Math 5 - Act. 06: Fruity O Fractions

Summary

Fruity O cereal is used in this activity to help students understand fractions better.

Materials

One or two bags of Fruity O Cereal (depending on class size) divided into smaller bowls and set on each table

Mmmm...Fruity Os and Fruity O Fraction worksheets

Fruity O Fractions part 2 (optional)

Additional Resources

Jump Kangaroo Jump by Stuart Murphy

Background for Teachers

This would make a good and fun assessment on students' knowledge of creating equivalent fractions using a common denominator. The first page, Mmmm...Fruity Os is using problem solving strategies and the given clues to determine the quantity of each color of Fruity Os. Students should be familiar with strategies, like Guess and Check, Drawing a Picture, Act it Out, Use a Model, and Working Backwards. These two activities do not need to be done together or at the same time. One is for problem solving; the other is for fractions.

Intended Learning Outcomes

1. Demonstrate a positive learning attitude toward mathematics.

2. Become mathematical problem solvers.

Instructional Procedures

Invitation to Learn

Do you think one color of Fruity O's is more common than the other colors? Everyone grab a handful of Fruity Os and write down how many of each color you have. Can you express those numbers as fractions?

Instructional Procedures

Begin with the invitation to learn.

Have students report what color they had the most of.

Record fractions for how many students had the most red, orange, yellow, green, blue, and purple. (14/28 of us had orange as our most common color, 3/28 had green . . .) See if any of those fractions can be simplified.

If you are doing both activities, introduce the first sheet as a problem solving activity that they can use their Fruity Os to help them solve. You could work through the first problem together as a class if your students don't know where to start.

The second sheet, Fruity O Fractions could be used as an assessment of finding equivalent fractions using a common denominator or work through that one together and use Part 2 as your assessment.

If you are not using it as an assessment you could work through the problems together and have the students do number 3 on their own or in groups.

Problem number three has the students writing their own riddle. This could be difficult for some of the students. You many want to do one together as a class first.

Have students continue working on Part 2, assign it as homework, or use it the next day as an assessment piece.

(Answers to Mmmm...Fruity Os: #1 12 red, 3 yellow, 6 blue #2 5 red, 12 yellow, 6 blue #3 8 red, 3 yellow, 8 blue #4 5 red, 15 yellow, 5 blue)

(Answers to Fruity O Fractions: #1 4 blue, 6 yellow, 10 red #2 4 blue, 12 yellow, 8 red #3 answers will vary)

Extensions

Possible Extensions/Adaptations

Use Fruity O Fractions Part 2 (Answers: #1 8 yellow, 8 orange, 2 green, 6 red #2 3/10 red, 5 blue, 6 yellow, 10 green, 9 red #3 16 blue, 10 red, 6 orange, 2 green, 2 yellow, 4 purple). Use this activity to show multiplication of whole numbers by a fraction $(1/5 \times 20 = 4)$.

Homework & Family Connections

Give students a baggie of 24 Fruity O's and have them record the fraction of each color, simplifying if possible. Write it as a riddle and share in class the next day.

Assessment Plan

Mentioned earlier in Instructional Procedures.

Authors

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