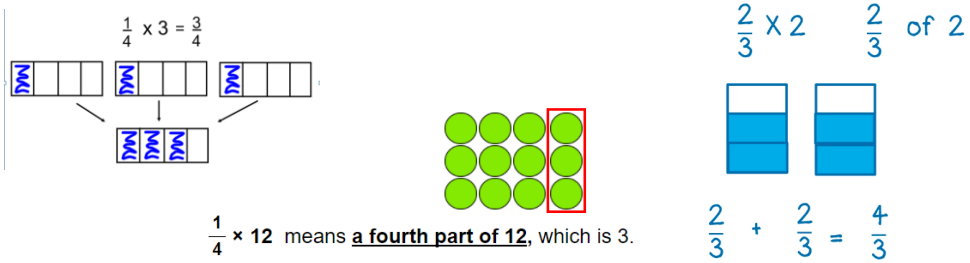
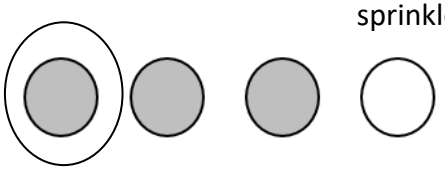
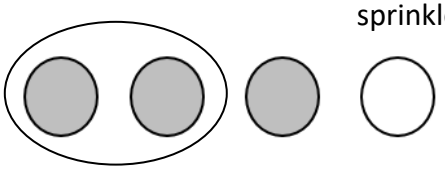
Grade 5

Understanding Multiplying Fractions

Check out the "Parent Quick Smarts" video for this unit and Using Area Models to Multiply Fractions Unit, by using this link: https://goo.gl/ffGnkN

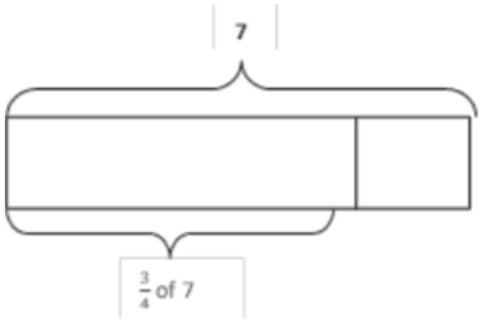
Overarching Student Learning Goals In this unit, your child will work to build an understanding of the following:	**Resources/Tasks to support your child at home.**
Representing multiplication of a whole number by a unit fraction and a fraction.  	• Cooking – Leah baked 12 cookies. She made ¼ of the cookies chocolate chip. She made 2/3 of the cookies sugar cookies. How many cookies are chocolate chip? How many cookies are sugar? • LearnZillion Video: https://goo.gl/L1LfSX Multiply Fractions by Whole Numbers Using Visual Models
Representing multiplication of a fraction by a fraction. At the bake sale, $\frac{3}{4}$ of the cookies are sugar cookies. Of the sugar cookies, $\frac{1}{3}$ have sprinkles. At the bake sale, what fraction of all the cookies have sprinkles?  $\frac{1}{3}$ of $\frac{3}{4}$ is $\frac{1}{4}$ $\frac{1}{3} \times \frac{3}{4} = \frac{1}{4}$ At the bake sale, $\frac{3}{4}$ of the cookies are sugar cookies. Of the sugar cookies, $\frac{2}{3}$ have sprinkles. At the bake sale, what fraction of all the cookies have sprinkles?  $\frac{2}{3}$ of $\frac{3}{4}$ is $\frac{2}{4}$ or $\frac{1}{2}$ $\frac{2}{3} \times \frac{3}{4} = \frac{2}{4}$ or $\frac{1}{2}$	• Use a number line or other model to solve the problem: Tony had $\frac{6}{8}$ of a pizza. $\frac{1}{6}$ of that pizza has anchovies. What fraction of the pizza has anchovies? • Khan Academy: Multiplying 2 Fractions: Fraction Model https://goo.gl/ch1Bmq • Khan Academy: Multiplying 2 Fractions: Number Line https://goo.gl/3N8YvD

For more information on the learning goals and your child's progress, please contact your child's teacher.

Grade 5

Estimating whether the resulting product will be equal to, greater than or less than a factor.

$\frac{3}{4} \times 7$ is less than 7 because 7 is multiplied by a factor less than 1 so the product must be less than 7.



Explaining how the product will be affected when multiplying a value by a factor less than one or greater than one.

Will the product of 3/4 × 6,350 be less than 6,350 or greater than 6,350? Explain.

Sample answer that indicates understanding: Since ¾ is less than 1 whole, and any number multiplied by 1 is equal to that number, the product will be less than 6,350.

- If you have $\frac{3}{4}$ of a sandwich and want to give half of it to a friend. Is your answer more than or less than either factor? Prove it with a model.
- If tomorrow you run $\frac{7}{4}$ the distance you ran today, will you have run more than or less than you ran today? How do you know?
- LearnZillion: Predict the Product of Multiplying a Fraction Less Than One by a Whole Number https://goo.gl/ozFUuQ