

Converting Measurements

Fruit Monster

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.

	 Give students a Fruit Monster Game Mat, dry erase marker and math tools. Display the first puzzle in Level 4. Say to students, "Look at the Fruit Monster card in this puzzle. How is this card different from the cards in Levels 2 and 3?" Have students Think, Pair, Share with a partner. Discuss that in this level, the card shows Fruit Monsters sharing more than 1 pie. Have students use their game mat and math tools to solve the puzzle. Try a student's solution and watch the feedback. Ask students, "How could we express how much pie 1 Fruit Monster eats? How could we represent this puzzle with an equation? How could we represent the solution as both a fraction and a mixed number?" Repeat with other puzzles in Levels 4 and 5.
,,,,	 Give students a Fruit Monster Game Mat, dry erase marker and math tools. Display a puzzle from Level 3 and discuss what is shown in the Fruit Monster card. Say to students, "This card shows us that for every 1 whole pie we can feed 4 Fruit Monsters. How could we represent the amount of pie each Fruit Monster eats?" Have students share their answers and thinking. Then say to students, "What if the Fruit Monster card in a puzzle represented quarts and gallons? On the card, what would represent quarts and what would represent gallons? How do you know?" Have students work with a partner or small group to answer the questions. Share students' thinking. Prove that the whole pie would represent a gallon and the 4 Fruit Monsters would each represent 1 quart. In other words, a quart is ¼ of a gallon. Solve 3 – 4 puzzles in Level 3 and discuss the puzzle as gallons and quarts.
	 Give students a whitebaord, dry erase marker and math tools. Display a puzzle in Level 3 and remind students that we proved the Fruit Monster card could represent the relationship between quarts and gallons. Ask students to work with a partner or small group to create a Fruit Monster card to represent a different measurement conversion (e.g., 1 whole pie is eaten by 12 Fruit Monsters to represent 1 foot is 12 inches or an inch is 1/12 of a foot). Have students share their Fruit Monster cards. Use a few of the cards to pose different puzzle situations using the cards (e.g., How many feet is 24 inches?).
	• Give students a Fruit Monster Game Mat, whiteboard, dry erase marker and math tools. Display a puzzle in Level 5. Model for students how to represent the puzzle with a repeated addition sentence and a multiplication sentence to represent how much pie is eaten. For example, $2/3 + 2/3 + 2/3 + 2/3 = 8/3$ and $4 \times 2/3 = 8/3$. Ask students to represent the total amount of pie as a fraction and a mixed number. Repeat with other puzzles in Level 5.
REFLETATE TALK Classroom Extensions Pre-Work Name: Date Solve 321 x 45 using two different strategies?	• If you are using Puzzle Talks as part of your remote learning plan, it is important to think about how to maximize the learning in the virtual environment. One strategy might be to do Pre-Work. Pre-Work encourages students to think about the concept prior to the Puzzle Talk.



Name:	Date:	

Would it take longer to fill a large fish tank using a quart sized bucket or a gallon sized bucket? Why?

Chris says that measuring a length to a smaller unit (e.g., mm vs cm) leads to a more precise measurement. Do you agree or disagree? Why?

Shantel needed to move furniture through a doorway. She measured the height of the door and found the doorway was 84 inches tall. She measured the furniture and found that it was 6 feet tall. Will Shantel be able to move the furniture through the doorway? How do you know?