There are 5 Columns and 5 Diagonals. Hexes only appear on Column -2 Diagonals 0, 1, and 2 inclusive
Column -1 Diagonals -1, 0, 1, and 2 inclusive
Column 0 Diagonals -2, -1, 0, 1, and 2 inclusive
Column 1 Diagonals -2, -1, 0, and 1 inclusive
Column 2 Diagonals -2, -1, and 0 inclusive.

The number tokens are: 2, 3, 3, 4, 4, 5, 5, 6, 6, 8, 8, 9, 9, 10, 10, 11, 11, 12

A Terrain Hex a is Above a Terrain Hex b iff a.x = b.x and a.y = b.y - 1
If A Terrain Hex a is Above Terrain Hex b then Terrain Hex b is Below Terrain Hex a
A Terrain Hex a is to the Upper Right of Terrain Hex b iff a.x = b.x + 1 and a.y = b.y - 1
If A Terrain Hex a is to the Upper Right of Terrain Hex b then Terrain Hex b is to the Lower Left of Terrain Hex a
A Terrain Hex a is to the Upper Left of Terrain Hex b iff a.x = b.x - 1 and a.y = b.y
If A Terrain Hex a is to the Upper Left of Terrain Hex b then Terrain Hex b is to the Lower Right of Terrain Hex a

The Map contains 3 Ore Hexes, 4 Grain Hexes, 4 Lumber Hexes, 4 Wool Hexes, 3 Brick Hexes, and 1 Desert Hex.

Only the Desert Hex has no Number Token.

Both the Column Index and Diagonal Index range in value from -2 to 2.
A Terrain Hex has a Border in each of the 6 Directions

A Border is an Ocean Border, \( ob \), iff for all Terrain Hex \( a \) and Terrain Hex \( b \) Terrain Hex \( a \) does not share Border \( ob \) with Terrain Hex \( b \).

There are exactly 4 Generic Harbors.

There is a Harbor on the Border below the Terrain Hex at Column 0 Diagonal 2
There is a Harbor on the Border to the Lower Right of the Terrain Hex at Column 1 Diagonal 1
There is a Harbor on the Border to the Lower Right of the Terrain Hex at Column 2 Diagonal 1
There is a Harbor on the Border to the Upper Right of the Terrain Hex at Column 2 Diagonal -2
There is a Harbor on the Border above the Terrain Hex at Column 1 Diagonal -2
There is a Harbor on the Border above the Terrain Hex at Column -1 Diagonal -1
There is a Harbor on the Border to the Upper Left of the Terrain Hex at Column -2 Diagonal 0
There is a Harbor on the Border to the Lower Left of the Terrain Hex at Column -2 Diagonal 1
There is a Harbor on the Border to the Lower Left of the Terrain Hex at Column -1 Diagonal 2

Note: See previous page for definition of “Hex a has a direction to Hex b”.

For every Border, \( b \), there must exist a Terrain Hex \( a \) and Direction \( d \) such that Terrain Hex \( a \) has Border \( b \) in the Direction \( d \)