DOMINOES

A set of dominoes has been laid out, using numbers instead of dots for clarity, but the lines separating the dominoes have been omitted. Can you identify the position of each domino?

Tips for Solving Dominoes

1 Use the check grid to mark off the dominoes you've found.

2 When you find a domino, look for other instances of that pair. If other instances exist, you can draw a line between the two digits, because you know they do not form a domino. See the example puzzle, below.

3 It shouldn't be necessary to search out unique pairs of digits, but sometimes, it can be helpful. Doubles are easy combinations to look out for.

4 Other things to look out for are 'must be' combinations. For example, a corner like this:

1 6
6

Faced with this situation, you know the 1 6 domino can't be anywhere else in the grid, so wherever else you find 1 6 in the grid, you can draw a line between the two digits.

There are other tricks, but you will pick them up as you go along! The one thing to emphasise is, that you never have to guess! You can always find your way using logic.

A quick search will show that 3-3 and 6-6 are uniquely placed, so draw their edges. 0-0 must be one of the pairs shown in green, so it must include the 0 next to the 6. That 0 cannot therefore be connected to the 6. Draw a line between the two. 1-1 must use two of the three adjacent 1s in the right-hand column, so the middle 1 cannot be joined to the adjacent 6. Put a line between them. 5-5 must be along the bottom line, so draw a line between the middle 5 and the 4 above. Also put a line between the 0 and the 5 in the bottom-right corner, because 0-5 has to be in the top-left corner.

0	5	2	2	5	4	6	5
3	6	2	2	4	4	4	1
3	6	1	2	3	4	6	1
0	1	4	3	0	2	2	1
3	5	3	0	3	1	5	6
6	4	0	3	6	0	4	1
1	6	0	0	2	5	5	5

0 0						
0 1	1 1					
0 2	1 2	2 2				
0 3	1 3	2 3	3 3			
0 4	1 4	2 4	3 4	4 4		
0 5	1 5	2 5	3 5	4 5	5 5	
0 6	1 6	2 6	3 6	4 6	5 6	6 6

2-2 now must use the 2 next to the 0-5 on the top line and is completed by either of the 2s next to it. Put a line through every other pair of adjacent 2s. This leaves a 2 on the second row with only one possible partner, the 4 to its right, so draw in that domino and put a line between the other 2/4 pair.

Now consider the bottom-left corner. The green 1 can only join to a 6. We don't yet know which, but we can discount any other 1/6 combination.This leaves the 6 on the right-hand edge with only one option, the 5 to its left, so 5-6 has been found and its edges completed. The 5 in the top corner cannot now be joined to the 6, so must form the 1-5 domino, with the 1-1 domino below.

0	5	2	2	5	4	6	5
3	6	2	2	4	4	4	1
3	6	1	2	3	4	6	1
0	1	4	3	0	2	2	1
3	5	3	0	3	1	5	6
6	4	0	3	6	0	4	1
1	6	0	0	2	5	5	5

0 0						
0 1	1 1					
0 2	1 2	2 2				
0 3	1 3	2 3	3 3			
0 4	1 4	2 4	3 4	4 4		
0 5	1 5	2 5	3 5	4 5	5 5	
0 6	1 6	2 6	3 6	4 6	5 6	6 6

The next three dominoes to emerge (5-5, 1-4, 2-6) give more lines and more dominoes appear. 2-5 is found in the bottom row and a line between the other 2/5 means 2-2, 1-2, 4-5, 4-6 and 4-4 are all identified. This in turn fixes the place for the 0-2 and 2-3 above it. 0-1 is found middle-left and the line we draw between the other 0/1 pair locates 1-3 and 0-6. The three shown in green is now surrounded by 0s and so must be 0-3. Putting lines between the other 0/3s leads to the completion of the remaining dominoes.

0	5	2	2	5	4	6	5
3	6	2	2	4	4	4	1
3	6	1	2	3	4	6	1
0	1	4	3	0	2	2	1
3	5	3	0	3	1	5	6
6	4	0	3	6	0	4	1
1	6	0	0	2	5	5	5

0 0						
0 1	1 1					
0 2	1 2	2 2				
0 3	1 3	2 3	3 3			
0 4	1 4	2 4	3 4	4 4		
0 5	1 5	2 5	3 5	4 5	5 5	
0 6	1 6	2 6	3 6	4 6	5 6	6 6