

Sudoku Rocks!
The Complete Sudoku Book
500+ Puzzles

David Klein

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Table of Contents

Introduction	vii
Basic Information You'll Need to Know	1
What is Sudoku?	1
The Elements.....	2
Candidates	3
When to Write in the Candidates	4
Buddy Cells.....	5
A Final Word about Playing With Candidates	7
Sudoku Solving Methods	9
Non-Candidate Solving Method 1: Open Single	9
Complete Your First Sudoku Puzzle Right Now.....	10
Non-Candidate Solving Method 2: Naked Single.....	11
Non-Candidate Solving Method 3: Hidden Single.....	12
Candidate Solving Method 1: Only Candidate	13
Candidate Solving Method 2: Unique Candidate in an Element.....	15
Candidate Solving Method 3: Exclusive Element.....	17
Candidate Solving Method 4: Naked Twins	20
Candidate Solving Method 5: Naked Triplets (And Quads)	21
Candidate Solving Method 6: Hidden Twins, Triplets, and Quads.....	25
Advanced Solving Method 1: X-Wings	26
Advanced Solving Method 2: Swordfish	29
Advanced Solving Method 3: Unique Rectangles	31
Advanced Solving Method 4: XY-Wings (aka Y-Wings)	33
Advanced Solving Method 5: XYZ-Wings	35
Advanced Solving Method 6: Forcing Chains.....	36
The Puzzles	39
Extra Easy (20 Puzzles)	41
Easy (80 Puzzles)	45
Mild-Medium (80 Puzzles)	59
Medium (80 Puzzles).....	73
Difficult (80 Puzzles).....	87
Expert (80 Puzzles).....	101
Genius (80 Puzzles)	115
Bonus: Super Extreme Puzzles (12 Puzzles).....	129
Bonus: Alphabet and Alphabet Hybrid Puzzles (18 Puzzles).....	132

Answer Key.....137

Introduction

Some years ago, I noticed little puzzles appearing in newspapers. They had a 9x9 grid of 81 cells, and some of the cells were already filled in with numbers. What was this new game? After ignoring the game for a few years and mispronouncing the name for a few more, I finally decided to give it a try. I'm glad I did.

Sudoku is an excellent game. Actually, it's a brilliant game. Of all the puzzles, it's by far my favorite. Millions feel the same way, many of those players describing Sudoku as "addictive." Sudoku can be so mind-engaging and exhilarating that once you start it can be hard to stop.

When I first began to play, as much as I enjoyed the game, I found it a little frustrating. Why? Because there is usually no instruction with the puzzles, even for beginners. For other types of puzzles, very little instruction is needed. For instance, how long would it take to explain to someone how to assemble a jigsaw puzzle? Maybe just a few seconds. ("Connect the pieces until an image is formed and there are no pieces remaining.") How about a crossword puzzle? About the same. ("Fill in the boxes by answering the clues.")

But not so for Sudoku. All puzzles require the use of solving techniques, and the more difficult level puzzles require advanced solving techniques. Untutored brain power alone won't get it done. So I did careful research and soon learned the tried and true solving methods that work. And for the most part, those methods are simple to learn. In person, I can teach some of the methods in less than ten seconds each. They really are that easy.

Pronouncing Sudoku can be tricky: it's one of the most mispronounced words in our language. So here's a tip to pronounce it correctly: **Sue** (like the name), **dough** (as for bread), **coo** (like a pigeon). The accent is on "dough": **sue-DOUGH-coo**. Because it's the order of the u's and o's that's most often confused, sometimes it's helpful to just remember the order of the vowels: u,o,u. (If it were up to me, I think I'd rename the game "81." Most people can't pronounce Sudoku correctly—you'll often hear something like Sudaco, which sounds like a morph between a cough medicine and a brand of gasoline. It's confusing, and it makes the game seem more complicated than it is and scares potential newcomers away. But 81, for the 81 cells in each puzzle, is simple, and, I believe, would encourage more people to begin to play.)

This book—which is the first in the series of Sudoku Rocks! puzzle books—with its excellent instruction, hundreds of puzzles at various levels of play, and specialty alphabet puzzles, such as Word Guess, will teach you to become a skilled Sudoku player. It's designed to provide literally hundreds of hours of mind-engaging fun. May you learn to become skilled at Sudoku, may it become a regular part of your life, may it sharpen your thinking ability, and may you enjoy the process along the way.

David Klein, November 2017

Basic Information You'll Need to Know

What is Sudoku?

Sudoku, first created in 1979, is a game of logic. Although numbers are normally used in Sudoku puzzles, Sudoku is not a game of mathematics. You'll never add, subtract, multiply, or divide. Rather, logic will dictate which numbers should ultimately be assigned to each cell. (Example: "Because this cell is a 4, and that cell is a 4, and these cells can't be a 4, this cell must also be a 4.") Sudoku puzzles are designed to have only one correct solution, and as you apply logic, with the help of the Sudoku solving methods I'll teach you, you'll hone in on and find the correct puzzle solution.

Sudoku puzzles are a grid of 81 cells in nine rows and nine columns. Each puzzle is additionally broken down into nine 3x3 subsections, known as "boxes," which are separated by darker, thicker lines. When the puzzle is completed, the cells in each row will be numbered 1-9 (though likely not in that order), the cells in each column will be numbered 1-9, and the cells in each box will be numbered 1-9. There can be no duplication of a number in any row, column, or box; and there can be no exclusion of a number in any row, column, or box.

Sudoku puzzles typically begin with about 25-35 cells filled in. These cells are referred to as "givens." In better Sudoku puzzles the givens form symmetrical patterns.

If mathematics is not a part of Sudoku, why are numbers used? Actually, anything could be properly used in a Sudoku puzzle: numbers, letters, pictures, symbols, punctuation marks, etc.; what's important is that there are nine distinct entries. Numbers are the easiest for the mind to grasp and work with. One drawback of using letters: unexpected patterns could form embarrassing words.

Sudoku puzzles can be created in varying degrees of difficulty. This book provides puzzles at eight different levels: Extra Easy, Easy, Mild-Medium, Medium, Difficult, Expert, Genius, Super Extreme. The easier level puzzles can be solved using just one, two, or three of the basic solving methods. The more difficult level puzzles require more advanced solving techniques.

How long does it take to play a Sudoku puzzle? That depends on two factors: the difficulty of the puzzle and the skill level of the player. When a player's skill level matches the degree of difficulty of the puzzle (a less-experienced player playing a beginner puzzle; an expert playing an expert-level puzzle), solving the puzzle might take perhaps 25 to 60 minutes.

How good can you become at Sudoku? Of course, every person has a different aptitude for every skill, but it's likely that you can begin to solve the easier-level puzzles within a matter of minutes or hours, and maybe even on your first go at it. When you learn the first two or three basic solving methods, you'll be able to solve the beginner puzzles. (Some of the easier level puzzles in this book can be solved using only one simple method for the entire puzzle.) If you keep at it, you may be able to solve the mid-level puzzles within a few days or a week. The more difficult level puzzles will take more persistence, and it will take a special person with lots of tenacity to solve the very, very high level puzzles, such as Super Extreme, to completion.

The good thing is, most people enjoy Sudoku the moment they begin to play, and they continue to enjoy it for years and years.

The Elements

Sudoku puzzles contain three “elements.” Those elements are rows, columns, and boxes. Each element contains nine cells. Notice in the figure *A Completed Puzzle* that each row contains nine cells, each column contains nine cells, and each “box,” (each 3x3 section, separated by thicker, darker lines) contains nine cells. When a Sudoku puzzle is completed, the cells in each row, column, and box will contain one occurrence each of the numbers 1-9.

1	8	7	3	2	5	9	6	4
4	2	9	8	1	6	5	3	7
5	6	3	4	9	7	1	8	2
3	7	1	9	8	2	4	5	6
2	9	4	6	5	3	8	7	1
8	5	6	7	4	1	3	2	9
6	3	8	1	7	9	2	4	5
9	4	5	2	6	8	7	1	3
7	1	2	5	3	4	6	9	8

A COMPLETED PUZZLE

For easy reference, each box can be referred to by a number, as shown in the figure *Numbering of Boxes*. Each row can also be referred to by a number, 1 being the top row, 2 the next row, and so on. Each column can likewise be referred to by a number, 1 being the left column, 2 the next column, and so on.

Box 1	Box 2	Box 3						
Box 4	Box 5	Box 6						
Box 7	Box 8	Box 9						

NUMBERING OF BOXES

This is useful when identifying cells or sections of a puzzle. For instance, if I write “look at the twins in box 5,” you know to look at the box in the middle of the puzzle. If I write “see cell 45,” you know to look in the fourth row down at the fifth cell in. Notice this in the figure *Cell Numbers*.

11	12	13	14	15	16	17	18	19
21	22	23	24	25	26	27	28	29
31	32	33	34	35	36	37	38	39
41	42	43	44	45	46	47	48	49
51	52	53	54	55	56	57	58	59
61	62	63	64	65	66	67	68	69
71	72	73	74	75	76	77	78	79
81	82	83	84	85	86	87	88	89
91	92	93	94	95	96	97	98	99

CELL NUMBERS

Candidates

Only the easiest Sudoku puzzles can be solved without using candidates. All skilled Sudoku players play with candidates: they are the building blocks of solving Sudoku puzzles. What are candidates? They are the small numbers written (or printed) at the tops of the cells that are not already filled in, and they represent the numbers a cell can possibly be based on the numbers already entered in the puzzle. Notice in the puzzle *Sudoku Puzzle with Candidates*, that the candidates for cell 15 (the middle cell in the top row) are “124”. This is because 356789 are already filled in the buddy cells (those in the same row, column, and box). The remaining numbers, those not in the buddy cells, are still candidates, namely, “124”. As we whittle the candidates down through Sudoku solving techniques, we’ll discover what the correct number is. But we know it can’t be a number that is already entered in the same row, column, or box, as that would violate the no duplication rule of Sudoku.

An experienced Sudoku player finds as much satisfaction in eliminating a candidate as in filling in a cell, because it’s just as important. It’s all part of the process of whittling down your puzzle and honing in on the correct puzzle solution.

It’s important to stress the need to be meticulous when eliminating candidates. Make sure to put a line through all candidates that should be eliminated. And more importantly, don’t eliminate any that should not be eliminated. Doing so would likely sabotage your puzzle. I recommend using a systematic method of elimination, such as row first, then column, then box. By doing so, your chances of making an error will be greatly reduced. You may want to double check to make sure you’ve eliminated the correct candidates. (I’m writing from experience: If I fail on a puzzle it’s not because I don’t know the methods to solve it; it’s almost always because I’ve gotten sloppy with my candidate elimination.)

13457	13457	8	14	124	29	6	249	12349
134	6	4	5	124	7	249	8	12349
9	14	2	1468	3	68	5	4	7
156	2	56	9	1678	4	7	3	56
1346	134	7	16	5	6	8	2469	2469
456	8	4569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	456	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

SUDOKU PUZZLE WITH CANDIDATES

Candidates are extremely important tools for solving Sudoku puzzles. You can't solve more than the easiest level puzzles without them. Playing mid-to-high level Sudoku puzzles without candidates is like trying to play a sport after sundown, without lights, with your hands tied behind your back and while wearing someone else's eyeglass prescription and greatly oversized boots—it's very inefficient and not much fun. Thus, I recommend always using candidates, especially on the higher-level puzzles.

Of note, for every non-candidate solving method, there is a more efficient corresponding candidate solving method. So if you write in all the candidates before you play the puzzle, the non-candidate methods essentially become obsolete.

When to Write in the Candidates

When it comes to using candidates, you have four choices: 1. Play only the easiest level puzzles that don't require candidates. 2. Write in the candidates in all empty cells before you begin the puzzle. 3. Write in candidates as you play, perhaps one row or 3x3 box at a time. 4. Play puzzles with candidates already entered.

Writing candidates in each cell before you begin to play is simple . . . and tedious. It is, however, the most efficient way to solve a puzzle that has no candidates supplied. How do you know which numbers are candidates? Simply look at every empty cell, and notice the numbers that are in each of those cell's buddy cells (those on the same row, in the same column, and in the same 3x3 box). Whichever numbers are not yet entered among those cells, those are the candidates: write those numbers in small print at the top of the cell. With all the candidates entered, you'll be equipped to solve any Sudoku puzzle.

What about writing the candidates in as you play? How does that work? There is no standard technique, and you may find something that works well for you. Many players begin to solve the puzzle with non-candidate solving methods, such as Hidden Single. When the puzzle seems locked to those methods, they either write in all of the candidates for the remainder of the puzzle or they may do so in segments, perhaps

one element (row, column, or 3x3 box) at a time. If you choose the latter method, I recommend that you select an element that has very few unsolved cells, such as four or less. (Please keep in mind that the most efficient way to solve any Sudoku puzzle is with all the candidates entered in the entire puzzle. Some, though, do not enjoy the somewhat tedious process of gathering all of the candidates at one time before they even begin to work on the puzzle.)

Buddy Cells

Understanding buddy cells is a key to playing Sudoku successfully. Simply put, buddy cells are those cells in the same row, column, and box of any given cell. Notice the puzzle *Buddy Cells*. Cell 54 is featured and darkened. Notice cell 54's buddy cells, which are the lighter gray cells. Those represent the cells in the same row, column, and box as cell 54.

13457	13457	8	14	124	29	6	249	12349
134	6	4	5	124	7	249	8	12349
9	14	2	1468	3	68	5	4	7
156	2	56	9	1678	4	7	3	56
1346	134	7	16	5	6	8	2469	2469
456	8	4569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	456	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

BUDDY CELLS

Why are cell 54's candidates 1 and 6? Look at the buddy cells, and notice that the numbers already entered are 2345789. Everything but 1 and 6. Therefore, cell 54 has to be either a 1 or 6.

What happens in a cell directly affects all of its buddy cells. For instance, you don't know it yet, but the answer for cell 54 is "1". When you write "1" in cell 54, you may then draw a line through all candidates 1 in all of cell 54's buddy cells. Why? Because the 1 is now accounted for: there can be no duplication of numbers in any of the buddy cells: those in the same rows, columns, and boxes.

Notice in the puzzle *Buddy Cells with Candidates Eliminated*, that when 1 is written in cell 54, the candidate 1 should be eliminated in each of cell 54's buddy cells.

13457	13457	8	1 4	124	29	6	249	12349
134	6	4	5	124	7	249	8	12349
9	14	2	1 468	3	68	5	4	7
156	2	56	9	1 678	4	7	3	56
1 346	1 34	7	1	5	6	8	2469	2469
456	8	4569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	456	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

BUDDY CELLS WITH CANDIDATES ELIMINATED

Sudoku Builds These Excellent Qualities . . .

1. Thinking Ability
2. Logic
3. Patience
4. Self-Control
5. Self-Respect
6. Concentration

Question: Aren't these many of the qualities that have been used to promote the martial arts? (Yes, some of them. But with Sudoku, no one gets kicked in the head. According to several studies, being kicked in the head does not enhance thinking ability.)

See asterisk () on page 163 for a comprehensive list of these studies*

A Final Word about Playing With Candidates

From a Sudoku point of view, three of the four puzzles below are identical. Can you guess which three? And more importantly, can you guess which one is vastly different? (Of course, they all look different, but from a Sudoku point of view, which one is truly different?) The answer follows the puzzles.

		2	4		8	7		
	3						8	
9		1				4		5
3				7				8
			5		6			
1				2				4
8		6				1		9
	4							2
		3	7		5	8		

PUZZLE 1

123456 789	123456 789	2	4	123456 789	8	7	123456 789	123456 789
123456 789	3	123456 789	123456 789	123456 789	123456 789	123456 789	8	123456 789
9	123456 789	1	123456 789	123456 789	123456 789	4	123456 789	5
3	123456 789	123456 789	123456 789	7	123456 789	123456 789	123456 789	8
123456 789	123456 789	123456 789	5	123456 789	6	123456 789	123456 789	123456 789
1	123456 789	123456 789	123456 789	2	123456 789	123456 789	123456 789	4
8	123456 789	6	123456 789	123456 789	123456 789	1	123456 789	9
123456 789	4	123456 789	123456 789	123456 789	123456 789	123456 789	2	123456 789
123456 789	123456 789	3	7	123456 789	5	8	123456 789	123456 789

PUZZLE 2

56	56	2	4	13569	8	7	1369	136
4567	3	457	1269	1569	1279	269	8	126
9	678	1	236	36	237	4	36	5
3	2569	459	19	7	149	2569	1569	8
247	2789	4789	5	13489	6	239	1379	1237
1	56789	5789	389	2	39	3569	35679	4
8	257	6	23	34	234	1	3457	9
57	4	579	13689	13689	139	356	2	367
2	129	3	7	1469	5	8	46	6

PUZZLE 3

gromita	Choo Choo	2	4	✌️	8	7	ASL	Song 151
Carlye's Cow	3	👍	Joybird	Pioneer Singers 8	duv	Muffin-Hadnot	8	MC Day
9	Bobby	1	😊	T6	📷	4	Doodle	5
3	Great	Gildar	SKE	7	Sham-ma Rae	🎵🎵🎵	Chipper	8
☀️	Sunshine	💬	5	Sunrae	6	mc-day	Fagel	Cubbie
1	©	slagena	Buttons	2	Caleb	Sophia	Sam	4
8	Flipper	6	Avadoll	Lana-bird	Don't Give Up!	1	Blossom	9
Mo-Spi	4	Lexi-Jewel	Leo	PA1-1406	Becky	1931	2	Jerry
Mark	SSMP-Watson	3	7	Best Seller	5	8	Nancy	Joy

PUZZLE 4

Answer: Puzzle 3, the one with the correct candidates, is different. It's the only one that provides information that will help you solve the puzzle. The other puzzles are the same in that they provide absolutely nothing of benefit. Puzzle 1 has no candidates, thus providing nothing helpful. Puzzle 2 lists all the numbers 1-9 in each cell, thus providing nothing helpful. And puzzle 4 is just assorted gibberish, which also provides nothing of use. (But it sure was fun to make puzzle 4.)

Notice how helpful the correct candidates are in puzzle 3. With the candidates in place, a fairly new player can solve the entire bottom row in just a few seconds. Looking at the bottom row we know that cell 91 is a 2 and cell 99 is a 6. (Those are the only candidates; therefore those are the only numbers those cells can be.) And cell 98 must be a 4, because the cell next to it is a 6. That leaves cells 92 and 95 as "19" twins. Now notice the "19" twin in cell 92. It's the only cell with 1 as a candidate in the 3x3 box it occupies. Therefore, it has to be a 1, because no other cell in that box can be a 1. That makes the remaining cell, cell 95, a 9. Entire row solved. Try doing that with the other three puzzles! (As much as I love the Mark and Joy in Puzzle 4, they were of no use in solving the puzzle. The 2 and 6 in the bottom corner cells of puzzle three got things kicked off to a great start.) Using candidates pares the puzzle down to exactly what you need to know to solve it. And it gets rid of all the clutter.

(Let's revisit puzzle 3 for one more helpful glance. Now that it's been established that the bottom middle cell, cell 95, is a 9, notice that you can eliminate the candidate 9 from six more cells. All of the 9s in the buddy cells, those in the same box and same column can be eliminated. Your puzzle is now being pared down toward completion. And you're just getting started.)

Sudoku Solving Methods

Non-Candidate Solving Method 1: Open Single

Degree of Difficulty: Extremely Easy

You'll rarely if ever be able to use Open Single at the very outset of the puzzle, as it requires eight of the nine cells in one element to be filled in. But as the puzzle progresses, you'll find ample opportunity to employ it. Since Open Single is the easiest non-candidate method to learn, we'll discuss it first.

Notice in the puzzle *Open Single*, that there is only one unsolved cell on row two. Simply look at the other eight cells in the row and see which number 1-9 is not already filled in. In this case, it's the 5. Write 5 in the empty cell, as shown in the puzzle *Open Single Marked*. Follow the same procedure for any column, row, or box that has only one cell remaining.

	4	1			3	5		9
8		2	1	4	9	3	7	6
	3	7	6		2	4		
	1	3		7	8	6	4	2
4			5	2		8	3	7
			3			9		1
2	8	5			7	1		
1	9	6		3	5			4
	7			1	6	2		

OPEN SINGLE

	4	1			3	5		9
8	5	2	1	4	9	3	7	6
	3	7	6		2	4		
	1	3		7	8	6	4	2
4			5	2		8	3	7
			3			9		1
2	8	5			7	1		
1	9	6		3	5			4
	7			1	6	2		

OPEN SINGLE MARKED

Which Area of the Puzzle Should You Play First?

Players new to Sudoku often wonder which area of the puzzle to begin solving first. You may begin anywhere you like, but experienced players normally start with the easier methods, and then, when the easier methods dry up—which they will on the more challenging puzzles—they move on to more advanced methods. (Think in terms of a jigsaw puzzle: players can begin the puzzle anywhere they like, but most begin by building the border, as border pieces are the easiest to find and connect. This gets the puzzle off to a good start.) As you use the easier solving methods and reduce candidates, other easier solving methods are created among the remaining cells.

One change tends to open up other things in that same area of the puzzle. Pay particular attention to the cells where you just entered a number or eliminated candidates. In other words, give special focus to whichever area of the puzzle is “hot.”

Complete Your First Sudoku Puzzle Right Now

There's a certain thrill to completing your first Sudoku puzzle. And you're not going to have to wait to do it. Notice the puzzle *First Puzzle*. It's solved except for three cells (22, 55, 88). Fill in the three cells correctly and you'll have completed your first Sudoku puzzle. Of course, Sudoku puzzles are never printed with this

2	8	1	4	3	5	6	7	9
7		3	2	6	8	1	4	5
6	5	4	1	7	9	3	2	8
5	2	6	3	9	4	7	8	1
3	7	8	6		2	5	9	4
4	1	9	8	5	7	2	6	3
9	3	2	5	8	6	4	1	7
8	6	5	7	4	1	9		2
1	4	7	9	2	3	8	5	6

FIRST PUZZLE

many givens, but this will be a nice introduction for you to playing and completing a puzzle using the most basic Sudoku method. (To solve the three cells, remember that each row, column, and 3x3 box must have one occurrence of the numbers 1 through 9. Use the solving method you just learned, Open Single.)

The Answer: You can find the solution to this puzzle on page 163. See how you did. And you may be interested to know, this is an expert level puzzle. Of course, by the time all the cells were completed but the three, it became ultra-beginner, but when this puzzle was in its original form, with just the givens, it was a very difficult puzzle.

Should You Guess?

No. Sudoku is not guessing; Sudoku is logic. You'll only get in trouble by guessing: your puzzle will become oatmeal in no time. For example, say one cell has four candidates and you guess. Your chance of guessing correctly is 25 percent. Do that a second time, and your chance of being correct on both guesses is reduced to 6.25 percent. One more similar guess and you'd be down to 1.6 percent. Guessing will only ruin your puzzle. If you feel hopelessly stuck, get up and do something else for a while. When players return to the puzzle, with a fresh look at the puzzle and neurons recharged, they often find valid solutions in no time.

Non-Candidate Solving Method 2: Naked Single

Degree of Difficulty: Easy

When a cell's buddy cells have all numbers filled in 1-9 except for just one number, that is a naked single. Notice the darker shaded cell 23 in the puzzle *Naked Single*. Now look at the numbers that are already filled in the buddy cells, which are marked in lighter gray: those on the same row (6, 5, 7, 8), the same column (8, 2, 7, 3, 1) and the same box (8, 6, 9, 2). The only number remaining is a 4, so write a 4 in the cell, as shown in *Naked Single Marked*.

Naked singles are easy to execute, but finding them is often time-consuming. With candidates already

		8				6		
	6		5		7		8	
9		2		3		5		7
	2		9		4		3	
		7		5		8		
	8		2		3		1	
2		3		9		1		8
	9		3		1		7	
		1				3		

NAKED SINGLE

		8				6		
	6	4	5		7		8	
9		2		3		5		7
	2		9		4		3	
		7		5		8		
	8		2		3		1	
2		3		9		1		8
	9		3		1		7	
		1				3		

NAKED SINGLE MARKED

written in the blank cells, naked singles are the easiest method to find and complete. You'll have a cell with only one candidate, and the cell must be that number, because it can't be anything else. You can read more about this method, Only Candidate, on page 13.

What Level Puzzles Should You Play?

If you are a beginner, you should definitely start with the extra easy puzzles. Once you feel comfortable at that level and are ready for more of a challenge, move up to the next level. Keep progressing from level to level as your skill increases. It's not necessary to play every puzzle at every level. Advance as you feel ready.

Can't I Just Remain at the Easier Levels?

Of course. Sudoku is a game, not a high school or college course. (Although it would be nice if it were.) Enjoy it as a game and lifestyle choice. If you enjoy playing at the easier levels, and if you find it relaxing and satisfying, feel free to stay there. Of course, most with inquisitive minds will probably want to give the more difficult puzzles a try. Some who have progressed to advanced puzzles never play the easier ones, preferring puzzles that require advanced solving methods.

Non-Candidate Solving Method 3: Hidden Single

Degree of Difficulty: Easy to Moderate

A hidden single occurs when a cell in an element (row, column, or box) is the only possible cell that can be a certain number in that element. Notice the puzzle *Hidden Single*. Highlighted cell 22 has to be a 1. How do we know that?

Notice that there is a 1 on the top row and a 1 in the first column. Therefore, none of the other cells on

				1				
		2				6		
3		4				1		2
8		3	6		4	5		9
5	4						8	7
1		7	2		8	3		4
2		8				4		6
		1				7		
				6				

HIDDEN SINGLE

				1				
	1	2				6		
3		4				1		2
8		3	6		4	5		9
5	4						8	7
1		7	2		8	3		4
2		8				4		6
		1				7		
				6				

HIDDEN SINGLE MARKED

that row or in that column can be a 1. That leaves only two cells in the top-left 3x3 box that could still be a 1, cells 22 and 32. But notice on line three that a 1 is already filled in. That means that no other cells on line three can be a 1. That leaves one cell remaining. So by default, cell 22 has to be the 1, because no other cells in that element (3x3 box) can be a 1. Write 1 in box 22, as shown in the puzzle *Hidden Single Marked*.

An Easy Way to Find Many Hidden Singles

When I begin to play a non-candidate Sudoku puzzle, if I don't immediately write in the candidates, the first thing I look for are hidden singles. And my favorite way to find many hidden singles is this: look for the same number in two of the three rows or columns of a 3x9 strip. For instance, the first three rows all the way across form a 3x9 strip. And notice that in these rows in the puzzle *Hidden Single*, there is a 1 in two of the rows, the first and the third row (in cells 15 and 37). Because the 1 in those two rows are in the middle and right 3x3 boxes, the 1 in the other box, the left box, must be on row two. Row two already has one entry, a 2. There is already a 1 in the first column, so cell 21 can't be the 1. Therefore, the 1 in that box is in cell 22.

This method corresponds to the candidate method called "Unique Candidate in an Element" . . . It's much easier to spot a hidden single with the candidates in place.

Now we'll move on to the more efficient solving methods, those with candidates. The easy methods are made easier by the inclusion of candidates, and the more difficult solving methods are possible to perform only with the inclusion of candidates. (You'd probably have to have an Einsteinian IQ of over 180 to pull off the advanced method XYZ-Wing without using candidates.)

Candidate Solving Method 1: Only Candidate

Degree of Difficulty: Extremely Easy

Using candidates makes solving Sudoku puzzles much easier, and Only Candidate is by far the easiest solving method. It's easy to find and it's easy to perform. I normally don't care for the term "no brainer," but if there's a solving method that qualifies under the category "no brainer," this is it. Notice highlighted cell 23 in the puzzle marked *Only Candidate*. The only candidate for cell 23 is a 4. That means this cell has to be a 4; it can't be anything else, because cell 23's buddy cells are filled in with all numbers 1-9 except for 4. Proceed by writing a large 4 in the cell, putting a line through the candidate and then putting a line through all other candidate 4s in cell 23's buddy cells (those in the same row, column, and box), as shown in the puzzle *Only Candidate Marked*.

13457	13457	8	14	124	29	6	249	12349
134	6	4	5	124	7	249	8	12349
9	14	2	1468	3	68	5	4	7
156	2	56	9	1678	4	7	3	56
1346	134	7	16	5	6	8	2469	2469
456	8	4569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	456	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

ONLY CANDIDATE

13 57	13 57	8	14	124	29	6	249	12349
13	6	4	5	12	7	2 9	8	123 4 9
9	1	2	1468	3	68	5	4	7
156	2	56	9	1678	4	7	3	56
1346	134	7	16	5	6	8	2469	2469
456	8	4 569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	4 56	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

ONLY CANDIDATE MARKED

Congratulations, you've just learned your first candidate solving method. And even though it's an easy one, it's a very important method, one you'll be using frequently in every puzzle if you play with candidates. Now on to candidate solving method number two.

What Are the Most Common Problems That Cause Puzzle Failure?

1. Guessing. Don't guess. Two or three guesses in one puzzle almost guarantees a ruined puzzle. Take the time to figure things out and use proper solving methods.
2. Rushing. One small mistake may ruin your puzzle. Be meticulous, and it helps to double check things as you go. Sudoku is not a race. Slow down and enjoy each puzzle.

Candidate Solving Method 2: Unique Candidate in an Element

Degree of Difficulty: Very Easy

Notice highlighted cell 45 in the puzzle *Unique Candidate in an Element*. That cell contains a unique candidate in an element. There is only one occurrence of candidate 8 on the entire row. Therefore, this cell must be an 8, because no other cell on that row can be an 8, and each element (row, column, and box) must have an 8. As shown in *Unique Candidate in an Element Marked*, write a large 8 in cell 45, put a line through the candidates in cell 45, and put a line through each 8 in cell 45's buddy cells. (Note: Cell 45 is the only occurrence of 8 in the 3x3 box it occupies. In this way, too, cell 45 qualifies as a unique candidate in an element.)

Now let's move on to candidate method three.

13457	13457	8	14	124	29	6	249	12349
134	6	4	5	124	7	249	8	12349
9	14	2	1468	3	68	5	4	7
156	2	56	9	1678	4	7	3	56
1346	134	7	16	5	6	8	2469	2469
456	8	4569	2	67	3	479	1	4569
2	457	3	467	9	56	1	456	8
4568	9	456	3	2468	1	24	7	2456
45678	457	1	4678	24678	2568	3	24569	24569

UNIQUE CANDIDATE IN AN ELEMENT

Advanced Solving Method 6: Forcing Chains

Degree of Difficulty: Very Challenging to Extremely Challenging

When all else fails, and especially when you know you are working on a puzzle of the very highest level of difficulty, you may want to, or need to, employ the technique “Forcing Chains.” How do you force chains? You select a candidate in one of the cells and you focus on that one candidate, proceeding with the puzzle as though that candidate were the correct answer for that cell. If it turns out to be an incorrect candidate, you’ll find out eventually—sometimes sooner, sometimes later—and then you’ll need to reverse the steps you’ve completed with the wrong candidate. After doing that, you may eliminate that candidate from the cell. (Yes, that’s a lot of steps to eliminate one candidate. We’re definitely not talking Naked Twins here. But when an extremely high-level puzzle seems locked, this may be your only way to unlock it.)

Let’s take a look at two examples of Forcing Chains. The first example is difficult, and the second example is even more difficult. Some Forcing Chains can be nearing “off the chart” challenging. Can you imagine having to perform an XYZ-wing as one of the steps in a forced chain to learn that the chain is in error? But this method is useful for the most difficult puzzles and may be your last resort when all else fails.

I’ll be referring to many cells by their numbers in the two examples that follow. If you are not familiar with cell numbers in Sudoku, please see the chart *Cell Numbers* on page 3.

Notice the puzzle *Forcing Chains 1*. The light gray cell, cell 33, has only two candidates, 4 and 9. Let’s begin to force a chain by assuming that 9 is correct. If cell 33 is 9, then cell 17, the dark gray cell, must be 9. How do we know that? Because if cell 33 is 9, then cell 38 must be 2, and that leaves cell 17 as the only possible 9 in that 3x3 box. So cell 17 must be a 9. If cell 17 is a 9, then graduated gray cell 87 must be a 3. And if cell 87 is a 3, the other graduated gray cell, 83, can’t be a 3 and so must be a 9.

49	6	8	2	1	7	349	5	34
1	2	5	9	4	3	8	6	7
7	3	49	6	5	8	1	29	24
5	9	1	8	2	4	7	3	6
6	4	7	5	3	9	2	8	1
3	8	2	1	7	6	5	4	9
2	1	46	3	9	5	46	7	8
8	7	39	4	6	2	39	1	5
49	5	3469	7	8	1	3469	29	234

FORCING CHAINS 1

So we've reached a point where two cells, 33 and 83, are 9. That's not possible because both cells are in the same column. Therefore, this forced chain is in error, and cell 33, our starting point, cannot be a 9. Proceed by crossing out 9 as a candidate in cell 33 and writing a large 4 in the cell. (If you've made any changes to your puzzle on paper, you'll need to reverse those steps and return to the puzzle's correct state, the state it was in before you began to force the errant chain.)

Again, that's a lot of work to eliminate just one candidate. But when you eliminate the 9 as a candidate from cell 33, this entire puzzle opens up and becomes a cinch to solve. A skilled player could complete the puzzle, from that point, in about one minute.

Now let's try an even more complex example of forcing chains. Notice the puzzle *Forcing Chains 2*. (Note: Many cells are affected in this maneuver and it would be difficult to follow if each one were marked in a slightly different shade of gray. Hence, the beginning cell is marked in light gray, and the ending cells, where the chain is proved incorrect, are marked in darker gray.) Let's begin a forced chain by assuming 8 is the correct answer in the light gray cell 14. If cell 14 is an 8, the cell next to it, cell 15, must be a 5. And if cell 15 is a 5, cell 95 must be an 8, being the only candidate 8 remaining in the column. If cell 95 is an 8, then cell 96 must be a 9, and if cell 96 is a 9, cell 56 must be a 5. If cell 56 is a 5, then cell 86 must be a 3. If cell 86 is a 3, cell 85 must be a 5. At this point, we have forced the puzzle into an impossibility, because now cells 15 and 85, both in the same column, are both 5s. Both cells can't be 5, so we now know that the cell where we began the forced chain, cell 14, cannot be an 8. Eliminate the 8 as a candidate in cell 14, and write a large 5 in that cell.

2	1	6	58	58	4	7	3	9
7	4	8	39	39	2	1	6	5
5	9	3	7	6	1	8	2	4
4	56	1	356	2	7	356	9	8
3	8	2	569	1	59	56	4	7
9	56	7	3568	4	358	356	1	2
8	3	4	2	7	6	9	5	1
1	7	9	4	35	35	2	8	6
6	2	5	1	89	89	4	7	3

FORCING CHAINS 2

As in the puzzle *Forcing Chains 1*, the elimination of this one candidate opens the puzzle up to many easier solving methods. The puzzle becomes "unlocked."

Again, while completing the Forced Chain maneuver is very complex, often involving many steps, the definition is simple: Take one candidate, assume that candidate is correct, and move forward with the puzzle. If the candidate is incorrect, that will become apparent to you in subsequent moves, as the puzzle will present

a situation of Sudoku impossibility, such as two of the same number in the same element. If this occurs, the starting point, the original candidate, is incorrect, and that candidate can be eliminated from the puzzle.

Note: When selecting a starting place for forcing chains, it's a good idea to select a cell that has only two candidates. If you were to select a cell that had, say, five remaining candidates, you'd be engaging in a lot of work to eliminate one candidate, but you'd still have four candidates remaining, and that might not help you to unlock and proceed with the puzzle. But if you select a cell with two candidates, and you eliminate one of those candidates, you've effectively solved that one cell, and that will likely lead to a chain reaction of your being able to quickly solve other cells.

The Puzzles

There are eight levels of puzzles in this book. The puzzles at the first level are very easy; they can be solved without using candidates. And the puzzles increase in difficulty at each level. The last level is so difficult that only a very small percentage of experienced players will likely have success in solving them.

1. **Extra Easy.** There are 20 Extra Easy puzzles to get the beginner acclimated to Sudoku. All 20 puzzles can be solved without using candidates, and the first ten puzzles are as easy as Sudoku puzzles can be: they can be solved using just one simple method, Naked Single. Puzzles 11-20 can be solved using just two methods.
2. **Easy.** The 80 puzzles in this section are just a slight step up from the Extra Easy puzzles. A novice should be able to solve these puzzles without being overly challenged. All 80 puzzles can be solved without the use of candidates.
3. **Mild-Medium.** These 80 puzzles present just a little more challenge and require more Sudoku skill. Naked twins will be required to solve some of the puzzles.
4. **Medium.** These 80 puzzles are a step up from the mild-medium puzzles. Naked triplets will be required to solve some of the puzzles.
5. **Difficult.** These 80 puzzles present a little more challenge. Some will require more difficult solving methods, such as Exclusive Element and Naked Quads.
6. **Expert.** All 80 puzzles require one or more challenging solving methods, such as Hidden Pair, Unique Rectangles, and X-Wings.
7. **Genius.** All 80 puzzles require one or more advanced solving methods, including X-Wings, XY-Wings, Unique Rectangles, Swordfish and others.
8. **Bonus: Super Extreme Puzzles.** These 12 puzzles are not for the weak at heart and definitely not for the weak of mind. They are beyond advanced, but are super-advanced and require the most difficult solving methods, such as Swordfish, Hidden Quads, XY-Wings, XYZ-Wings, and Forcing Chains. Only a very small percentage of Sudoku players will be able to solve these puzzles, and they'll need lots of time and grit to do so. Borrowing a term from the automotive industry: "Not Responsible for Blown Head Gaskets."
9. **Bonus: Alphabet Puzzles.** Sudoku Rocks! includes three types of bonus alphabet puzzles as well as math puzzles. Regular alphabet puzzles use letters instead of numbers. Several cells are shaded gray, and when the puzzle is completed, those shaded cells will spell a word, phrase, song title, location, food, movie, person, or so on. The enjoyment of Sudoku is amplified by the additional challenge of guessing the alphabetical answer as you work through the puzzle. Alphabet hybrid puzzles are played with numbers just like a regular Sudoku puzzle, but several cells are shaded gray, and a conversion chart is provided that assigns each number to a letter. Simply fill in the supplied blank lines with the converted letters and the puzzle will spell a word, phrase, song title, location, food, movie, person, and so on. Word Guess puzzles are similar to Alphabet Hybrid puzzles, but only some of the letters are provided. A hint, that will help you guess the answer, is also provided. And finally, there are Math

Hybrid puzzles. A mathematical equation is provided with blank spaces. Fill in the numbers from the grayed cells in the puzzle in the blank spaces and then solve the mathematical equation.

Puzzle 1 – Extra Easy

		7				8		
		5	7		3	1		
8	3		1		4		5	7
	6	9	3		7	4	8	
				5				
	8	3	4		2	6	7	
6	9		2		5		4	8
		8	6		1	2		
		4				5		

Puzzle 2 – Extra Easy

		5				6		
	2		6	5	9		8	
9		3				5		1
	5			2			1	
	4		3		1		7	
	8			4			6	
4		8				1		7
	3		1	7	4		9	
		2				4		

Puzzle 3 – Extra Easy

		7		3		2		
	6		2		8		4	
3		2				1		8
	7		8		2		3	
4				6				1
	3		1		7		8	
1		3				6		5
	5		9		6		1	
		4		5		8		

Puzzle 4 – Extra Easy

		5	1		2	7		
	2						1	
8			6	5	3			4
2		6				3		7
		4		8		6		
7		8				4		1
3			2	6	8			5
	6						4	
		7	5		4	2		

Puzzle 5 – Extra Easy

	3					6		
4			7	6	2			8
		8	3		1	7		
	2	4				5	8	
	6			5			2	
	5	7				6	1	
		1	2		8	9		
3			4	1	9			5
	7						4	

Puzzle 6 – Extra Easy

	3		9		7		8	
7		1				4		5
	8			6			9	
1			7		2			8
		8		1		9		
9			3		5			4
	5			2			7	
2		7				1		9
	1		4		6		3	

Puzzle 7 – Extra Easy

	5	3				9	8	
1			8	9	5			6
6								5
	7		5		9		1	
	2						5	
	8		1		7		3	
2								8
8			3	6	2			4
	6	4				1	2	

Puzzle 8 – Extra Easy

	9	8				3	6	
6		5				8		2
2	3		5		6		7	1
		6		7		2		
			6		5			
		9		1		7		
9	5		3		8		2	7
8		2				4		9
	4	7				5	1	

Puzzle 9 – Extra Easy

	4	3				6	1	
8	6		3	1	2		4	5
2								3
	2		9		5		8	
	5						3	
	9		8		7		5	
9								1
4	7		2	6	1		9	8
	8	2				5	6	

Puzzle 10 – Extra Easy

7								2
	4	8	6		2	5	7	
	2		1		7		8	
	3	9	7		1	6	2	
				6				
	1	4	3		8	7	9	
	8		4		3		1	
	6	7	2		5	8	4	
4								7

Puzzle 11 – Extra Easy

	9						7	
3		4		8		5		9
	5		1	9	4		3	
		5				6		
	7	8		5		2	1	
		9				4		
	8		3	4	2		6	
2		1		7		3		8
	6						4	

Puzzle 12 – Extra Easy

	4	3				6	9	
2			4	3	6			1
7								2
	3			8			4	
	1		5		9		7	
	9			7			2	
9								7
3			1	5	7			8
	7	5				3	1	

Puzzle 13 – Extra Easy

	9	3				5	2	
4			9		5			3
5		6		2		8		4
	8		5		6		4	
		5				9		
	3		7		2		8	
7		8		6		2		9
2			8		1			7
	6	1				4	5	

Puzzle 14 – Extra Easy

		4				5		
		2		1		9		
8	9		4		7		2	1
		1	3		4	7		
	4			2			5	
		6	9		8	4		
1	2		6		5		7	4
		7		4		2		
		8				1		

Puzzle 15 – Extra Easy

		8				4		
	7		6	5	4		8	
4		9				6		7
	1		9		7		4	
	9			3			7	
	4		1		5		9	
5		1				3		4
	6		8	1	3		5	
		7				1		

Puzzle 16 – Extra Easy

		2				8		
	4	9		8		2	6	
7	1		3		6		4	5
		6		3		5		
	2		5		8		9	
		3		1		4		
8	7		6		2		5	9
	6	4		5		7	8	
		5				6		

Puzzle 17 – Extra Easy

	6		4		2		9	
7	2						4	6
		9	3		7	5		
6		2				9		7
3		7				8		5
		4	8		6	1		
1	7						8	2
	8		7		1		5	

Puzzle 18 – Extra Easy

	4	1				8	7	
5				4				1
2			3		7			4
		2				3		
	1						6	
		7				1		
1			7		2			8
7				8				3
	5	3				6	2	

Puzzle 19 – Extra Easy

	9	5				3	4	
6			5		9			2
8				4				9
	7			2			3	
		8	9		7	2		
	6			5			9	
7				8				3
1			4		6			5
	2	6				4	1	

Puzzle 20 – Extra Easy

	3	6				7	5	
1			3		4			6
8		5				1		3
	9			4			7	
			7		1			
	6			2			3	
9		7				4		8
5			8		9			7
	8	3				5	9	

Bonus: Super Extreme Puzzles

For those who are not only Sudoku experts, but really, experts among the experts, the following twelve puzzles will put you to the test. The puzzles increase in difficulty as they increase in number. Puzzle 1 is very difficult, but puzzle 12 is a five-alarm blazing knock-your-socks-off don't-try-this-at-home-kiddies puzzle. My guess is that about 1 in 10 Sudoku players will be able to solve the first puzzle, 1 in 200 the middle puzzles, and 1 in 1,000 the last two.

What makes these puzzle so difficult? They require combinations of advanced solving techniques, including Swordfish, Unique Rectangles, XY-Wings, XYZ-Wings, and Forcing Chains.

Two Suggestions for Tackling These Puzzles:

1. Run For the Hills.
2. If you do stick around, please understand that these are no ordinary puzzles. They are chock full of the most difficult solving methods. View them as a 5,000 piece jigsaw puzzle as opposed to 100 piece. You can likely complete the 100 piece puzzle in one sitting. The 5,000 piece puzzle, especially if warily made, is not to be tackled in one sitting. (For the ultimate in cleverly designed, tricky jigsaw puzzles, see Vermont's legendary Stave Puzzles: www.stavepuzzles.com.) It may take days, weeks, or months. Learn as many of the advanced methods as you can (see our website, www.sudokurocks.com), and apply those methods when the puzzle seems locked. View each bit of progress—each completed cell and each deleted candidate—as a victory. Then, if you happen to complete the puzzle, view it as a huge victory. If you complete one successfully it means you are a Sudoku master, at the top of the heap.

Puzzle 1 – Smoking Hot 

				1			2
		9		3		5	
	4						6
	2	3		9		7	
5			2		4		3
		7		6		2	1
	1						9
		6		5		1	
8			3				

Puzzle 2 – Smoking Hot 

			5		9	3	7
2			6			9	8
				8			
9		2					6
	4	1				2	3
	6					8	4
				5			
4		7			6		5
	1	8	9		7		

Puzzle 3 – Smoking Hot 

	6						2
4				5			1
		8			3	4	
	1				6		
		2	1		4	6	
			3				9
		4	7			2	
7				8			5
	5						4

Puzzle 4 – Sizzling Hot  

6		8		1	5	2	
		7		8		9	4
		1		9	2	4	
7							2
		6	1	7		8	
	6	9		4		5	
		5	6	2		7	1

Puzzle 5 – Sizzling Hot  

							5
2			8		5		7
	1	9				4	
6		2	9		4		5
				1			
8			2		7	9	6
		6				7	8
9			7		2		1
	8						

Puzzle 6 – Sizzling Hot  

	8	1	2		6	9	5
	6	7			9	1	8
9			1		2		7
	4		5		7		9
	7	3	4			8	9
	1	9	7		3	5	6

Puzzle 7 – Flaming Hot   

			6			9		
			4	3	9		6	
		1				3		7
2				9				5
		3	1		6	2		
1				5				4
9		2				7		
	5		9	6	8			
		6			2			

Puzzle 8 – Flaming Hot   

			4					
2		9	3		1			7
		6					8	
	7		6		9		1	
		3					5	
	2		5		7			9
	9						4	
4			2		6	1		9
					5			

Puzzle 9 – Sun's Core    

		8		1		4	3	9
				2		6		
4					6			5
	7							
		9	6		3	7		
							8	
2			7					6
		4		5				
7	8	1		6		2		

Puzzle 10 – Sun's Core    

			1	7	2			
	2			5			1	
		9					2	6
6				1		5		9
	1						7	
3		7		8				4
2		5					8	
	8			2				4
			5	3	8			

Puzzle 11 – Ouch!    

		6		5		1		
					3			
5	3	1		8	6		7	
1				4				
8	5	2		1	4		6	
		9						5
3	1	8		7	9		2	
		3						
		8		9		5		

Puzzle 12 – Seek Shelter

YOU DON'T WANT
TO KNOW
HOW MANY FLAMES!!!

7				4				3
	1						7	9
	4	8		7		6		
			7	8				
		9	5		3	7		
				2	1			
		4		5		8	1	
8	7						5	
5			6					7

Bonus: Alphabet and Alphabet-Hybrid Puzzles

Alphabet Puzzle 1 – Easy

R		O		K		E		V
		K	R		C	O		
L	H			N			R	C
		R				N		
C	V			R			O	K
		V	O		H	C		
N		H		C		K		L

Alphabet Puzzle 2 – Medium

		A		B		Y		
B				U				O
M	O		A		Y		R	B
			R	Y	A			
		R	L		B	U		
			O	E	U			
E	A		Y		M		L	U
Y				R				A
		M		A		O		

Alphabet Puzzle 3 – Difficult

	9			D			E	
G		R				9		i
2			i		9			3
			G	i	2			
D								2
			D	C	R			
3			9		i			D
R		2				3		9
	G			3			C	

Alphabet Puzzle 4 – Expert

		C	A	N	D	Y		
			Y		O			
N								T
C			K		I			D
	O			A			I	
I			T		C			N
O								K
			O		Y			
		D	C	I	T	N		

Alphabet Puzzle 5 – Expert

			F	U	N		
	Y					P	
N			Y	I			T
		U	I	P	S		
	S					F	
		I	S	L	T		
F			N	Y			S
	P					Y	
			P	L	U		

Alphabet Puzzle 6 – Genius

D							M
		N	O		M	D	
	O			E			U
	Q			O			E
M			R		U		D
	R			D			N
	M			U			D
		Q	E		R	U	
O							N

Note: Yes, there is a hint in there somewhere.

Note: No S's are now visible, but they do appear in the puzzle.

Alphabet Hybrid Puzzles

When you complete the puzzle (or while you're solving it), convert the number of each gray cell to a letter using the Hybrid Conversion Chart. Enter those letters on the corresponding lines. For both the gray cells and lines, work left to right, top to bottom. The letters will spell a phrase, place, movie, food, song, person, etc.

Alphabet Hybrid Puzzle 1 – Extra Easy

3								8
8						6	5	1
		5		6	1	4	3	
			7	3				
		2				7		
				2	4			
	4	9	1	7		8		
7	8	3						9
2								6

Alphabet Hybrid Puzzle 2 – Extra Easy

			4	6	2			
	9						6	
4	6		1		7		8	5
7		1		3		8		6
3			8		4			2
9		4		1		5		7
6	1		9		5		2	3
	4						5	
			6	2	1			

Hybrid Conversion Chart

1 2 3 4 5 6 7 8 9
C N D M L O I A R

Hybrid Conversion Chart

1 2 3 4 5 6 7 8 9
T O P U N G D Y S

Alphabet Hybrid Puzzle 3 – Mild-Medium

	8			5			2	
1			7		8			3
		5				1		
5		8				3		6
		9	5		3	2		
2		7				9		5
		2				6		
8			4		1			2
	5			3				4

Alphabet Hybrid Puzzle 4 – Expert

	1						8	
		8				7		
		3	8		6	4		
	3		4		1		5	
8								9
	9		2		3		7	
		1	7		2	3		
		7				5		
	4							1

Hybrid Conversion Chart

1 2 3 4 5 6 7 8 9
N U S R I T A E M

Hybrid Conversion Chart

1 2 3 4 5 6 7 8 9
i S R C B ' K E U

Word Guess Puzzles

The same as Alphabet Hybrid Puzzles, but only some letters are supplied. See page 134 for more information.

Word Guess Puzzle 1 – Extra Easy

				1	6			
	4						7	
			7	9	8			1
		5		4		8		
1		7				2		6
		4		2		1		
4			2	7	3			
	5							9
			8	5				

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
A	L			O	S	E	T	

Word Guess Hint: Twists and Dips

Word Guess Puzzle 2 – Easy

	8	5		6		2		
	2							
3					7			1
				5	4	7		
		6				8		
		2	6	7				
8			9					7
							1	
		7		2		5	9	

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
M	L		A		D			O

Word Guess Hint: Apple, Cherry, Etc.

Word Guess Puzzle 3 – Mild Medium

4								3
	2	9	8		7	4	1	
			4		1			
		4				1		
1	9		5		4		6	2
		5				8		
			3		6			
	4	1	9		5	2	3	
5								6

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
		V			E	L	T	

Word Guess Hint: Did John and Paul Have a Spelling Issue?

Word Guess Puzzle 4 – Medium

6			9		3			2
	2	7		8		6	4	
	9		6		4		7	
	4		3		9		5	
	6	8		7		3	1	
5			1		8			7

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
D		G	L					O

Word Guess Hint: It's a Mix

Word Guess Puzzle 5 – Difficult

		6				4	3	
	7			2			5	
1								
		4		8	1			7
			7		2			
2			4	6		9		
								4
	2			9			8	
	8	1				7		

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
M	B	R	L	I	N			

Word Guess Hint: Kind of Like a Diva in another Field

Word Guess Puzzle 6 – Genius

3	8						5	6
7	1						3	4
		5		4		1		
			9	1	5			
4			3		6			1
			2	7	4			
		7		5		4		
8	9						7	5
5	4						1	9

Hybrid Conversion Chart

1	2	3	4	5	6	7	8	9
A	L					E	I	C

Word Guess Hint: Don't Let This Genius-Level Puzzle Shake You Up

Math Hybrid Puzzles

Fill in the spaces with the grayed cells, left to right, top to bottom, and then solve the mathematical equation.

Math Hybrid Puzzle 1 – Extra Easy

		7		5		6		
	9		8		6		1	
		3		9		2		
1		8				9		3
	4		9		3		6	
3		9				4		2
		5		6		7		
	3		7		1		2	
		1		8		3		

___ + ___ - ___ + ___ + ___ - ___ + ___ = ___

Math Hybrid Puzzle 2 – Genius

	6	4	3		1	2	5	
		9				6		
5			4		6			1
	5		8		3		4	
2								3
	8		9		7		6	
1			6		4			9
		5				4		
	4	8	5		9	3	2	

√ ___ + ___³ x ___ - ___² + ___ = ___

Answer Key

Puzzle 1 – Extra Easy

2	1	7	5	6	9	8	3	4
9	4	5	7	8	3	1	2	6
8	3	6	1	2	4	9	5	7
5	6	9	3	1	7	4	8	2
4	7	2	8	5	6	3	1	9
1	8	3	4	9	2	6	7	5
6	9	1	2	3	5	7	4	8
7	5	8	6	4	1	2	9	3
3	2	4	9	7	8	5	6	1

Puzzle 2 – Extra Easy

8	7	5	4	1	3	6	2	9
1	2	4	6	5	9	7	8	3
9	6	3	7	8	2	5	4	1
6	5	7	9	2	8	3	1	4
2	4	9	3	6	1	8	7	5
3	8	1	5	4	7	9	6	2
4	9	8	2	3	6	1	5	7
5	3	6	1	7	4	2	9	8
7	1	2	8	9	5	4	3	6

Puzzle 3 – Extra Easy

8	1	7	4	3	5	2	6	9
9	6	5	2	1	8	3	4	7
3	4	2	6	7	9	1	5	8
5	7	1	8	4	2	9	3	6
4	8	9	5	6	3	7	2	1
2	3	6	1	9	7	5	8	4
1	2	3	7	8	4	6	9	5
7	5	8	9	2	6	4	1	3
6	9	4	3	5	1	8	7	2

Puzzle 4 – Extra Easy

6	9	5	1	4	2	7	3	8
4	2	3	8	7	9	5	1	6
8	7	1	6	5	3	9	2	4
2	1	6	4	9	5	3	8	7
9	3	4	7	8	1	6	5	2
7	5	8	3	2	6	4	9	1
3	4	9	2	6	8	1	7	5
5	6	2	9	1	7	8	4	3
1	8	7	5	3	4	2	6	9

Puzzle 5 – Extra Easy

7	3	2	9	8	5	1	6	4
4	1	5	7	6	2	3	9	8
6	9	8	3	4	1	7	5	2
1	2	4	6	9	3	5	8	7
8	6	3	1	5	7	4	2	9
9	5	7	8	2	4	6	1	3
5	4	1	2	7	8	9	3	6
3	8	6	4	1	9	2	7	5
2	7	9	5	3	6	8	4	1

Puzzle 6 – Extra Easy

6	3	5	9	4	7	2	8	1
7	9	1	2	3	8	4	6	5
4	8	2	5	6	1	3	9	7
1	4	3	7	9	2	6	5	8
5	7	8	6	1	4	9	2	3
9	2	6	3	8	5	7	1	4
3	5	4	1	2	9	8	7	6
2	6	7	8	5	3	1	4	9
8	1	9	4	7	6	5	3	2

Puzzle 7 – Extra Easy

7	5	3	2	4	6	9	8	1
1	4	2	8	9	5	3	7	6
6	9	8	7	1	3	2	4	5
3	7	6	5	8	9	4	1	2
9	2	1	6	3	4	8	5	7
4	8	5	1	2	7	6	3	9
2	3	9	4	5	1	7	6	8
8	1	7	3	6	2	5	9	4
5	6	4	9	7	8	1	2	3

Puzzle 8 – Extra Easy

1	9	8	4	2	7	3	6	5
6	7	5	1	3	9	8	4	2
2	3	4	5	8	6	9	7	1
5	1	6	8	7	4	2	9	3
7	2	3	6	9	5	1	8	4
4	8	9	2	1	3	7	5	6
9	5	1	3	4	8	6	2	7
8	6	2	7	5	1	4	3	9
3	4	7	9	6	2	5	1	8

Puzzle 9 – Extra Easy

5	4	3	7	8	9	6	1	2
8	6	7	3	1	2	9	4	5
2	1	9	6	5	4	8	7	3
6	2	1	9	3	5	7	8	4
7	5	8	1	4	6	2	3	9
3	9	4	8	2	7	1	5	6
9	3	6	5	7	8	4	2	1
4	7	5	2	6	1	3	9	8
1	8	2	4	9	3	5	6	7

Puzzle 10 – Extra Easy

7	5	1	9	8	4	3	6	2
9	4	8	6	3	2	5	7	1
3	2	6	1	5	7	4	8	9
5	3	9	7	4	1	6	2	8
8	7	2	5	6	9	1	3	4
6	1	4	3	2	8	7	9	5
2	8	5	4	7	3	9	1	6
1	6	7	2	9	5	8	4	3
4	9	3	8	1	6	2	5	7

Puzzle 11 – Extra Easy

8	9	6	2	3	5	1	7	4
3	1	4	6	8	7	5	2	9
7	5	2	1	9	4	8	3	6
4	3	5	8	2	1	6	9	7
6	7	8	4	5	9	2	1	3
1	2	9	7	6	3	4	8	5
5	8	7	3	4	2	9	6	1
2	4	1	9	7	6	3	5	8
9	6	3	5	1	8	7	4	2

Puzzle 12 – Extra Easy

1	4	3	7	2	8	6	9	5
2	5	9	4	3	6	7	8	1
7	8	6	9	1	5	4	3	2
6	3	7	2	8	1	5	4	9
4	1	2	5	6	9	8	7	3
5	9	8	3	7	4	1	2	6
9	6	1	8	4	3	2	5	7
3	2	4	1	5	7	9	6	8
8	7	5	6	9	2	3	1	4

Puzzle 13 – Extra Easy

8	9	3	6	4	7	5	2	1
4	1	2	9	8	5	7	6	3
5	7	6	1	2	3	8	9	4
9	8	7	5	1	6	3	4	2
1	2	5	4	3	8	9	7	6
6	3	4	7	9	2	1	8	5
7	5	8	3	6	4	2	1	9
2	4	9	8	5	1	6	3	7
3	6	1	2	7	9	4	5	8

Puzzle 14 – Extra Easy

6	1	4	8	9	2	5	3	7
7	3	2	5	1	6	9	4	8
8	9	5	4	3	7	6	2	1
5	8	1	3	6	4	7	9	2
9	4	3	7	2	1	8	5	6
2	7	6	9	5	8	4	1	3
1	2	9	6	8	5	3	7	4
3	6	7	1	4	9	2	8	5
4	5	8	2	7	3	1	6	9

Puzzle 15 – Extra Easy

6	2	8	7	9	1	4	3	5
1	7	3	6	5	4	9	8	2
4	5	9	3	2	8	6	1	7
3	1	5	9	8	7	2	4	6
8	9	6	4	3	2	5	7	1
7	4	2	1	6	5	8	9	3
5	8	1	2	7	9	3	6	4
2	6	4	8	1	3	7	5	9
9	3	7	5	4	6	1	2	8

Puzzle 16 – Extra Easy

6	5	2	4	9	1	8	3	7
3	4	9	7	8	5	2	6	1
7	1	8	3	2	6	9	4	5
1	9	6	2	3	4	5	7	8
4	2	7	5	6	8	1	9	3
5	8	3	9	1	7	4	2	6
8	7	1	6	4	2	3	5	9
9	6	4	1	5	3	7	8	2
2	3	5	8	7	9	6	1	4

Puzzle 17 – Extra Easy

5	6	3	4	8	2	7	9	1
7	2	8	1	9	5	3	4	6
4	1	9	3	6	7	5	2	8
6	4	2	5	3	8	9	1	7
8	5	1	6	7	9	2	3	4
3	9	7	2	1	4	8	6	5
2	3	4	8	5	6	1	7	9
1	7	5	9	4	3	6	8	2
9	8	6	7	2	1	4	5	3

Puzzle 18 – Extra Easy

3	4	1	2	5	9	8	7	6
5	7	9	6	4	8	2	3	1
2	6	8	3	1	7	5	9	4
6	8	2	9	7	1	3	4	5
4	1	5	8	2	3	7	6	9
9	3	7	4	6	5	1	8	2
1	9	6	7	3	2	4	5	8
7	2	4	5	8	6	9	1	3
8	5	3	1	9	4	6	2	7

Puzzle 19 – Extra Easy

2	9	5	7	1	8	3	4	6
6	4	7	5	3	9	1	8	2
8	3	1	6	4	2	5	7	9
5	7	9	8	2	4	6	3	1
3	1	8	9	6	7	2	5	4
4	6	2	1	5	3	8	9	7
7	5	4	2	8	1	9	6	3
1	8	3	4	9	6	7	2	5
9	2	6	3	7	5	4	1	8

Puzzle 20 - Extra Easy

4	3	6	1	8	2	7	5	9
1	7	9	3	5	4	2	8	6
8	2	5	9	7	6	1	4	3
2	9	1	6	4	3	8	7	5
3	5	8	7	9	1	6	2	4
7	6	4	5	2	8	9	3	1
9	1	7	2	3	5	4	6	8
5	4	2	8	6	9	3	1	7
6	8	3	4	1	7	5	9	2

Puzzle 1 – Easy

9	5	6	4	3	7	1	8	2
8	4	2	1	5	6	9	3	7
7	3	1	2	9	8	5	6	4
6	9	8	5	7	2	3	4	1
1	7	3	8	4	9	6	2	5
5	2	4	3	6	1	7	9	8
2	6	9	7	8	5	4	1	3
3	8	5	9	1	4	2	7	6
4	1	7	6	2	3	8	5	9

Puzzle 2 – Easy

3	9	7	1	6	2	8	4	5
2	5	6	8	4	7	1	9	3
4	1	8	9	3	5	2	7	6
7	2	1	5	8	6	4	3	9
6	8	9	3	7	4	5	1	2
5	4	3	2	1	9	7	6	8
8	7	5	4	9	3	6	2	1
1	3	4	6	2	8	9	5	7
9	6	2	7	5	1	3	8	4

Puzzle 3 – Easy

9	3	4	7	5	1	2	8	6
5	2	8	4	9	6	7	3	1
7	1	6	8	2	3	9	5	4
2	6	7	3	1	4	8	9	5
1	5	3	9	7	8	6	4	2
8	4	9	5	6	2	3	1	7
4	7	1	6	3	9	5	2	8
3	8	5	2	4	7	1	6	9
6	9	2	1	8	5	4	7	3

Puzzle 4 – Easy

4	5	1	3	7	2	9	8	6
7	6	2	8	9	4	5	3	1
3	9	8	1	6	5	4	7	2
1	4	6	5	2	3	8	9	7
9	2	3	7	8	1	6	5	4
8	7	5	6	4	9	2	1	3
5	3	9	2	1	6	7	4	8
6	8	4	9	3	7	1	2	5
2	1	7	4	5	8	3	6	9

Puzzle 5 – Easy

9	2	6	4	1	7	8	5	3
1	5	7	8	3	2	4	6	9
3	8	4	9	5	6	7	2	1
6	3	2	5	7	9	1	8	4
4	7	9	6	8	1	2	3	5
8	1	5	3	2	4	6	9	7
7	4	8	2	9	3	5	1	6
2	6	3	1	4	5	9	7	8
5	9	1	7	6	8	3	4	2

Puzzle 6 – Easy

7	1	5	3	9	4	8	6	2
2	9	3	8	6	1	5	7	4
6	4	8	2	7	5	9	3	1
3	7	6	5	2	9	1	4	8
4	5	1	6	8	3	7	2	9
9	8	2	1	4	7	3	5	6
1	2	7	9	3	6	4	8	5
5	6	4	7	1	8	2	9	3
8	3	9	4	5	2	6	1	7

Puzzle 7 – Easy

7	4	1	2	6	3	8	5	9
3	2	5	8	9	4	6	1	7
6	8	9	1	7	5	3	4	2
2	7	4	3	5	1	9	6	8
1	9	3	6	2	8	5	7	4
5	6	8	9	4	7	1	2	3
9	3	2	7	1	6	4	8	5
8	5	6	4	3	2	7	9	1
4	1	7	5	8	9	2	3	6

Puzzle 8 – Easy

6	8	2	7	4	3	9	1	5
4	9	7	6	5	1	8	3	2
5	3	1	8	9	2	7	4	6
1	6	9	5	7	4	3	2	8
8	5	3	2	6	9	1	7	4
2	7	4	3	1	8	5	6	9
3	1	6	4	8	5	2	9	7
7	2	5	9	3	6	4	8	1
9	4	8	1	2	7	6	5	3

Puzzle 9 – Easy

2	9	7	4	6	1	5	3	8
1	5	8	9	2	3	4	7	6
6	3	4	7	5	8	1	2	9
7	1	9	8	3	4	6	5	2
4	8	6	5	7	2	9	1	3
3	2	5	6	1	9	8	4	7
8	6	3	1	4	7	2	9	5
5	7	1	2	9	6	3	8	4
9	4	2	3	8	5	7	6	1

Puzzle 10 – Easy

6	7	8	1	2	4	9	3	5
1	3	2	9	5	8	4	7	6
4	5	9	7	3	6	8	1	2
7	6	1	2	4	3	5	8	9
9	4	5	8	6	1	3	2	7
8	2	3	5	7	9	1	6	4
3	1	4	6	9	7	2	5	8
2	9	7	3	8	5	6	4	1
5	8	6	4	1	2	7	9	3

Puzzle 11 – Easy

7	4	5	6	8	9	2	3	1
1	6	3	7	5	2	4	8	9
2	9	8	4	1	3	6	5	7
9	7	1	2	6	5	8	4	3
5	8	2	3	4	7	9	1	6
4	3	6	8	9	1	5	7	2
8	2	7	9	3	4	1	6	5
6	1	9	5	7	8	3	2	4
3	5	4	1	2	6	7	9	8

Puzzle 12 – Easy

7	5	6	2	4	9	1	8	3
3	9	4	1	7	8	6	5	2
2	8	1	6	3	5	4	7	9
5	6	3	4	1	7	2	9	8
4	1	7	9	8	2	5	3	6
8	2	9	5	6	3	7	1	4
6	3	5	8	2	1	9	4	7
9	7	2	3	5	4	8	6	1
1	4	8	7	9	6	3	2	5

Puzzle 13 – Easy

2	5	4	3	8	7	1	9	6
7	8	3	9	1	6	4	2	5
9	1	6	4	2	5	8	7	3
1	7	5	8	4	2	6	3	9
6	4	8	7	3	9	2	5	1
3	2	9	5	6	1	7	4	8
4	9	1	2	5	8	3	6	7
5	6	2	1	7	3	9	8	4
8	3	7	6	9	4	5	1	2

Puzzle 14 – Easy

5	9	3	6	1	4	8	2	7
4	7	1	5	8	2	6	9	3
8	2	6	7	9	3	1	5	4
3	5	2	1	7	9	4	6	8
9	8	7	2	4	6	3	1	5
1	6	4	8	3	5	9	7	2
7	1	9	4	5	8	2	3	6
2	3	8	9	6	7	5	4	1
6	4	5	3	2	1	7	8	9

Puzzle 15 – Easy

2	6	8	5	3	1	7	9	4
7	3	4	9	6	2	1	5	8
9	5	1	7	8	4	2	6	3
4	9	6	3	7	5	8	2	1
5	1	2	8	4	6	3	7	9
3	8	7	2	1	9	6	4	5
8	2	5	1	9	7	4	3	6
1	4	9	6	2	3	5	8	7
6	7	3	4	5	8	9	1	2

Puzzle 16 – Easy

9	5	6	1	3	4	2	7	8
1	8	4	2	7	6	5	3	9
7	3	2	5	9	8	4	1	6
6	4	5	7	8	9	1	2	3
8	2	1	6	5	3	7	9	4
3	9	7	4	1	2	6	8	5
4	1	3	9	2	5	8	6	7
2	6	8	3	4	7	9	5	1
5	7	9	8	6	1	3	4	2

Puzzle 17 – Easy

8	5	1	3	2	4	6	9	7
6	3	4	8	9	7	2	5	1
9	7	2	1	5	6	3	8	4
5	1	3	9	4	2	7	6	8
7	2	9	6	8	3	1	4	5
4	6	8	5	7	1	9	3	2
3	4	7	2	6	8	5	1	9
2	9	6	4	1	5	8	7	3
1	8	5	7	3	9	4	2	6

Puzzle 18 – Easy

4	2	9	5	8	1	3	6	7
1	6	7	2	4	3	9	8	5
3	5	8	9	6	7	2	4	1
6	3	1	7	2	8	4	5	9
2	9	4	6	3	5	1	7	8
7	8	5	4	1	9	6	2	3
5	7	2	1	9	6	8	3	4
9	4	3	8	7	2	5	1	6
8	1	6	3	5	4	7	9	2

Puzzle 19 – Easy

7	5	8	1	4	2	6	3	9
3	2	9	5	8	6	7	1	4
4	6	1	9	3	7	2	8	5
8	4	6	3	2	9	5	7	1
9	1	5	6	7	8	4	2	3
2	3	7	4	5	1	9	6	8
1	9	3	2	6	5	8	4	7
6	8	4	7	9	3	1	5	2
5	7	2	8	1	4	3	9	6

Puzzle 20 – Easy

2	8	5	4	9	1	6	7	3
7	9	1	6	3	5	8	4	2
4	6	3	7	8	2	9	5	1
3	1	9	5	7	6	4	2	8
6	4	2	3	1	8	7	9	5
5	7	8	9	2	4	1	3	6
8	5	6	2	4	9	3	1	7
1	3	4	8	5	7	2	6	9
9	2	7	1	6	3	5	8	4