

## The Grapes of Math

Literacy Focus: Oral Reading Fluency

Math Focus: Operations and Algebraic Thinking

Lesson Summary:

- Whole class
- Student read aloud of The Grapes of Math by Greg Tang (2001)
- The oral reading of each poem can be used as a bell ringer for sixteen class periods

Objective: Students will be able to read grade level prose with speed, accuracy, and expression.

Research on Choral and Repeated Reading

- Tierney, R.J., & Readence, J.E. (2000). *Reading strategies and practices: A compendium* (3<sup>rd</sup> ed.). Needham Heights, MA: Allyn and Bacon

Materials

- Tang, G. (2001). *The grapes of math*. New York, NY: Scholastic Inc. ISBN- 13: 978-0-439-59840-8

Common Core Standards.

- RF.3.4b Read on-level prose and poetry orally with accuracy, appropriate rate and expression on successive readings.
- RL.3.4 Read with sufficient accuracy and fluency to support comprehension.
- 3.OA.1 Interpret products of whole numbers as the total number of objects in each group.
- 3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division or properties of operations.
- 3.OA.8 Solve two step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity.

Before Reading

- Have students look at the picture of the poem and make predictions. Ask several questions to activate their prior knowledge. Have students turn to their partner to discuss their ideas before talking about the answers as a class:
  - What operation do you think you will use to solve the riddle? Why?
  - What would be the slowest way to solve the riddle?
  - What would be the fastest way to solve the riddle?

During Reading

- Enlarge the text on the Smartboard by using the document camera. Make sure the classroom atmosphere is relaxed and non-threatening by having students sit on the floor around the Smartboard.
- Model how to read the poem by reading it with the appropriate rate and expression for students. Use your finger as a pointer to keep students focused on the text that you are reading.
- Ask these questions after you have modeled how to read the poem fluently:
  - We are reading out loud to work on our fluency. What do you already know about fluency? *Fluency is being able to read with the right speed, accuracy, and the proper expression.*
  - What does speed mean? *How fast or slow.*
  - What does accuracy mean? *Being able to correctly sound out words.*
  - What does proper expression mean? *How you read the poem, how you are using your voice.*
  - Why do we care about fluency?
- Line-a-choir reading- The poems in this book are either divided into four stanzas or three stanzas. This lesson plan focuses on a poem that has four stanzas. Divide the class into four groups and assign each group a stanza. If grouping students by reading ability, assign stronger readers to group one and struggling readers to group 4.
  - Group 1 will read stanza 1 and then stop.
  - Group 2 will read stanza 2 and then stop.
  - Group 3 will read stanza 3 and then stop.
  - Group 4 will read stanza 4 and then stop.
- Read the poem in this manner (line-a-choir) for three times.
- Additional ideas:
  - Introduce the term stanza (lines of a poem grouped together). Why are the stanzas in this poem important? (The lines are grouped by their rhymes).
  - When reading a poem with three stanzas, divide your class into three groups and assign them to each stanza.
- Students are now ready to read the poem cumulatively. Instruct students that they will read their line when it is their turn and continue to read the lines after it. They do not just read their line and stop like they did in line-a-choir. Repeat a cumulative reading of the poem if desired.
- Read the poem in unison (everyone reads all the lines at the same time).

### After Reading

- Review what fluency is and the importance of fluency.
- Now that we are able to read the poem fluently, we need to solve the question that the poem is asking. On your white board (or paper) please write the answer to the riddle. As a class, discuss the answer and how students solved the problem.

- There are 16 poems in this book. A choral and repeated reading of each poem will replace the mental math and math message of 16 lessons in the Everyday Math series. The poems are a great review of multiplication, division, addition, and subtraction and can be used with any unit.