

14 What's the Combination?



Pairs

Start

Mix the Game Cards 1–5 and place them in a pile face down.

1. Turn two cards face up. Player 1 creates a combination problem using the two numbers.



5

3

Marc has different color fruit bowls: red, blue, and yellow. He has five different fruits: strawberry, pineapple, melon, orange, and green apple. If Marc fills one bowl with one type of fruit, how many different combinations are possible?

2. Player 2 solves the problem by making a chart and writing an equation.

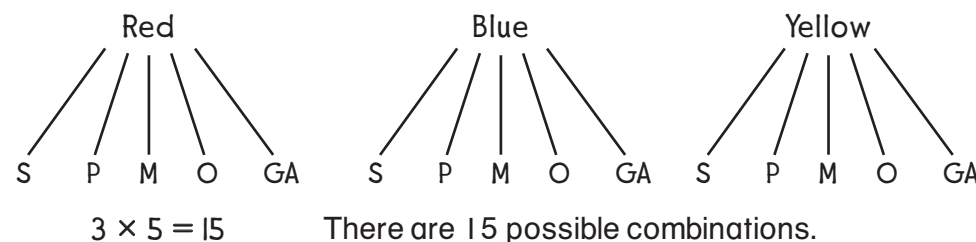
			
			
			
			
			
			

$3 \times 5 = 15$ There are 15 possible combinations.

3. Mix the cards and play 3 more times. Alternate roles.

Extend Another way to solve combination problems is to make a tree diagram.

- Write the names of one type of item across the top.
- From each item, draw a "tree branch" for every item that can be combined with it.
- Label each branch.
- Count the items at the end of the lines.



Here is a tree diagram for the fruit bowl problem. S stands for "strawberry," P stands for "pineapple," M stands for "melon," O stands for "orange," and GA stands for "green apple."

With your partner, make tree diagrams for each of your combination problems.