 PUZZLE TALK

Materials

White board and markers

Directions


- Display the first puzzle in Level 1. Ask students, "What do you see? How do you think we solve this puzzle?" Share students' thinking. Ask students, "What do you know about the number in the sky? Turn and talk to a neighbor about what you know about the number _____."
- Have students decide where they think the blob should go and why. Try a student solution and solve the puzzle.
- Display the next puzzle and work together to solve it. After JiJi shows the answer, pause the puzzle and discuss what JiJi showed (e.g., 416 is equal to 4 hundreds, 1 ten and 6 ones). Repeat with the remaining puzzles in Level 1.

- Display the first puzzle in Level 2. Have students work together to decide where to place the blob. Solve the puzzle. When the next number appears in the sky, ask students, "What do you see now? How can we use the first number we placed on the number line to help us place the next number?" Place the second number.
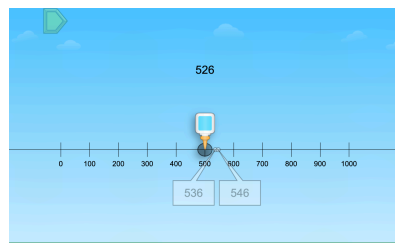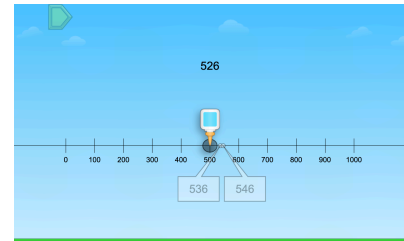
- Work together to place the third number in the sky. Pause the puzzle before JiJi crosses. On their whiteboards, have students write the three numbers that we placed on the number line. Ask students to Think-Pair-Share how the three numbers are related to each other. Discuss students' answers (e.g., 671, 771, and 871 have the same number of tens and ones, but a different number of hundreds). Focus the discussion on the change in the written form of the numbers (e.g., in 671, 771 and 871 the only digit that changes is in the hundreds place. Each number is 100 bigger so the tens and ones don't change.)
- Repeat with the remaining puzzles in Level 2.

Sample Questions

- How did you determine where to place the blob?
- Does the number you placed first help you place the second number? Why?
- How much farther/nearer to 0 is this number than the first number you placed?
- How many 100's bars will there be for this number?
- Why weren't there any tens bars or ones bars for this number?
- Which number is bigger? How do you know?
- This is a 3 digit number. What does each digit represent?

What to look for

How does the student:
- use spatial reasoning to help them place the blob? (e.g., halfway between, closer to, almost)
- use place value to help them place the blob?
- compare numbers? (Do they use place value? Location on a number line?)
- describe a number? (Do they use place value language?)