# INTERNATIONAL INDIAN SCHOOL, BURAIDAH **COMPUTER SCIENCE**

**CLASS 5 A/B/C** - 2025-26

# Worksheet - I **SECTION A**

## Choose the correct answer and write the option.

1	
1. How many different ice cream cones can you make using 3 flavors and 3 toppings?	
a) 5 b) 6 c) 3 d) 9  2. In a standard 4×4 Sudalry, how many times does each number appear?	
<ul><li>2. In a standard 4×4 Sudoku, how many times does each number appear?</li><li>a) Once b) Twice c) Thrice d) Four times</li></ul>	
3. Sudoku is mainly a game of:	
a) Luck b) Guessing c) Logical thinking d) Memory	
4. A menu has 4 main courses and 2 desserts. How many different meal combos can be made?	
a) 6 b) 4 c) 8 d) 2	
5. How many ways can you choose 1 pen from 3 and 1 pencil from 2?	
a) 4 b) 6 c) 5 d) 3	
6. If you have 3 shirts and 4 pants, how many outfit combinations can you make without repetition?  a) 3 b) 5 c) 7 d) 12	
7. Which of the following is NOT a rule of 4x4 Sudoku?	
a) No number should repeat in a row b) No number should repeat in a column	
c) Numbers can be repeated in the same box d) Each box must have all four numbers	
SECTION B	
Write the correct answer in the blank.	
1.A 4x4 Sudoku has rows and columns.	
2.If you have 0 options in one group, your total combinations will be(Zero)	
3 mini grids are in a 4x4 Sudoku puzzle.	
4. There are possible combinations of juice and glass when you have 5 juice types and 3 glass t	ypes.
5.The more choices we have, the combinations we can make.( <b>More</b> )	
SECTION C	
State True or False.	
1. You can combine the same color twice when counting combinations without repetition.	
2. Counting combinations means finding how many ways you can select items regardless of order.	
3. If you add one more shirt to 3 existing ones, combinations with 2 pants will increase.	
4. The sum of all numbers in one row of a completed 4x4 Sudoku is 10.	
5. Combinations increase if we increase the number of choices.	
6. If one number is missing in a row, you can figure it out by checking the other three.	

## **SECTION D**

### **ANSWER THE FOLLOWING**

1. What do we mean by counting combinations?

Ans: Counting combinations means finding out how many ways items can be paired or arranged using given choices.

- 2. Suppose you must stack up 2 Blue bricks and 1 black brick. Suppose the number of ways of doing this is m. Also, suppose that the ways of choosing the position for the 2 blue ones in n. Then, what is the relation between m and n? Draw the different combinations to stack up the bricks.
  - 3. What is the key rule to follow when solving a 4x4 Sudoku?

Ans: Each number appears exactly once in a row, column, or mini grid.

4. What is a mini-grid in Sudoku?

Ans: In a 4x4 Sudoku, the entire grid has 4 rows and 4 columns. It is divided into four 2×2 mini grids. Each mini grid must contain all 4 different colors or numbers without repetition.

5. You need to travel from point A to point B. To do this, First, you travel from A to C by car. Then, you travel from C to B by boat. However, there is a rule: You cannot use a car and a boat of the same color on your journey. You have 3 cars in colors: Red, Yellow, and Green, 4 boats in colors: Yellow, Green, Orange, and Cyan. How can you plan your travel from A to B following these rules?

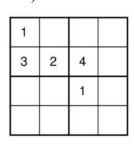
### **SECTION E**

1. Complete the following Sudoku puzzles

a)

	4		
			4
		2	3
2	3		

b)



c)

4	3	1
1		
	1	

d)

4			
	1		3
1		3	

e)

		4
2		2
2		3
4	1	2