

Teamwork



Get Started



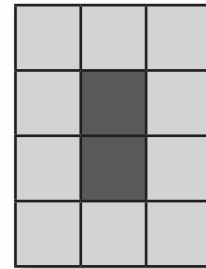
Get 20 squares in one color and 20 in another color.

Repeat for Each Round

Choose **a**, **b**, or **c**. Ask one team member to read the problem and tell the team what is known, and what needs to be found.

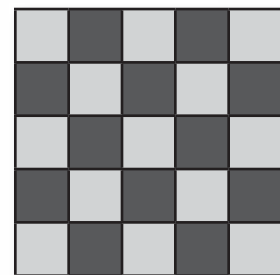
Work together. Use your squares to help you solve the problem.

- a.** Mary wants to tile a floor using red tiles and blue tiles. She wants a red center strip and a surrounding border of single blue tiles. Use your squares to form the pattern. If the center strip has five single red tiles, how many blue tiles does Mary need? If the center strip is two red tiles wide and seven red tiles long, how many blue tiles does Mary need?



- b.** John wants to place square red bricks in the center of his patio floor. He wants to surround the square center with a blue border that is one square blue brick wide. Use your squares. Make the pattern, first with only 1 brick in the center, then with 4, then with 9. How many blue bricks will John need if his red square center is 20 bricks long and 20 bricks wide?

- c.** Form a square checkerboard made up of red and blue squares. If the number of squares along one side is an odd number and the corner square is red, can you always predict the color of the middle square?



If you have more time



What happens to the middle square in problem **c** if the number of squares along one side of the checkerboard is an even number?