Math 3 - Act. 03: Unifix Flash Cards

Summary

Students will use the unifix flash cards to build a model, showing the relationship between repeated addition & multiplication and subtraction & division.

Main Core Tie

Mathematics Grade 3

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

Additional Core Ties

Mathematics Grade 3

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA) Standard 3.OA.1

Mathematics Grade 3

Strand: OPERATIONS AND ALGEBRAIC THINKING (3.OA) Standard 3.OA.2

Group Size

Individual

Materials

- *2 X 2 = BOO!*
  by Loreen Leedy (Holiday House)
  Four copies of the unifix flash cards, copied on cardstock or construction paper
  Unifix blocks or link-ercubes (approximately 50 per student)
  Ten copies of overhead unfix flash cards, cut out
  Whiteboard or chalkboard
  Approximately 100 Unifix cubes per student
  Colored pencils
  Copy of songs to connect to the multiples (overhead copy very helpful)

Instructional Procedures

Invitation to Learn

Ask your students, “How are addition, multiplication, subtraction, and division related?”
Read a chapter from *2 x 2 = BOO!* which correlates to the multiple for discussion.

Instructional Procedures

The teacher will demonstrate how to use the unifix flash cards to build a model, showing the relationship between adding and multiplying.
As prior experience, students should have built 1’s, 2’s, and 3’s.
Say, “Cover one group with one unifix cube. One group, with one unifix cube equals one unifix cube.”
Students will sing about the multiples and the teacher will follow-up with questions such as: “We are singing about the multiples of *, if we have a product of *, what are our factors?”
The students will investigate and record their discoveries as they build additional models and write their representations.
The teacher will demonstrate the relationship between repeated addition and multiplication.
The students will investigate and record their discoveries as they build additional models and write their representations.

The teacher will demonstrate how to use the unifix flash cards to build a model, showing the relationship between repeated subtraction and division.
The students will investigate and record their discoveries as they build additional models and write their representations.
Encourage students to see that one way to show a pattern is to write a number sentence, or use numerical notation.

Extensions

Possible Extensions/Adaptations/Integration
This procedure should be revisited periodically and systematically to help students achieve mastery with each of the multiples through ten times ten, related division facts, and the ability to describe their method.
Students will make a vocabulary entry in their mathematics journal.
Students will create an array a day, both with rectangles and with dot arrays.
Homework & Family Connections
After working with these unifix flash cards in math class, have the students take the cards home and have the student "teach" someone in their family how to use the unifix flash cards. The family member will sign the envelope, indicating that they have worked together to enhance their mathematical understanding.

Assessment Plan

Response item for student journals:
Students will draw and label one of the fact family members, showing the relationship between repeated addition and multiplication and repeated subtraction and division.

Authors

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