SHRI DHARMASTHALA MANJUNATHESHWARA SCHOOL

GRADE 6 WORKSHEET 3

Chapter: Number Play

1. Colour or mark the supercells in the table below.

6228	670	9435	3780	3708	7308	8000	5583	52

2. Fill the table below with only 4-digit numbers such that the supercells are exactly the coloured cells.

5346			1258			9635	

Note : Coloured cells -2,4,9

3.Will the cell having the largest number in a table always be a supercell? Can the cell have the smallest number in a table be a supercell? Why or why not?

4.a. Write the numbers whose digits add up to 14.

b. What is the smallest number whose digit sum is 14?

c. What is the largest 5-digit whose digit sum is 14?

d. How big a number can you form having the digit sum of 14? Can you make an even bigger number?

5.. Find out the digit sums of all the numbers from 40 to 70.

6.Write any 2 examples each for Palindromic Time and Palindromic date.

7.Check 'Kaprekar constant' for the number 8632.

8.Pratibha uses the digits ‘4’, ‘7’, ‘3’ and ‘2’, and makes the smallest and largest 4-digit numbers with them: 2347 and 7432. The difference between these two numbers is 7432 – 2347 = 5085. The sum of these two numbers is 9779. Choose 4 -digits to make:

a. the difference between the largest and smallest numbers greater than 5085.
b. the difference between the largest and smallest numbers less than 5085.

c. the sum of the largest and smallest numbers greater than 9779.

9.1. Write an example for each of the below scenarios whenever possible.

a) 5-digit + 5-digit to give a 5-digit sum more than 90,250

b) 5-digit – 5-digit to give a difference less than 56,503

10.Check if the Collatz Conjecture holds for the starting number 7.