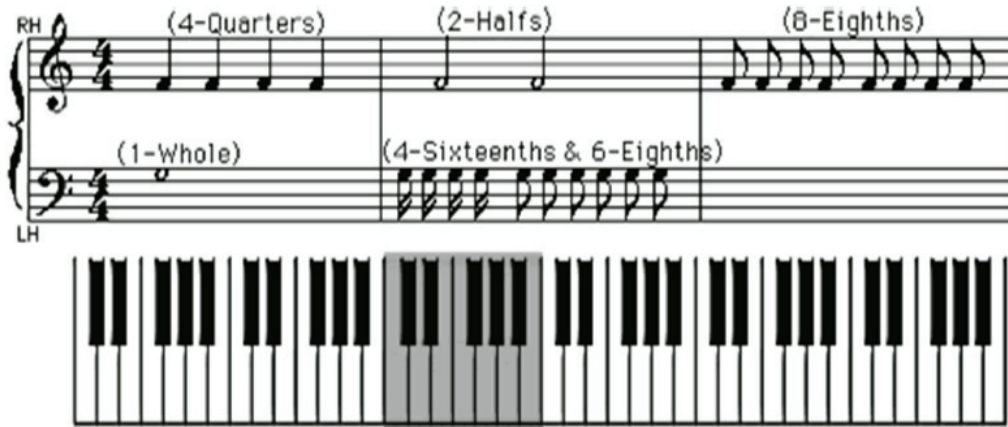


Musical Math

Activity 3 - Musical Fractions



Before each musical piece begins the musicians need to look at the staff. The music staff is where notes are written to instruct musicians what notes to play. At the beginning of each staff there is a time signature. In the example above, the time signature 4/4 actually represents a fraction. Four quarters (fourths) added together equal one. Let's look at some examples below.

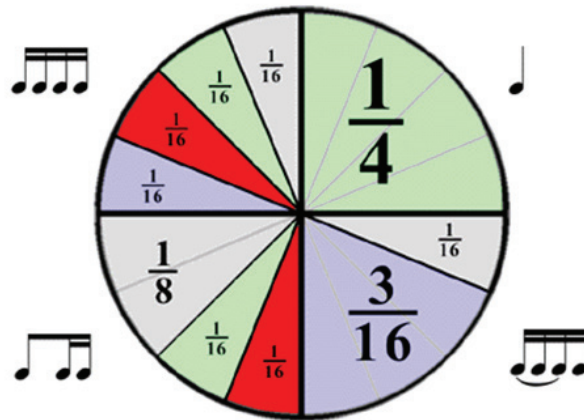
- $1 = 1$ (one whole note equals one measure).
- $1/2 + 1/2 = 1$ (two half notes added together equal one measure).
- $1/4 + 1/4 + 1/4 + 1/4 = 1$ (four quarter notes added together equal one measure).
- $1/8 + 1/8 + 1/8 + 1/8 + 1/8 + 1/8 + 1/8 + 1/8 = 1$ (eight eighth notes added together equal one measure).
- $1/16 + 1/16 + 1/16 + 1/16 + 1/8 + 1/8 + 1/4 + 1/4 = 1$ (four sixteenth notes, two eighth notes and two quarter notes added together equal one measure).

As you can see, any combination that equals one is fine.

Can you believe THIS is math?

Musical Math

Activity 3 - Musical Fractions - *continued*



Activity Instructions:

How many different ways can you make up one full beat? Using the pie chart above as your guide, try to make at least eight different combinations of notes that equal one full beat (one whole pie).

Can you believe THIS is math?