CHAPTER AT A GLANCE
KNOWING YOUR NUMBERS - 1
CLASS - VI

Number: A number is an idea which answers the question how many objects in a collection.

Numerals: The numerals are the symbols by means of which numbers are represented.

INDIAN SYSTEM OF NUMERATION

Crore		Lakh		Thousand		One		
Ten Crore	One Crore	Ten Lakh	One Lakh	Ten Thousand	One Thousand	Hundred	Ten	Ones

One hundred = 10 tens
One Thousand = 10 hundred = 100 tens
One lakh = 100 thousand = 1000 hundred
1 crore = 100 lakh = 10000 thousands

INTERNATIONAL SYSTEM OF NUMERATION

Millions			Thousands			Ones		
Hundred millions	Ten millions	One million	Hundred thousands	Ten thousand	One thousand	Hundred	Tens	Ones

1 Billion = 1000 million

Natural numbers: All counting numbers are called natural numbers.
It is denoted by N = 1, 2, 3, 4, 5...........

Whole numbers: Counting numbers together with zero (0) are called whole numbers.
It is denoted by W = 0, 1, 2, 3, 4, 5..........

Face value: The face value of a digit in a number is the digit itself

Place value: Face value × value of place it occupies in place value

Successor: The number that comes just after a given number is called its successor. It is given by adding 1 to it.

e.g: Successor of 8 = 8 + 1 = 9   Successor of 45 = 45 +1 = 46

Predecessor: Just opposite of successor is called predecessor. Or
Predecessor of 16 = 16 – 1 = 15   Predecessor of 98 = 98 – 1 = 97

Conversion of units

mm	cm	dm	metre	da m	hato m	km
1000	100	10	1	1/10	1/100	1/1000

ROMAN NUMERALS

Rule 1: If a symbol is repeated, its value is added as many times it occurs

1	2	3	4	5	6	7	8	9	10	50	100	500	1000
I	II	III	IV	V	VI	VII	VIII	IX	X	L	C	D	M

Rule 2: A symbol is not repeated more than three times. But the symbols V, L and D are never repeated.

Rule 3: If a symbol of smaller value is written to the right of the symbol of greater value. Its value gets added to the value of greater symbol

e.g : VII = 5 + 1 + 1 = 7   XI = 10 + 1 = 11

Rule 4: If the symbol of smaller value is written to the left of a symbol of greater value, its value gets subtracted

IV = 5 – 1 = 4   XL = 50 – 10 = 40

- The symbol I can be subtracted from V and X ones only
- The symbol X can be subtracted from L and C ones only
- The symbol C can be subtracted from D and M ones only

ASSIGNMENT

1. Fill in the blanks:
   (i)   The smallest natural number is.......
   (ii)   A roman number can't be repeated more than................ times.
   (iii)   LX+.....................................= CL
   (iv)   The smallest 3-digit number with distinct digits is............
   (v)   1 million in international system is equivalent to........................

2. Insert commas in correct positions and write the following numbers in words in Indian system and international system of numeration:
   (i)   30000009   (ii) 2345678   (iii)   2020560   (iv)   1114232

3. What is the place value of digit 7 in the number 37210861?

4. Find the difference between the place values of two 3's in 935071360.

5. Write in numeration form:
   (i)   Five crore forty two lakh thirty nine
   (ii)   Seventy one lakh seven
   (iii)   Four million forty nine thousand six hundred eight
   (iv)   Twenty nine million four hundred five thousand seven hundred three

6. Make the greatest possible 6-digit number using the digits 1,4,3,5,0,7.

7. Arrange the following in ascending order:
   2456890, 274580, 6542913, 485673

8. Round off to nearest tens and hundreds: (I) 7642   (ii) 4386   (iii) 1089

9. Estimate the following results by rounding off with general rule:
   (i)   6398+17928   (ii) 6993-789   (iii) 39× 311   (iv) 968 ×539

10. Write Roman numerals for the following:
    (i)   32   (ii) 347   (iii) 1491   (iv) 1672

11. Write following in Hindu-Arabic numerals:
    (i)   XXXVI   (ii) XLV   (iii) XLIV   (iv) CMLXV

12. A merchant had Rs 80920 with him. He placed an order for purchasing 50 ceiling fans at RS 1200 each. How much money will remain with him after the purchase?

13. A bottle contains 900 ml of oil. What is the total quantity of oil contained in such 7 bottles?

CHAPTER AT A GLANCE

WHOLE NUMBERS -2

CLASS - VI

1. **Natural Numbers :** All counting numbers are known as Natural Numbers. It is denoted by N

For Example : 1, 2, 3, 4, ...

2. **Whole Numbers :** Natural Numbers along with 0 is known as Whole Numbers . These are denoted by W. For Example : 0, 1, 2, 3, 4, ...
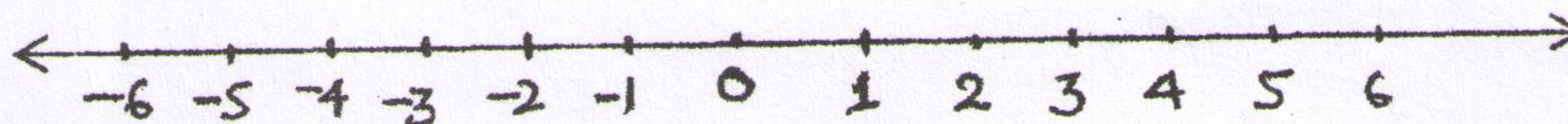
3. **Predecessors :** If one (1) is subtracted in any natural number we get Predecessor of natural numbers.

For Example : predecessor of 12 = 12-1 = 11

4. **Successor :-** Ifone is added to natural number we get successor of natural number
Example: Successor of 46=46+1=47& 51=51+1=52

Number line

5. **Properties of whole numbers:**
$A + B = C$ $A - B = C$

Eg: $3 + 2 = 5$ Eg: $3 - 1 = 2$

6. **Commutative of addition and multiplication:**
$A + B = B + A$ and $A \times B = B \times A$
Eg: $3 + 2 = 2 + 3$ and $3 \times 2 = 2 \times 3$

7. **Distributivity of multiplication over addition:**
$A \times (B + C) = (A \times B) + (A \times C)$

8. Zero is the additive identity for whole number

ASSIGNMENT

1. Write three natural numbers after 1099.
2. Write the successor of 1999.
3. Write the predecessor of 1000.
4. All natural numbers are whole numbers are true or false?
5. Write the smallest whole number.
6. Find 7+5+3 in two ways.
7. Find 12x55 by using distributive property.
8. Simplify 126x55+126x45 by using property.
9. The school canteen charges Rs.25 for lunch and Rs. 5 for milk for every day. How much money do you spend in4 days on these things?
10. Find the product by using suitable property
   (a) 345 X 105   (b) 242 X 102