

## INDIAN SCHOOL AL WADI AL KABIR Class VI, Mathematics WORKSHEET (2025-26) Number Play

## **Multiple Choice Questions** Q.1. The smallest number whose digit sum is 8 is: C Α 26 В 17 44 D 80 Q.2. is defined as a number that is larger than all of its neighboring numbers in a grid. C Α Supercell В Cell number Palindrome D None of these Q.3. The Kaprekar constant is: Α 6147 6714 C 6471 D 6174 Q.4. is a number that reads the same forward and backward. Palindrome C None of these Α Supercell В Kaprekar constant D number Choose which is not a palindrome number. Q.5. C Α 16261 В 1661 10601 D 1606 Q.6. The smallest 4-digit number only using the digits 4,0,3,2 is: 2034 В 2304 3042 D 2340 Α Q.7. On a number line, 3256 would be exactly between C Α 3250 & 3500 В 3350 & 3500 3450 & 3500 D 3000 & 3250 Choose the super cell in the table given below: Q.8. 123 103 234 122 546 110 Α 103 В 123 546 D 234 Q.9 In the Collatz sequence, what operation is applied if the number is odd? Multiply by 3 & C В Multiply by 2 Multiply by 3 D Α Add by 1 add 1 Q.10 Which among the following palindromic time? C Α В 10:11 12:12 D 12:21 12:32

LONG ANSWER QUESTIONS:
Write any 4 palindrome numbers using the digits 2,3,4.
Write smallest and greatest 4 – digit number using the digits 1,0,9,6. Also find its sum and difference.
Write any two examples for palindromic date.
Check if the Collatz Conjecture holds for the number 26. (Show the proper steps)
Identify the numbers marked on the number lines below, and label the remaining positions.  a. + + + + + + + + + + + + + + + + + + +
Mark the appropriate positions of the given number on the number line.  2150, 1700, 3200, 4030
If we group the 5-digit numbers between 25,000 and 65,000 such that all of their digits are odd:  a. What is the largest number in the group?  b. What is the smallest number in the group?  c. Which number in the group is closest to 50,000?
Digit sum 18:  a. Write any two numbers whose digit sum is 18.  b. Which is the smallest number whose digit sum is 18?
Mark the super cells in the given table: 1430 6000 5555 8990
4115 3567 4444 8888
3256 1234 6781 1221
5785 1844 5675 6034
CASE STUDY:  Two friends, Leon and Liya, are playing a game with 9 number cards. The numbers written on them range from 0 to 9. Leon chooses four cards with the digits 7, 1, 6, and 4.  DIDENTIFY TO STATE TO STA