Dynamic Fractions

Third Grade
Adapted by C Moore

CORE SUBJECT AREA

Math

ART FORM + ELEMENTS

Music

MSCCR STANDARDS

3.NF.3d Compare two fractions with the same numerator

MSCCR CREATIVE ARTS STANDARDS

MU: Re 8.1.3. Interpret intent and meaning in artistic work. Support interpretations of musical works that reflect creators'/ performers' expressive intent.

  a. Demonstrate and describe how the expressive qualities (such as dynamics and tempo) are used in performers' interpretations to reflect expressive intent

DURATION

20-30 minutes

OBJECTIVES

TSW identify when the music is quiet and when the music is loud. TSW define crescendo and decrescendo. TSW demonstrate dynamic levels with their voices. TSW compare fractions using comparison symbols (< and >).

MATERIALS NEEDED

Music (see resources) , pack of dynamic flash cards for each student with each dynamic term abbreviation: pp-ff, crescendo and decrescendo, whiteboard and dry erase markers, student worksheet (attached in artifacts).

VOCABULARY

Dynamics -Pianissimo
Piano
Mezzo-piano
Mezzo-forte
Forte
Fortissimo
Crescendo
Decrescendo fraction
Numerator
Denominator
Comparison
Symbols
Greater than
Less than

RECOMMENDED RESOURCES

Recording of Hall Mountain King
https://www.youtube.com/watch?v=kLp_Hh6DKWc Song: John Jacob Jingleheimer Schmidt

https://www.youtube.com/watch?v=H_imuS5oh84 Song: Forte Piano

LESSON SEQUENCE

The teacher will play The Hall of the Mountain King. The students will listen and then describe the piece. The student will tell how the music differed from the beginning to the end. (It will be soft at the beginning and loud at the end.)

The teacher will tell students that they are going to learn about dynamics, the volume of music, and how to speak some Italian.

1. Display flash cards with each dynamic tern starting with p and f.
2. Discuss Italian words and abbreviations.
3. Speak words at the correct dynamic level and have students echo you.
4. Continue with pp and ff.
5. Add mp and mf.
6. Finish with crescendo and decrescendo. For crescendo, have students speak the numbers 110--start soft and gradually get loud and for decrescendo, have students speak the numbers 110--start loud and gradually get soft. Then use both, have the students speak 1-5 crescendo and 6-10 decrescendo.

Then,

1. The teacher will teach the song John Jacob Jingleheimer Schmidt.
2. The teacher will choose six children to stand up front holding flash cards for pp through ff.
3. The students will sing one verse as f (forte) and at the "da, da, das" at ff (fortissimo).
4. The students will sing each subsequent verse one dynamic softer while keeping the "das" loud.
5. As their dynamic level is sung, the child with corresponding flash card holds it up high above their head. (The students are sitting can use their own flash cards to display the dynamic level as well.)
6. The teacher will compare the two fractions on the board. 2/6 & 5/6
7. The students will compare the two fractions by using a comparison model. 2/6 < ⅚
8. The students will read the fractions using either the crescendo or decrescendo depending on whether it is greater than or less than.

   Example: 2/6 < 5/6 read softly and then loudly 2/6 is less than 5/6
   *This activity could be repeated with the Forte Piano for extra practice

EXTENDED LEARNING ACTIVITIES

Students could order fractions from greatest to least to greatest.

SOURCES

http://lessonplanspage.com/musiclearndynamictermsdemonstratedynamiclevels15-htm

TIPS + FREQUENTLY ASKED QUESTIONS

I would recommend using this activity after the standard has been taught and only when comparing fractions with same denominators or same numerators. Emphasizing the rules for comparing fractions--same numerators: the smaller denominator is the greater fraction

Same denominators: the larger numerator is the greater fractions

Dynamics Abbreviation Italian Word English meaning

pp pianissimo very soft

p piano soft

mp mezzo-piano medium soft