

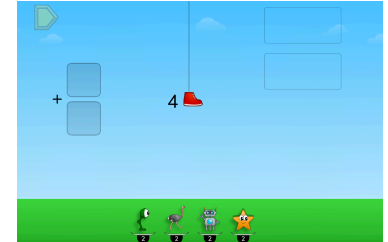


Materials

whiteboards, dry erase markers
Bouncing Shoes Game Mat
centimeter cubes (or other math tools)
Creature Cards for each student

Directions

- Give students a whiteboard, dry erase marker, Bouncing Shoes Game Mat, centimeter cubes (or other math tools), and Creature Cards. Display the first puzzle in Level 2.
- Ask students, “What is different about this puzzle and the other Bouncing Shoes puzzles we’ve solved? How do we know how many shoes we need to fill?” Have students share their understanding of the number shown and how they will prove they have filled that many shoes.
- Have students represent their puzzles on the game mats and with equations.
- Ask students, “If you could add 2 more creatures to use to solve this puzzle, which two creatures would you add and why?” Have students turn and talk to a neighbor about their thinking.
- Allow a couple volunteers to share their thinking and their solution.
- Engage the students in a conversation about the different thinking and solution strategies that have been presented. Repeat with other puzzles in Level 2.



- Display the first puzzle from Level 3 and have students solve the puzzle. After you have shared solutions, ask questions like, “If you added (one, two) shoes, how many shoes would you have and how would this change your solution?” Have students Think, Pair, Share with a partner. Discuss the new solutions and prove the answers are correct.
- Display the next puzzle in Level 3. Ask students, “Can you find a solution using 3 creatures? What would the equation for this look like?” Share students’ solutions and prove the 3 numbers equal the total number of shoes.
- Display the next puzzle in Level 3 and ask students to find a solution. Ask students to record the solution on their whiteboard using an equation. Share students equations.
- Repeat with the remaining puzzles in Level 3.

Sample Questions

- How many shoes do we need to fill?
- Is there more than one answer to this puzzle?
- How do you know those two creatures equal the total number of shoes?
- How could we represent this puzzle with an equation?
- What does each number in this equation represent?
- Is there a solution using three creatures?
- Which creatures could you use if we added ___ more shoes?

What to look for

- How does the student...
- model the problem on the Bouncing Shoes Game Mat?
 - represent the puzzle with numbers and symbols?
 - write equations to represent the problem and solution?
 - discuss what the numbers in their equation represent in the puzzle?
 - prove their answer is correct?