

## MATH & MUSIC Lesson 12: Duple vs. Triple Meter

2-6

Distinguish between musical samples that would be counted in multiples of 2 (duple meter) or 3 (triple meter). Note how some samples can be counted in either way, and demonstrate how this can be solved mathematically (for instance, music written in a six feel could be divided by 2 or 3). Listen to various excerpts and determine whether it would fall in a duple or triple meter, or both.

Standards listed on next page

#### Supplies: none

#### **Objective**

Using movement and counting, students will identify duple vs. triple meters after understanding the structure of a time signature.

#### Outline & Procedure using the video

- 1. Learn about the purpose of the time signatures, first recalling what a **measure** is in music (00:43). A measure is how we organize the notes so they are easier to read. A measure represents 1 unit of time as specified by the **time signature**.
  - 2. Break down what each note in a time signature represents (1:12). The top number represents the number of beats in a measure.
    - 3. 4/4 is also referred to as common time.
    - 4. Other time signature examples are 3/4 and 6/8 (2:00).
      - 5. How many beats would be in each measure for a time signature of 17/8 (2:15)? How many beats would be in each measure for the time signature 5/4 (2:45)?
    - 6. The bottom number indicates what type of note receives one beat- so in 4/4, a quarter note receives 1 beat (3:20).
      - 7. In 6/8, what type of note does the "8" on the bottom represent (4:00)?
    - 8. The time signature helps tell us the **meter** of a piece, or how many notes are regularly grouped together in a measure (4:50). These are generally divisible by 2, 3, or 4.
      - 9. If the number of beats is divisible by 4, it is called a **quadruple** meter, ex. 4/4 (5:05).
      - 10. If the number of beats is divisible by 3, it is called a **triple meter**, ex. 3/4 (5:40).
      - 11. If the number of beats is divisible by 2, it is called a **duple meter**, ex. 2/4 (6:05).



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- 12. You can determine the meter by looking at the top number of a time signature and seeing if it is divisible by 2, 3, or 4 (6:35). Sometimes we can determine this by movement and counting instead!
  - 13. Listen to the first example to try and determine by counting (6:45).
    - 14. Ex. 1: Star Spangled Banner (7:00)
  - 15. To determine, first find the pulse of the music (8:00). If you can march evenly one foot to the other, it is in a duple meter.
    - 16. Ex. 2: Excerpt from Tchaikovsky 5 (8:15). March along!
  - 17. If a piece is in a triple, it will feel like a waltz! (8:40)
    - 18. Ex. 3: "Remember" by Berlin (arr. Mounsey)
- 19. Now try to figure it out on your own (9:13).
  - 20. Ex. 4: "Hey There" by Europe (arr. Berens). Duple-marching!
  - 21. Next example (10:35). Ex. 5: "Elephant" from *Carnival of the Animals. Triplewaltz!*
- 22. DIY at home: try listening to a few songs and figure out whether they are in duple or triple meter. Remember to use marching or waltzing to help you identify! (11:40)

### **Kentucky Standards:**

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.

#### **Ohio Standards:**

2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.