

Oklahoma Panhandle State University
Math-Ese Workshop

October 7, 2006

“Comprehension of Word Problems”

The student will learn to solve multiplication word problems by modeling the problem as repeated addition.

Nancy Lines

Name: Nancy Lines

Grade Level/Subject: 4th Grade Math

Topic: Multiplication as Repeated Addition

Objectives:

The student will be able to recognize the repeated addition pattern of multiplication when reading the book, "*Each Orange Had 8 Slices*".

The student will answer the questions asked in the book using both repeated addition and multiplication.

P.A.S.S. Objectives

Standard 1: Problem Solving

1. Use concrete and pictorial model to solve problems.

Materials: *Each Orange Had 8 Slices* by Paul Giganti, Jr.

Circles divided into 1/8th parts

16 cornels of popcorn per student

Introduction:

Begin the lesson by a guided discussion recalling the concept of multiplication being "repeated addition".

Instructional process:

1. Read the book, *Each Orange Had 8 Slices* by Paul Giganti, Jr.
2. Turn to the page stating that each orange had 8 slices.
3. Give the student a circle divided into one eighth pieces and some cornels of popcorn. Asked the students to cut the circle into eights and form a model of the orange in the book.
4. Ask the student how many seeds are there in all. Show how they got their answer on paper using addition. Ask them if they could use multiplication to get their answers. Have the student solve the same problem using multiplication.
5. Give the students copies of the pages in the book and ask them to answer the questions asked on each page.
6. They will demonstrate how they can get the answer by adding and multiplying.

Closure:

Have student write a word problem illustrating repeated addition.
Ask the students to write in their math journal.

Assessment:

The students will be assessed by their ability to model the repeated addition/multiplication problems and the accuracy of their answers.

Modifications:

Advanced Students: Give them advanced problems to solve.

Special Needs: Reduce the number of problems the students will be completing and allow manipulatives to help model the problems.

Reflection:

The students enjoyed the book. Using the fraction circles and popcorn to model the concept helped them to “see” the concept. I would use this again.