

Lesson Plan By: Becca Flanders

Lesson: Using Music to Teach Fractions ☺

Length: 30 minutes

Age or Grade Intended: 2nd

Source: original ☺

Academic Standard:

2.1.8 Recognize fractions as parts of a whole or parts of a group (up to 12 parts).

Performance/Behavioral Objectives:

After being introduced to the 3 “notes”, students will demonstrate their understanding of fractions by creating a rhythm pattern using their “notes” in groups of twos.

Assessment: To assess the student’s understanding, each group will present their rhythm to the rest of the class. The teacher will listen to see if they rhythm they clap is accurately represented by the “notation” they create with the pattern blocks.

Advanced Preparation by Teacher:

In order to prepare for this lesson, the teacher must create 3 pattern blocks. These blocks can be made out of construction paper. They should be made as follows

Brown rectangles- representing half notes (2 beats)

Red rectangles- representing quarter notes (1 beat) should be half the size of the brown rectangles

Purple rectangles- representing eighth notes (1/2 beats) should be half the size of the red rectangles and ¼ of the size of the half notes.

The teacher must prepare 10 of each block type and place them in a plastic baggie. There should be enough plastic baggies so that the class can be split into partners and each partner group will have their own baggie.

Procedure:

Introduction/Motivation:

Ask the class: “Who here loves to listen to music? What are some of your favorite singers/bands to listen to (take a couple answers). Okay, well today we are going to learn about how song writers like (insert example artist) write songs. Did you know that without math, there would be no music? It’s true, let’s investigate and find out why!”

Step by Step Plan:

-Ask the class what a pattern is (Blooms: Knowledge)

-Explain/Elaborate on the definition of a pattern- remind them that patterns have sections that repeat themselves. In music, we call these patterns rhythm.

-explain that the rhythms in music are made up of different notes. Each note has a different value. Today we are going to make up our own secret musical note system with these paper blocks. (pass out the block baggies).

-Ask the students to take out their blocks.

-Ask the students to locate the red block. Explain that the red block is worth one beat. Have the class practice what this sounds like by clapping one time (Bodily-Kinesthetic Intelligence).

-Have the student's line up a row of 7 red blocks; this is a really easy pattern! Let's clap to hear what it sounds like! (Clap 7 times in a steady beat)

-Would that make a very fun song? (no- it's boring!) Let's add some more notes here.

-Take a purple block and lay it on top of the red block, what do you notice about the purple block in comparison with the red block (it is one half in size).

-Let's write a fraction to represent the relationship of the purple block to the red block ($\frac{1}{2}$) (Logical Mathematical Intelligence). So when we are clapping our rhythms we know that the length of one of our claps for the purple note should be one half of the length of our red note. Let's try this (Instructor should keep a steady beat with quarter notes (red notes) while class claps eighth notes (purple notes))

-Now take out a brown block. Lay a red block over one of the brown blocks- what do you notice about the relationship between the red block and the brown block (the red block is one half of the brown block).

-Practice clapping the brown notes

-Repeat the same steps by comparing the purple and the brown notes.

-Let's see if we can make a rhythm to a song!

-I'm going to make a pattern on the board with blocks. Will you help me clap it?

-(Create this pattern on the board).

-Have the class clap the rhythm. Tell the class that this is actually a real beat to a real song! Play the clip from <http://www.youtube.com/watch?v=iikKzQwgBJc>

-Did you hear the rhythm in the song?

-Alright...I think you guys are ready to create your own rhythms! Are you ready?

-You can use any combination of blocks but your pattern must have 4 beats in it. This means all the whole numbers and fractions in the repeating segment must add up to 4.

-Do an example and explicitly show the addition.

-Split the class into partners

-Allow 2 minutes for the partner groups to create a pattern.

-Ask the groups to turn and share their songs with the partner group next with them.

-Alright now that you've all had a chance to share with your partner group. Would any group like to come up and be a ROCKSTAR and share their rhythm they created with us?

Closure: -Alright now that you've all had a chance to share with your partner group. Would any group like to come up and be a ROCKSTAR and share their rhythm they created with us?

Accommodations/Enrichments: To accommodate the students in my class that are mildly cognitively impaired I would write the note values on their card. I would also have them work with a supportive partner.

To enrich this activity I would challenge students to come up with their own lyrics to their rhythm.

Self Reflection:

