

Fourth Grade Unit 6 – Fraction Multiplication

Focus for Unit 6 - Multiply a fraction by a whole number using visual fraction models and equations to represent the problems

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| <ul style="list-style-type: none"> • Apply and extend previous understandings of multiplication to multiply a fraction by a whole number • Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$ • Understand a multiple of a/b as a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. | <ul style="list-style-type: none"> • Solve word problems involving multiplication of a fraction by a whole number by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie? |
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Activities for home

- Find examples of fractions around the house or neighborhood. Multiply or simplify the fractions that you find.
- Use measuring cups when baking or cooking. Discuss the amount of $\frac{1}{2}$, $\frac{1}{3}$, or $\frac{1}{4}$ cups to complete a recipe that calls for whole cups.
- Pick or create numbers to make fractions and mixed numbers. Multiply or simplify using the fractions you created.
- Create or pick numbers to make fractions. Multiply the fractions then write a matching story problem.
- Practice multiplication and division facts.

Vocabulary

Fraction: a number that names part of a whole or part of a group
Whole Number: a number with no fractional parts, no decimal parts and no negatives
Numerator: the top number in a fraction, which shows how many of the equal parts of the whole or group are being considered
Denominator: the bottom number in a fraction, which shows how many equal parts the set or whole has been divided into
Equivalent Fractions: two or more fractions that name the same amount
Equal: exactly the same amount or value
Quantity: how much there is of something
Simple Fraction: a fraction where the numerator and the denominator cannot be any smaller
Equation: a number sentence that says two things are equal
Multiplication: repeated addition
Visual Fraction Model: representing fractions by dividing objects, shapes, divided bars or number lines