

Fractions

Standard:

3.NF.1: Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.

MU:Cn11.0.3a: Demonstrate understanding of relationships between music and other arts, other disciplines, varied contexts, and daily life.

Objective:

Students will identify fractions as the quantity of a parts of $1/b$.

Students will demonstrate an understanding of how a fraction of water in a glass creates a sound and those sounds together can create music.

Materials:

- 8 glasses filled with water at all fraction levels from $1/8$ - $8/8$
- Food color for water
- Post it notes with fractions and equivalents
- Wood stick to make music on glasses
- Fraction Game- "I have... who has?"
- Fraction Worksheet

Lesson Process:

- Teacher will begin by showing students the full $8/8$ glass of water. T will explain that the fractions we are using will be in eighths. Place the $8/8$ sticky note in front of the glass. Introduce equivalent fractions by explaining that $8/8 = 1$.
- T shows the $4/8$ glass. Ask the students what fraction of the glass has water compared to the first glass. If they say half ask for the fraction as an eighth. Also explain that it is a half and put out the $4/8$ and $1/2$ sticky note.
- Next show the $2/8$ glass and ask how much water is in it, in comparison to the first and second glasses. Use $2/8$ and $1/4$ sticky notes.
- Go up to the $6/8$ and ask for the comparison. Ask what the equivalent fraction could be. Use the $1/4$ glass if they need a tip. Put out the $6/8$ and $3/4$ sticky notes.
- Bring out the following and ask what fraction should be in front: $7/8$, $5/8$, $3/8$, $1/8$
- Use the wooden stick to play sounds on the glasses. Show the students that different amounts of water in the glasses can create different sounds. Let students play if they wish. If you don't have time for every student, let them play after they finish their game and worksheet.

- Hand out one game card to each student. Play the game "I have... who has?"
- After the class plays the game, hand out the worksheet for extra practice on identifying fractions.

Accommodations:

-All students can participate in the class discussion. Students with visual or hearing impairments may sit close to the teacher. During the game, students who need help reading or understanding their card may sit near the teacher for extra help, or may ask for assistance from a classmate. Teacher will help students one-on-one or as a small group, if in need of assistance completing the worksheet.