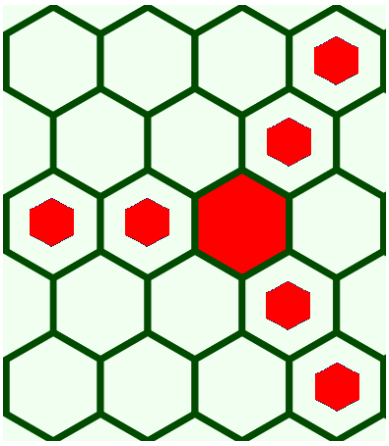
HEXAWARS

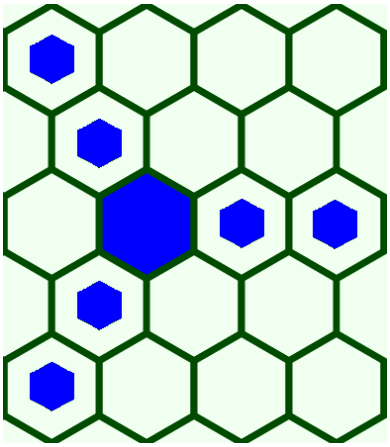
by **©Adrï**

HOW TO PLAY

HexaWars is a game to be played in a grid filled with hexagons.
Two players (in the pictures, red and blue) are set randomly on the board, and their target is to maximize their overall score until the board is completely filled with coloured tiles.

Basic movements: Each player has its own basic movement (that is symmetrical with respect to the other player's movement). In our case, reds and blues are able to move as follows:



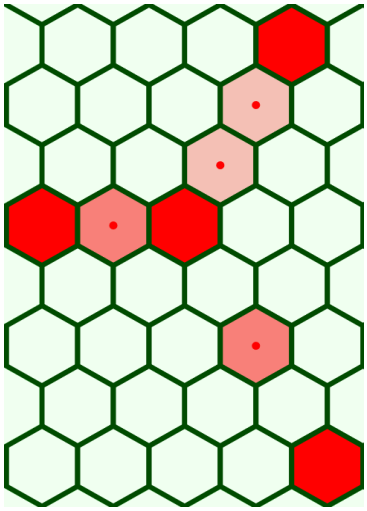


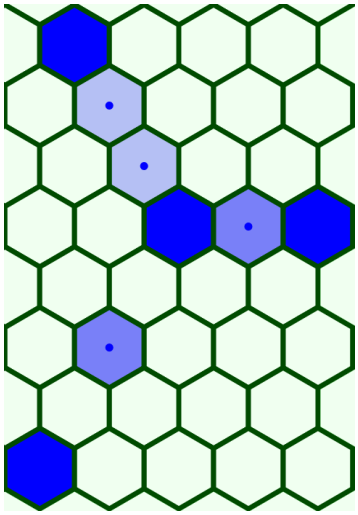
When you touch an allowed empty tile (the ones with little hexagons above) a new tile will be generated where you touch.

Tiles have different 'colour intensity', that depends on the 'power' of a tile. Tiles with 'full power' (100% of power) will be normally seen in its colour (that is, opaque). Tiles with less than 100% of power will be seen in its colour but with 'transparency'. Its 'power percentage' is represented as the transparency rate of the tile.

Generation: The tile you create when you touch an allowed space is always created at 100% of power. A new tile(s) will be automatically generated between the tile that you touched and the tile that allowed you to touch that space. If the number of spaces between the original tile and the created one is odd, a new tile will be generated just in the middle point. The new generated tile's power will be a fourth of the sum of the powers of the two tiles that generated that one. In simple terms, if the original tile was 100% of power and the one that you create is always 100% of power, then the tile in the middle will be 50% of power ((100+100)/4).
On the other hand, if the number of spaces between the original tile and the created one is even, two new tiles will be generated around the middle point, each one with half the power of the previous case. That is, if the original tile was 100% of power and the one that you was 100% of power, then the tiles in the middle would be 25% of power each ((100+100)/8).

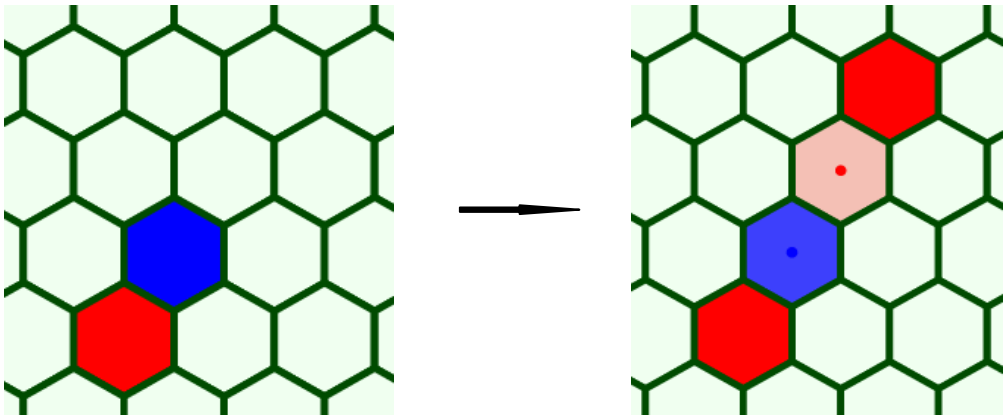
The pictures below will clarify this explanation:





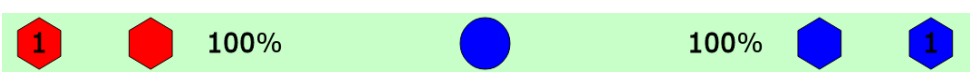
In both cases we take as the tile in the middle as the original one. Thinking for example of the reds, it is easy to see that the touched tiles are the surrounding three 100% tiles, while the more transparent ones are the automatically generated. As one can see, when there exists a middle point between the original tile and the touched one a 50% tile appears in the middle, whereas if there is not two tiles of 25% appear. The same happens with the blues on the right side.

Taking over: Now, what if the generated tile should appear where your opponent's tile is? In that case, a simple calculation of the difference of percentages will tell who possesses the tile. Imagine that a red tile at 25% should be generated where a blue tile at 100% is. What would be the result? It would be a blue tile of 75% (the percentage it had minus the percentage of the tile that was generated over it).



If the difference is negative, then the tile will change colour.

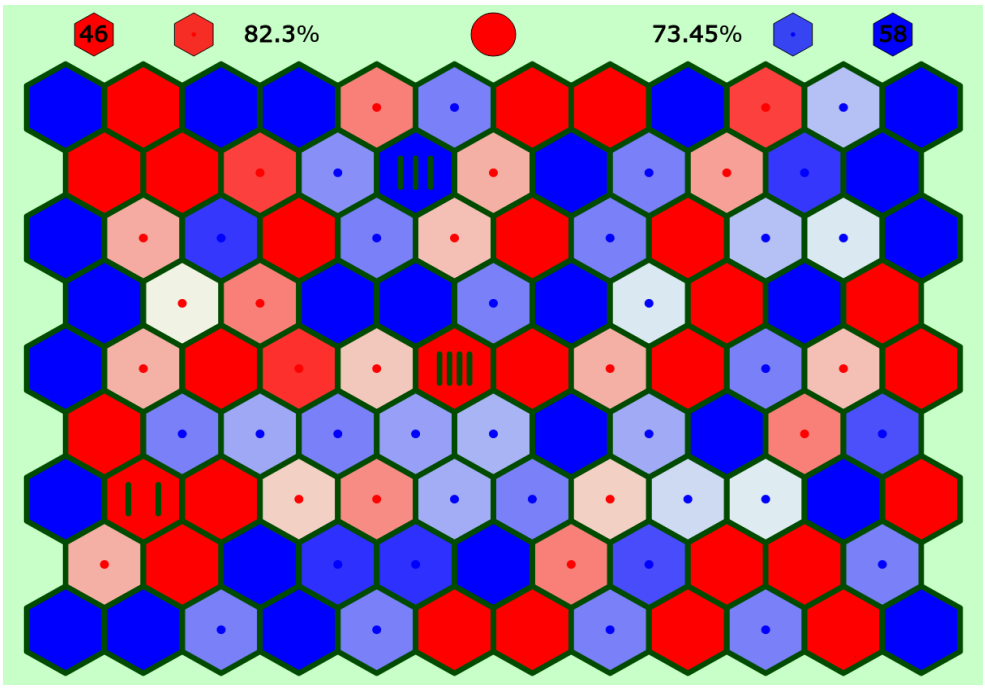
Score bar: The partial scores can be seen on top of the screen. The number inside the tile tells the number of tiles you own. The percentage (and percentage-wise drawn tile) represents the average percentage of all your tiles. The circle in the middle says who's turn is.



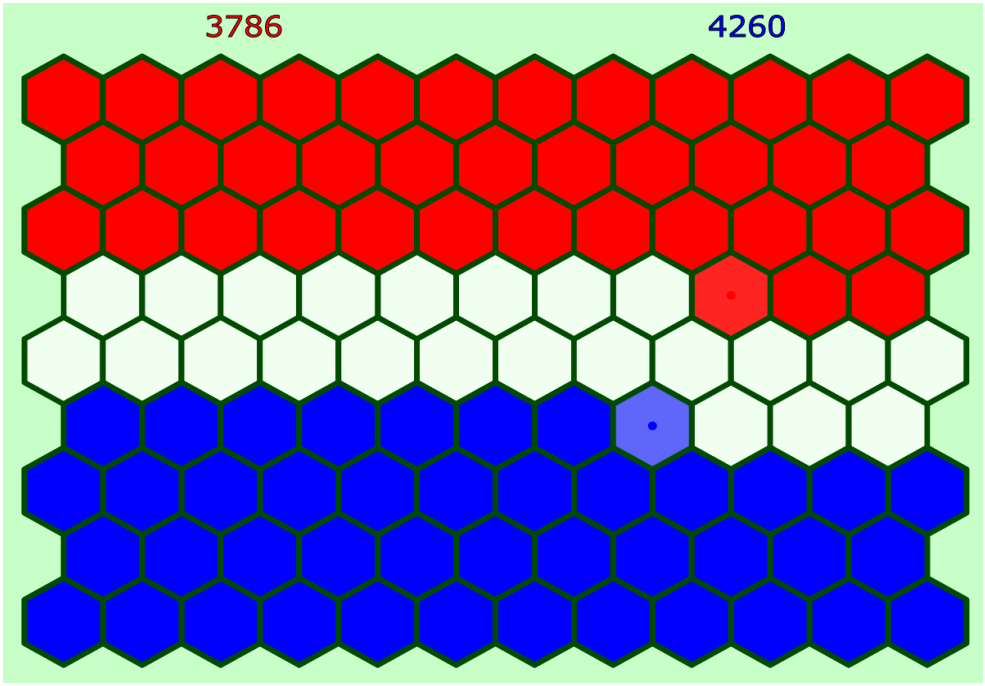
The calculation of the final score is the fairiest:

total score = (number of owned tiles) x (average percentage)

This is a representation of a game come to the end:



And its score representation after the game – in an animation, you will see the board get filled with an amount of tiles that would equal to your current total score:

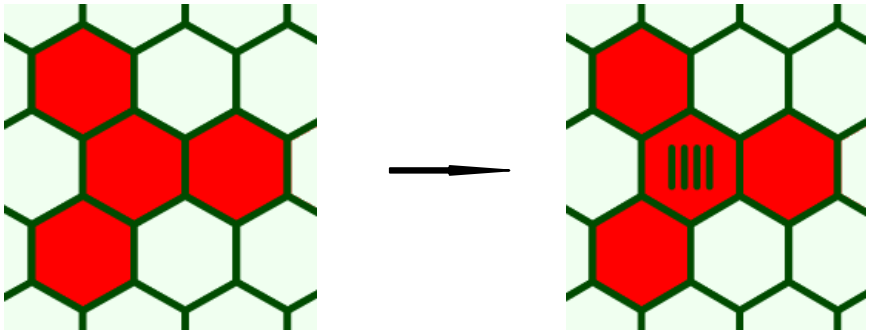


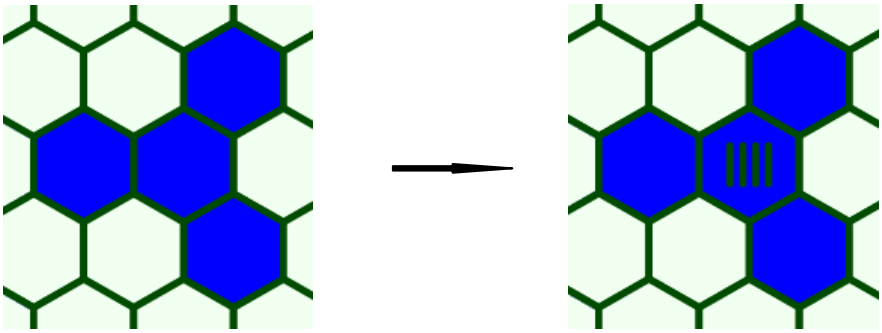
(Total scores: 3786 = 46 x 82.3 and 4260 = 58 x 73.45 respectively)

Cores: Cores are special tiles, with a value of 300%. They appear at the begining of the match, and can also be created and taken over.

They have 4 vertical bars, representing their 'life'. If an opponent's tile is generated in their place, their percentage will not decrease. It will always be 300%. However, in that case the number of vertical bars will be reduced by 1. When it comes down to 0, the tile will change colour (because it changes owner) and 4 new vertical bars will appear again. Its 'power' will always remain 300%.

To create cores during the match, the following patterns must be achieved:





In other words, a 100% tile must be surrounded by three 100% tiles in the *contrary position* to its movement allowance.

Creating and taking over cores may help you win the match.