Puzzle Talk - Grade 2 Missing Addend (Level 1)



These facilitation suggestions are what a student-led discussion might look like when looking at puzzles in Level 1. Depending on how students respond, it likely would take one session for Level 1.

Description	• • •	 Puzzle Location: Grade 2 > Addition and Subtraction Situations within 100 > Missing Addend > Level 1 Topic: Find missing addends Purpose of the Puzzle Talk: Focus on student thinking and developing problem solving skills using guiding questions for each step in the Problem Solving Process Preparation: View the Game in a Minute video Gather Materials: Provide students with a whiteboard and a dry-erase marker with an eraser 	0 1 2 3 4 5 6 7 8 9
	Notice and Wonder	 Display the first puzzle from Level 1. Ask students: "What do you notice? What do you wonder about this puzzle?" Allow a few students to share their thinking with the whole class. 	
	Predict and Justify	 Have students think individually about how they could solve the puzzle, then turn and share with a partner before sharing as a class. Students should provide mathematical reasoning for the idea they want to try. They can use their math tools to illustrate their strategies. As students share their strategies, list these ideas for the class to consider. 	
	Test and Observe	 Select one of the students' strategies. Ask the class: "Why do you think the answer is?" Solve the puzzle and have students describe what happened. 	
	Analyze and Learn	 Ask students to think about how what they saw happen compares to their prediction. Use the animation controls to pause the puzzle while students check if their answer matches the puzzle on the screen. Discuss how the feedback might provide evidence as to why the solution will work or not work. Ask students: "What did we learn from the animation? Can you describe the mathematics that is happening in this puzzle?" What does JiJi have to start with? (the amount in the blue bar) What does JiJi want to have? (the amount in the yellow bar) What does JiJi need? (the amount in the pink bar) Continue with additional puzzles from Level 1. Have students: "Can you write it in an equation?" Then, have students prove their equation matches the puzzle. Select strategies students suggest to try. Use the animation controls to replay and examine what happens in the puzzle. If the puzzle was incorrect, discuss why the strategy used was successful. If the puzzle was incorrect, analyze what happened and consider how to adjust the strategy to try again. 	