

microchip

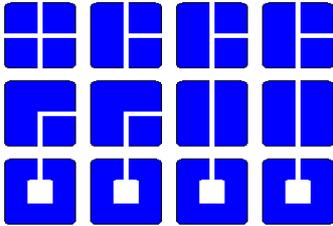
An abstract strategy game for 2 to 5 players by **Néstor Romeral Andrés**

INTRODUCTION

In **Microchip**, 2 to 5 players compete to create a structure that looks like a microchip with tiles depicting paths and connections.

MATERIAL

- 5 boards
- Bag
- Box
- 60 tiles in 5 colours, with the same distribution for each colour:



SETUP

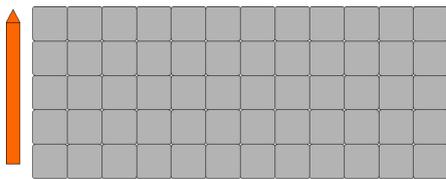
For 3 or 4 players: Arrange all tiles randomly and *facing up* into a 5x12 rectangle (the pool).

for 5 players: Arrange the tiles into a 6x10 rectangle.

For 2 players: Randomly discard 10 tiles to the game box (they're not used during the game) and arrange the remaining tiles into a 5x10 rectangle.

Finally place an object (such as a pencil) next to one of the *short* sides. That side is the end of the pool. The last column of opposite side is the '*draw column*'.

Each player takes one board at random.



Example of setup for 3 or 4 players. The rightmost column is the *draw column*.

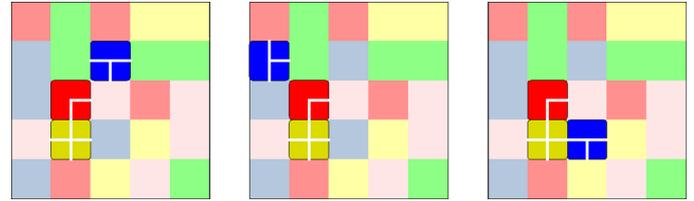
HOW TO PLAY

Determine the starting player by any peaceful means. The game is balanced so none of the players have an advantage due to turn order.

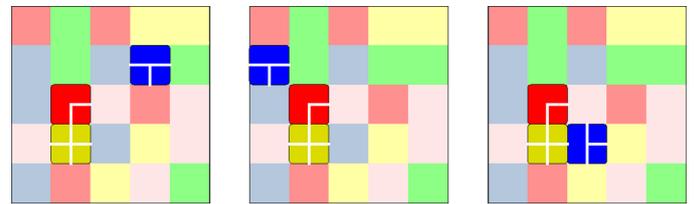
Players take turns clockwise drawing **one tile** of your choice from the *draw column*. Notice that the *draw column* might have just 1 tile left. Once the last tile of the *draw column* has been taken, the next column becomes the *draw column*.

You can **test** arrangements of your tiles on your board (microchip testing) during play as much as you want when it's not your turn. The placements must obey the following rules:

- The tile colours must match colours of the spaces they're placed on. The square colours are a bit lighter for clarity.
- The connections of the tiles must match with those of the adjacent tiles (if any).
- Open connections towards the board edge are forbidden.



Examples of **legal** placements for the blue tile.



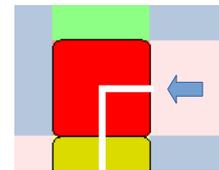
Examples of **illegal** placements of the blue tile (wrong colour, open end pointing towards the board edge or creating an open end for the yellow tile).

GAME END

After all the tiles have been drawn, the players will enjoy a few minutes to build their final microchips. There can be some tiles unused.

The player that created the **most valuable** microchip wins (see below). A microchip is a structure that:

- Has all tiles placed legally.
- It has no 'open' paths.



An open path.

- All the tiles of the structure are connected to the rest along the paths. If there are tiles not connected to it, they are not part of the structure. If there are 2 or more separate structures only the biggest one counts.

In case of a tie, the microchip with the most tiles among the tied ones wins. If the tie persists, play again.

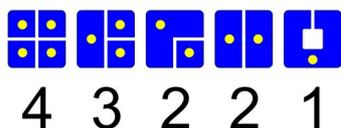
Not being able to create a microchip is very rare. Notice that the smallest possible microchip contains 2 tiles.

MICROCHIP VALUE

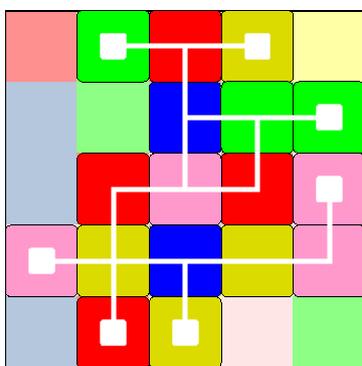
The microchip value is the sum of the connections of each of its tiles. **Unused** tiles are worth **minus 2** points.



Notice that you can count the areas of each tile instead, getting the same result. This might be easier for you.



EXAMPLE OF ENDGAME



A microchip with value=33.
If the player has left 3 tiles unused,
the final score is 27 points = $33-2 \times 3$.

CHAMPIONSHIP RULES

Determine the winning score for the championship (for example, 100).

After each game, players add their scores to their accumulated score for the championship. If at least one player reaches or surpasses the winning score, the player with the highest accumulated score becomes the world champion. Ties are broken by the number of wins.

SOLO PUZZLE

Shuffle all the tiles face down and pick 5 random tiles of each colour. Remove the remaining tiles from the game. Use one board at random.

Turn the removed tiles face up and aim to create the most valuable microchip.

GAME BOARDS

The boards have been generated randomly (obeying some constraints) and there might be no two equal boards in the entire planet (unless copied). You can purchase additional boards, swap boards with other **Microchip** owners or even create your own.

Here is how to create a board:

1. Pick a random colour as the 'special colour'.
2. Paint *one* of the inner 3x3 squares in that colour.
3. Paint the remaining 8 squares of that inner 3x3 area with the rest of the colours, using *2 squares for each colour*.
4. Paint each one of the 4 board corners with a *non-special* colour (all corners different).
5. Paint the remaining border squares (12) using the special colour 4 times and the non-special colours 2 times each.

The resulting board must contain each of the 5 colours exactly 5 times.

Boards that don't comply with these generation rules *might* not be suitable for playing.