Just in Time Quick Check

Standard of Learning (SOL) 4.2c

Strand: Number and Number Sense

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The student will identify the division statement that represents a fraction, with models and in context.

Grade Level Skills:

• Identify the division statement that represents a fraction with models and in context (e.g., $\frac{3}{5}$ means the same as 3 divided by 5 or $\frac{3}{5}$ represents the amount of muffin each of five children will receive when sharing 3 muffins equally).

Just in Time Quick Check

Just in Time Quick Check Teacher Notes

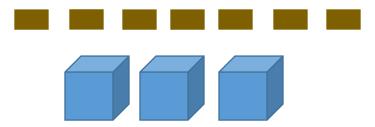
Supporting Resources:

- VDOE Mathematics Instructional Plans (MIPS)
 - 4.2c Sharing: Division Statements and Fractions (Word) / PDF Version
- VDOE Word Wall Cards: Grade 4 (Word) | (PDF)
 - o Equivalent
 - o Fraction: Models for one-half/one-fourth
 - o Fraction: Models for two-thirds
 - o Fraction: Model for five-sixths
 - Fraction: Models for three-eighths
 - Numerator/Denominator
 - Proper Fraction
 - Improper Fraction
 - Mixed Number

Supporting and Prerequisite SOL: 4.2b, 3.2a, 3.2b, 2.4a, 2.4b

SOL 4.2c Just in Time Quick Check

- 1. Six children share three cookies equally.
 - a. Draw a model to show how six children share the three cookies equally.
 - b. What fraction describes the amount of cookie each child has?
- 2. A student has 7 brownies. The student will divide the 7 brownies equally into the 3 boxes shown.



Write a division statement to represent how many brownies are in each box.

3. A group of four children shares two sandwiches equally.



Write a division statement to show the amount of sandwich that each child will receive.

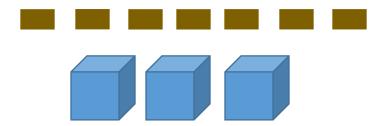
SOL 4.2c - Just in Time Quick Check Teacher Notes

Common Errors/Misconceptions and their Possible Indications

- 1. Six children share three cookies equally.
 - a. Draw a model to show how six children share the three cookies equally.

 Some students may recognize this as a division situation but will draw a model showing 6 cookies divided into 3 groups rather than a model of three cookies divided among 6 children. These students may have the misconception that the larger number is always the dividend in division. Some students may need experience exploring contexts where the dividend is smaller than the divisor. Teachers may also wish to provide students with additional experiences with models. This may help students understand contexts where a fraction represents division.
 - b. What fraction describes the amount of cookie each child has?

 A student that has the misconception that the dividend has to be the larger number may write $\frac{6}{3}$ rather than $\frac{3}{6}$. Students may benefit from conceptual experiences using fraction models to represent the cookies and children.
- 2. A student has 7 brownies. The student will divide the 7 brownies equally into the 3 boxes shown.



Write a division statement to represent how many brownies are in each box.

A common misconception is that the answer must be a proper fraction. If a student has this misconception, they may write " $3 \div 7 = \frac{3}{7}$ brownie". Teachers may wish to model how to equally divide the brownies among each box, as well as modeling other situations that would result in both improper and proper fractions. This will provide students with the example of concrete thinking that will lead to the algebraic concept.

3. A group of four children shares two sandwiches equally.



Write a division statement to show the amount of sandwich that each child will receive.

Some students may write " $4 \div 2 = \frac{4}{2}$ sandwiches" because they believe that the numbers must be written in the order that is seen in the problem. This may be the result of a misconception about writing the problem or it may reflect difficulty with reading comprehension. These students may benefit from more experience with building or

drawing models of problems involving fractions as division, as well as more experiences with differe between the dividend, divisor, and quotient.					