

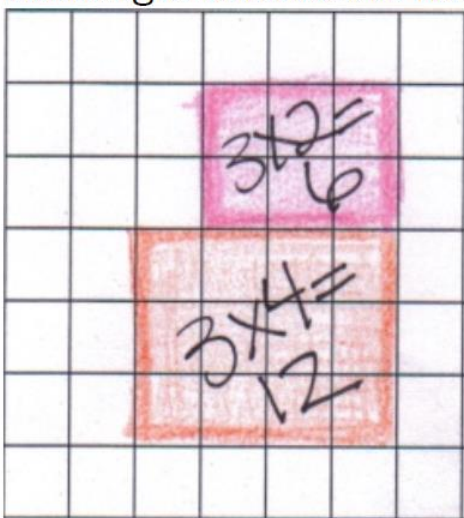
Materials required: 2 dice and grid for recording, one different colored pencil for each player

Players: 2-3

Activity:

1 Using one shared grid, player one starts and rolls two dice. And then colors the array on the grid, for example if they roll a three and a four they color in any  $3 \times 4$  rectangle.

Each player should write the number of squares in the rectangle to indicate the product of the two sides.



Take turns, and the last player to fit on an array, wins. You can't pass or reroll the dice.

Variation:

Each player gets his or her own grid. And the first player to color in all the squares in their grid wins. But as the grids fill up players will roll totals that will not fit on the grid, you can allow them to skip their turn. Or break up the factors if you choose. For example a player might identify that  $6 \times 4$  is the same as  $2 \times 4$  and  $4 \times 4$ . This implicitly reinforces the distributive law of multiplication.

The size of the grid will determine the length of the game. So you can reduce it down.

