-and-a-Two-and-a", it's probably compound duple meter. (Make sure numbers always come on a pulse, and "one" always on the strongest pulse.)

This may take some practice if you're not used to it, but it can be useful practice for anyone who is learning about music. To help you get started, the figure below sums up the most-used meters. To help give you an idea of what each meter should feel like, here are some animations (with sound) of duple simple⁷, duple compound⁸, triple simple⁹, triple compound¹⁰, quadruple simple¹¹, and quadruple compound¹² meters. You may also want to listen to some examples of music that is in simple duple¹³, simple triple¹⁴, simple quadruple¹⁵, compound duple¹⁶, and compound triple¹⁷ meters.

⁶"What Kind of Music is That?" <<http://cnx.org/content/m11421/latest/>>

⁷See the file at <<http://cnx.org/content/m12405/latest/duplesimple.swf>>

⁸See the file at <<http://cnx.org/content/m12405/latest/duplecompound.swf>>

⁹See the file at <<http://cnx.org/content/m12405/latest/triplesimple.swf>>

¹⁰See the file at <<http://cnx.org/content/m12405/latest/triplecompound.swf>>

¹¹See the file at <<http://cnx.org/content/m12405/latest/quadsimple.swf>>

¹²See the file at <<http://cnx.org/content/m12405/latest/quadcompound.swf>>

¹³See the file at <<http://cnx.org/content/m12405/latest/metdup.mp3>>

¹⁴See the file at <<http://cnx.org/content/m12405/latest/mettrip.mp3>>

¹⁵See the file at <<http://cnx.org/content/m12405/latest/metquad.mp3>>

¹⁶See the file at <<http://cnx.org/content/m12405/latest/metcompdup.mp3>>

¹⁷See the file at <<http://cnx.org/content/m12405/latest/metcomptrip.mp3>>

Meter	Meters		Example Time Signature
	Count		
Duple Simple	1 & 2 &		2 4
Triple Simple	1 & 2 & 3 &		3 4
Quadruple Simple	1 & 2 & 3 & 4 &		4 4
Duple Compound	1 & a 2 & a		6 8
Triple Compound	1 & a 2 & a 3 & a		9 8
Quadruple Compound	1 & a 2 & a 3 & a 4 & a		12 8

Figure 8.1: Remember that meter is not the same as time signature; the time signatures given here are just examples. For example, 2/2 and 2/8 are also simple duple meters.