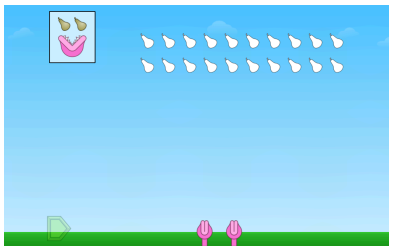
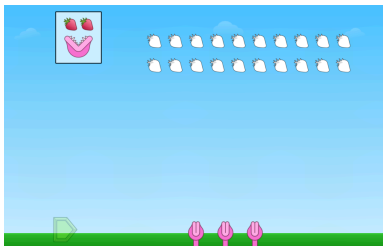
Materials

Whiteboards
Fruit Monster game mat
Dry erase markers, math tools

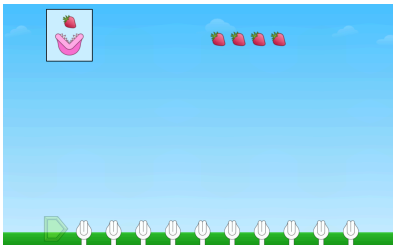
Directions



- Give students whiteboards and dry erase markers. Display, the first puzzle in Level 1 that has 1 Fruit Monster. Ask students, "What do you see? What do you think we need to do to solve this puzzle?" Have students Think-Pair-Share their ideas about the puzzle.
- Ask students, "How many pieces of fruit do you think we should pick and why?" Click the number of fruit the students guess and pause the puzzle when the fruit is above the Fruit Monster. Say to the students, "Why did we feed the Fruit Monster ___ fruits? The card in the corner tells us how many pieces of fruit the Fruit Monster eats." Try one or two more puzzles with one Fruit Monster.



- Choose a puzzle in Level 1 that has more than one Fruit Monster. Ask students, "What is different about this puzzle? How many pieces of fruit do we need now?" Have students turn and talk to a neighbor about how to solve the puzzle and why. Share ideas and solutions. Solve the puzzle, but pause before the Fruit Monsters eat the fruit. Work together to write an equation that represents the puzzle (e.g., 1 x 4 = 4 or 2 x 5 = 10). Repeat with the remaining puzzles in Level 1.



- Display the first puzzle in Level 2. Ask students, "How is this puzzle different from the puzzles we just did? What do we need to do to solve this puzzle?" Ask students to write down how many Fruit Monsters they think we should choose. Share answers and strategies. Solve the puzzle, but pause the puzzles before the Fruit Monsters eat the fruit.
- Work together to write a division equation to represent what happened in the puzzle (e.g., 12 ÷ 3 = 4 because we had 12 apples and each Fruit Monster eats 3 apples). Ask students, "What multiplication equation could we write to represent what we see on the screen now? (e.g., 4 x 3 = 12).
- Explain that 12 ÷ 3 = 4 and 4 x 3 = 12 are related facts. 12, 3 and 4 are a number bond. Discuss with students the inverse relationship between multiplication and division. We can use a multiplication fact to solve a division problem and vice versa.
- Repeat with the remaining puzzles in Level 2.

Sample Questions

- How do you think we solve this puzzle?
- How do you decide how many monsters to select?
- How are you counting?
- How did you decide how many pieces of fruit you need?
- What if we added ___ more Fruit Monsters?
- What if we added ___ more pieces of fruit?
- How would you write an expression or equation to represent this puzzle?
- How would you represent this as repeated addition? As multiplication?

What to look for

How does the student:

- figure out how much fruit is needed? How many Fruit Monsters are needed?
- use language to describe a multiplication/division situation?
- use counting/multiplication/division to find the solution?
- represent the situation with expressions/equations?