# Fifth Grade Mathematics Newsletter

Marking Period 3, Part 1

| MT | Learning Goals by Measurement Topic (MT)<br>Students will be able to . . . |
|---|---|
| **Number and Operations - Fractions** | • represent and solve real-world multiplication problems with fractions in different ways.<br>• interpret multiplication of a fraction by a fraction as resizing.<br>• apply informal knowledge of the distributive property to decompose **mixed number** factors and multiply.<br>• solve problems involving area of rectangles with fractional side lengths.<br>• apply and explain efficient strategies to multiply fractions. |

| Thinking and Academic Success Skills (TASS) | | |
|---|---|---|
| | It is . . . | In mathematics, students will . . . |
| **Elaboration** | adding details that expand, enrich, or embellish. | • add detail to explain the steps used to multiply fractions.<br>• expand on interpretation of an area model.<br>• explain with details how area models help represent and solve problems involving multiplying a fraction by a fraction.<br>• extend knowledge of the relationship between the size of a product and the size of its factors when multiplying fractions. |
| **Intellectual Risk Taking** | accepting uncertainty or challenging the norm to reach a goal. | • adapt and make adjustments to meet challenges when seeking solutions to multiplication problems involving fractions.<br>• demonstrate willingness to accept uncertainty by sharing ideas, asking questions, or attempting new strategies to solving word problems.<br>• challenge self and others by creating real world examples when multiplying fractions to see math as sensible and useful.<br>• consider different ways to represent a given situation when a problem is hard to understand. |

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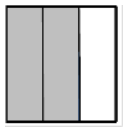
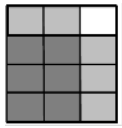
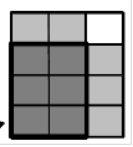
Marking Period 3, Part 1

## Learning Experiences by Measurement Topic (MT)

| MT | In school, your child will . . . | At home, your child can . . . |
|---|---|---|
| **Number and Operations - Fractions** | • **partition** a whole into fractional parts to represent multiplying fractions using an area model.<br><br>Example: $\frac{2}{3} \times \frac{3}{4}$<br><br>The whole is **partitioned** into three equal parts. Two of the three parts are shaded to represent $\frac{2}{3}$.  <br><br>Then the whole is **partitioned** into four equal parts. Three of the four parts are shaded to represent $\frac{3}{4}$.  <br><br>The product is the overlapped region.<br><br>$\frac{2}{3} \times \frac{3}{4} = \frac{6}{12}$<br><br>The answer is $\frac{6}{12}$ →  | • use real-world examples to multiply fractions using an area model.<br><br>Example: A cookie recipe calls for $\frac{2}{3}$ cup of flour. You are making $\frac{3}{4}$ of a batch. How much flour do you need? (Try similar problems using other measurements or recipes.) ***note:*** *this is an example of resizing*<br><br>Example: You did your homework for $1\frac{1}{4}$ of an hour. You spent $\frac{1}{2}$ of the time reading. What fraction of an hour did you read?<br><br>• show intellectual risk-taking by creating real-world problems<br><br>Website to support learning about multiplying fractions:<br><br>http://www.learner.org/courses/learningmath/number/session9/part_a/try.html |

| Glossary | |
|---|---|
| | **mixed number:** a number written as a whole number with a fraction Example: $3\frac{2}{5}$<br><br>**partition:** divide a whole into equal parts |