Math 3 - Act. 01: Math in My World

Summary

Students will record in their journals the many ways in which mathematics is part of their world.

Main Core Tie

Mathematics Grade 3

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA) Standard 3.OA.8

Additional Core Ties

Mathematics Grade 3

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA) Standard 3.OA.7

Mathematics Grade 3

Strand: NUMBER AND OPERATIONS IN BASE TEN (3.NBT) Standard 3.NBT.1

Mathematics Grade 3

Strand: NUMBER AND OPERATIONS - FRACTIONS (3.NF) Standard 3.NF.2

Group Size

Individual

Materials

- Math in the Bath

by Sara Atherlay (Simon and Schuster)

Mathematics Journal Cover Page

Problem Solving Strategies

Example of student created poster

Additional Resources

Math Man by Teri Daniels (Orchard)

There are many math problems at the local supermarket. Helps students make the connection of mathematics to the real world.

Background for Teachers

Number sense can be described as a good intuition about numbers and their relationships. It develops gradually as a result of exploring numbers, visualizing them in a variety of contexts, and relating them in ways that are not limited by traditional algorithms. No substitute exists for a skillful teacher and an environment that fosters curiosity and exploration at all grade levels." Hilde Howden, Arithmetic Teacher, Feb. 1989

Children with good number sense pay attention to numbers and know how numbers relate to each other. They know the cardinal and ordinal numbers and can define numbers in several ways. For example, 12 may be defined as 12 ones, 1 ten + 2 ones, 6 + 6, 3 X 4, and so on. Children with good number sense can compare the relative sizes of numbers. They know that 51 is smaller than 100, much larger than 2, and about the same as 49. They also understand the effect of operations on numbers—that addition results in larger number and subtraction results in a smaller number. Children develop number sense first by manipulating objects, then by using language to explain their thinking.

Intended Learning Outcomes

4. Communicate mathematically.

5. Make mathematical connections.

Instructional Procedures

Invitation to Learn

Read Math in the Bath.

Instructional Procedures

Have students brainstorm a list of all the many and varied ways in which mathematics is part of their world and record it in their math journals.

Students will record the shared ideas as their first journal entry. The entry should include:

- Date:
- Problem Solving Strategy: Brainstorming.
- Today's Challenge:

List all the many and varied ways in which mathematics is part of my world. (Suggestions: month, date and year born; weight; height; people in family; telephone number; pets; address; zip code; age; year started school; number of books owned; library card number).

Closure: Show the students poster examples.

Extensions

Possible Extension/Adaptations/Integration:

Students may use their list of ways math is part of their world and classify the items into categories. The teacher may suggest categories, such as Math at School, Math in After School Activities, Math at Home, Math at the Store, etc. This could be an additional journal entry teaching the students the problem solving strategy of making an organized list.

Students may make a poster entitled "Math In My World" showing ways math is all around them. Students could create their poster using the computer program, "Inspiration."

Authors

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