# INDIAN SCHOOL NIZWA-WORKSHEET

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| | **MATHEMATICS** | |
| | **CH – 3 – Number Play** | |
| **Name:_____** | **Date:_____** | **Class: VI Sec:__** |

**CHOOSE THE CORRECT ANSWER**:

1. The greatest and the smallest 4-digit number which can be formed using the digits 9, 7, 4, 1 without repetition are

(a) 9471, 1749 (b) 9174, 4719 (c) 9714, 4179 (d) 9741, 1479

2. The supercell in the given table is

| | | | | | |
|---|---|---|---|---|---|
| 34 | 94 | 86 | 56 | 43 | 20 |

(a) 86 (b) 43 (c) 94 (d) 56

3. What is the next number in the sequence 3, 9, 27, 81,….

(a) 143 (b) 243 (c) 118 (d) 199

4. What is the difference between largest 3-digit number and smallest 2-digit number?

(a) 898 (b) 899 (c) 989 (d) 998

5. Which of the following is the Kaprekar constant?

(a) 4176 (b) 7614 (c) 6174 (d) 1476

6. Which of the following is a palindromic number?

(a) 677 (b) 616 (c) 918 (d) 236

7. How many times does the digit 5 appear when writing all the numbers from 1 to 100?

(a) 20 (b) 10 (c) 25 (d) 15

8. The largest 4-digit number, using any one digit twice, from digits 4, 7, 3 and 1 is .

(a) 7431 (b) 7743 (c) 74431 (d) 7731

9. The largest 5-digit number having only 3 different digits is:

(a) 98997 (b) 99879 (c) 99987 (d) 99897

10. Which of the following is the supercell in the given table?

| | | | | | | |
|---|---|---|---|---|---|---|
| 241 | 30 | 345 | 600 | 540 | 200 | 190 |

(a) 600 (b) 540 (C) 241 (d) both a and c

**FILL IN THE BLANKS:**

11. The magic number 6174 is called the _____.

12. In the number 1234, the digit 2 is at the _____ place.

13. The total number of three-digit numbers are _____.

14. If you reverse the digits of the number 9889, then you still get _____.

15. The difference between 7000 and 1345 is _____.

16. The largest 4-digit number that can be made using the digits 4, 7, 3, and 2 is _____ .

17. The numbers that read the same from left to right and from right to left are called _____

18. The digits of the number 764 add up to _____.

19. The number 2754 lies on the _____ side of 3000 on the number line.

20. When you add 800 to 5678, the result is _____.

**STATE WHETHER THE FOLLOWING STATEMENTS ARE TRUE OR FALSE:**

21. Total number of three-digit numbers are 899.

22. The magic number of Kaprekar is 6174.

23. The number 7667 is a palindrome number.

24. The number in a supercell is larger than its adjacent cell.

25. 15083 lies on the right side of 15077 on the number line.

26. In the date 11/02/2011, the digits do not read the same from left to right and from right to left.

**27. CASE BASED QUESTIONS**:

Geeta is trying to understand shifting digits with four tiles on which number 1, 2, 3, 4 is written.

(i) The number if she arranges tiles in increasing order is _____

(ii) What is the largest number?

(a) 4321 (b) 4123 (c) 3412 (d) 4231

(iii) What is the smallest number?

(a) 1234 (b) 4231 (c) 1342 (d) 1243

(iv) Which number is formed when she interchanges unit place digit to hundreds place digit in largest number?

(a) 4321 (b) 4123 (c) 4231 (d) 1234

(v) The difference between largest and smallest number is 387.

(a) True (b) False

**VERY SHORT ANSWER TYPE QUESTIONS:**

28. What is the sum of the digits in the number 898 and 717?

29. What is the first step of the Collatz conjencture for an even number?

30. What is the smallest four-digit palindrome number?

**SHORT ANSWER TYPE QUESTIONS:**

31. Find the difference between the greatest and the least 5-digit number that can be written using the digits 6; 2, 7, 4, 3 each only once.

32. Read the following numbers and answer the questions below.

475320, 9847215, 97645310, 30458094.

(a) Which is the smallest number?

(b) Which is the greatest number?

(c) Arrange these numbers in increasing order.

33. Fill the table below such that we get as many supercells as possible. Use numbers between 90 and 100 without repetitions.

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**LONG ANSWER TYPE QUESTIONS:**

34. Determine the sum of the smallest and the largest five-digit palindrome number. Also calculate their difference.

35. Apply the Kaprekar rule to the number 2114. Show each step and verify if the iteration leads to Kaprekar constant.