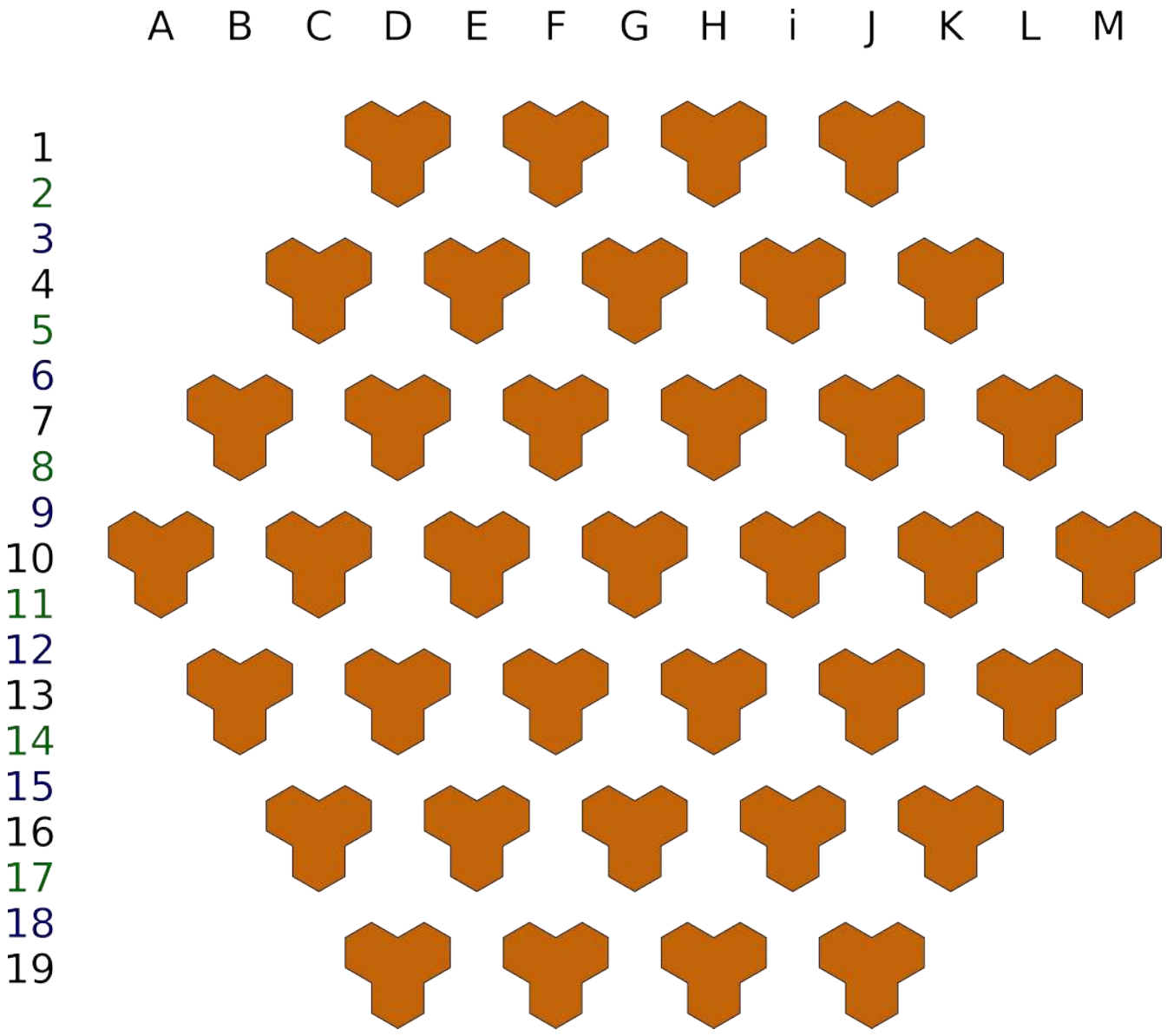
Lazo

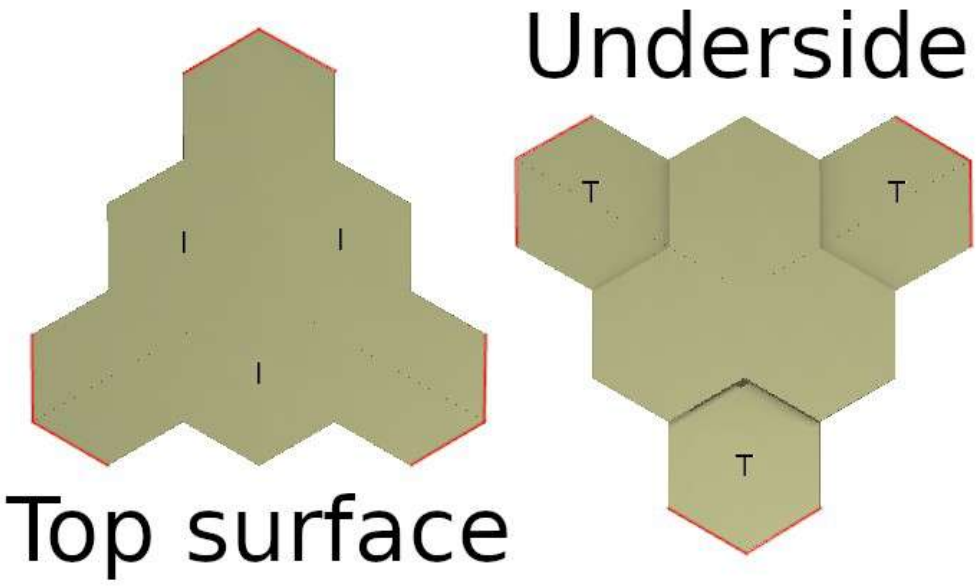
Lazo is a two-player board game. The board is a grid of holes which are shaped like three regular hexagons joined together. These holes are positioned in a hexagonal pattern. The full size grid traditionally has 91 holes in the overall shape of a hexagon with six holes along each edge. Here is a smaller grid of 37 holes.



Each player has tiles of their own color, here called white versus black. Viewed from above, each tile has the overall shape of six regular hexagons joined together. On the underside of each tile is a “peg” which fits into any hole on the board. The peg portion is half as thick as the main portion of the tile.

T means Tip, I means Interior hex

The underside of a tip touches the top surface of an interior



Three mutually adjacent tiles on the same layer either share a common vertex or form a gap which is the same shape & size as the holes on the board.

The board is initially empty. White makes the first move. A move consists of placing one tile either in a hole on the board surface or in a hole formed by three tiles on the same layer. You must place a tile on your move. If you have no legal move, you lose. Any tile placed on other tiles must rest on three tiles beneath it. No overhang is allowed. The tile must also be placed adjacent to at least one other tile of the same color, either beneath it or on the same layer. There is no such restriction when placing a tile on the board surface.

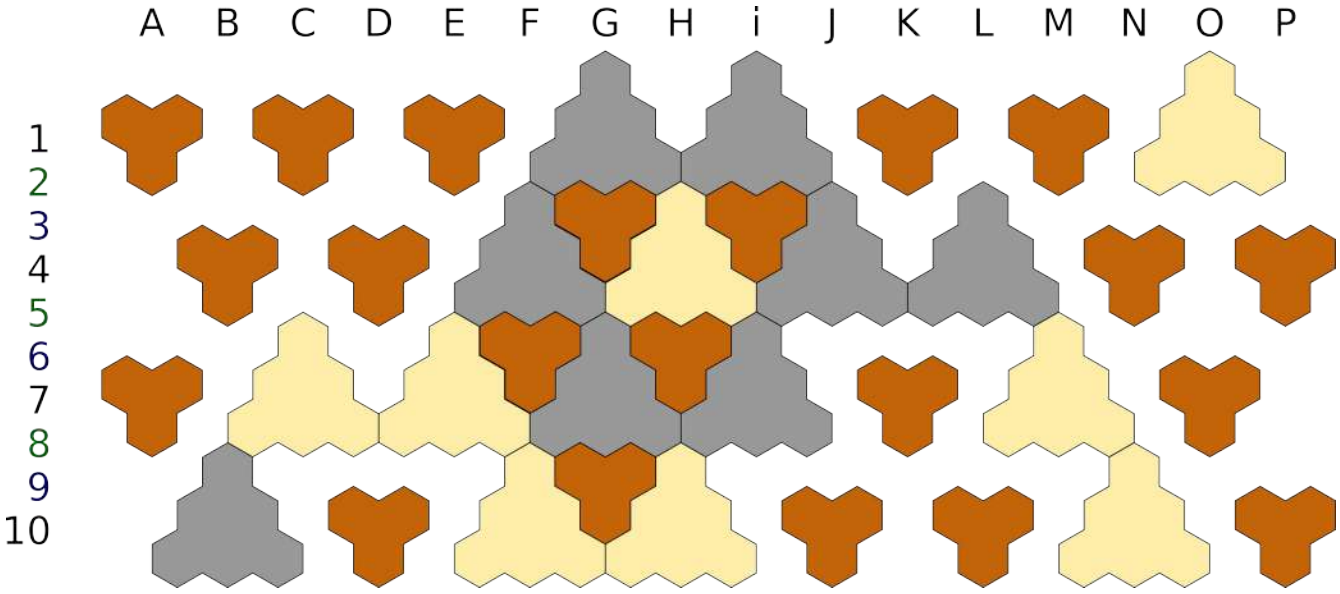
At the moment in the game when white places the first tile, black has the option to either place a black tile elsewhere on the board, or in the same hole white played in, returning the white tile to that player’s supply. Other than that, tiles are not moved once placed and are not captured.

Each layer has room for fewer tiles than the layer beneath. But the **lattice of spaces** extends in all directions, above and beneath the board. This lattice does not completely fill up the space it occupies. The pegs are only half as thick as the main portion of the tiles. Below the underside of each peg, and above the upper surface of each tip, there is a gap which is called a **blocking region**.

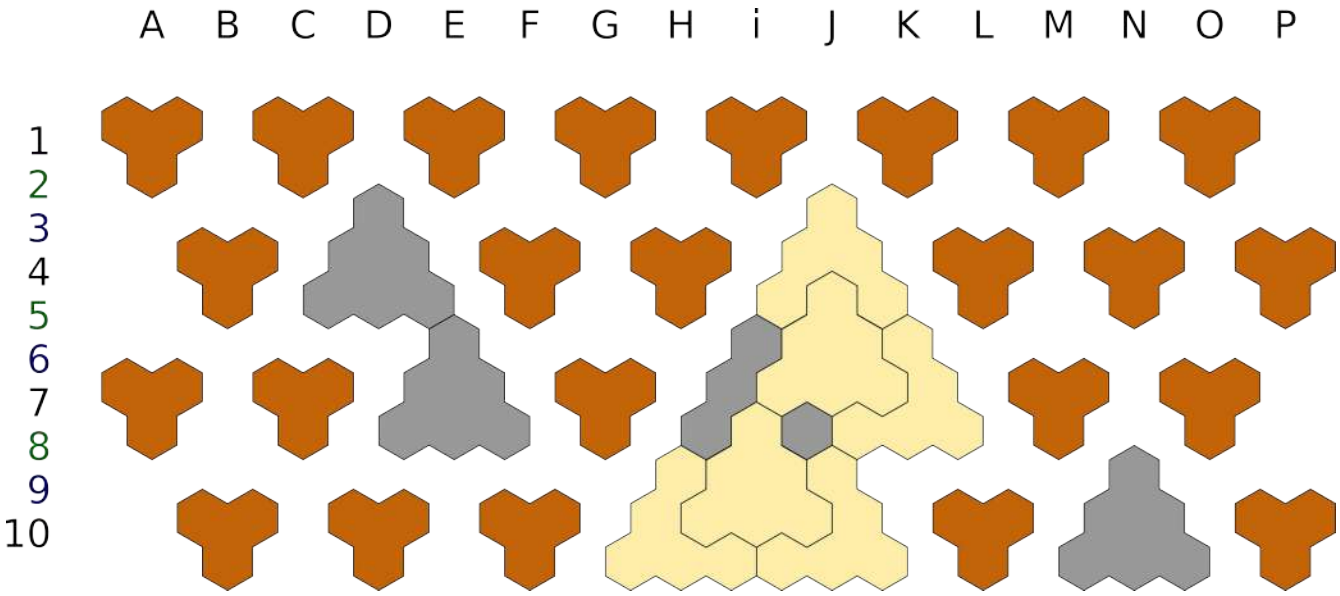
A **lattice path** is a sequence of lattice spaces, each adjacent to the next, which may or may not be occupied by tiles. Each space is adjacent to three spaces on the layer below, six on the same layer, and three on the layer above.

The object of the game is to form a **loop** of your color tiles and possibly the board surface. This loop must have a **lattice hole**, which is a lattice path consisting of either

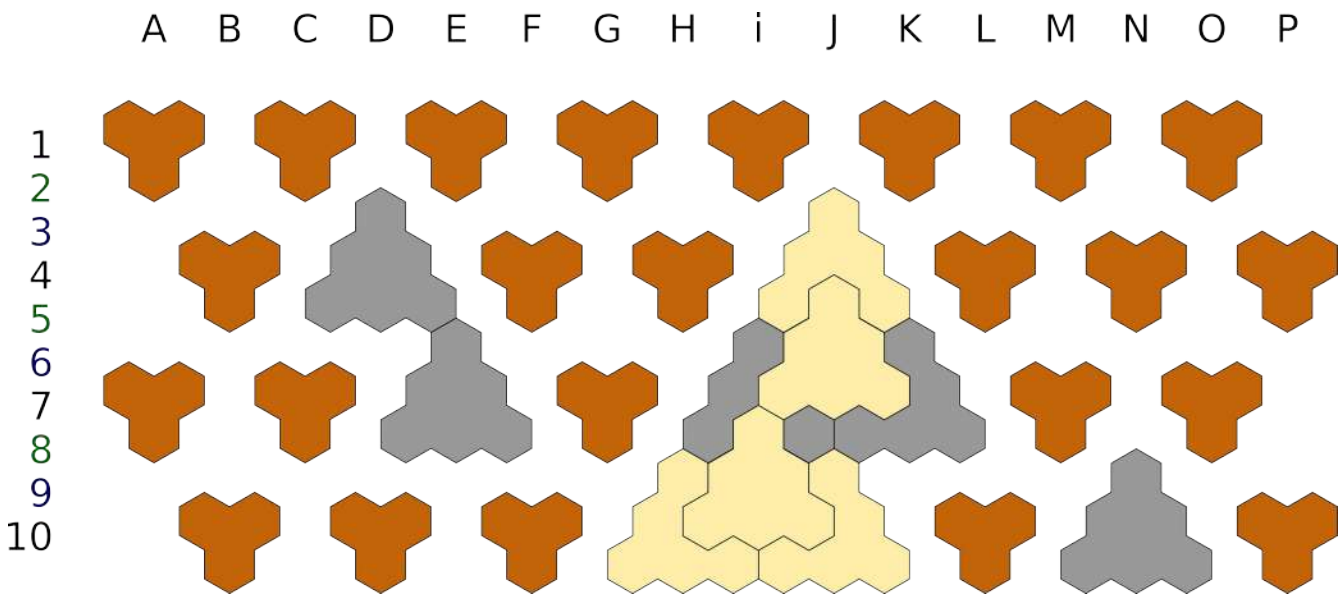
opposing tiles or blank spaces, which passes completely through your loop. There are two ways to form a loop. A **board surface loop** is a loop of your tiles, all on the board surface, which goes around at least one opposing tile or vacant space. The lattice hole passes through this opposing tile or vacant space, extending above and below the board.



An **arch** or **3-d loop** is a loop formed by your tiles and usually the board surface. A lattice hole must pass completely under the arch (or through the loop) formed by your tiles. This implies there must be at least two adjacent opposing tiles on the same layer for your arch to pass over. In the following diagram, an arch has not been formed.



You can see the tip of a black tile at J8. But there is a blocking region above each tip of every tile on the board. There is no lattice space above this tip which is adjacent to the black tile. The only lattice space above this tip is two layers above, which is not adjacent. That means there is no lattice hole which passes through this apparent loop.



This is a legal arch. You could say that white has completed a **bridge** over a **river** of at least two black tiles on the layer below. Since all tiles above the board surface must be placed adjacent to another tile of the same color, a path of same color tiles can always be traced from every tile to the board surface. The last tile placed to complete an arch is always one of the highest layer tiles that completes the bridge.

You might wonder how a player can verify a board surface loop if part of the possible loop is buried by other tiles. The answer is, as long as the game is ended the moment either player forms a loop, you will always be able to see a continuous path of your color when viewed from above when you form a board surface loop. If there were a path of one color which is buried from view by opposing tiles, that would imply that the opponent must have already formed an arch over your tiles, and the game should have ended already.

If the entire pyramid of legal spaces to play in is filled without either player forming a loop, the player who made the last move is the winner.