

Addition and Subtraction Situations with Unknowns

Push Box

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 whiteboards and dry erase markers. Display the first puzzle in Level 3. Ask students "Deep this puzzle represent addition or subtraction? How
	 Ask students, "Does this puzzle represent addition or subtraction? How do you know?" Have students turn and talk to a neighbor about their strategy and solution for the puzzle.
	Have students record their thinking on their whiteboards.Repeat with other puzzles in Level 3.
	• On one of the addition problems in Level 3 ask students how many orange blocks there would be if they had 10 more (or other appropriate values).
	 Have students write the equation for this change in their notebooks (e.g., 4 + 5 = 9 to 4 + 5 + 10 = 9 + 10).
	Show a puzzle from Level 4.Have students discuss what they notice with a partner.
	 Have students think about how they might solve the puzzle. Ask students to use the Push Box Game Mat to show their solution. Have student share their thinking with a partner.
	 Share several examples from drawing arrows, etc. to writing equations. Discuss that there are multiple ways to represent these problems. Could they find all of the ways?
PUSH BOX GAME MAT	 Put students into pairs. Give each pair a Push Box Game Mat and 20 snap cubes or connecting cubes. Have student #1 create a puzzle by placing blocks on the left side and right side of the mat (like they are shown in the puzzle).
	 Student #2 works to find the unknown and solve the puzzle. Have students switch roles and repeat.
PUZZLETALK Extensions	 Give students problems that are similar to the problems in the puzzles. For example:
Student Work Name: Date: Janet and Gail worked with Garfield to build a tower 20 blocks high. Janet stacked 6 blocks and Gail stacked 6 more on top of Janet's blocks. How many blocks does Garfield need to add to the tower to make it 20 blocks high?	 Janet and Gail worked with Garfield to build a tower 20 blocks high. Janet stacked 6 blocks and Gail stacked 6 more on top of Janet's blocks. How many blocks does Garfield need to add to the tower to make it 20 blocks high?
	 Have students share their strategies and solutions. (Can be done remotely)
PLZZET TALK CLZZET OTOM 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.

First Grade



Name:	Date:

Janet and Gail worked with Garfield to build a tower 20 blocks high.

- Janet stacked 6 blocks and Gail stacked 6 more on top of Janet's blocks.
- How many blocks does Garfield need to add to the tower to make it 20 blocks high?



Name:	Date:

Look at the following equation: 6 + 4 = 7 + 3. Is this equation true or false? Explain your thinking.

Look at the following equations: 5 = 1 + 4 and 1 + 4 = 5 Are these equations both true? Why or why not?

Brendan has 5 fewer cookies than Mark. Brendan has 8 cookies. How many cookies does Mark have? Explain.