

## COPOLYMER

**INTRODUCTION** Copolymer is an ultra simple game for two players. A printed paper "board," a pen of one color, and a pen of another color can be used to play. Any honeycomb patterned grid with an odd number of cells can be used, such as the regular hexagonal board in Figure 1.

**BASIC MOVES** Players take turns coloring in cells on the (initially empty) board, at least one cell per turn. Players are not allowed to pass on their turn.

Define "connection" here as coloring in a cell adjacent to two **opposing** cells (that is, adjacent to each of at least two of **your opponent's** cells). Having formed a connection, as defined here, you must color in at least one more cell while it is still your turn.

**Your turn concludes when you color in a non-connecting cell.** So, for example, the first turn of the game will necessarily be a single move turn since there are no opposing cells to connect to. Likewise the second and third turns must be single move turns since there will not be two opposing cells available to connect to.

You are never required to form a connection, unless the only available cells are connecting cells for you.

**OBJECT OF THE GAME** Once the board fills up, the player who has claimed the majority of cells wins.

**EXAMPLE PLAY** Here one player will be Gray and the other Scribble. In Figure 2a it's Scribble's turn. Scribble makes both of his available connections in Figures 2b and 2c, and claims a non-connecting cell in Figure 2d, concluding his turn.

Now Gray makes a connection in Figure 3a, and claims a non-connecting cell in Figure 3b. Notice that Gray chose not to make all three of his available connections. This is important because if Gray had done so, he would have lost the game to Scribble on the following turn. By making only one connection, Gray secured a victory for himself.

Tempo is paramount in Copolymer. The end game is fairly trivial on an eleven cell board. On a 271 cell board (ten cells on a side), the end game is exceedingly complex.

**AUTHOR'S NOTE** Feel free to copy, distribute, profit from, or do whatever you like with this document and the game of Copolymer. However please don't change the name or the rules, and please attribute the game to me, Mark Steere. Other games I invented: Quadrature, Tanbo, Impasse, Byte, Diffusion, Cephalopod, Box Hex, and Net Y. For more information see marksteeregames.com.

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