$500^{\text {th }}$ Puzzle Special - 9 Shady Masterminds


## Rules

## General Rules:

There are nine 9 x 9 grids which can easily be divided into shaded cells and unshaded cells. The shaded cells are given for each puzzle at the end of its specific rules. Between each pair of grids, there are some clues. These clues give the number of common shaded cells in the corresponding rows/columns on either side. Common is defined as a shaded cell being in the same relative position in both concerned grids from left to right and top to bottom.

The Puzzle Placements are also given below, after the specific rules.

## Specific Puzzle rules:

Tapa: Shade some empty cells black to create a single connected wall. Numbers in a cell indicate the length of consecutive shaded blocks in the neighboring cells. If there is more than one number in a cell, then there must be at least one white cell between the shaded cell groups. Cells with numbers cannot be shaded, and the shaded cells cannot form a $2 \times 2$ square anywhere in the grid. Shaded cells: The wall.

## More: http://www.gmpuzzles.com/blog/tapa-rules-and-info/

Light \& Shadow: Divide the grid into gray and white regions, each containing exactly one number and with an area equal to that number. Numbers in white cells are part of white regions; numbers in gray cells are part of gray regions. Same colored regions cannot share an edge. Shaded cells: The gray regions.

## More: http://www.gmpuzzles.com/blog/2014/06/light-shadow-serkan-yurekli/

Mochikoro: Determine whether each cell is white or black according to the following rules. No $2 \times 2$ cell area within the grid may contain all black cells. The white cells must all form rectangle-shaped "islands". No two islands may be adjacent horizontally or vertically; however, the islands must all be connected through their corners. No cell with a number in it may be black. Every cell with a number in it must be part of an island containing that many white cells. Every island must contain at most one number (although an island may contain no numbers). Shaded cells: The black (non-island) cells.

## More: http://mathgrant.blogspot.in/2010/01/rules-block-band.html

Nanro: Label some cells with numbers to form a single connected group of labeled cells; no $2 \times 2$ group of cells may be fully labeled. Each bold region must contain at least one labeled cell. Each number (including any given numbers) must equal the total count of labeled cells in that region. When two numbers are orthogonally adjacent across a region boundary, the numbers must be different. Shaded cells: The labeled cells.

## More: http://www.gmpuzzles.com/blog/nanro-rules-and-info/

LITS: Shade exactly four connected cells in each outlined region, to form an L, I, T, or S tetromino, so that the following conditions are true: (1) All shaded cells are connected with each other; (2) No $2 \times 2$ group of cells can be entirely shaded black; (3) When two tetrominoes in adjacent regions share an edge, they must not be of the same type (L, I, T, or S), regardless of rotations or reflections. Shaded cells: The cells occupied by the tetrominoes.

## More: http://www.gmpuzzles.com/blog/lits-rules-and-info/

Chocona: Paint some cells black to form mxn rectangles where $m$ and $n$ are equal to or greater than 1 and need not be equal. No two rectangles may be adjacent horizontally or vertically. A number in a region gives the number of black cells in that region. All black cells in the grid must be part of rectangles. Shaded cells: The cells occupied by the rectangles.

Note: There is no need for the rectangles to be connected at corners, even though that has happened in the example.


Battleships: Place the fleet of ships given on the right into the grid. Different ships cannot touch each other, not even diagonally. Unlike classic Battleships, the clues are inside the grid, and give the number of ship segments in the 8 neighbouring cells. Ships cannot be placed on clues.
Shaded cells: The cells occupied by the ship segments.
Note: The example given below has a different fleet.


Höhle: Shade some cells to leave behind a single connected group - the cave - with no enclosed, shaded cells and not covering any $2 \times 2$ area. In other words, all shaded cells must be connected by other shaded cells to an edge of the grid. All numbered cells must be a part of the cave, with each number indicating the total count of cells connected vertically and horizontally to the numbered cell including the cell itself. Shaded cells: The outer (non-cave) cells. Example:


Bosnian Road: Draw a loop in the grid by travelling horizontally and vertically without touching itself. The numbers in the grid indicate the number of cells occupied by the loop in the 8 neighbouring cells. Shaded cells: The cells occupied by the loop.

More: http://yureklis.wordpress.com/2013/01/21/bosnian-road/

Puzzle Placements:

| Tapa |  <br> Shadow | Mochikoro |
| :---: | :---: | :---: |
| Nanro | LITS | Chocona |
| Battleships | Höhle | Bosnian <br> Road |

