

## INSTRUCTION BOOKLET

 (PUZZLES BY NIKOLA ŽIVANOVIĆ)12 PUZZLES - 90 MINUTES

| POINTS TABLE |  |
| :---: | :---: |
| HIDDEN WORDS | 20 |
| ABC DECODER | 14 |
| WORD NURIKABE | 24 |
| SNAIL'S NEST | 21 |
| WORD LABYRINTH | 17 |
| FULL TAPA | 15 |
| WORD CONNECTIONS | 23 |
| WORD STAIRS | 5 |
| SIGMA SNAKE | 12 |
| SCRABBLE | 14 |
| A SCRABBLE | 3 |
| WORD SEARCH | 12 |
| Total | $\mathbf{1 8 0}$ points |

## GENERAL INSTRUCTIONS:

- Before the test starts, a password protected PDF file will be available to download. This will contain the test puzzles.
- After you start the test, the password will be shown to you. You can open the PDF using the password, solve on paper and enter the answer keys using the website.
- After you start the test, submission is allowed upto $\mathbf{9 0}$ minutes.
- Time bonus of 2 point per minute saved will be awarded if all 12 puzzles are submitted correctly or if 11 puzzles are submitted correctly and there is a minor mistake in the remaining puzzle.
- There would not be any provision to solve online. After solving on paper, you have to copy the answer keys and submit.
- A timer will be available for you on the test page.
- The submission page will warn you when you are trying to enter the answer keys in the wrong format. You should re-check the answer key format in these cases. However, your submissions will be recorded even if there are warnings.
- You may submit as many times as you want. Only your last submission will be considered for scoring.
- Points are generally indicative of the difficulty of the puzzles and time required to solve it. However, personal experience and preference might differ.
- The examples given below only explain the rule of the puzzle and it's not a puzzle by itself.
- The puzzle booklet will contain the instructions of puzzles but not the examples.


## SPECIAL THANKS TO:

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## HIDDEN WORDS (20 points)

Place all given words in the grid such that words cannot touch each other, not even diagonally. The letters outside the grid means that they must appear in that row or column at least once.


Answer key: Enter the letters of the $7^{\text {th }}$ row and $3^{\text {rd }}$ column (marked by an arrow). Ignore the empty cells. (For the given example correct answer key for the $3^{\text {rd }}$ column would be: MOJ)

## ABC DECODER (14 points)

Each letter covers different integer values from 1 to 19 (in the example 1-7). Find the concrete values of the letters on the strength of their given sums. One value is already given, $\mathrm{S}=7$.

$B O B=4$
DEB $=11$


| B | D | E | O | R | S | T |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 6 | 4 | 2 | 3 | 7 | 5 |

Answer key: Enter the total value of word BEST. (For the given example the answer would be: 17)

## WORD NURIKABE (24 points)

Place the given words in the grid, so that the words are readable in horizontally and vertically connected cells. Different words can't touch eachother horizontally and vertically. The remaining cells must form a single connected shape and can't have any $2 \times 2$ areas anywhere. Each word has one letter given in the grid.


Answer key: Enter the letters of the $3^{\text {rd }}$ and $8^{\text {th }}$ row. Ignore the remaining cells. (For the given example the answer for the $3^{\text {rd }}$ row would be: $R O$ )

## SNAIL'S NEST (21 points)

Write each of the names in the word list into its own snail, entering the letters in order starting from the outside of the snail and spirally inward. Not all squares will be used, and "-" indicates those squares that must remain blank. A letter can not appear more than once in any row or column of the full grid. Ignore spaces and punctuation in the word list, if any.

> ALASKA KENTUCKY NEBRASKA VIRGINIA


Answer key: Enter the letters of the $2^{\text {nd }}$ and $5^{\text {th }}$ row. Ignore the empty cells. (For the given example the answers for the $2^{\text {nd }}$ and $5^{\text {th }}$ row would be: KYUAS, IANK)

## WORD LABYRINTH ( 17 points)

Write all the given words into the grid, following the spiral. Words must be separated by at least one empty cell. Letters cannot appear more than once in any row or column.


Answer key: Enter the letters of the $5^{\text {th }}$ row. Ignore the empty cells. (For the given example the answer for the $5^{\text {th }}$ row would be: ADEJ)

## FULL TAPA (15 points)

Paint some cells black to create a continuous wall. Number/s in a cell indicate the length of black cell blocks on its neighboring cells. If there is more than one number in a cell, there must be at least one white cell between the black cell blocks. Painted cells cannot form a $2 \times 2$ square or larger. There are no wall segments on cells containing numbers. Enter the given words once each into the entirety of the empty cells. Words must be written either across or down, and all words formed by consecutive letters in the grid must appear in the word list. Some letters are already given.


Answer key: Enter the letters of the $5^{\text {th }}$ and $10^{\text {th }}$ row. Ignore the painted cells and cells with numbers. (In the given example there are no letters in the $5^{\text {th }}$ row, but important to know - in each answer key indicated by an arrow there will be at least one letter)

## WORD CONNECTION (23 points)

Place the words into the grid (one letter per square) so that they do not touch each other, not even diagonally, and so that they read in a straight line either forwards or backwards, horizontally or vertically. Then find a path that uses every square in the grid and passes through each word in order, starting with the first letter of the first word, traveling straight through the full length of each word (from the beginning of the word to the end), and ending with the last letter of the last word. Sign " X " between two cells means that path cannot pass there.


Answer key: Enter the number of turns the path makes after the end of one word and before the beginning of the next, in order starting with the end of the first word. (For the given example the answer would be: 224)

## WORD STAIRS (5 points)

Place all given words in the diagram so that no letter is repeated within a row/column. All words should be placed like stairs (e. g. up-left-up-left). Words can cross or overlap each other. Some letters are already given.

FLUID MECHANICS DYNAMIC STATIC CEBIR


|  |  | I | C |  |  | R |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | M |  | S | B | I |
| Y | N |  | I | C | E |  |
| D |  | A | N | I | T |  |
|  | C | H | F | L | A | T |
| M | E |  |  | U | I | S |
|  |  |  |  |  | D |  |

Answer key: Enter the letters of the $2^{\text {nd }}$ and $7^{\text {th }}$ row. Ignore the empty cells. (For the given example the answers for the $2^{\text {nd }}$ and $7^{\text {th }}$ row would be: AMSBI, D)

## SIGMA SNAKE (12 points)

Draw a snake of letters in the grid, whose head and tail are given in grey cells and that doesn't touch itself, not even diagonally. Avoid cells with numbers. The snake must be formed only of numbered words (as written in the given word list) in any order. A number gives the total of the adjacent (even at a point) numbers that are in the snake. Some other letters are given. You don't need to use all the words but you may use each word only once.

$$
\begin{aligned}
& 1-\text { ONE } \\
& 2-\text { TWO } \\
& 3-\text { THREE } \\
& 4-\text { FOUR } \\
& 5-\text { FIVE }
\end{aligned}
$$



Answer key: Enter the letters of the $2^{\text {nd }}$ and $9^{\text {th }}$ row. Ignore the empty cells. (For the given example the answer for the $2^{\text {nd }}$ row would be: EVI)

## SCRABBLE (14 points)

Place all the listed words in the grid. Each word crosses with at least one other word and all words are interconnected. Words that are not on the list cannot appear anywhere in the grid (not even two-letter words). All interconnections are marked.


Answer key: Enter the letters of the $4^{\text {th }}$ and $8^{\text {th }}$ row. Ignore the empty cells. (For the given example the answer for the $4^{\text {th }}$ row would be: ONE)

## A SCRABBLE (3 points)

Place all the listed words in the grid. Each word crosses with at least one other word and all words are interconnected. Words that are not on the list cannot appear anywhere in the grid (not even two-letter words). All letters A are given.


Answer key: Enter the letters of the $2^{\text {nd }}$ and $8^{\text {th }}$ row. Ignore the empty cells. (For the given example the answer for the $2^{\text {nd }}$ row would be: NO )

## WORD SEARCH (12 points)

Find all 34 names of countries ( 6 in the example) in the grid of letters. Each word reads in a straight line in any direction, horizontally, vertically, or diagonally. The central 50 letters ( 4 in the example) in the grid have been removed, but they are randomized below the grid.

CHINA CUBA INDIA LAOS LIBYA NORWAY

| C | K | M | E | I | Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| H | O | S | N | A | L |
| I | L |  |  | A | I |
| N | I | $\cdots$ |  | B | B |
| A | O | S | D | U | Y |
| N | P | A | A | C | A |


$\Rightarrow \quad$| C | K | M | E | I | Y |
| :---: | :---: | :---: | :---: | :---: | :---: |
| H | O | S | N | A | L |
| I | L | D | W | A | I |
| N | I | R | O | B | B |
| A | O | S | D | U | Y |
| N | P | A | A | C | A |

Missing letters:
W O R D
Answer key: Enter all the missing letters of the $1^{\text {st }}$ and $4^{\text {th }}$ row. (For the given example the answer for the $1^{\text {st }}$ row would be: $D W$ )

