

# VUT

This game, and all its variants, were created in 2007 by Juan Diego Sánchez Torres, Spanish mathematician and game designer (e-mail: odisbaum@hotmail.com). They were published for the first time in his book *Juegos de tablero. Para el aula y otros lugares* (Editorial CCS. Madrid. 2008). (*Board games. For the classroom and elsewhere*).

## ITEMS

18 pieces (9 of each color), 18 pawns (9 of each color) and a board of 9 x 9.

## RULES

The game starts with the setup shown in figure 1. Then, the moves are performed in turns.

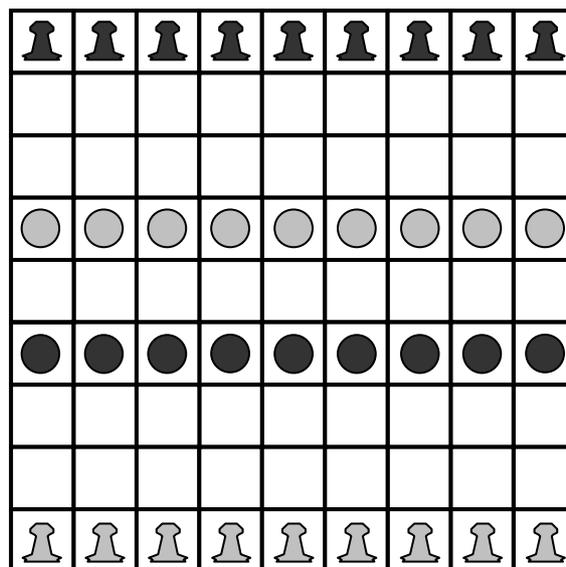


Figure 1: Board game and setup position.

Pieces and pawns can move a certain number of cells horizontally or vertically (not diagonally): the pieces, a maximum of two; the pawns, three at the most. It's not allowed to jump over any piece or pawn. Figure 2 shows the possible movements of pieces and pawns.

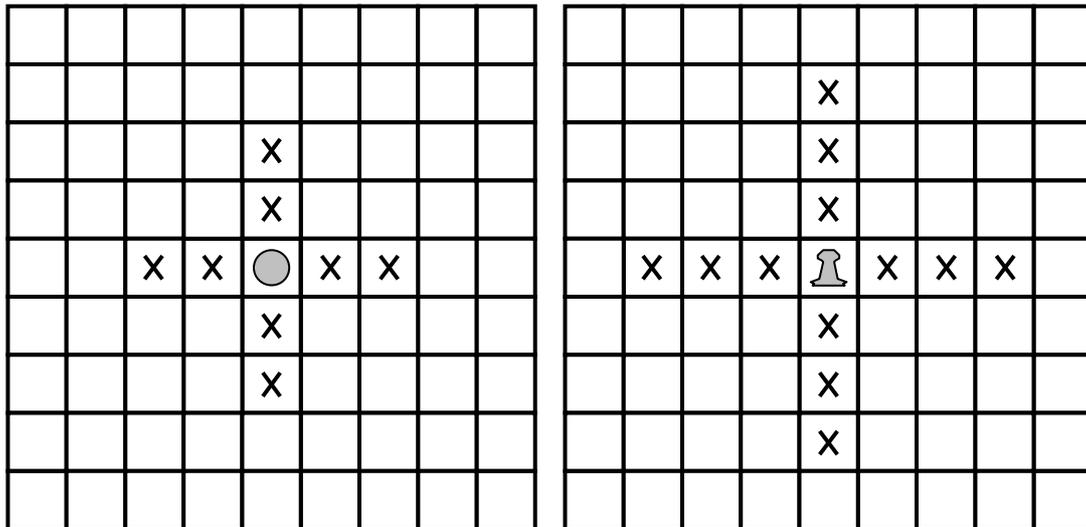


Figure 2: Each piece can move to the cells marked with an X.

Catches are made ‘by custody’, ie, leaving an opponent's piece or pawn between two of your own in a straight line (horizontal or vertical, not diagonal), after taking your move. Captured pieces and pawns are removed from the board at the same time, and they no longer take part in the game. Multiple captures are possible in a single move. Captures are not mandatory. A player may move one of his pieces or pawns and place it between two enemies, without involving a suicide. Figure 3 shows some examples.

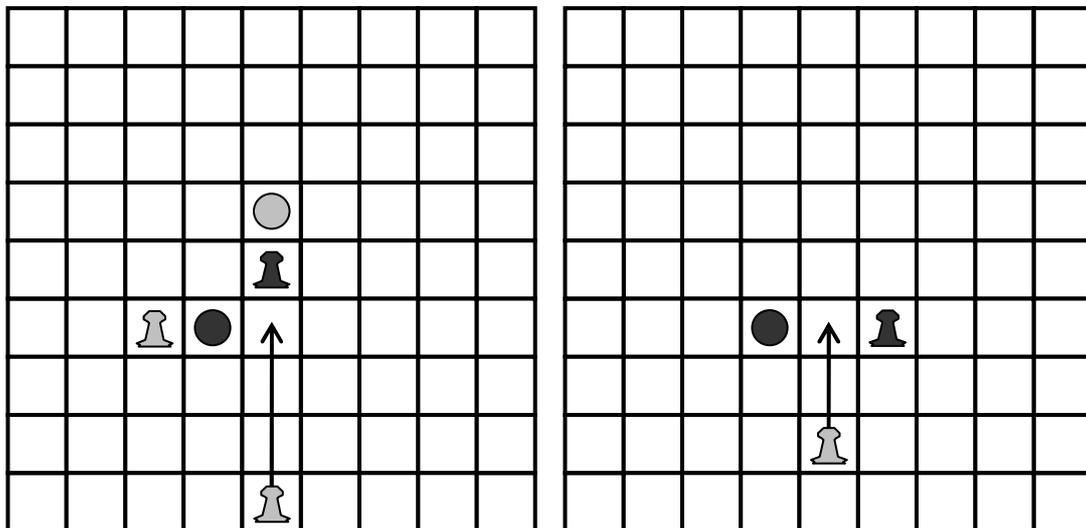


Figure 3: Left, moving the pawn as indicated by the arrow, the black piece and the black pawn are between two white ones, so they are trapped. Right, the movement described involves no catch; it's not a suicide to move your own piece or pawn between two rivals' pieces.

The player that places one of his pawns (not a piece) in the furthest row wins the game. If a player is blocked and cannot make a move on his turn, he loses. If the same move is repeated three times or if both players have lost their 9 pawns, the game ends in a draw.

# VARIANTS

## Royal VUT

This variant incorporates a new piece for each player (the king), which can move to any empty adjacent square, horizontally or vertically but not diagonally, as shown in figure 4. The remaining pieces and pawns move like in the original VUT.

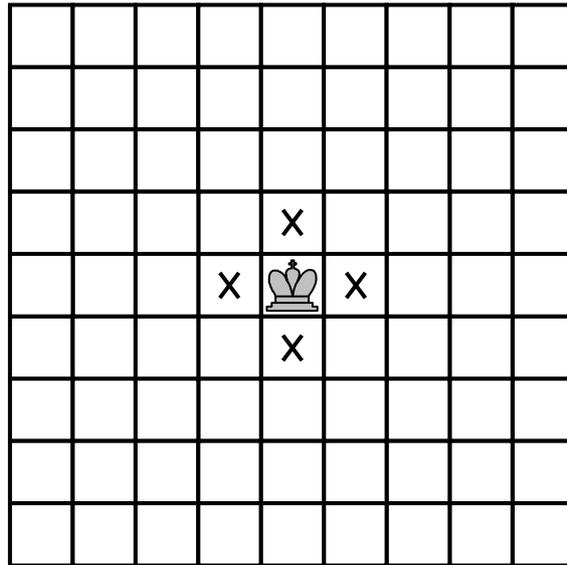


Figure 4: Cells to which the king can be moved, marked with an X.

The initial setup is shown in figure 5, where the central cell is shaded, which can only be occupied by kings, and cannot be crossed by the other pieces on the board. Kings cannot be captured or participate in the captures. The player who places his king in the center square wins the game.

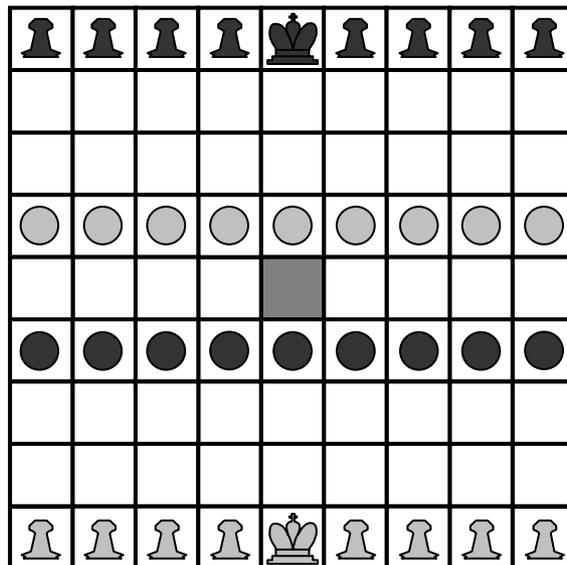


Figure 5: Initial setup.

# VUT extermination

In this variant, the player who manages to capture all the opponent's pieces and pawns wins the game. It raises the difficulty of the game, and that's why we add an additional rule to make the game more dynamic: it's possible to capture 'by custody' using one of your pieces and the board edge to surround the opposing piece, as shown in figure 6.

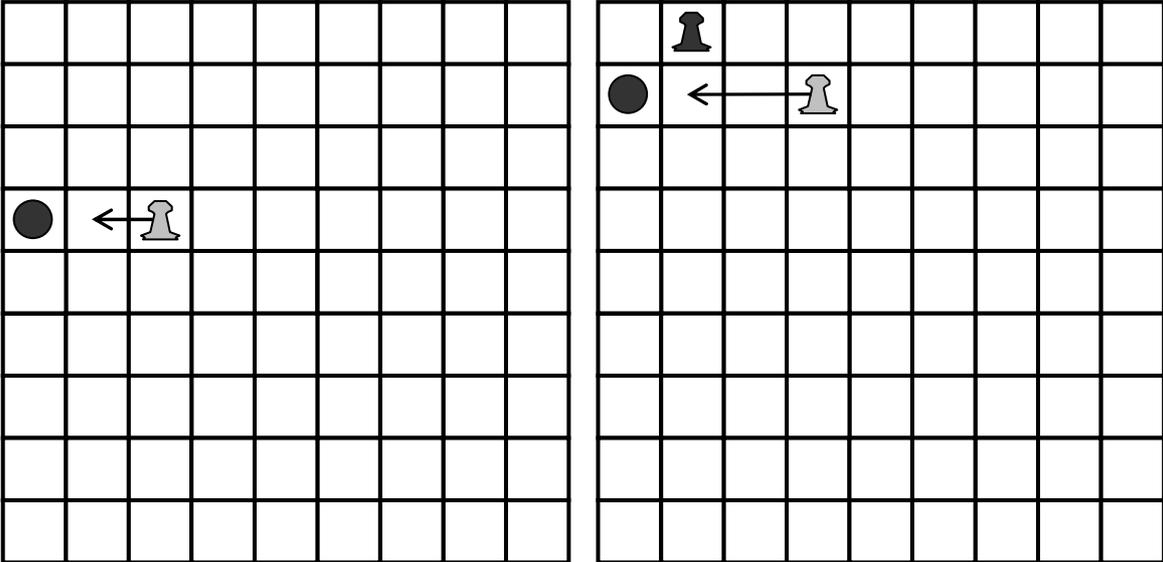


Figure 6: Detail of two different catches. By moving the white pawn as indicated by the arrow, Black is between it and the board edge, so it is trapped. Note that, in the right graphic, the capture is double.

Furthermore, the initial setup is different (shown in figure 7), to avoid that pawns may be trapped in the first movement.

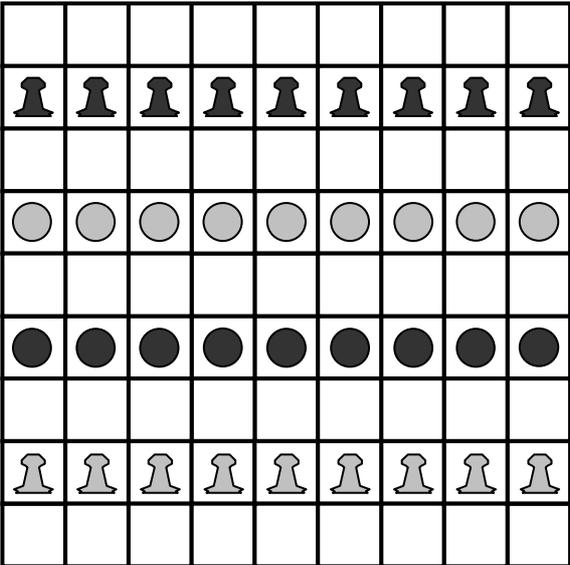


Figure 7: Initial setup.

### VUT extinction

In this variant, similar to Wayne Schmittberger’s ‘Chess extinction’, the player who catches all his opponent’s pieces or all his opponent’s pawns wins the game.

### VUT connection

The objective of this variant, similar to ‘Chess connection’ created by Joao Pedro Neto, is to connect the first row with the last one, through a chain of connected pieces or pawns of the same colour. Two pieces or pawns are connected if one (or both) may be moved to the cell occupied by the other one with a legal move. Figure 8 shows an example of the end of a game. If a player hasn’t got enough pieces or pawns to join the two rows, he loses.

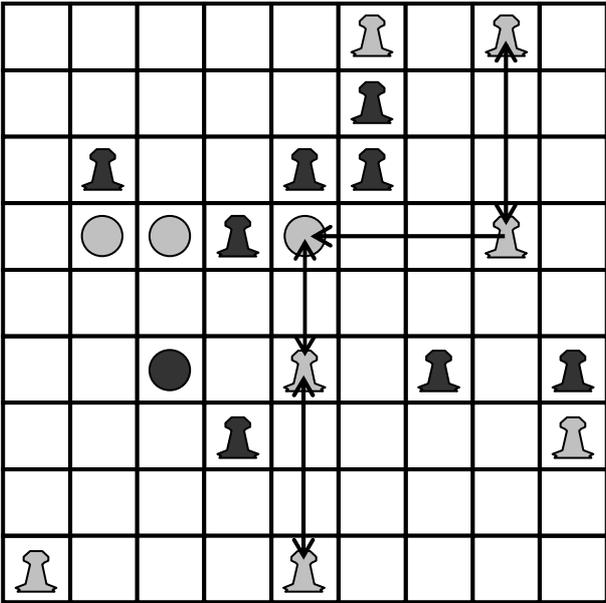


Figure 8: Winning setup for White, who has managed to form a chain that connects the first row and the last one. The connections between pieces and pawns of the chain are indicated by arrows.

# VUT cylindrical

The only difference between this variant and the original VUT is that the first and the ninth column of the board are communicated, so a piece or pawn can go out one side and enter the board on the other side. This board's feature allows a player to catch pieces and pawns located in the vicinity of the edges, as shown in figure 9.

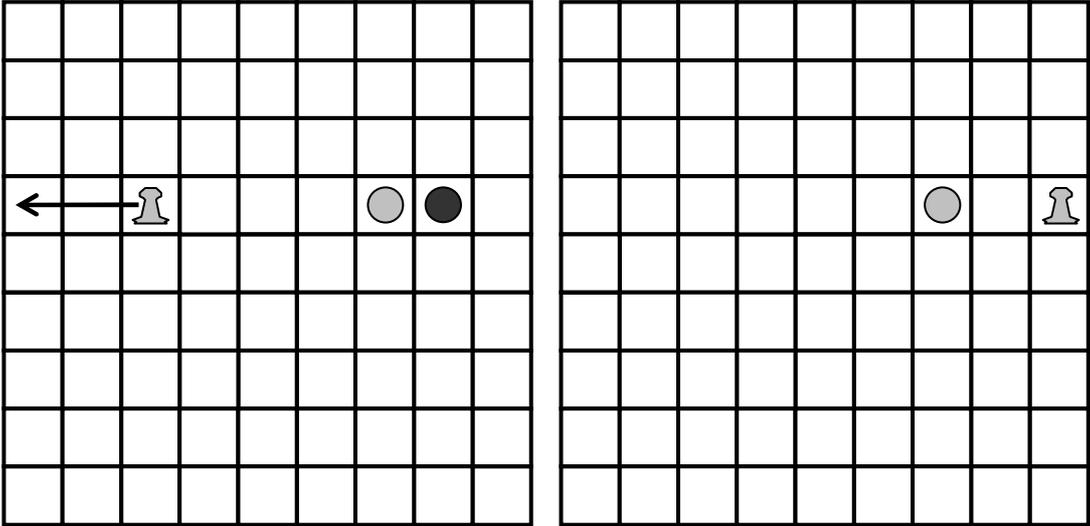


Figure 9: Detail of a capture sequence, performed by moving the white pawn off the board on the left edge, and incorporating it on the right side, which places the black piece between two opponents, and it is captured.

# VUT intervention

This variant differs from the original VUT as pawns may capture an opponent's piece or an opponent's pawn 'by custody' as well as 'by intervention', ie, by getting between two enemy pieces (or pawns) in a straight horizontal or vertical (not diagonal) line. In this situation, both rival's pieces (or pawns) are imprisoned and removed from the board. Only pawns can capture in this way, the pieces cannot do so. Figure 10 gives some examples.

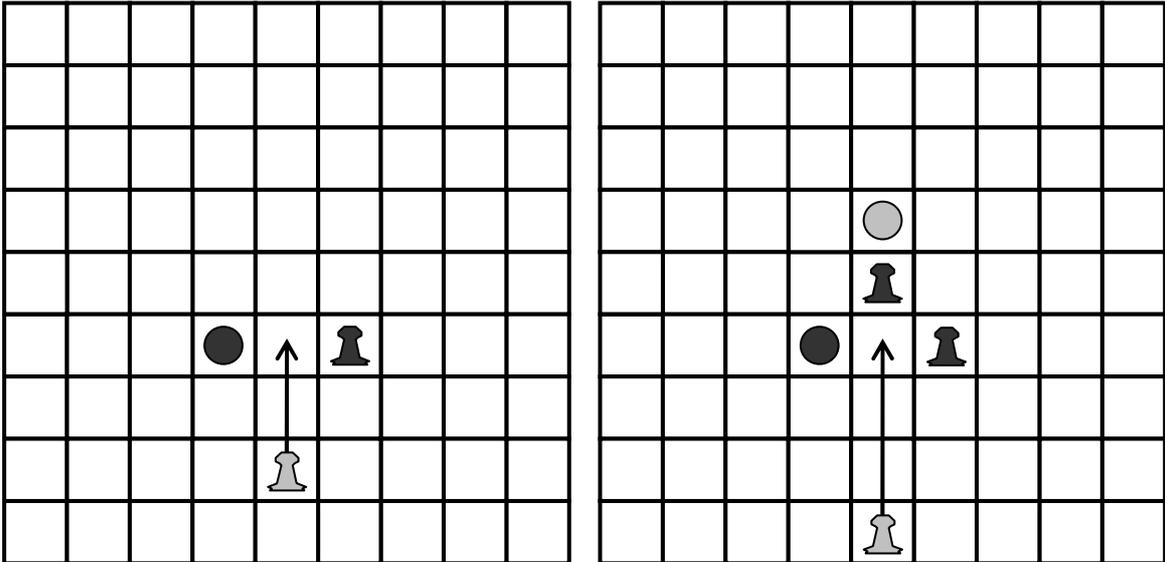


Figure 10: Left, moving the pawn as indicated by the arrow, it's between two enemy pieces, which are eliminated. Right, it combines a capture 'by custody' and 'by intervention' at the same time, as one black piece and two pawns are trapped after the pawn's move.

# VUT 7 X 7

This is the initial setup of this variant, played over a 7 x 7 board.

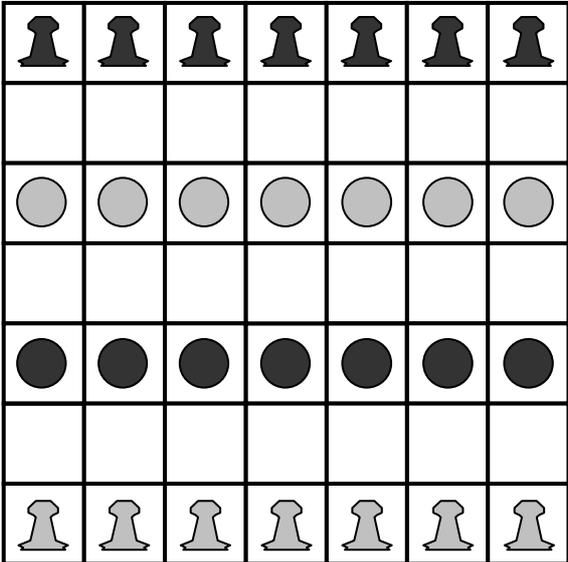


Figure 11: Board game and initial setup.

This variant has got the same rules as the VUT intervention, but the movements are "shorter". Specifically, the pieces can move one square horizontally or vertically; the pawns can be moved a maximum of two, also in horizontal or vertical line. Figure 12 shows the allowed moves.

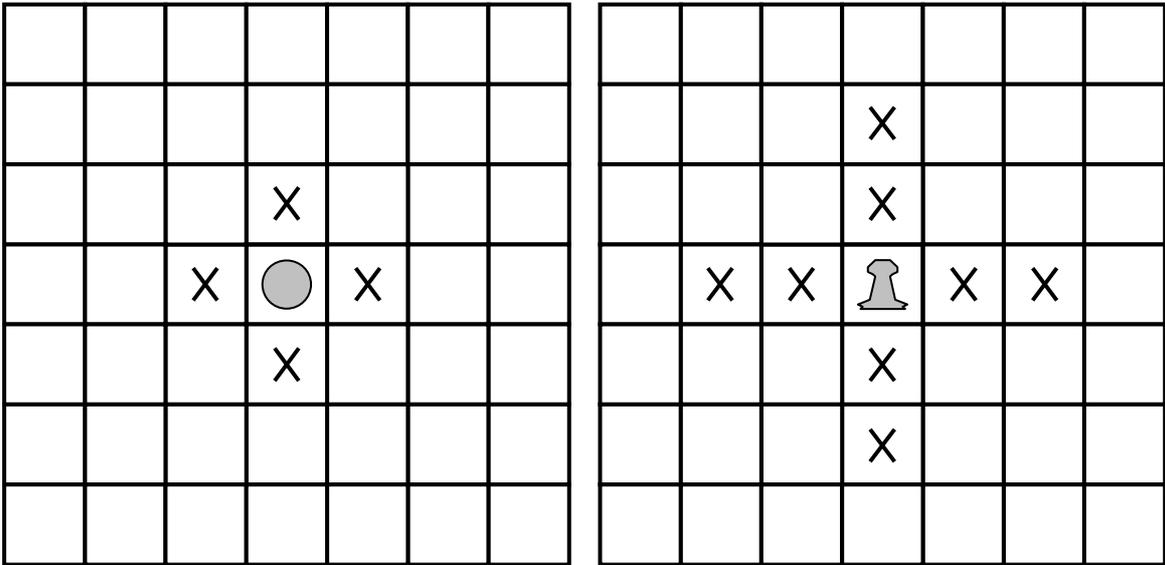


Figure 12: Cells to which pieces and pawns can be moved, marked with an X.

# VUT 11 X 11

This variant has the same rules as the original VUT, but it's played on a bigger board, 11 X 11. Initial setup is shown in figure 13.

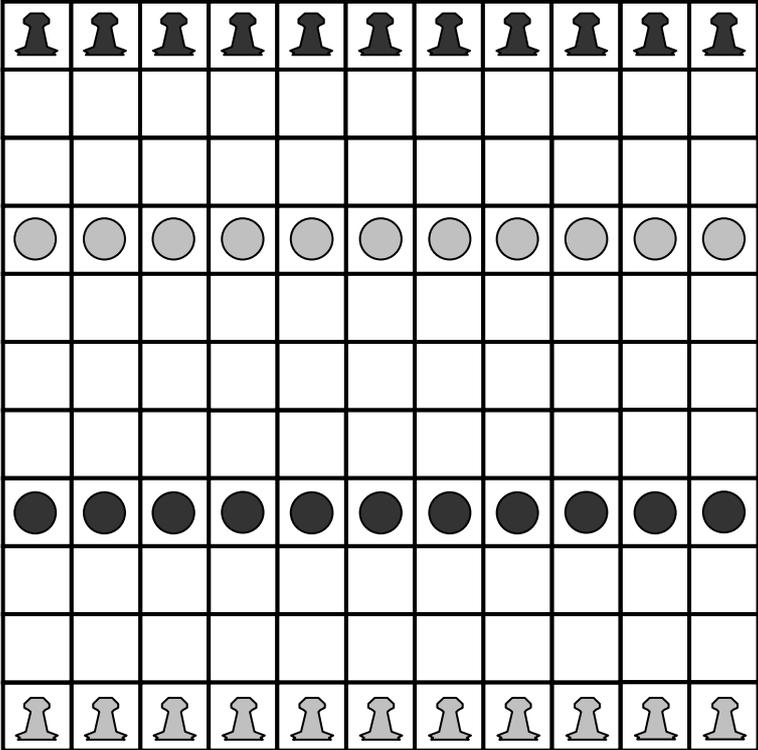


Figure 13: Board game and initial setup.