

# GROUP

by Mark Steere

## INTRODUCTION

Group is a very simple, two-player game played on a hexagonal board of any size, initially empty. The two players, Red and Blue, take turns placing stones of their own color onto unoccupied cells on the board, one stone per turn, starting with Red. Group uses the pie rule. Mark Steere designed Group in December 2025.

## LEGAL PLACEMENTS

Place your stone to form the smallest friendly group possible. (An isolated singleton is a group of size 1.) In **Figure 1**, it's Red's turn. The smallest friendly group Red can form would be comprised of 3 red stones. The black dots mark legal placements for Red.

## OBJECT OF THE GAME

The object is to form a friendly group of size  $N$  or larger, where  $N$  is a function of the board size. For a board with side length  $L$ ,  $N = 2L - 1$ . For example, if the board has side length 5,  $N = 2 \times 5 - 1 = 9$ . So on a board with side length 5, to win you must form a group comprised of 9 or more stones of your color. On a board with side length 6, the goal would be to form a friendly group comprised of 11 or more of your stones.

In **Figure 2**, the board has side length 5. Red has won the game by forming a group of size 12.

## DESIGN NOTES

"But... what if neither player forms a group of size  $N$  or larger?" One of them will, according to a theorem I recently formulated.

**Maximum Minimum Group Theorem:** For a hexagonally tessellated board, of a given shape and size, there is a maximum group size  $N$  such that, if the board is filled with two colors of stones, a group of at least size  $N$  must form in at least one of the colors. In the case of a regular hexagonal board, with side length  $L$ ,  $N = 2L - 1$ .

## AUTHOR'S NOTE

Feel free to publish this rule sheet and to program the game of Group. No licensing fee or royalties are expected. However, please don't change the name or the rules, and please attribute the game to me, Mark Steere. My other games can be found at [marksteeregames.com](http://marksteeregames.com).

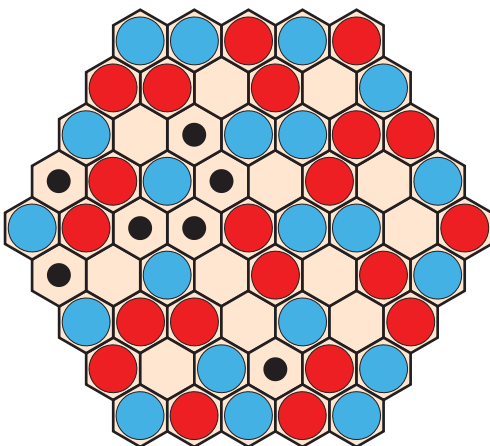


Figure 1

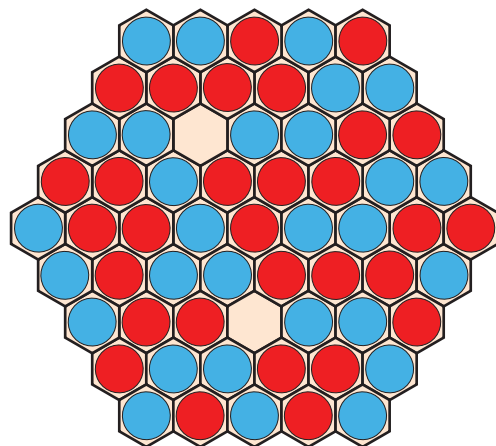


Figure 2