

Dark Cavern (solution)

by Ong Kah Kien

The first step is to solve the Light Up puzzle to determine the placement of all the lights in the cave/grid (of which there are 7). The logic entry points would be the two walls that show 2 adjacent lights out of 3 possible adjacent cells, which is very constraining. Especially as a pair of these adjacent cells are in the same column, and thus cannot both be lights.

The second step is to solve for the answers of all the given word clues (which are in alphabetical order of answers), representing all the light paths from these light sources. The table below summarizes the answers to these clues:

Light path clues	Light path answers
Lawyer's examination	BAR
Underlying rationale	BASIS
Fruit popular in a muffin	BLUEBERRY
Make wider	BROADEN
Military trainee	CADET
Vie or compete	CONTEND
Braincases	CRANIUMS
Distributes the cards	DEALS
Found during search	DISCOVERED
Detach, separate	DISJOIN
A marked difference	DISPARITY
Split into two camps	POLARIZED
Upset equilibrium of	UNBALANCE

As clued, we can then try to fill all these answers into the grid along the light paths, starting from the lights. For the two mirrored light paths, the answers turn 90-degrees like the light reflection (without filling in the cell with the mirror as instructed). The grid can be logically filled in a unique manner making use of the crossed paths/letters.

The last step is to determine the 6 clued positions of the Medusa in the cave/grid, using the solved positions of the lights and their paths. Extracting the letters in these positions in order gives the thematic answer for this puzzle **EREBUS**.

The grid on the following page shows all the filled light path answers, the positions of the lights (letters in yellow) and the positions of the Medusa (letters in green, with given order):



Constructor's notes:

With this particular puzzle answer, a thematic puzzle type that comes naturally would be a Light Up puzzle. As usual, the challenge is to add some variety to make the standard Nikoli logic puzzle type more interesting for solvers (and to mitigate against the use of online automated solvers). Since the answer is the Greek god of darkness, I weaved in Greek mythology with the thematic narrative of Medusa in her dark cavern, and the use of mirrors as a thematic variation to the standard Light Up (I subsequently found out that Thomas Synder had also written before mirror variants of Light Up puzzles which he terms as [irakakari](#)). In addition, for the extraction method, instead of a separate letter grid overlay, I used a crossword grid fill based on the light paths, which was a unique approach for a Light Up puzzle. And in line with the narrative, the extraction cells are based on the Medusa's positions, which in turn reference the positions of the lights, which is also interesting.