

## 8 reasons why you need to solve Sudoku

Sudoku is a traditional Japanese puzzle (su is a number, doku is next to it, standing alone) and is extremely popular all over the world. Researchers at the Computer Science Department of the British University of Warwick also took note of it and created a computerized version of the puzzle. An innovation is the color version of Sudoku, designed not only to simplify the game with the help of color clues, but also to allow scientists to better understand the peculiarities of our thinking and perception.

The classic version of the [Sudoku puzzle](#) is a 9x9 square, divided into 9 sub-squares with sides of three cells. Some cells contain numbers in advance, and the player needs to arrange the missing numbers so that all rows, columns and sub-squares contain numbers strictly from 1 to 9, never repeating themselves. In modernized Sudoku, each digit is assigned a specific color. The squares filled with numbers have the corresponding color, and the empty ones are painted in a mixture of colors, the palette of which indicates the variants of numbers that can be in this cell. Moreover, the darker such a square, the smaller the number of possible options. If you make a mistake, the square turns black.



For project leader Anthony Harfield, his invention is not an ordinary puzzle, but a matrix on the basis of which scientists can improve the so-called method of empirical modeling. Experts in this field believe that traditional computer programs are best suited for tasks that are simple, straightforward, and almost mechanical. People, for example, use logic, color perception, and experience to solve a new version of this puzzle at the same time, developing several aspects of mental activity. The computer does not have such abilities, but using empirical modeling, it will be possible to teach the technique new algorithms for finding a solution, which will improve its interaction with humans. The results of such developments can be used to improve training programs and work on the creation of artificial intelligence.

In the meantime, [free online Sudoku](#) was transformed into the Nintendo DS format in Japan and became the basis for a rapidly popular wellness program called Brain Training for the Elderly. Neurophysiologist Ryuta Kawashima, who was engaged in the selection of useful games, in addition to the traditional Japanese puzzle, included in this complex rebuses, riddles, math problems, reading fragments of classical literature aloud, and other puzzles and exercises for memory and attention.

All results in the game are saved, allowing you to monitor the performance of the brain. At the same time, the console encourages smart old people, showing on the screen the current intellectual age of the player, for example: "Your brain is 40 years old."

Of course, one of the main disadvantages of computer games is the lack of movement, and many avid gamers cannot boast of good physical shape. But Nintendo has developed not only games that improve memory, but also the Wii platform, which allows you to strengthen muscles. The gamer does not just press the buttons, but completely makes movements, for example, as when playing tennis, golf or bowling.

Mental exercise in the form of problem solving, puzzles and crossword puzzles, combined with proper nutrition and physical activity, can delay intellectual decline and reduce brain age in older adults by as much as 14 years. The main thing is not to be lazy, because memory is weakened primarily because older people do not pounce on information with the same enthusiasm as in their youth. Therefore, the brain needs constant training with a variety of tasks.

The best [online Sudoku](#) effect is a feeling of satisfaction after solving a difficult puzzle. Fortunately, not the only one. Let's list them all!

- 1) improves memory. Have you noticed yourself forgetting words / can't remember a nursery rhyme? The Sudoku solution is your option, because when you try to memorize the numbers and calculate the hidden ones, you train your memory as well as possible.
- 2) promotes the formation of new brain cells. Sudoku also stimulates the "survival genes" that normally sleep. It helps brain cells to live longer and to resist disease, strokes and medications.
- 3) develops the skill of thinking and logic.
- 4) increases the intelligence of the mind and develops those parts of the brain that are responsible for making decisions.
- 5) improves concentration. During the game, you have to concentrate on how to fill in the empty fields correctly. It teaches you to think strategically and be creative in problem solving.
- 6) makes you happier. And also, you can play with your child, which will create a warm atmosphere of joint pastime.
- 7) Reduces the Risk of Alzheimer's Disease. And not so long ago we devoted a whole post to this fact.
- 8) energizes. Sudoku is relaxing and refreshing. Therefore, after the game you will have the energy for new things.