

Im-PULSE Dancing

Fifth Grade + Math

CORE SUBJECT AREA

Math

ART FORM + ELEMENTS

Dance
Space
Time

MSCCR STANDARDS

CCSS.MATH.CONTENT.5.NF.B.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by fraction.

MSCCR CREATIVE STANDARDS

DA:Cr1.1.5 a. Build content, for choreography using several stimuli (for example, music/sound, text, objects, images, notation, observed dance, experiences, literary forms, natural phenomena, current news, social events).

DA:Pr4.1.5.b Dance to a variety of rhythms generated from internal and external sources. Perform movement phrases that show the ability to respond to changes in time.

DURATION

2-3 class periods, 75 minutes

RECOMMENDED RESOURCES

Scoring rubric found at https://d43fweuh3sg51.cloudfront.net/media/media_les/Scoring_rubric.pdf

Beats Per Minute worksheet

OBJECTIVE

TSW apply and extend understanding of multiplying fractions to convert ratios to a larger form

TSW choreograph a dance routine based on an observed dances.

TSW dance to rhythms from external and internal sources.

MATERIALS NEEDED

Stop watch
Chart paper
Timer
Paper
Pencils
Colored Markers

VOCABULARY

Ratio
Fraction
Tempo
Beat
Space
Time
Beats per minutes (BPM)

“DanceSense: Elements of Dance “ video found at https://ket.pbslearningmedia.org/resource/a043a463-51eb-4698ae5543d9a6cc7a63/dancesense-elements-of-dance/#.Wy_hEqdKjIU

“DanceSense: Understanding Dance” video found at <https://ket.pbslearningmedia.org/resources/55ef44f0-1d33-4713-88b88a15d6fe718/dancesense-understanding-dance/#.WzBK4KdKjIU>

En Sin Mi D’ Africa video found at <https://ket.pbslearning.org/resource/afriam.arts.dance.esin/africanfican-americanculture-e-sin-mi-dafrica/#.WzA6o6dKjIU>

LESSON SEQUENCE

Introduction

- TTW ask the students who like to exercise.
 - TTW explain that exercise is good for a person because it helps them stay in shape and maintain a healthy body.
 - TTW tell the students that a person can exercise by participating in dance routines.
 - TTW then explain that dance routines are a type of exercise because they allow physical movement that works a person’s muscles and raises their heart rate to a healthy level.
- TSW watch the video “DanceSense: Elements of Dance” found at https://ket.pbslearningmedia.org/resource/a043a463-51eb-4698ae5543d9a6cc7a63/dancesense-elements-of-dance/#.Wy_hEqdKjIU from 8:04 -8:35
- TTW explain to the students that tempo and beat have to do with the time. TTW explain that time.
 - TTW explain that time in dance has to do with the speed at which the dancers move to the beat of the music.
 - TTW review with the students that beat can be slow or fast and that tempo is the speed of the beat.
- TTW guide the students in clapping a slow beat and then a fast beat.
 - TTW explain that the tempo gets faster as the speed of the beat becomes faster.
- TTW play the video “DanceSense: Understanding Dance” video found at <https://ket.pbslearningmedia.org/resources/55ef44f0-1d33-4713-88b88a15d6fe718/dancesense-understanding-dance/#.WzBK4KdKjIU>
 - TT and the students will discuss the tempo in the video (ex. Was it fast? Slow? Did it speed up or slow down at all?)
- TTW play the video “E Sin Mi D’ Africa” found at <https://ket.pbslearning.org/resource/afriam.arts.dance.esin/africanfican-americanculture-e-sin-mi-dafrica/#.WzA6o6dKjIU>
 - TT and the student will discuss the tempo in this dance (ex. Was it fast? Slow? Did it speed up or slow down at all?)

- TTW ask the students if they noticed the level at which the dancers in the videos performed their dance (ex. The dancers' knees were bent, but sometimes they stood up straight or jumped).
 - TTW explain to the students that the level at which a dancer performs is their space.
 - TTW go on to explain that the dancers with bent knees were at a lower space, and that standing straight or jumping put them at a higher space.

Transition

- TTW ask how dancing might affect their pulse rate.
 - TSW volunteer various answers.
- TTW distribute "Beats Per Minute" worksheet to the students.
 - TTW explain to the students that a person's heart rate increases when they are participating in physical activity, such as dance, and that it is important to maintain a healthy heart rate.
- TTW explain to the students that the beats per minute (BPM) of their heart is how many times their heart beats each minute.
- TTW explain to the students that one can find the BPM of their heart by writing a ratio.
 - TTW review the definition of ratio.
- TTW set the timer for 30 seconds.
 - TSW count how many beats they feel.
 - TSW record this amount on their sheets.
- TTW model, using their own heart rate, how to use ratios to convert their pulses to their BPM.
 - TTW explain that one can arrange a ratio like a fraction (ex. 20/30) and then multiply it by a whole number or fraction to find the BPM in 60 seconds.
 - TTW guide the students in finding what they need to multiply by to find their BPM (answer 2/2).
 - TTW model multiplying to find her exact BPM.
- TSW follow the procedure to find their BPM.
 - TSW will record their answers.
 - TTW replay the segment of "DanceSense: Elements of Dance" video found at https://ket.pbslearningmedia.org/resource/a043a463-51eb-4698ae5543d9a6cc7a63/dancesense-elements-of-dance/#.Wy_hEqdKjIU
 - TSW perform the dance along with the dancers.
- TTW repeat the procedure for finding BPM by setting the timer for 30 seconds
 - TSW follow the steps TT modeled to find their BPM after dancing.
 - TSW record their answers.

Description



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- TTW engage the students in a discussions about the common characteristics in “E Sin Mi D’Africa” and “Understanding Dance.”
 - TTW guide the students in recalling that both dances contained changes in tempo and changes in level.
- TTW split the students into small groups of 4-5 students .
 - TTW distribute a piece of chart paper and different colored markers to each group.
- TTW tell the students that they choreographing a fitness dance routine that they will present to their classmates.
 - TS should have the following components included in their dance:
 1. Changes in level
 2. At least one movement sequence that is repeated eight times at a fast tempo and at least one movement sequence that is repeated eight times at a slow tempo.
 3. Provide the dancers with effective exercise.
- TTW project the scoring rubric found at https://d43fweuh3sg51.cloudfront.net/media/media_les/Scoring_rubric.pdf

EXTENDED LEARNING ACTIVITIES

This lesson could collaborate with a P.E. unit on exercise and movement.

SOURCES

Original lesson plan found at

<https://www.pblearningmedia.org/resource/ket-6dance/drumbeating-foot-stomping/?#.WyfoadkjIU> Modified by Allison Nester.

TIPS + FREQUENTLY ASKED QUESTIONS

Explain to the student before the activity the importance of not overdoing their movements and raising their heart rates too high. Also explain that just because their heart rate is higher/lower than another person’s does not mean they are in poor health and need to be worried.