



Figure 1













Figure 2







Fig. 4a Fig. 4b

### **INTRODUCTION**

O (the letter O) is a two-player game played on a hexagonal grid of any size, edge length 4 or longer. Stones of only one color are used, such as black. Players are simply designated Player 1 and Player 2. (O, in the language of combinatorial game theory, is an "impartial" or "non-partisan" game.) Mark Steere designed O in February 2024.

### PLAY

Players take turns placing a stone on an unoccupied cell, subject to restrictions explained below. Players will always have an available placement.

### **OBJECT OF THE GAME**

To win, you must form a loop of stones, an example of which is shown in Figure 1.

### **RESTRICTIONS**

**Figure 2** shows a series of glyphs. The green cells represent legal placements. The red cells represent illegal placements. The glyphs and their rotations (and mirror reflections) represent every possible arrangement of (from 0 to 5) stones immediately surrounding an unoccupied cell.

Players are not allowed to form an adjacency between a corner stone and a stone not on the perimeter. Figure 3 shows examples of legal and illegal corner placements.

# **O - PARTISAN VARIANT**

In partisan O, the players are designated Left and Right. **Figures 4a and 4b** show the only glyph which has a distinct mirror reflection. **Figure 4a** shows the "left" glyph. **Figure 4b** shows the "right" glyph. Only Left is allowed to place in the center of the left glyph (and its rotations). Only Right is allowed to place in the center of the right glyph (and its rotations). Left makes the first placement of the game.

Passing is not allowed in partisan O, but if you don't have a placement available, your turn is skipped. Other than this, and the additional restrictions on Left's and Right's allowed placements, the rules are the same in both versions.

## **DESIGN NOTES**

Some monocolored loop games require a "hack" to guarantee the formation of a loop, such as a rule which forbids placement on the center cell. No hacks are needed in O. A loop will always be formed.

**AUTHOR'S NOTE** Feel free to publish this rule sheet, and to program the game of O for online or offline play. There is no licensing fee, and no 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.

