

Equations through Poetry and Dance



Math and Dance

Grade 8

Math Common Core Standard(s) Grade 8

8.1.B.2.b Solve for the unknown equations.

Language Arts Common Core Standard(s) Grade 8

3.A.4.a Use structural features to distinguish among types of poetry such as ballad, narrative, lyric, elegy, etc.

3.A.4.b Analyze language and structural features to determine meaning.

Dance (MD) Standard(s) Grade 8

1.1. d. Reproduce memorized dances accurately.

2.1. c. Create and analyze movement sequences that demonstrate relationships between dance and other disciplines.



CONNECTED OBJECTIVES

Students will demonstrate the importance of balance in an algebraic equation by creating a haiku poem. Students complete the poems with the correct number of syllables in a line. Students will extend their understanding of haiku by creating their own and creating an interpretive dance to compliment the poem.

MATERIALS & RESOURCES

- One six foot length of rope
- Handout with sample haiku poems
- Worksheet: Balance the haiku

KEY CONTENT VOCABULARY

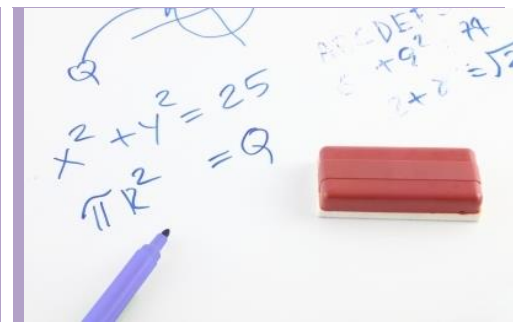
- Equation
- Variable
- Inverse Operation
- Balance

KEY ARTS VOCABULARY

- Balance
- Rhythm
- Beat

A S S E S S M E N T

- Students will perform their dance and haiku for the class
- Completed haiku



L E S S O N S T E P S

Part One:

- 1) Place a 6 foot length of rope on the floor in the middle of the classroom. Ask two students of fairly equal build to hold either end of the rope.
- 2) The students should pull the rope taut between them but not pull each other off balance. Have the students note that the sides are balanced.
- 3) Now add a second person to just one end of the rope. Ask what happens to the balance? How can balance be restored?
- 4) Add a second person to the other end of the rope as well. Is the rope balanced now? Try adding three people more to the one side. What happens and how is balance restored?
- 5) Have the students realize that in order to balance the rope they had to add the same thing to both sides. In order to maintain the balance, the same action must be done to both sides.
- 6) Ask the students to think of the rope as an equal sign and the people holding the rope as two sides of an equation. Whatever is done to one side must be done to the other in order to maintain the balance.

Part Two:

- 1) On a handout and on the overhead, share a few haiku with the students. Note that even though it is a short poem of three lines, it has strict rules. It must be about nature and each line has a specific number of syllables. The first line must have five syllables, the second line must have seven syllables and the third line has, again, five syllables.
- 2) Ask the students to try their hand at writing a haiku as a group. Remind them to pay attention to the syllable count in each line. When they have finished them, have the groups share their haikus with the class.
- 3) Place the following on the overhead:
5= The lovely blue _____ ex. 5 = 4 + x (solve x to find the missing syllables)
7= sings _____ at my window
5= Lulling me to _____
- 4) The above haiku is like an equation. On one side of the equal sign is the number of syllables that are necessary for the line of poetry. On the other side is the line. Point out that something is missing. Ask what needs to be added in the blanks to make each line be balanced as an equation.
- 5) Complete the worksheet of haikus to make certain that all lines are balanced properly.

Part Three:

- 1) Have students create another haiku that can be performed as part of an interpretive dance.
- 2) Students can connect to a different culture or a topic of their choice.
- 3) This will be presented to the class at the end.

E X T E N S I O N S A N D O P T I O N S

G E T S M A R T T H R O U G H T H E A R T S

A U T H O R : L a u r a C a s c i a t o B a t e s M i d d l e S c h o o l , A n n a p o l i s M D