## Square Numbers

Materials: square tiles, grid paper

1. Work with a partner. Use square tiles to copy and extend the pattern below until you have a sequence of six square arrays.

2. Draw the square arrays on grid paper. Write a multiplication equation to represent each square array.
3. Describe any patterns that you notice in the number of tiles in consecutive square arrays.
4. If you continued making square arrays, how many square tiles would you need to make the $9^{\text {th }}$ term in the sequence? What about the $20^{\text {th }}$ ? Explain your thinking.
