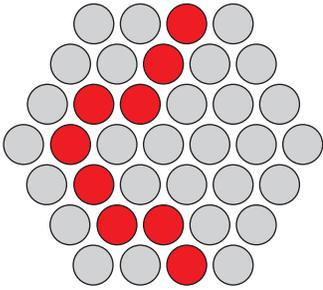# GYRE

by Mark Steere

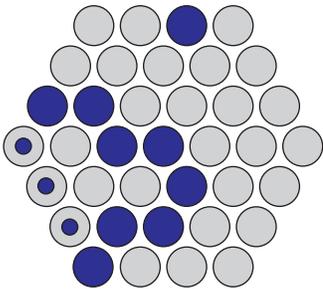Fig. 1 - Winning path for Red.

Fig. 2 - Blue loop.
● = perimeter cells claimed by Blue.
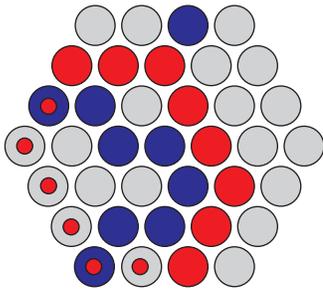

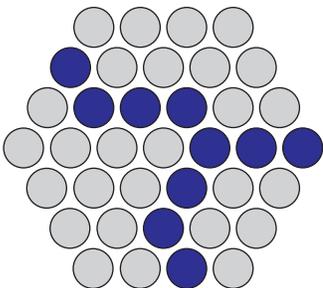Fig. 3 - Red surrounds Blue, taking possession of Blue's perimeter cells.

Fig. 4 - Winning path for Blue.

INTRODUCTION   Gyre is a two player game, played on a hexagonally shaped, honeycomb pattern board. A board with at least seven cells on a side (127 cells total) should be used. The two players, Red and Blue, take turns placing stones of their own color on unoccupied cells on the board, one stone per turn, starting with Red. Draws cannot occur in Gyre. Mark Steere designed Gyre in May, 2015.

OBJECT OF THE GAME   To win you must surround the center cell of the board with a "loop" (described below) in such a way that your opponent can't possibly form a loop surrounding yours. The center cell itself can be a part of a loop surrounding it, as seen in **Figure 2**. Blue has surrounded the center but hasn't won because his loop can be surrounded by Red, as we will see.

LOOP   A loop is comprised partly of a path of contiguous, like-colored stones, at least two of which are on the perimeter (outermost ring of cells), and partly of the **shortest path of perimeter cells** joining the perimeter stones. If there are two perimeter paths of equal length, then either may be used to form the loop. In **Figure 1**, the stone path together with the perimiter cell path to the right of it (the shorter of the two perimeter paths) form a loop surrounding the center cell. Blue has no way to surround this loop, so Red wins.

PERIMETER CELL OWNERSHIP You own all of the perimeter cells that help complete your loop, even while they're occupied by enemy stones. In **Figure 3**, two of Red's perimeter cells are occupied by blue stones.

NESTED LOOPS A perimeter cell may be owned by at most one player at a time. Perimeter cells are always awarded to the outermost of two competing, would-be loops. In **Figure 3**, Red has surrounded a blue loop and is now in possession of eight perimeter cells, including five previously owned by Blue (**Figure 2**).

PIE RULE   Player 1 begins the game by placing a red stone somewhere on the board. Player 2 then has two options: 1) He can place a blue stone on the board, in which case the two players will continue taking turns playing stones of their own color for the duration of play. 2) He can refrain from playing any stones, and instead switch colors with Player 1, counting Player 1's played red stone as his own first turn. Player 1 is now Blue, and must play a blue stone. Player 2 then plays a red stone and the players continue to take turns playing stones of their own (new) colors. This option is only available on Player 2's first turn.

AUTHOR'S NOTE Feel free to publish this rule sheet, and to program the game of Gyre 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.