

## Building Arrays Game

**Materials:** Grid Paper (Size can vary. At least 25 x 25), dice (two 6-sided or two 10-sided per pair)

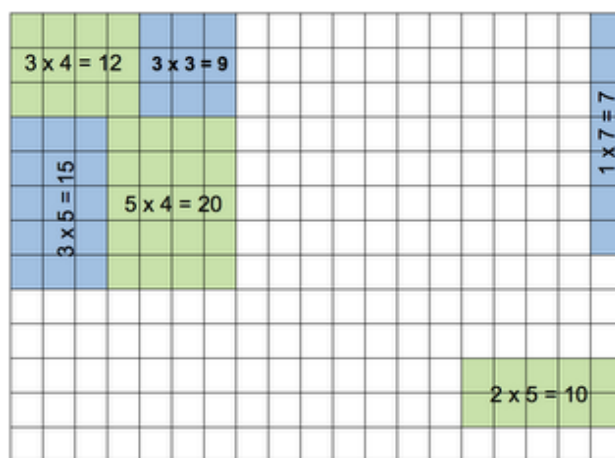
### **How to Play:**

This is an activity for children to complete to help understand the concept of arrays.

1. Children work in partners. Each group needs 1 sheet of grid paper, colored markers and either two 6-sided dice or two 10-sided dice.
2. Each child rolls the dice, the child with the highest number goes first.
3. Children then take it in turns to roll the two dice. If the child rolls a 2 and a 5, then they create a rectangle that is 2 by 5 and color a rectangle on the grid.
4. Each player uses a different colored marker. Record the array on the rectangle.
5. The other player rolls the two dice and draws a rectangle on the grid using their colored marker and records the array. (see example)
6. Continue to take it in turns back and forth creating rectangles on the grid. Children work towards filling up the whole sheet with their rectangles.
7. Once a player rolls the dice and there is no place for their array, the other player takes additional turns until he/she also can't add an array to the grid paper.
8. The player with the most number of squares colored in at the end wins!

### **Variations**

- Change the size of the grid paper.
- Play in groups of 3 to make the placement of boxes more challenging.
- Differentiate by providing different dice. (Some labeled with 1, 2, 5, 10; 10-sided dice, etc.)



Adapted from

<http://mathswithmeaning.blogspot.com.au/2013/06/math-game-monday-queens-birthday-holiday.html>