

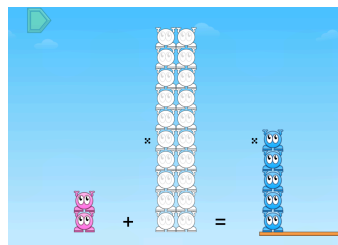
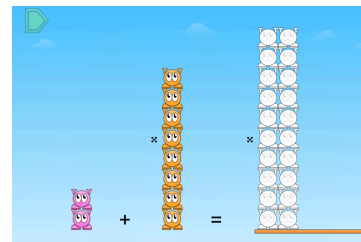


Materials

math tools
whiteboard and dry erase markers for each student

Directions

- Give students whiteboards, dry erase markers, and math tools. Display the first puzzle in Level 1. Ask students, “What do you notice?” Have students turn and talk to a neighbor about all of the things they see in the puzzle.
- Say to students, “I see JiJi’s Helping Hand is asking us to select 6. Why?” Discuss the two groups of critters shown (4 critters and 2 critters) and the plus and equal sign. Say to students, “The plus sign tells us to put these two groups together. Who can prove that 4 and 2 together make 6?”
- Display another puzzle in Level 1 that has a dot arrangement for 5 next to the stack of critters. Make sure students notice the arrangement of the critters. Discuss how this could help them with addition and subtraction (benchmarks of 5 and 10).
- Solve the remaining puzzles from Level 1. Discuss what is known and unknown in each puzzle. Have students record an equation to represent each puzzle on their whiteboards and share these equations.



- Display the first puzzle from Level 2. Have students discuss what they notice with a partner. Discuss how this puzzle compares to the Level 1 puzzles.
- Discuss the equation students could write for these problems. Explain to students that the missing number in an equation is called the *unknown*. An unknown can be represented by a letter, shape or symbol. In this puzzle, the unknown is what changes in the problem.
- Include some kind of symbol for the unknown in the equation (e.g., ? or \square).
- Have students write the equations on their whiteboards and then share whole group.
- Repeat with the remaining puzzles in Level 2.

Sample Questions

- What is known and unknown in this puzzle?
- What strategy did you use to solve this puzzle?
- How can you prove your answer is correct?
- How can you use the benchmark of 5 and 10 to help you solve this problem?

What to look for

- How does the student:
- discuss how the arrangement of critters (stacks of ten with five marked) in the puzzle helps with addition and subtraction?
 - discuss using benchmarks of five and ten to help add and subtract?
 - write equations to represent the puzzles include a symbol for the unknown in the problem?
 - discuss what is known and unknown in the problems?