

# MUSIC COUNTS

The title for this concert is: “**Music Counts.**” We will explore the relationship of how math is used in music.

The following information contains some important vocabulary words and short explanations of how math numbers are used to tell musicians how to count music.

## NOTE VALUES

The length of time that a note lasts is determined by a note value. They are differed by using the color of the note head, the presence or absence of a stem, and the presence or absence of a flag.

## TIME SIGNATURES

Vertical lines called bar lines divide the staff into measures. Time signatures make it possible to know the amount and type of notes that each measure contains.

## SIMPLE METER

The terms **duple**, **triple**, and **quadruple** refer to the number of beats that each measure contains. The term **simple** means that each of those beats can be divided into two equal notes.

Two-four time (2/4) is classified as **simple duple meter**.

**Duple:** there are two beats per measure.

**Simple:** each beat can be divided into two equal notes.

Two-two time (2/2) sometimes called **cut-time**, is also an example of **simple duple meter**.

Three-four time ( $3/4$ ) is classified as **simple triple meter**.

**Triple:** there are three beats per measure.

Four-four time ( $4/4$ ) is classified as **simple quadruple meter**.

**Quadruple:** there are four beats per measure.

A **time signature** in **simple meter** always has a 2, a 3, or a 4 in the numerator.

## **COMPOUND METER**

While beats in **simple meter** are divided into two notes, beats in **compound meter** are divided into three notes.

Six-eight time ( $6/8$ ) is classified as **compound duple meter**.

**Compound:** each beat can be divided into three equal notes.

Six-four time ( $6/4$ ) is also an example of **compound duple meter**.

Nine-eight time ( $9/8$ ) is classified as **compound triple meter**.

**Triple:** there are three beats per measure.

**Compound:** each beat can be divided into three equal notes.

Nine-four time ( $9/4$ ) is also an example of **compound triple meter**.

Twelve-eight time ( $12/8$ ) is classified as **compound quadruple meter**.

**Quadruple:** there are four beats per measure.

Twelve-four time ( $12/4$ ) is an example of **compound quadruple meter**.

A **time signature** in **compound meter** always has a 6, a 9, or a 12 in the numerator.

## ASYMMETRIC METER

An **asymmetric meter** combines two or more types of meters.

A measure in five-four time ( $5/4$ ) contains five quarter notes. Five-four meter is a **triple** ( $3/4$ ) and a **duple** ( $2/4$ ) **meter** combination.

A measure in five-eight time ( $5/8$ ) contains five eighth notes.

A measure in seven-four time ( $7/4$ ) contains seven quarter notes. Seven-four meter is a **quadruple** ( $4/4$ ) and a **triple** ( $3/4$ ) **meter** combination.

A measure in seven-eight time ( $7/8$ ) contains seven eighth notes. Seven-eight meter ( $7/8$ ) is a **quadruple** ( $4/8$ ) and a **triple** ( $3/8$ ) **meter** combination.

## STRONG and WEAK BEATS

Every measure has a certain number of beats.

Depending on the type of meter, some of these beats are **naturally accented**.

If a measure is in **duple meter**, the **first** beat is **strong** and the **second** beat is **weak**.

If a measure is in **triple meter**, the **first** beat is **strong** and the **second** and **third** are **weak**.

If a measure is in **quadruple meter**, the **first** beat is **strong**, the **second** is **weak**, the **third** is **medium**, and the **fourth** is **weak**.

**Accentuations** of beats apply in both **simple** and **compound** meters.

