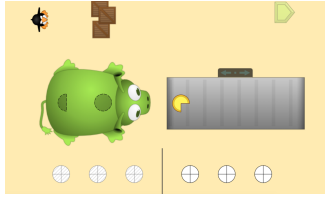
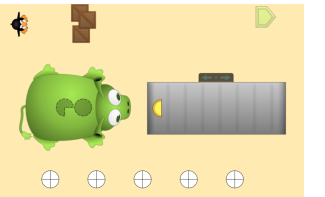
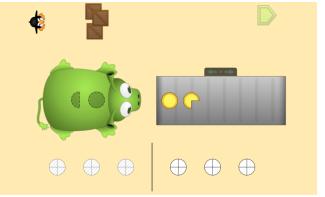
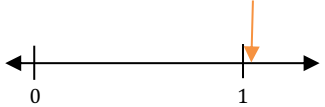
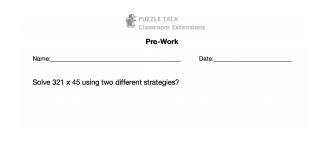


These activities extend the puzzles and the concepts learned in the puzzles throughout the week. The activities might be tasks, word problems, journal writing activities, or hands-on activities designed to deepen student understanding and help students make connections.

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 style="list-style-type: none"> • Give students a Pie Monster game mat, dry erase markers, and fraction tools, such as fraction strips, Cuisenaire rods, number lines, etc. Display the first puzzle in Level 3 that represents subtraction. Ask students how this puzzle is different from the other puzzles they did. • Ask students, “What is happening in this puzzle? Do we need to add or subtract pie pieces? How do you know?” Have students work with a partner, use their math tools to solve the puzzle and record their answer on their game mat. • Share students’ solutions and strategies. Ask students to write an equation to represent the puzzle and solution. Repeat with other puzzles in Level 3.
	<ul style="list-style-type: none"> • Display a puzzle in Level 1. Model for students how to write a story problem that represents what is happening in the puzzle. For example, if the puzzle shows $\frac{1}{2} + ? = 1\frac{3}{4}$, the story problem could be “Leroy needs $1\frac{3}{4}$ cup flour to make his banana bread recipe. There is $\frac{1}{2}$ cup left in the flour bag. How much flour does Leroy need to get from another flour bag to have enough flour to make his banana bread recipe?” • Solve the problem and put the answer into the puzzle to watch the feedback and prove the story problem matches the puzzle. Display a different puzzle in Level 1. Have students work with a partner or small group to write a story problem to represent the puzzle. Share a few problems and prove they represent the puzzle.
	<ul style="list-style-type: none"> • Give students whiteboards and dry erase markers. Display the puzzles from Level 3. For each puzzle, have students write down an equation to represent the puzzle. Their equation should have a ? to represent the unknown. (NOTE: Do not solve the puzzles. Click through each puzzle in the level so students can represent each puzzle with an equation.) • Ask students to choose one puzzle to represent with a story problem and solve. Share students solutions and story problems and check for accuracy by solving the puzzles and watching the feedback.
<p>$\frac{4}{8} + \frac{9}{16} =$</p> 	<ul style="list-style-type: none"> • Ask students to look at the following math problem: $\frac{4}{8} + \frac{9}{16}$. Say to students, “I know that the answer to this problem is a little more than 1 without drawing a picture or making a model. How could you use what you know about each fraction to estimate the sum?” • Have students turn and talk to a neighbor about their thinking. Help students to see that $\frac{4}{8}$ is a half and $\frac{9}{16}$ is a little more than a half (because $\frac{8}{16}$ is one half), so the two fractions together would equal a little more than 1. • Have students determine that the actual solution to the problem is $\frac{17}{16}$, which is a little more than 1, just like their estimate. Repeat with other fraction addition problems with unlike denominators. Help students to use the benchmarks of 0, $\frac{1}{2}$ and 1 to estimate the reasonableness of their solutions.
	<ul style="list-style-type: none"> • 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.



PUZZLE TALK
Extensions
Pre-Work

Name: _____

Date: _____

Can you name a fraction that is close to $\frac{1}{2}$ but not equal to $\frac{1}{2}$?

Can you put $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{7}{8}$, on a 0-1 number line without making tick marks?
Explain how you would estimate where each fraction goes.

Juan had $2\frac{1}{4}$ gallons of paint. He use some of the paint. Now Juan has $1\frac{1}{2}$ gallons of paint. How many gallons of paint did Juan use? How do you know?