

## Creative Dance Lesson Plan on Fractions

**Grade:** 5th

**Length:** 45 minutes

**Written by:** Erika Cravath

**Student Learning Outcome:** The students will demonstrate understanding of fractions as parts of a whole and how to convert fractions to percentages through movement choice and challenge activities.

**Equipment Needed:** Hand Drum; CD player; CD with creative dance music; mats with non-slip surfaces

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### Common Core: Mathematics

**Domain:** Number and Operations- Fractions

**Standard 1:** Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators.

### Utah Fine Arts Core -- Dance

Standard 2: The student will identify and demonstrate movement elements in performing dance.

Objective 1: Expand dance vocabulary with movement experiences in time.

c. Explore, in a small group, creating a 16-count rhythm pattern, performing the patterns in place, moving through space, and changing the floor pattern and spatial relationships among the dancers.

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### Behavioral Expectations: (3 minutes)

We have two rules for class today:

1. Always keep space around yourself. Never touch anyone else, the walls, or the steps unless I ask you to.
2. When the music or the drumming stops, you must freeze!

### Experience/Identify: (10 minutes)

Numerator/Denominator Shapes

In a fraction is the numerator above or below the dividing line? Denominator? Throughout class, whenever I say "numerator," freeze right where you are in a high shape. Any shape as long as it is in a high level. Whenever I say "denominator," freeze in a low shape. Let's practice. Travel throughout the room skipping, rolling, or sliding. If I call out numerator or denominator, freeze in the appropriate shape!

### Fractions and Sports

How many of you have ever watched a football game on TV? Basketball? Baseball? Raise your hand if you have ever heard the announcer say something like "He is 8 for 15 at the free-throw line today" or "They are 4 for 8 in passing attempts"? Those are fractions. What would the announcer mean if he said, "He is 1 for 4 at the plate today"? It means that the batter has batted four times and only hit once, or he is hitting  $\frac{1}{4}$  of the times that he bats. Which

would mean that he has a .250 batting average. What percent of the time is he hitting? Try this with a few other scenarios.

### Moving Fractions

Walk to the beat of the music. Take a step on every beat and don't be late! In dance, we count music phrases in beats of eight. Count on the beat to eight with me. Now, only walk for  $\frac{1}{2}$  of the beats in a phrase of eight counts. You decide which half. Walk on  $\frac{3}{4}$  of the beats. Walk for  $\frac{1}{2}$  of the beats and run for  $\frac{1}{4}$  of the beats. Run for  $\frac{1}{4}$  of the beats, walk for  $\frac{1}{8}$  of the beats, and jump for  $\frac{5}{8}$  of the beats.

### Explore/Investigate: (17 minutes)

#### Making Choices

Walk anywhere you want to in the room for seven counts. On the eighth count freeze in either a high or low shape. You choose, but be very clear so everyone can tell which one you chose. Count the students in low shapes and high shapes and figure out what percent of the class chose low shapes. Give students other choices to make. This could include:

1. Either jump or crawl for sixteen counts then freeze.
2. Move in a twisted or straight way.
3. March for eight counts. On the count of your choice, make a loud noise with your body.
4. Walk in a low level for two sets of eight counts. On the count of your choice, jump as high as you can.

After every choice, count the class and figure the percentages of the class that made each choice.

#### Movement Challenges

Set up non-slip mats in lines of three or four each. Line up in lines behind the mats. When the music starts, the first person in line will run and jump over the mats. Once they have cleared the mats, the next person may go. I will count to see how many students jump all the way over the mats without touching them. Figure the percent of success in the class, then try again with more mats. Add other challenges such as a turning jump or landing on one foot and balancing. New challenges could include:

1. Do fifteen jumping jacks and fall to the ground in ten seconds or less.
2. Turn around five times then crab walk to the other side of the room in less than thirty seconds.
3. Jump and do a full turn in the air.
4. Balance on one foot for one minute.

### Create/Perform: (10 minutes)

Teach students a sequence in four, four count sections. Do it together as a class. Use the four sections of this dance to create an eight section dance. Repeat sections. If you did not like one section, you do not have to use it. You could repeat your favorite section of the sequence eight times. Or you could order it section 1, 2, 3, 1, 2, 3, 4, 4, or any other order. Figure out your favorite way to sequence the dance, and be prepared to tell the class what fraction of your dance each section comprises of.

### Connect/Analyze: (5 minutes)

We just spent an entire dance class focusing on fractions! How many of you realized before that there were so many fractions in sports? music? movement? How can you use that knowledge to help you better understand sports? music? other activities?