



# Push Box Addition

Grade 1

Addition and  
Subtraction within 10

3 levels

## Probing Questions

- What do you see in this puzzle?
- What do you think you need to do to help JiJi cross?
- Where can you click?

## Stop the Animation

Stop the animation when the blocks are going up the ramp or being pushed up and ask students to describe the action.

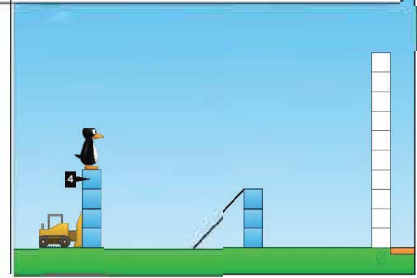
## Classroom Connection

After students solve the puzzle, redo the puzzle and have them write the matching equation.

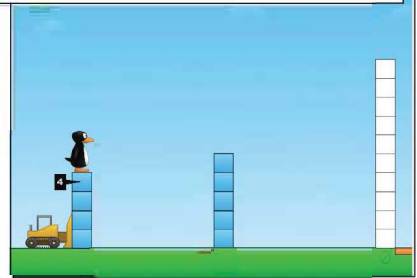
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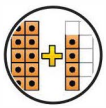
In Levels 1 and 2 JiJi starts on a greater number of blocks and adds a smaller number of blocks.



In Level 3 JiJi starts on a smaller number of blocks and adds a greater number of blocks.



Addition and Subtraction within 10



# Ten Frame Addition

Grade 1

△ Addition and Subtraction within 10

📖 5 levels

## Probing Questions

- What do you need to do to solve this puzzle?
- How can you make the problem easier by using the ten-frame?

## Stop the Animation

Pausing several times during the animation allows you to discuss how the numbers are being represented in the ten frame and how they are combined.

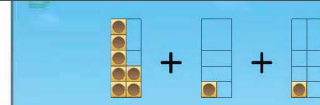
## Research is Clear

Changing the orientation and filling approach when using ten frames helps students develop a stronger number sense and think more flexibly.

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Levels 1 and 2 have 2 addends. Levels 3 and 4 have 3 or 4 addends.



Level 5 shows expressions with numerals.

$$7 + 1 + 1 + 1$$

Addition and Subtraction within 10 - 3



# Push Box Subtraction

Grade 1

△ Addition and Subtraction within 10

📖 4 levels

## Probing Questions

- What does the hole in the ground represent?
- What does the ramp represent?
- How can you help JiJi cross?

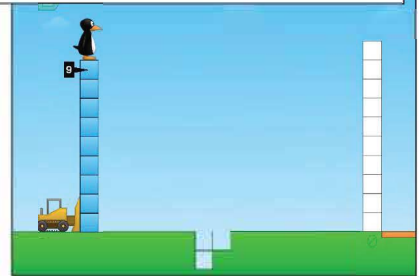
## What Do the Standards Say?

Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. CCSS.Math.Content.1.OA.A.1

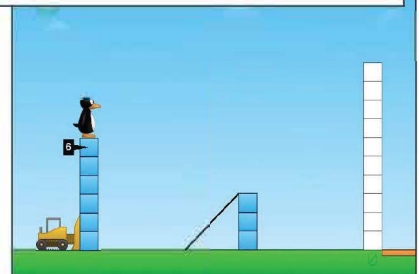
## Classroom Connection

Project puzzles on a white board and have students discuss how they determine whether to add or subtract and why.

Levels 1, 2, and 3 consist of only subtraction problems.



Level 4 includes both addition and subtraction problems.



Addition and Subtraction within 10 - 4

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