

## **Multiplying Fractions**

**Unit Multiples** 

These activities extend the puzzles and the concepts learned in the puzzles throughout the week. The activities might be tasks, word problems, journal writing activities, or hands-on activities designed to deepen student understanding and help students make connections.

Some of the activities listed below work well in a remote environment and can be easily added to your virtual classroom. The activities that can be used remotely are designated as such.

	<ul> <li>Give students a whiteboard, dry erase markers and fraction tools, such as fraction strips, Cuisenaire rods, number lines, etc. Display the first puzzle in</li> </ul>
≥ × 2/5	Level 5.
	• Ask students to compare this puzzle to the puzzles they solved in Levels 2
	and 3. Say to students, "Now we are not multiplying by a unit fraction. Our
	numerator is greater than 1. How will this change the way we represent and
	solve this puzzle?"
	Have students Think, Pair, Share their ideas. Have students use their tools
X	and whiteboards to solve the puzzle. Discuss the area model and how it
	represents the equation. Solve the puzzle and watch the feedback.
	Discuss how to find the product. Repeat with other puzzles in Level 5.
	• Give students a Fractions Number Line 3-5 Game Mat (0-5). Select a puzzle
$4 \times \frac{1}{4}$	from Level 3.
	• Ask students, "How could we represent what is happening in this puzzle
	using a number line?" Have students work with a partner to represent the
	puzzle.
	• Share a few number lines and talk about how the number line represents the repeated addition happening in the puzzle (e.g., $3 \times \frac{1}{4}$ is the same as $\frac{1}{4} + \frac{1}{4}$
0	+ $\frac{1}{4}$ with a product of $\frac{3}{4}$ ).
X	<ul> <li>Ask students to compare the number line model to the area model. Repeat</li> </ul>
	with other puzzles from Level 3.
	Give students a whiteboard, dry erase markers and fraction tools, such as
	fraction strips, Cuisenaire rods, number lines, etc.
PUZZLE TALK	<ul> <li>Pose the following problem to students:</li> </ul>
Classroom Enhanced	$\circ$ Jillian is going to put tiles on her kitchen floor and needs to know the
Name: Date:	area of the floor to buy her supplies. She measured the width of the
Jillian is going to put tiles on her kitchen floor and needs to know the area of the floor to buy her supplies. She measured the width of the room and found that it was 12 feet wide. The length of the room was 14 % feet long. What is the area of the kitchen? How do you know?	room and found that it was 12 feet wide. The length of the room was
of the kitchen? How do you know?	14 <sup>3</sup> / <sub>4</sub> feet long. What is the area of the kitchen? How do you know?
	Have students work with a partner or small group to solve the problem.
	Have students share their solutions and strategies.
	(Can be done remotely)
$\frac{2}{4} \times 1$	Give students a whiteboard, dry erase markers and fraction tools, such as     fraction string. Cuisepairs rade, number lines, etc., Display a puzzle fram
	fraction strips, Cuisenaire rods, number lines, etc. Display a puzzle from Level 6.
	<ul> <li>Ask students to represent the puzzle in three different ways: with a picture,</li> </ul>
	with a repeated addition sentence, and on a number line. Share students'
	representations and compare them.
0	Ask students, "Which model works best for you? Why?" Repeat with a few
للل ا	other puzzles in Level 6. Choose puzzles so that the whole number is in
	different positions.
PUZZLE TALK	
Classroom Extensions Pre-Work	• If you are using Puzzle Talks as part of your remote learning plan, it is
Name: Date:	important to think about how to maximize the learning in the virtual
Solve 321 x 45 using two different strategies?	environment. One strategy might be to do Pre-Work. Pre-Work encourages students to think about the concept prior to the Puzzle Talk.

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## **Fifth Grade**



Date:

Jillian is going to put tiles on her kitchen floor and needs to know the area of the floor to buy her supplies. She measured the width of the room and found that it was 12 feet wide. The length of the room was 14 <sup>3</sup>/<sub>4</sub> feet long. What is the area of the kitchen? How do you know?



Name:	Date:
	Bato

George said that 3/5 + 2/10 = 5/15. Do you agree or disagree? Prove your position.

How does a fraction, such as 1/3 or 4/8, represent division? Explain.

Darrell has 15 books on his bookshelves. One-third of the books are mystery books. How many mystery books does Darrell have? How do you know?