

Math 5 - Act. 02: Remainder of One

Summary

This is a beginning activity to introduce division with remainders and learn what a remainder represents.

Materials

- *Remainder of One*
by Elinor J. Pinczes
- 25 one-centimeter cubes per student
- Overhead squares
- Graph paper
- 2 sheets of white paper per student
- 1 copy of bug graph paper per student
- Scissors
- Glue

Additional Resources

The Kings Commissioners by Aileen Friedman

Intended Learning Outcomes

2. Become mathematical problem solvers.

Instructional Procedures

Invitation to Learn

Have you ever felt left out of something that you really wanted to be a part of?

Instructional Procedures

Each student needs 25 one-centimeter cubes and a sheet of graph paper.

Begin reading the story *Remainder of One*.

When they create the two rows of bugs, have the students build what that would look like using centimeter cubes to represent bugs.

Share the array on the overhead.

Discuss what the single centimeter cube represents (Lone Joe, the left over bug).

Draw the array on the graph paper writing what it represents in either words or a number sentence.

Repeat this with each new line configuration in the story.

Next we are going to create books that show the arrays we created while reading the story. Look at the different ways we write division problems (Standard II, Objective 2a.), as well as the necessary vocabulary.

Create an interlocking book.

Using the bug graph paper, cut out the array that shows $25 \div 2 = 12 \text{ r}1$. Label it with the number sentence. Discuss the vocabulary term for each number in the number sentence.

Record the terms on the last page in the book. Write, "dividend \div divisor = quotient and remainder" on the current page.

On the second page, cut out the array for:

Record the vocabulary terms for the number sentence.

On the third page, cut out the array for:

Record the vocabulary terms for the number sentence.

On page four, cut out the array for " $25 \div 5 = 5$ " and record the number sentence.

On the last page, make sure you have your vocabulary terms.

Curriculum Integration

Math/Science--Read Remainder of One by Elinor Pinczes.

Extensions

Possible Extensions/Adaptations

Have students grab a small handful of centimeter cubes. Count the number of cubes. On a sheet of graph paper, have them draw the arrays and write the number sentences for the following problems:

C = number of cubes they pulled out

$C \div 2 =$, $C \div 3 =$, $C \div 4 =$, $C \div 5 =$, $C \div 6 =$, $C \div 7 =$,

Continue as desired. This could also be done as a homework connection. Put cubes in a snack size bag for students to take home and work with.

Assessment Plan

Pull students back to do individual interview assessments or have them do this in their math journals.

Question: Is this statement true or false $24 \div 5 = 4r3$? Explain your reasoning.

Authors

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