



Midgard is a two player abstract strategy game of dominance. Players take on the role of Odin and his brothers in creating Midgard, the homeland of humanity from the remains of the vanquished ice giant Ymir. One player-god creates the seas and other the land masses.

Player turns alternate starting with the sea player. Each turn, players are required to place one of their tiles on an empty ice cell that does not share an edge with any occupied terraformed cell. The newly occupied cell is terraformed into a sea or land cell and influences the transformation of its adjacent cells. These adjacent cells are referred to as blizzard cells because what they will become is unclear. Later, sea and land tiles are also placed when regions of blizzard cells are completely enclosed. The blizzard cells are assigned to and terraformed by the player that exerts the most influence on the enclosed regions. A player's influence is determined by counting owned *edges* around the enclosed region. In the case of a tie, half the cells are filled with sea tiles and the other half by land tiles. The gods have decreed that this will always be possible!

When the board is completely terraformed or a player has no more tiles in hand, the player with the most tiles on the board wins the game. If the players tie for most tiles, the player occupying the most perimeter cells wins.

Components

- Midgard is played on a jagged edged triangular board; a 10 x 10 regular triangular grid of cells with more triangle cells affixed to 24 of its border triangles. The board has a total of 124 cells which includes 27 perimeter cells - cells that are adjacent to exactly one other cell. The center cell is a blizzard cell.
- 70 sea tiles
- 70 land tiles
- 70 blizzard tiles

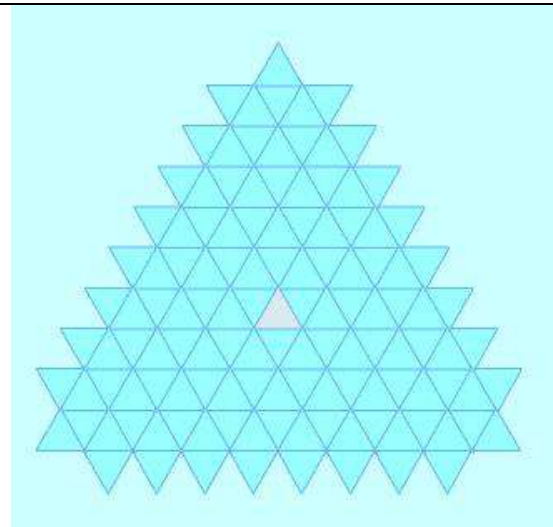


Figure 1. Midgard board – Initial Setup

Setup

The board is placed in the center of the playing area and one blizzard tile is placed on the center cell. See Figure 1.

Each player receives a set of either 70 sea tiles or 70 land tiles. Only 63 tiles are needed to ensure victory but the extra tiles will allow the players to quantify their victories. Gods enjoy boasting about their magnificent achievements.

There are 69 extra blizzard tiles that are put aside for the standard Midgard game. The blizzard tiles are used in the Mere Mortal (beginner) variant or used to seed a few extra interior ice cells at the start of the game.

Terms

Terraformed cell: A terraformed cell is a cell containing a sea or land tile. See Figure 2.

Adjacent cells: Cells are adjacent if they share a common edge. Cells that only touch at one point are not adjacent. In Figure 2, cell 'a' is adjacent to cell 'b' but cell 'a' is not adjacent to cell 'c'.

Ice cell: An ice cell is an empty cell not adjacent to a terraformed cell. Ice cells can only be adjacent to other ice cells or blizzard cells. In Figure 2, all the cyan cells are ice cells.

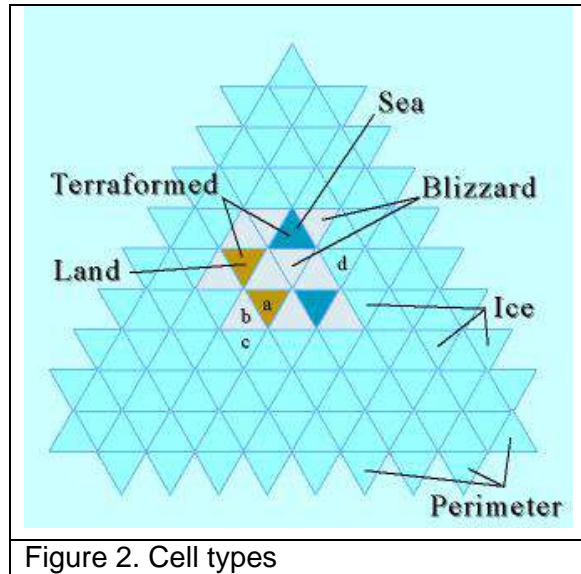


Figure 2. Cell types

Blizzard or influenced cell: An empty cell that is adjacent to a terraformed cell. The board's center cell is considered to be a blizzard cell even though it is not next to a terraformed cell at the beginning of a game. In Figure 2, all the grayed cells are blizzard cells. Blizzard cells are to be considered empty even though they may contain a blizzard tile when playing the Mere Mortal variant. Blizzard cells will sooner or later be terraformed into sea or land tiles.

Enclosed region: An enclosed region is a connected set of blizzard cells such that no cell in the region is adjacent to an ice cell. The border of the region is defined by the edges shared between terraformed and blizzard cells. A set of blizzard cells is connected if you could cut along the border edges of the region and then pick up the entire set of blizzard cells by pinching only one of its cells. In Figure 2, if the sea player placed a tile on cell 'd', three blizzard cells would be enclosed.

Influence count: A player's influence on an enclosed region is the number of his or her own border edges – not terraformed tiles. Figure 2, if either player played a tile to cell 'd', that player would win the enclosed region by a count ratio of 3 to 2!

Rules of Play

Starting with the sea player, players take turns performing the following two actions:

1. A player must drop one of his or her tiles on any empty ice cell that meets the following restrictions:
 - a. The ice cell is *not* adjacent to any sea or land cells. See Figure 3 for samples of legal and illegal drop moves. In fact, in Figure 3, any cyan ice cell is legal.

- b. The cell is not the center blizzard cell. Ymir was already starting to melt before the gods got to work. This helps counter-balance a slight advantage for the first player.

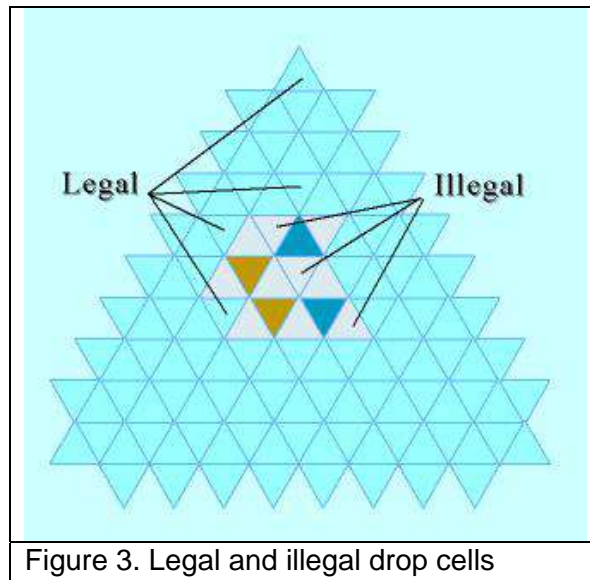


Figure 3. Legal and illegal drop cells

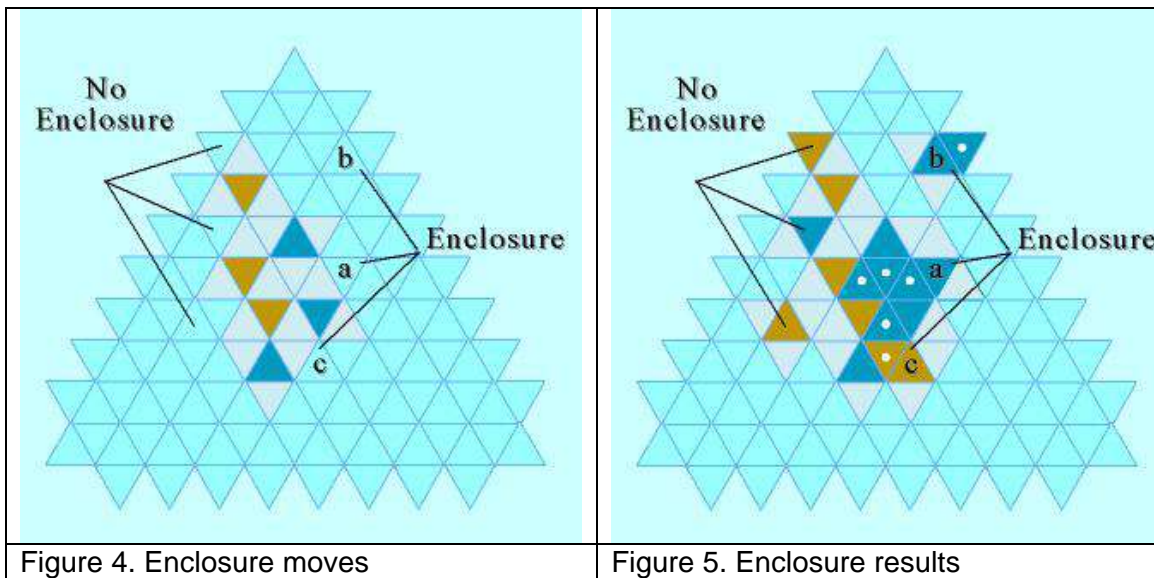
Once placed a tile terraforms the newly occupied cell into a sea or land cell and influences its adjacent cells. The adjacent cells become **blizzard** cells and neither player can drop tiles on these cells. Blizzard cells are grayed in the figures.

If a player is unable to place a terraform tile the game ends and a winner is determined. See *Winning the Game* below.

2. If the newly terraformed cell completes the **enclosure** of one or more regions of blizzard cells, each of these regions' cells must be terraformed with the tiles of whichever player influences the region the most. If a tie occurs, each player covers half of the enclosed cells, starting with the moving player. Note that only the number of cells matters for scoring purposes so placement can be arbitrary.

A player's **influence** on a blizzard region is determined by counting own *edges* on the border of the enclosed region. The player with a clear majority wins all the cells of an enclosed region. When multiple regions are enclosed by the placement of a tile, it is possible for *either* player to win some, all or none of these regions. The regions are assessed one at a time.

In Figure 4, if a player placed a tile at cell 'a', he or she would enclose a region of three cells and wins the region by influence counts of 3 to 2. If a player placed a tile at cell 'b', he or she would enclose a perimeter cell and wins it by influence counts of 1 to 0. If the sea player placed a tile at cell 'c', he or she would enclose and win two cells by influence counts of 3 to 1. If the land player placed a tile at cell 'c', he or she would enclose the region but only tie the sea player; 2 to 2. In this case, both players would win one cell. Figure 5 shows the cells captured by enclosure; the cells are indicated by dots.



Winning the Game

When all the cells on the board are occupied by land or sea tiles or one player runs out of tiles, the player owning the highest number of cells on the board wins. In the case of a tie, the player who occupies the most perimeter cells wins. The perimeter consists of the 27 outermost cells, each of which is adjacent to exactly one other cell.

The easiest way to determine the number of owned cells on the board is to subtract the number of tiles in hand from 70.

You are now ready to build a world.

Mere Mortal (Beginner) Variant

The Mere Mortal variant uses all the Midgard rules but adds a player aid. Blizzard tiles are used to indicate blizzard cells as they are created. This helps players easily see potential regions that could be enclosed and helps locate isolated ice cells.

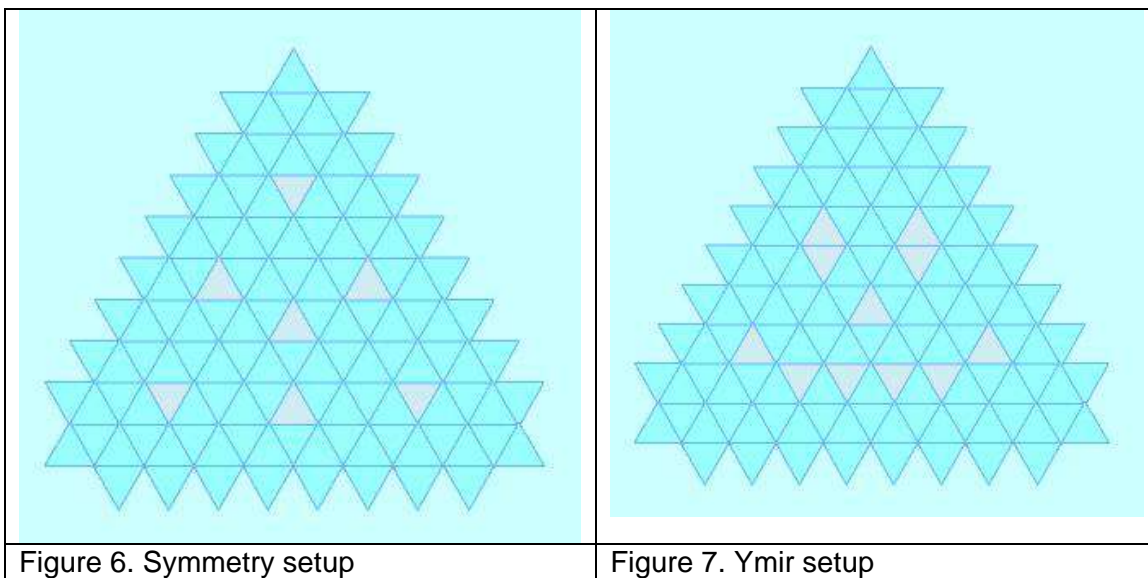
Odin (Advanced) Variant

The Odin variant uses all the Midgard rules but delays the capture by enclosure. Instead of assigning enclosed regions when they are enclosed, players wait until the game ends. The end comes when both players agree there are no more ice cells to be found. Note that all perimeter cells should be terraformed or be adjacent to a terraformed cell at the end of the game. The all knowing Odin can easily find ice cells, but can you?

If enclosure procedures begin and ice cells are discovered, these ice cells are to be treated as if they were blizzard cells!

Loki Variant

The Loki variant uses all the Midgard rules but instead of placing only one blizzard token on the center cell, players seed the *interior* cells of the game board with a few more blizzard cells. Do not seed perimeter cells which are still needed for breaking ties. The players are free to try any setup that they both agree to but it is suggested that center cell symmetry is maintained. See Figures 6 and 7 for examples.



Author's Release

The rules for Midgard may be duplicated and distributed in hardcopy or electronic form and this game, variants and puzzles based on the these rules may be *programmed* for online play provided the game's name and rules are not altered and the author, Phillip Leduc, is given credit for the design of the game. If you have any questions or comment, the author can be reached at p.leduc@cox.net.