You are reading the "puzzle booklet" of the WS+PC 2021 trivia game, which took place on Saturday, November 20th, at 1 PM GMT. The answers to some of the questions might have changed since then. The correct answers are based on the statistics we collected back then. There are 50 questions in total, with 5 themes W (world - people who have participated in WSPC before), S (sudoku), + (this year's world sudoku and puzzle convention), P (puzzle), and C (championship - past WSPCs) respectively. Questions across the 5 themes take turns to appear. All the Sudoku and Puzzles that appeared are logically solvable and have a unique solution. Enjoy ❤️

1. (W) Who has been the winner of WSC the most times? (30s time limit)
   a. Kota Morinishi
   b. Jan Mrozowski
   c. Thomas Snyder
   d. Tiit Vunk

2. (S) Who is known as the Father of Sudoku? (30s time limit)
   a. Will Shortz
   b. Maki Kaji
   c. Thomas Snyder
   d. Tetsuya Nishio

3. (+) Approximately how many people registered for this year's WS+PC as of this point? (30s time limit)
   a. 600
   b. 800
   c. 1000
   d. 1200

4. (P) **Number link** (pair up all the matching symbols on the grid with single continuous lines. The lines cannot branch off or cross over each other, and the symbols have to fall at the end of each line): Do the two highlighted cells (also marked by the question mark) belong to the same link? (30s time limit)
   a. True
   b. False

W	S	+	P	C	2	0	2	1
						0		
								1
			?					
						?		
				W	S	+	P	C

5. (C) (year of the first WSC)+(year of the first WPC)? (30s time limit)
    a. 3996
    b. 3998
    c. 4006
    d. 4008

6. (W) Who has been the second place of WSC the most times? (30s time limit)
    a. Tiit Vunk
    b. Kota Morinishi
    c. Jakub Onderušek
    d. Yuhei Kusui

7. (S) What is the minimum number of givens needed for a classic sudoku to be unique? (30s time limit)

8. (+) Approximately what percentage of people in this year's WS+PC have never participated in WSPC before? (30s time limit)
    a. 20%
    b. 30%
    c. 40%
    d. 50%

9. (P) **Akari** (Place light bulbs in the white squares. The number in the black squares shows how many light bulbs are next to it vertically and horizontally. Each light bulb illuminates from bulb to black square or outer frame in its row and column. Every white square must be illuminated and a light bulb can not illuminate another light bulb): Where is the light bulb in row 4? (90s time limit)
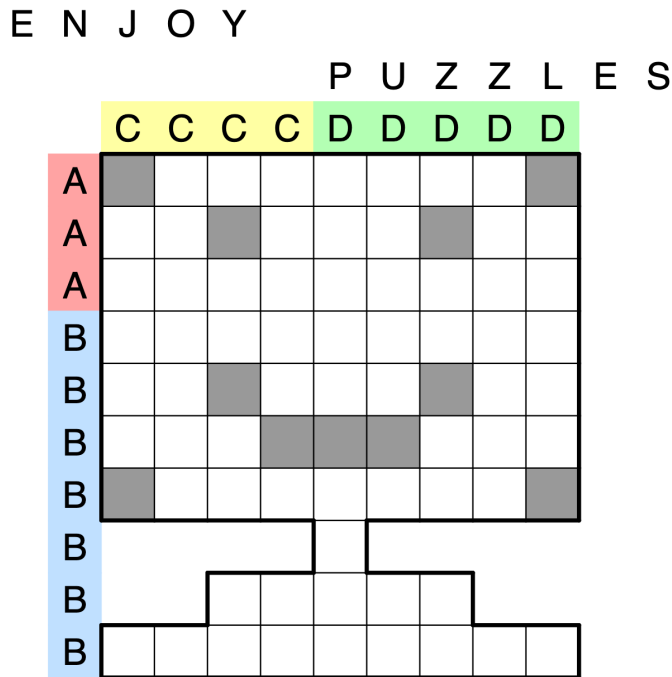
a. Column 1-3
b. Column 4-6
c. Column 7-8
d. There is no light bulb in row 4

	1	2	3	4	5	6	7	8
1								
2			2				2	
3				0				1
4								
5								
6	1				2			
7		1				0		
8								

10. (C) Which country hosted the first World Sudoku Championship? (30s time limit)
   a. Italy
   b. USA
   c. Czech Republic
   d. Slovakia

11. (W) Who has been the winner of the WPC Under 18 category the most times? (30s time limit)
   a. Walker Anderson
   b. Ryotaro Chiba
   c. Yanzhe Qiu
   d. Freddie Hand

12. (S) What is the minimum number of distinct given digits required for a classic sudoku? (30s time limit)

13. (+) How many time trials do we have for this year's WS+PC? (30s time limit)
   a. 11
   b. 22
   c. 33
   d. 44

14. (P) **Scrabble** (Place all the listed words exactly once in the grid going across (left to right) or down (top to bottom). Each word intersects with at least one other word and all words are interconnected.No words of two or more letters can appear anywhere in the grid, except the ones listed. All instances of some letters are given): Which region completely covers the word "PUZZLES"? (60s time limit)
    a. Row 1-3
    b. Row 4-10
    c. Column 1-4
    d. Column 5-9

15. (C) Which country hosted the first World Puzzle Championship? (30s time limit)
    a. Japan
    b. USA
    c. Hungary
    d. Germany
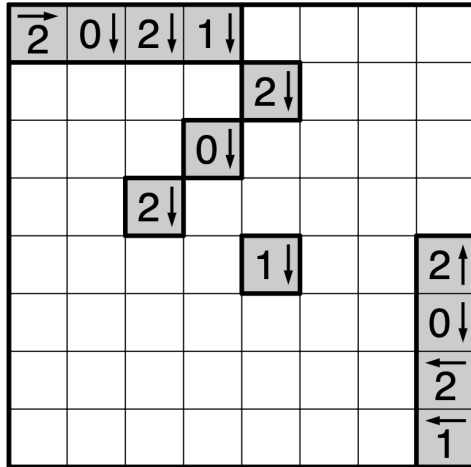
16. (S) Who has been the winner of the WSC Over 50 category the most times? (30s time limit)
    a. Taro Arimatsu
    b. Mark Goodliffe
    c. David McNeil
    d. Zoran Tanasic

17. (S) **Classic Sudoku** (Place a digit from 1 to 9 into each of the empty cells so that each digit appears exactly once in each row, column, and 3x3 outlined box): What is the digit in the highlighted cell (also marked by the question mark)? (120s time limit)

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

18. (+) How many sudokus are there in total in the sudoku competition at this year's WS+PC? (60s time limit)
    a. 85
    b. 87
    c. 95
    d. 97

19. (P) **Yajilin** (Blacken some white cells and then draw a single closed loop (without intersections or crossings) through all remaining white cells. Blackened cells cannot share an edge with each other. Some cells are outlined and in gray and cannot be part of the loop. Numbered arrows in such cells indicate the total number of blackened cells that exist in that direction in the grid): How many black squares in total are there in this Yajilin puzzle? (120s time limit)

20. (C) Which year did WSC and WPC first merge? (30s time limit)
    a. 2009
    b. 2010
    c. 2011
    d. 2012

21. (W) Who has been the winner of the WPC Over 50 category the most times? (30s time limit)
    a. David McNeil
    b. Stefano Forcolin
    c. Ulrich Voigt
    d. Taro Arimatsu

22. (S) Dots mark the difference between two digits. What value could the dots be? (120s time limit) (solving link can be found in the solution file)
    a. 1
    b. 2
    c. 3
    d. 4

23. (deleted) (+) Who is currently in the top 10 in both the competitive portions (sudoku competition and puzzle competition) of WS+PC? (30s time limit)
    a. Ken Endo
    b. Kota Morinishi
    c. Hideaki Jo
    d. Freddie Hand

24. (P) **Coded Skyscrapers** (Each digit inside the grid represents the height of the skyscraper in that cell. Each number outside the grid represents the number of skyscrapers that can be seen in the corresponding row or column. Taller skyscrapers hide shorter ones. Moreover, some of the numbers outside the grids are coded by letters. Same letters represent the same number, different letters represent different numbers.): Rank the numerical value of W, S, P, C in ascending order (?<?<?<?). (120s time limit)

25. (C) Which country has won the WPC team title the most times? (30s time limit)
    a. Germany
    b. Japan
    c. USA
    d. Czech Republic

26. (W) How many times did Wei-Hwa Huang win the WPC? (Please enter a number) (30s time limit)

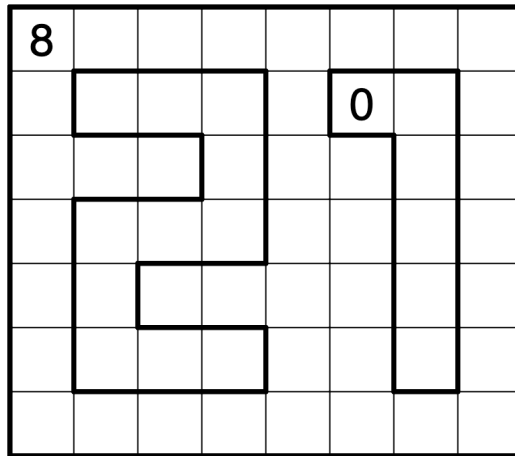27. (S) What sudoku variant could this solution be? (60s time limit)
    a. No touch (Apply Classic Sudoku rules. Same numbers cannot touch each other even diagonally)
    b. Antiknight (Apply Classic Sudoku rules. No cell that is a knight-step away can contain the same digit. In chess, a knight moves two squares forward followed by one sideways)
    c. Nonconsecutive (Apply Classic Sudoku rules. No pair of consecutive digits can be placed in vertically or horizontally adjacent cells)
    d. XV (Apply Classic Sudoku rules. Adjacent cells with digits summing to 5 are marked by V, while those summing to 10 are marked by X. All possible V and X are marked)

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

28. (+) Approximately how many people attempted the round with the most number of starts so far? (30s time limit)
    a. 200
    b. 400
    c. 600
    d. 800

29. (P) **Heyawake** (Blacken some cells so that all remaining cells are connected orthogonally. No two black cells can share an edge. Any single horizontal or vertical line of white cells cannot traverse more than one thick line. Numbers indicate the amount of black cells in that region): How many black cells do you need to paint in the region with a shape of 2? (240s time limit)

30. (C) Which country has the tradition of bringing in newcomers each year for WSPC? (30s time limit)
    a. USA
    b. Japan
    c. China
    d. Czech Republic

31. (W) Who shared the same birth date as Palmer Mebane? (30s time limit)
    a. Tom Collyer
    b. Tiit Vunk
    c. Hideaki Jo
    d. Gareth Moore

32. (S) What sudoku variant could this be? (240s time limit) (solving link can be found in the solution file)
    a. Sequence (Apply Classic Sudoku rules. The numbers along the lines have to be different and are in an arithmetic sequence. The difference between two following numbers along a line is always the same.)
    b. Fuzzy Arrow (Apply Classic Sudoku rules. Exactly one circle should be added to one end of each grey line. One arrow should be drawn at the loose ends of each grey line then. Finally, solve standard arrows sudoku. A number placed in a cell

with a circle must be the sum of the numbers placed in cells the adjoining arrow passes through. Numbers may repeat on arrows)

c. Renban (Apply Classic Sudoku rules. Each line contains a set of distinct consecutive digits)

d. Palindrome (Apply Classic Sudoku rules. The digits in the cells with the line form palindromes, i.e. they read the same from both the directions)

33. (+) Rank the following panelists from the oldest to the youngest: Walker Anderson, Ryotaro Chiba, Tantan Dai, Freddie Hand. (30s time limit)

34. (P) What is the Nikoli puzzle Norinori based off of? (30s time limit)
    a. Chocolate
    b. Graham Crackers
    c. Seaweed Snacks
    d. Dominos

35. (C) Which year did the Sudoku Grand Prix (GP) start? (30s time limit)
    a. 2012
    b. 2013
    c. 2014
    d. 2015

36. (W) Which of the following is Ryotaro Chiba? (30s time limit)
    a. 森西 亨太
    b. 遠藤 憲
    c. 條 秀彰
    d. 千葉 遼太郎

37. (S) **Quadruple Sudoku** (Apply Classic Sudoku rules. Additionally, each set of small numbers at the intersection of two lines indicate numbers that are in the four adjacent cells): What is the digit in the highlighted cell (also marked by the question mark)? (120s time limit)

    a. 2
    b. 5
    c. 7
    d. 9

38. (+) All of the Japanese panelists studies/studied at the University of Tokyo. (30s time limit)

    a. True
    b. False

39. (P) **ABCtje** (Write a number from 1-9 under each letter so that the numbers corresponding to the letters in each word have the given sum. Different letters must stand for different numbers): What is the sum of the numbers corresponding to the letters in the word DOE? Please enter an integer. (240s time limit)

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S  U  P  P  O  S  E  =  36
    S  U  D  O  K  U  =  34
    P  U  Z  Z  L  E  =  31
    D  O  U  D  O  U  =  20
          P  U  L  L  =  21
             D  O  E  =  ?
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40. (C) People from how many different countries have won individual WPC before? (30s time limit)
    a. 5
    b. 7
    c. 9
    d. 11

41. (W) What is Hideaki's favorite puzzle type? (30s time limit)
    a. Kakuro
    b. Tapa
    c. Classic Sudoku
    d. Curve Data

42. **Between Sudoku** (Apply Classic Sudoku rules. Digit(s) on each line must be between two digits in the circles): What is the digit in the highlighted cell (also marked by the question mark) (60s time limit)

43. (+) Which country on the Time Trial Country Leaderboard currently has more gold medals than silver medals? (30s time limit)
    a. Japan
    b. United Kingdom
    c. USA
    d. France

44. (P) Tapa: Serkan Yurekli // Balance Loop: Prasanna Seshadri // Aqre: Eric Fox // Castle Wall: ?? (30s time limit)
    a. Thomas Snyder
    b. Palmer Mebane
    c. Nikoli
    d. Serkan Yurekli

45. (C) Which one of the following is not a tradition of WSPC? (30s time limit)
    a. Football
    b. Scavenger Hunt/Puzzle Hunt
    c. Karaoke
    d. Sightseeing

46. (W) What is the first name of this person? (Capitalize the first letter) (30s time limit)

47. (S) **ER Fortress** (Apply Classic Sudoku rules. All digits from 1-6 appear exactly once in the shaded cells. Digits in the shaded cells must be greater than the digits in their

horizontally or vertically adjacent white cells): Which cell in the extra region is 6? (120s time limit)

    a. A5
    b. C2
    c. D2
    d. D3

48. (+) What is the variant that Bakpao asked TiiT about during Sudoku Solver's Panel? (Please enter two capitalized letters) (30s time limit)

49. (P) **Capsules** (place WS+PC once in each outlined region. Same symbols cannot touch each other, not even diagonally): What is ?# (Values of the symbols) (240s time limit)

50. (C) What is the song that we usually sing together at the end of each WSPC karaoke night? (30s time limit)
    a. Byron's Sudoku Song
    b. Wonderwall
    c. Bohemian Rhapsody
    d. Canadian Anthem