

Understanding Counting Systems

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Musicians typically learn to count rhythm using several types of counting systems. Knowledge of different counting systems provides musical solutions for musicians in a wide variety of scenarios. The three most common counting systems are described below. All three have merit and facilitate fluency in reading. Students with different learning styles or strengths may prefer one counting system to another. Counting should be taught to students in the sequence listed below.

1. **Language based counting** is based on words and vocabulary that the student knows. This system connects known language with a specific rhythm length or pattern; for example, "plum, plum, apple, plum," "walk, walk, jogging, walk," or "pie, pie, pizza, pie." The connection between language and rhythm is a basic musical skill.

2. **Single symbol or single gesture counting** is based on a nonsensical word or single numbered counting for each symbol. For example, the ta system, "ta, ta, titi, ta, titi, titi, ta, ta," the du system, "du, du, duday, du," or single numbered counting, "one, one, one-and, one, one-and, one-and, one-two." In the short term this system connects visual symbol with a specific language syllable or numerical value. It also provides a specific linguistic connection to a single symbol or rhythmic gesture. In the long term, this system provides a basis for counting unusual or unequal phrase lengths or rhythm structures or unusual meters. It also is useful in establishing the concepts and the skills of reading subdivisions and dotted rhythms without the understanding of numerical fractions.

3. **Standard numerical counting by the measure and its subdivision** counts the beats and subdivisions numerically throughout a single measure according to the meter and the number of beats per measure at that tempo. For example, four beats per measure could be counted "one, two, three-and, four, one-and, two-and, three, four" at a moderate tempo. This system requires an understanding of numerical fractions and is complex in terms of rhythmic translation and the numerical. It should first be taught separately from playing or from sight-reading. It is intellectually based and will require diligence to master. This system should be introduced last as it is numerically based and does not have an immediate linguistic connection. Knowledge of this system is important as every musician will refer to notes and rhythms using the counted beat within a measure. However it is the most complex system and requires more care in preparation, presentation and practice for a musician to practically reference it while playing.

String players have a distinct advance in reading and processing rhythms. Because have a physical response to rhythm symbol and subdivision through the motions of our bow arm, we tend not to count unless the patterns are very irregular or if there are longer notes, ties or rests. We tend to make the most of our rhythmic errors in those instances.