

lesson seeds

EQUAL rhythms

MATH AND MUSIC

Objectives

CONTENT	FINE ARTS
Common Core Math: 4.OA.2 , 4.NF.2 , 4.NF.3.c	Music: 4.2.1.a , 4.1.4.b , 4.3.2.b

Materials:

- Sentence Strips
- Pencils with erasers
- Magnets to hang the sentence strips
- Laminated cards with fractions and their musical notation equivalents
- Hand drums, small percussion instruments

1. Follow the steps for the Equation Rhythms technique found at: <http://educationcloset.com/2012/11/08/equation-rhyme-time-math-through-music>
2. Once students can confidently clap an equalling answer within a 4-beat pattern, extend the activity to 6 or 8 beat patterns and add more complex rhythms like 16th notes (tika tika) and dotted half notes (ta...ti).
3. Notate a 4-beat "call" rhythm on the board using visuals first (quarter, eighth, half notes, etc) and have students clap it. Then, add the name of the note under the visual ($1/4$, $1/8$, $1/2$) and ask students to speak the names as they clap the call.
4. Explain that music notes are simply a different way to represent fractions and that in music, every measure needs to equal out to 1. How you represent that one is up to you.
5. Have students review your previous call rhythm with fractions and practice adding the fractions together. Do they equal one?
6. Students can work in collaborative teams to create an answer to the call pattern on the board using sentence strips. Their answer must equal one, but they may notate it however they wish. Their notations must include the fractional equivalents at the bottom.
7. Place the sentence strips on the board in a column. The teacher can clap the call and the entire class will clap the first answer. As a class, determine if the answer strip equals one. If not, work as a group to decide what to add or cut. Continue until all answer strips have been performed.

Assessment:

Rhythmic Composition

Provide students with a series of cards that have fraction equations that equal one and corresponding cards with the musical notation. Have students pair the fractions with the music notation cards. Then, have students rearrange the paired cards into a sequence and play the rhythmic composition using drums or body percussion.