

DON BOSCO SCHOOL, KOKAR, RANCHI

Session-2020 - 2021

Class 4 ABC

Subject- Mathematics

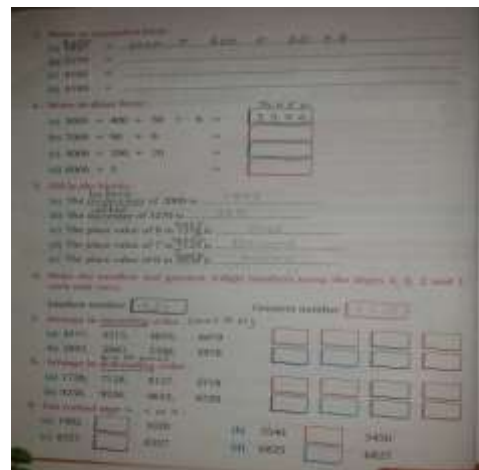
TOPIC : Chapter. 1 - NUMBERS AND NUMERATION

***Please note that the prepared topic has to be written in the copy WITH Date and Exercise no. written.**

Exercise 1 : Revision do it in the book

As you all have already learnt in class 3 till numbers up to 9999 this is quick revision to it.

Please note: Kindly put **TH H T O** as applicable beginning from the **right side**. **One example has been done for all the questions.**



Before starting with this topic kindly note down the following in your **notebook**.

1. Smallest 1-digit number = 1

Greatest 1 – digit number =9

2. Smallest 2-digit number =10

Greatest 2 – digit number =99

3. Smallest 3-digit number =100

Greatest 3 – digit number =999

4. Smallest 4-digit number =1000

Greatest 4 – digit number =9999

5. Smallest 5-digit number =10,000

Greatest 5 – digit number =99,999

6. Smallest 6-digit number =1, 00,000

Greatest 6 – digit number =9, 99,999

NUMBERS BEYOND 9999

1. 5 – digit numbers i.e from 10,000 to 99999

EXAMPLE

TTH	TH	H	T	O
5	7	5	9	0

2. 6– digit numbers i.e from

1, 00,000 to 9, 99,999

EXAMPLE

L	TTH	TH	H	T	O
2	5	0	4	7	9

In the above tables L = Lakhs

H = Hundreds

TTH = Ten Thousands

T = Tens

TH = Thousands

O = Ones

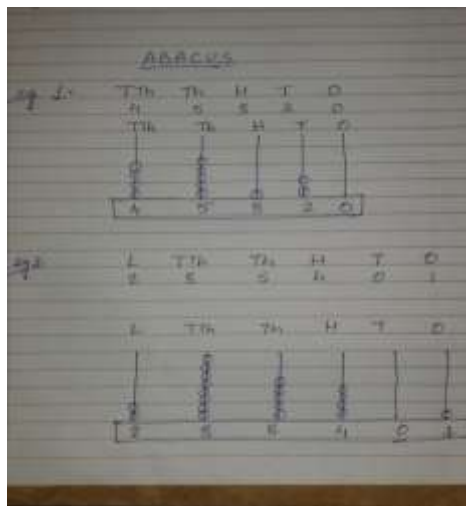
Now as we have known the 5- digit and 6- digit numbers therefore these numbers can also be represented on the **abacus**. For example:-

1. TTH TH H T O

4 5 8 2 0

2. LTTH TH H T O

2 8 5 4 0 1



(The following picture has been attached for your convenience)

Assignment: - Exercise 2 (question no. 2, 3, 4 and 5 in the copy rest in the book)

INDIAN AND INTERNATIONAL PLACE VALUE SYSTEM

(Kindly refer to the book and note down in your copy)

1. Indian Place Value System

In Indian it is known as **Hindu- Arabic system of numeration**. It is divided into 3 groups called **periods**.

a) **Ones period** =

H	T	O
---	---	---

b) **Thousands period** =

T TH	TH
------	----

c) **Lakhs period** =

TL	L
----	---

***NOTE:** - While writing the numbers the periods are separated by a **comma (,)**

For example:

TL	L	TTH	TH	H	T	O
	3	5	7	5	2	1

Therefore the number is written as: - **3, 57,521**

2. International Place Value System

This place value system is used in large number of countries and is also divided into 3 periods.

a) **Ones period** =

H	T	O
---	---	---

b) **Thousands period** =

H TH	T TH	TH
------	------	----

c) **Lakhs period** =

H M	T M	M
-----	-----	---

***NOTE:** - While writing the numbers the periods are separated by a **comma (,)**

For example:

M	H TH	T TH	TH	H	T	O
	8	5	4	1	3	2

Therefore the number is written as: - **854,132**

Assignment: - Exercise 3 (question no. 1 & 2 in the copy)

Number Names

The number name of a number is derived by placing its digits in the place value chart.

Example: - Write the number name of the number 564301 in Indian and International system.

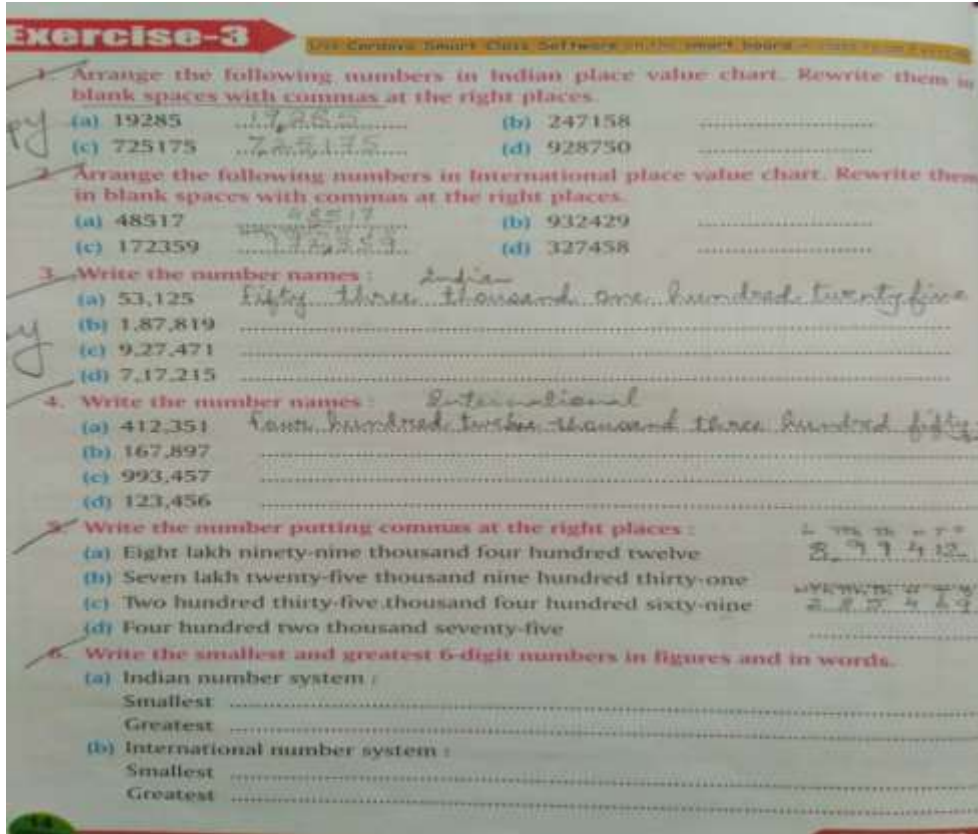
Indian system - L TTH TH H T O

5, 6 4, 3 01= Five lakh sixty-four thousand three hundred one.

International system – HTH TTH TH H T O

5 6 4,3 0 1 = Five hundred sixty-four thousand three hundred one.

Assignment: - Exercise 3 (question no. 3, 4, 5&6 in the copy)



Place Value and Face Value

Face Value – The face value of a digit in a numeral is the digit itself irrespective of its place in that numeral.

L TTH TH HT O

Example: - In the numeral 1, 3 2, 8 5 3 the face value of 3 in the ten thousands place and the face value in the ones place is the same i.e. 3

Place Value - The place value of a number is its value according to the place in the place value chart.

Place value of a digit = face value of digit x value of the place in the number

Example:-Write the place value of the underlined digits in the numeral 3, 85,462.

L TTH TH HT O

3, 8 5, 4 6 2 = 3 lakhs 8 ten thousand 5 thousand 4 hundreds 6 tens 2 ones

L	TTH	TH	H	T	O
3	8	5	4	6	2

Therefore place value of 3 = 3 x 1, 00,000

= 3, 00,000

Place value of 2 = 2×1

$$= 2$$

EXPANDED FORM OF A NUMBER

Writing a numeral as the sum of the place values of all its digits is called expanded form of the number.

Example: - Write the expanded form of 7,83,419.

Solution: - first place it in the place value chart as shown below:-

L	TTH	TH	H	T	O
7	8	3	4	1	9

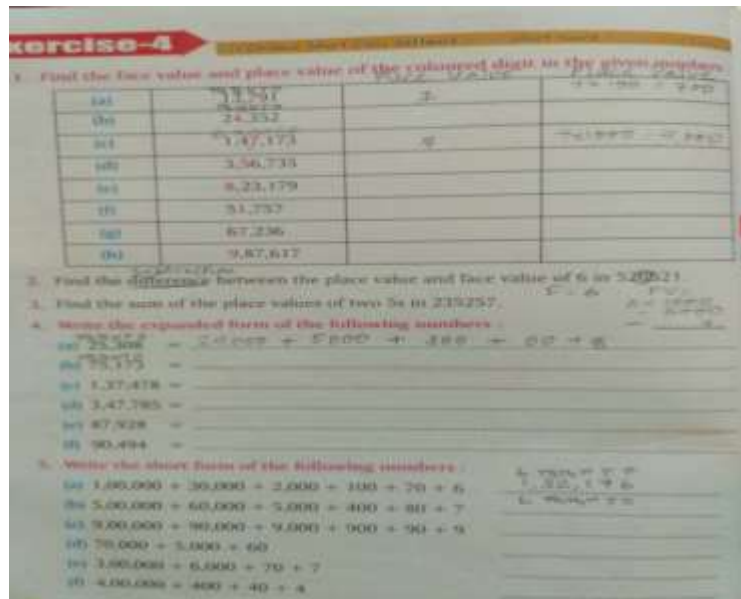
Now in the expanded form we write

$$7, 83,419 = 7 \times 1, 00,000 + 8 \times 10,000 + 3 \times 1,000 + 4 \times 100 + 1 \times 10 + 9$$

$$= 7, 00,000 + 80,000 + 3,000 + 400 + 10 + 9$$

Assignment: - Exercise 4 (question no.1,4 & 5 in the book and question no. 2 & 3 in the copy)

The first part of every questions has been solved for your understanding



Successor and Predecessor of a number

In simple words **Successor** means *after* and **Predecessor** means *before*.

Example :- a) successor of 7, 43,210 = $7, 43,210 + 1$

$$= 7, 43,211$$

b) Successor of 9, 99,999 = ?

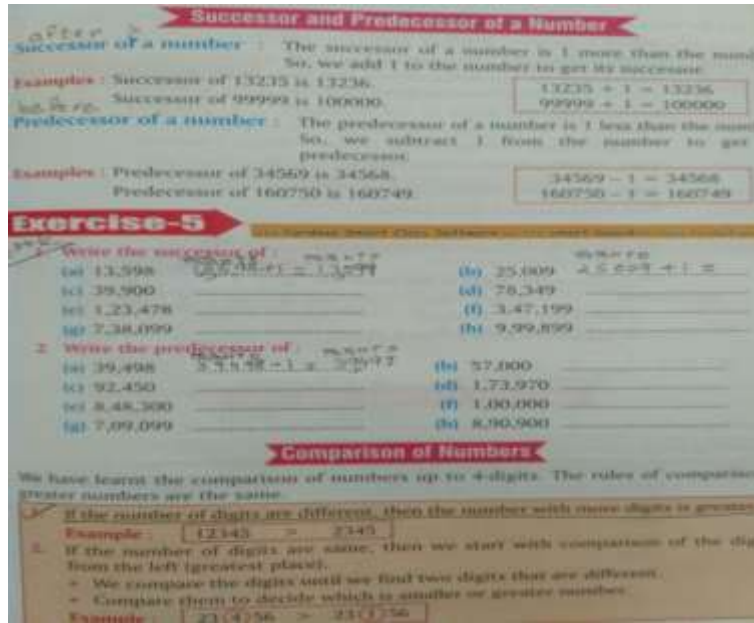
Example :- a) predecessor of 3, 56,019 = $3, 56,019 - 1$

$$= 3, 56,018$$

b) Predecessor of 1, 00,000 = ?

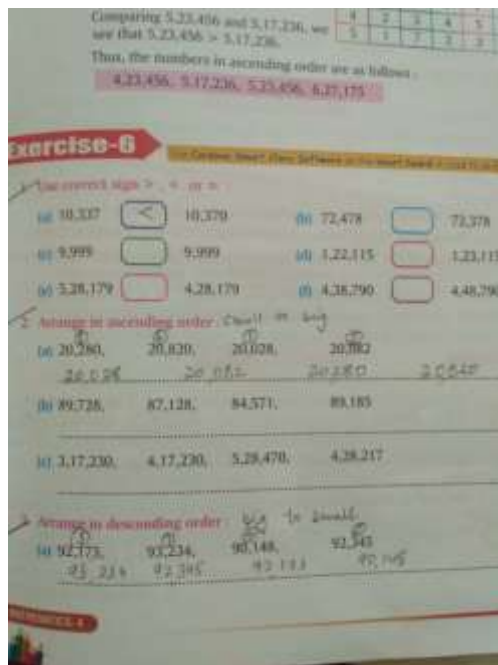
Assignment: Exercise no. 5 (question no 1 & 2 in the book)

The first part of every questions has been solved for your understanding



1. **Comparison of numbers** – you have to put these signs (> < =)
2. **Ascending**(small to big)**and descending order**(big to small)

Assignments: - Exercise no. 6 (question no 1, 2,3 &4 in the book)



Forming numbers

When forming of number certain points have to be focused:-

1. **Forming the greatest number** – To form the greatest number from the given sets of digits, write the digits in decreasing order.

Example:- form the greatest number using 6,3,0,8,1,5

Solution:- the number is 8,65,310

2. Forming the smallest number – To form the smallest number from the given digits, write the digits in increasing order.

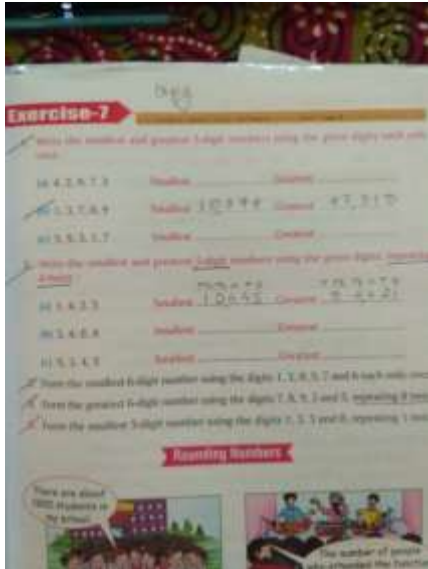
Example: - Form the greatest number using 9, 3, 0,1,4,5

Solution: - The number is 1, 03,459

***do not begin the number with '0'. Write 0 after the next smallest digit.**

Exercise no.7 (question no 1, 2, 3, 4 & 5 in the copy)

The first part of every questions has been solved for your understanding



- Q 4. Form the smallest 6-digit number using the digits 7,8,9,3 and5 **repeating 8 twice**.

Solution: - the number is 2,57,889

Rounding numbers

Rounding off a number does not give the exact value but a value close to the answer.

Rounding to the nearest tens (10).

Example :- a) Round off 48 to nearest 10's

Solution :- 48 lies between 40 and 50

48 is closer to 50 , so it can be rounded to 50

b) Round off 23 to nearest 10's

?

Rounding to the nearest hundreds

Example :- a) Round off 607 to nearest 100's

Solution :- 607 lies between 600 and 700

607 is closer to 600, so it can be rounded to 600

b) Round off 346 to nearest 100's

?

Assignment :- Exercise no 8 (question no. 1 & 2 in the copy)

The first part of every questions has been solved for your understanding

Solve the exercise as I have done in the examples with the statement.

Exercise-8

1. Round off to the nearest tens:

(a) 57 → 60 (b) 93 (c) 291 → 300 (d) 325 → 300 (e) 588
(f) 724 (g) 819 (h) 983 (i) 1723 (j) 35876

2. Round off to the nearest hundreds:

(a) 446 (b) 719 (c) 983 (d) 1185 (e) 1236 (f) 6253
(g) 8999 (h) 15728 (i) 18997 (j) 24264

Mental Maths Corner

1. Tick (✓) the correct answer. *book*

(a) Which is the same as 60 tens?
(i) 6 ones (ii) 60 ones (iii) 6 hundreds (iv) 60 hundreds

(b) The sum of the place values of two 4s in 401406 is
(i) 400400 (ii) 400000 (iii) 440000 (iv) 80000

(c) A six digit number begins with _____ place in Indian system.
(i) lakhs (ii) ten lakhs (iii) thousands (iv) ten thousands

(d) The greatest number of five digits using 1, 0, 9 and 8 repeating 0 is
(i) 98101 (ii) 98100 (iii) 99101 (iv) 90081

2. Fill in the blanks.

(a) The successor of 38,999 is _____.

(b) The predecessor of 9,53,180 is _____.

(c) The expanded form of 4,90,999 is _____.

(d) The place of 0 in 1,02,376 is _____.

#Kindly do Mental Maths corner in the book

Review exercise in the copy