Multiplication Strategies and Writing Story Problems

Summary

Students will model multiplication problems using Unifix cubes.

Main Core Tie

Mathematics Grade 3

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA) Standard 3.OA.3

Materials

- *The Best of Times* , by Greg Tang Art paper Unifix cubes
- Corner pieces
- Crayons
- Additional Resources

Books

- The Grapes of Math
- , by Greg Tang; ISBN 0-439-21040-2
- Math for All Seasons
 - , by Greg Tang; ISBN 0-439-44440-3
- Math Appeal
 - , by Greg Tang; ISBN 0-439-21045-5
- Too Many Kangaroo Things To Do
 - , by Stuart J.Murphy; ISBN 0-590-10060-2
- Hershey's Kisses Multiplication and Division , by Jerry Pallotta; ISBN 0-439-56009-8
- The Best of Times
 - , by Greg Tang; ISBN 0-439-52918-2

Background for Teachers

Students need to use a variety of methods and tools to facilitate computation of numbers. Rounding is one method for estimation. Students need to practice mental math strategies to help approximate correct answers.

Intended Learning Outcomes

2. Become mathematical problem solvers.

Instructional Procedures

Invitation to Learn

We will model some multiplication problems. Students will configure number sentences using Unifix cubes.

Instructional Procedures

Placing a corner piece on the overhead, place six Unifix cubes (2×3) in the center of the corner piece. What is the multiplication problem these cubes show?

Place Unifix cubes on the outside of the corner piece and on the top of the corner piece to show

the multiplication problem.

Ask what the difference is between 2 x 3 and 3 x 2. Have students

demonstrate the difference on the overhead and explain why it is the correct answer.

After a couple of problems, ask if the students like riddles.

Read the book The Best of Times.

Together have the class come up with a multiplication problem and write the problem on the board.

Have the students come up with ideas for a story to go with the problem. Some students could make it a riddle.

Illustrate the problem.

Show several examples explaining how the numbers represent groups.

Pass out art paper for each student. Have the students each make a page for the class book discussed in *Assessment Plan*.

Extensions

Students roll two dice to come up with numbers to multiply together and illustrate in their journals. May use die-cut paper, stickers, or punches to represent items in word problems. Introduce the <u>Nada activity</u> (pdf) having students engage in continued review and practice.

Assessment Plan

Make a class book. Each student may be graded on the page s/he turns in for the book. The page will demonstrate what they know about representing a problem with words.

Authors

Utah LessonPlans