## 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.

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

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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		Т	гн	Tł	H	Н	T	0	]
2. 6– digit numbers i.e from			5	7		5	9	0	1, 00,000 to 9, 99,999
-								_	
EXAMPLE	L	T TH	Т	Н	н	Т	0		
	2	5	0		4	7	9		
In the above tables <b>L</b> =	= Lakł	าร						-	H = Hundreds
π	H = T	en Tho	ousa	and	S				T = Tens
т	H = T	housa	nds						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

2. LTTH TH H T O

4 5 8 2 0

2 8 5 4 0 1

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(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	=	Н	Т	0
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:

For example:

TL	L	TTH	TH	Н	Т	0
	3	5	7	5	2	1

3, 57,521

Therefore the number is written as: -

#### 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	=	Н	Т	0		
b) Thousands period	=	НТ	н   т	тн	TH	
c) Lakhs period	=	НМ	TN	Л	Μ	

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

Μ	H TH	T TH	TH	Н	Т	0
	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 - LTTH 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

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

Arrange the blank spaces	following numbers in with commas at the r	a Indian place va	ande charte sessi	ite them
(a) 19285	and of Partie and and and	(b) 247158		
(c) 725175		(d) 928750		
	following numbers in ces with commas at th		e value chart. R	ewrite the
(a) 48517	The state of the s	(b) 932429		
(c) 172359		(d) 327458		
3 Write the nu	mber names : 2nd	Sen :	a 190 m m	1000
(a) 53,125	Eisty three th	passand proc.	hundrade tur	inter faces
(6) 1.87,819	- 4			
1 (0) 9.27.471				
(d) 7.17.215				
4. Write the m	mber names : 2.1	In melional		
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#### **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 H T O

Example: - In the numeral  $1, \underline{3}$  2, 8 5  $\underline{3}$  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 palce 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
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**Example:**-Write the place value of the underlined digits in the numeral <u>3</u>, 85,46<u>2</u>.

#### L TTH TH H T O

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

L	TTH	TH	Н	Т	0
3	8	5	4	6	2

Therefore place value of  $3 = 3 \times 1,00,000$ 

= 2

#### **EXPANDED FORM OF A NUMBER**

Writing a numeral as the sum of the place values of all its digits is call 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	Н	Т	0
7	8	3	4	1	9

Now in the expanded form we write

7, 83,419= 7 x 1, 00,000 + 8 x 10,000 + 3 x 1,000 + 4 x 100 + 1 x 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

1.44	alos and place value	7.	
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and .	3747.373	14	
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040	8,23,179		
100	31,737		
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(04)	9,87,677		
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#### 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

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

Successor and Produc	assor of a Number
Succession of a manuface The ancession for we add to parameters Succession of 152213 is 13236. Succession of 99993 is 100000.	of a sumber is 1 more than the minds the number to get 85 become (1035 + 1 = 13236 9999 + 1 = 100000
Prodecessor of a momber The predeces for, we add predecessor Examples   Predecessor of 34550 is 34568. Predecessor of 160750 is 160749.	Anti of a Hallforr is 1 broadbare the manth tract 1 from the manther to get 34569-1 - 34568 160750-1 - 160756
Exercise-5	And in case of the second seco
Wenter the sengence of the 13.598         Senative Contraction           10.395,900         13.598	WHAPPED           (b) 25:009         2.5:293:4:1:2           (d) 70:349         (d) 70:349           (d) 70:349         (d) 70:349           (d) 70:349         (d) 70:349           (d) 10:32,000         (d) 1.73:920           (d) 11:300,000         (d) 1.300,000
Gomparison	of Numbers -
We have learned the comparison of numbers     Define manufacts are displayed and different. the     Evanpole     Use an evaluation of digits are same. The     Tom the belt ignorement planet.     ' We complete the digits could such that     Complete shows to decide which is an     Defined.     '' Defined to the digits of the digits	our to 4-aligner. The roles of comparison a the number with more aligner is growing, a new stary with comparison of the digi- tion degra ther are different.

- 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 )

Thus, r	ring 5.33.406 and 3.17.236, we $\begin{array}{c c c c c c c c c c c c c c c c c c c $
exercise-6	Der Constant, State St. State and St. State of Street St.
	< 10,370 m 72,478 72,378
41 9,999	9,999 60 1,22,115 1,23,113
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00 39,728,	87,128, 84,571, 89,185
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L	

#### Forming numbers

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

1. <u>Forming the greatest number –</u> To form the greatest number from the given sets of digits, write the digits in decreasing order.

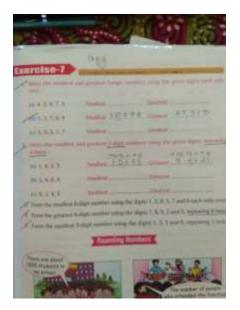
<u>Example:-</u> form the greatest number using 6,3,0,8,1,5 <u>Solution: -</u> the number is 8,65,310 2. Forming the smallest number – To form the smallest number from the given digits, write the digits in increasing order.

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-E	1	APM				
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Tick of the co		1	osk			
(0) Which is th	e same as 60 s	èns?				
(i) 6 ones	(iij 60 o	nes	(m) 61	hundreds	014 60 I	aundreds [
(b) The sum of	the place value	es al tw	n 4s in 401	1406 is		
(i) 400400	(1) 4000	000	(iiii) 44	0000	(iv) BOO	100 E
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<ul> <li>A six digit n</li> <li>(i) lakhs</li> </ul>	(ii) ten l	akhs	(ini) th		(ev) tam	theometats [
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#### #Kindly do Mental Maths corner in the book

Review exercise in the copy