

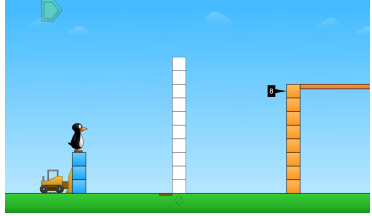
Puzzle Talk - Grade 1

Push Box (Level 1)



ST Math
Created by MIND Education

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	<ul style="list-style-type: none"> • Puzzle Location: Grade 1 > Addition and Subtraction Situations with Unknowns > Push Box • Topic: Teaches addition by combining stacks of boxes. • 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 Push Box Game Mat 01, cubes, whiteboards, and markers 	 <p>click here for puzzle</p>
Notice and Wonder	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Ask students to 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 cubes to represent the puzzle or sketch on the whiteboard. • As students share their strategies, list these ideas for the class to consider. 	
Test and Observe	<ul style="list-style-type: none"> • Select one of their solutions to try. • Solve the puzzle and have students describe what happened. 	
Analyze and Learn	<ul style="list-style-type: none"> • Ask students: "How does what happened compare to what you thought would happen?" • Replay the puzzle using the same strategy. Pause the animation and ask questions such as: <ul style="list-style-type: none"> ◦ "What is the unknown in the puzzle?" ◦ "Can you write an equation to represent this puzzle using a question mark to represent the unknown?" For example, $3 + ? = 8$. • Have students work with a partner to solve the puzzle. Pause the puzzle before Jiji crosses the screen. Ask students to record the answer on their whiteboards. For example, students would write $3 + ? = 8$, and $? = 5$ • Repeat with other puzzles in Level 1. • For each puzzle: <ul style="list-style-type: none"> ◦ Have students represent the puzzle on their game mats and show how they would solve it. ◦ Share several examples of ways students showed their strategy on the game mats, such as drawing arrows or writing equations. • You can use the animation controls to replay and examine what happens in the puzzle. <ul style="list-style-type: none"> ◦ If the puzzle was correct, 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. 	