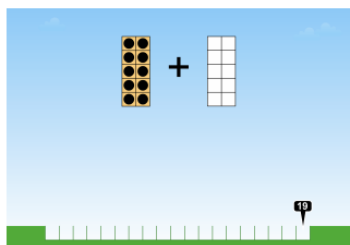
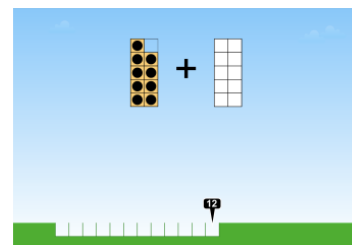


Standards
K.CC.NBT.1

Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.

Game Description

Given one ten frame filled with 1-10 dots select the number of dots needed in the second ten frame to make the number given on the ground. Decompose a number less than 20 into two parts. Record the decomposition using a visual expression.

Suggested Puzzles

Level 3

Level 4
Materials

Double Ten Frames, plastic chips or blocks, whiteboards and markers

Directions

- Play Level 1 of Ten Frame Counting to introduce students to the game. Have an informal discussion about what they notice happening in the puzzle.
- Give students Double Ten Frames and plastic chips or blocks. Project a puzzle from Level 3.
- Have students model the ten frames with their blocks. Have them determine how many are needed to solve the puzzle.
- Have students share their solution with a neighbor. Select different students to share their solution with the class. Have them prove their solution by showing how they got their answer by modeling with any tools they used (blocks, plastic chips, paper, pencil, whiteboard, etc.)
- Discuss the different ways students solved the problem.

Sample Questions

- What do you notice in this game?
- If the frame is full what do we know about the number of dots?
- How do you see the dots in the frame on the left that helps you count them?
- How do you determine the number needed at the bottom, in the grass? (What strategies are they using?)

What to look for

How does the student:

- understand the problem represented in the puzzle?
- find the solution? (Does the student count on or count all?)
- explain how to solve the puzzle? (Does the student make 10? Does the student use the benchmark of 5?)

Extensions

- Give students a number line and have them model the problem from the ten-frames in the puzzle on the number line.