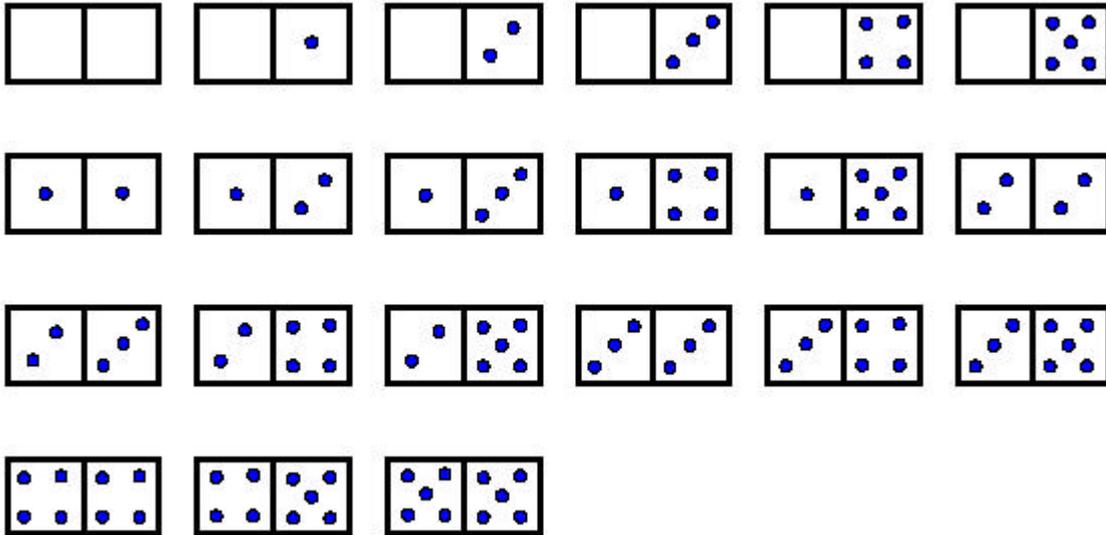


## A Game of Pairs with 21 Domino Counters

In order to play, every player will use these **21 domino counters**:



Start by laying your counters face down, and at random, make a rectangle of  $6 \times 7$  squares with them (take a good look that every counter is made up of two squares joined together by a side). Now, and don't allow your partner to see it, turn them face up taking care of not changing their position, and write down in the  $6 \times 7$  panel of the **game sheet** the dots (numbers) shown in every of the 30 squares, but without showing the position of the counters: The position of the counters is, precisely, what your partner will have to discover.

In the  $6 \times 7$  board in the **result sheet** write down the answer, that is, the position of the domino counters.

The other player will do the same, and immediately after, you will exchange the game sheets where you have written down the dots, but not the solution.

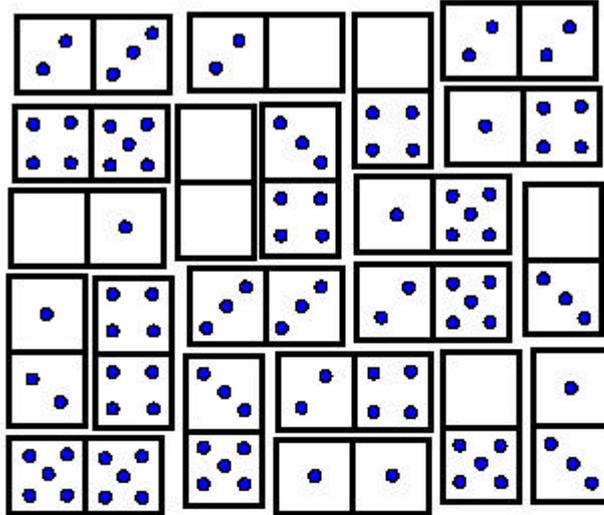
**The winner is** the one who can find out the position of the 21 counters in less time.

Let's see an example: a player has placed his 21 counters making a rectangle of  $6 \times 7$  squares. The given result can be seen in the figure of the following page. The notes made in the game and results sheets are the ones you can see a little further down of the figure with the counters.

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Now, both players will exchange their game sheets, and thinking carefully, they must be able to get the respective result sheets, that is to say, to guess the situation of the partner's counters.

POSICIÓN DE LAS FICHAS



HOJA DE JUEGO

2	3	2	0	0	2	2
4	5	0	3	4	1	4
0	1	0	4	1	5	0
1	4	3	3	2	5	3
2	4	3	2	4	0	1
5	5	5	1	1	5	3

HOJA DE RESULTADO

2	3	2	0	0	2	2
4	5	0	3	4	1	4
0	1	0	4	1	5	0
1	4	3	3	2	5	3
2	4	3	2	4	0	1
5	5	5	1	1	5	3

(POSITION OF THE COUNTERS / GAME SHEET / RESULT SHEET)

To find out the position of the counters you **have to bear in mind** that there is one counter and only one of each type (0-0, 0-1, 0-2, etc.). This is the basis from which we start off to find out the position of every counter. However, there is almost always a problem: some counters can be placed in different positions. Pay attention to the first three squares of the first row in the game sheet; you can see that the counter 2-3 could be placed occupying the first two positions or, the second and the third. You can even notice that a 2 and 3 together are shown in other places in the board. Therefore, to start with, we should analyze other counters to see if some of them can be placed in an only way. In order to do this in a

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systematical way it will be very helpful to you to prepare a board with all the counters marking on it all those counters you have already found.

COUNTER	PLACING
0-0	<del>  </del>
0-1	
0-2	<del>  </del>
0-3	
...	...

**Bear in mind that,** sometimes, for a same initial board different solutions can be available. That is common when, both at the beginning, or during the game, there are several possibilities for placing a certain counter. To face this situation we will have to analyze one by one all the possibilities offered. Some of them can take us to the solution; in some others, on the contrary, we will be forced to repeat later on an already placed counter: that will make evident that we took the wrong way.

For that reason, if your partner finds a solution that does not match with the one you have written down, you will have to admit it valid, but only after checking that all the counters are there, and none of them is repeated.

YOU WILL NEED (each one):

21 domino counters, a pencil, a game sheet and a result sheet.