



THE HDFC SCHOOL PUNE

Learning Design

Grade: VI

Subject: Mathematics

Date: 30th March to 17th April 2020

Topics: Knowing Our Numbers

Learning Objectives: Students should be able to

1. Develop the understanding of large numbers.
2. Represent numbers in their expanded form.
3. Understand the Indian and International system of numeration.
4. Compare both the systems.
5. Apply the knowledge of large numbers to real life.
6. Solve word problems based on large numbers.
7. Estimate sum, difference and product using rounding off.
8. Use brackets and solve by expanding it.
9. Write Roman numerals for given Hindu Arabic numerals.
10. Apply the knowledge acquired to real life situations.

Flow of Content

This week covers the recapitulation of concepts covered in the previous class. In addition to that it covers addition , subtraction , multiplication of integers, distributive property of multiplication over addition and subtraction, and division of integers.

Teaching/ Learning Strategies

1. Discussion
2. Questioning
3. Interactive discussion
4. Inter disciplinary teaching.

The method of teaching adopted for this chapter is “Virtual classroom” using MS PowerPoint as the teaching tool during the ZOOM interactive sessions.

1. Concept of expanded notation will be revisited for larger numbers. With the help of examples students will revise place value, number name and its expanded form.

Expanded Form

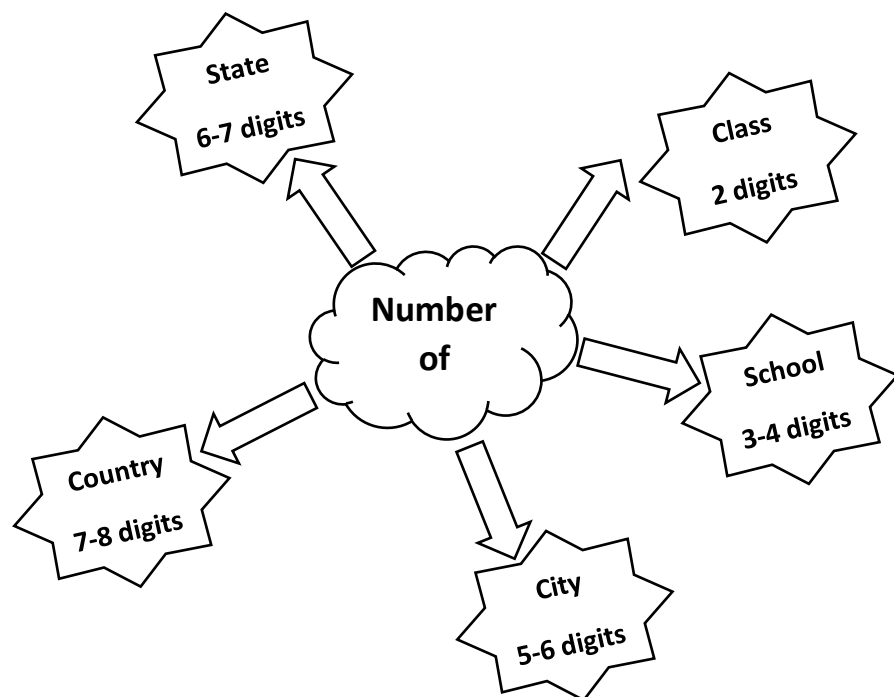
In expanded form, we write the number by showing the value of each digit.

Standard Form 7294

Expanded Form 7000 + 200 + 90 + 4

Number name : Seven thousand two hundred and ninety four.

2: Through examples and probing questions, students will be introduced to 6-7 and 7-8 digit numbers.



Comparison of Indian and International System of Numeration) The correlation between both the systems will be explained with the help of a video on YouTube.

Periods	Millions			Thousands			Ones		
Places	Hundred Million	Ten Million	Million	Hundred Thousand	Ten Thousand	Thousand	Hundred	Tens	Unit
Numbers				7	0	2	8	4	5
	3	6	0	4	0	0	2	9	5

Periods	Crores		Lakhs		Thousands		Ones		
Places	Ten crore	Crore	Ten Lakh	Lakh	Ten Thousand	Thousands	Hundred	Tens	Ones
Place value	10,00,00,000	1,00,00,000	10,00,000	1,00,000	10,000	1000	100	10	1

Indian Numeral System

TC	C	TL	L	TT	Th	H	T	O
3	8	2	4	0	5	7	6	5

Crores Lakhs Thousands

Thirty eight crore twenty four lakh five thousand seven hundred and sixty five

International numeral system

75,318,090

Seventy five million three hundred eighteen thousand and ninety



4: Ex 1.1 will be discussed in class, students will solve the exercises in their notebooks.

5: Application in real life

Students will read the problem and solve the problem and explain the method used and the operation involved.

6: Rounding off song

With this activity students will recall rounding off of numbers.
Some examples will be discussed.

ROUNDING

Underline the digit look next door.

If it's 5 or greater add one more.

If it's less than 5 leave it for sure.

Everything after is a zero, not more.



7: With the help of some examples and by questioning students will understand the concept of estimation using round off (sum, difference and product)

A trader receives money from 2 sources

Source 1: ₹13, 567

Source 2: ₹26, 785

If he has to pay ₹ 37, 000 to someone do you think he has enough money?

Questions from ex 1.3 will be discussed.

8: Rules for writing Roman Numerals will be recapitulated in the class.

Some Basic Rules

- Roman numerals read from **left to right**, larger values to the left and work to the smaller values on the right.
 - ✓ $CV = 100 + 5 = 105$
 - ✓ $LXI = 50 + 10 + 1 = 61$
- A symbol can be repeated **three times**.
 - $III = 1 + 1 + 1 = 3$
 - $XXX = 10 + 10 + 10 = 30$
- Only I, X, C and M can be repeated.

- 1. Whenever a Roman numeral is repeated or a smaller Roman numeral follows a larger number, the values are added together.
 - For example: VIII ($5 + 1 + 1 + 1 = 8$)
- 2. Whenever a smaller Roman numeral appears before a larger Roman numeral, the smaller number is subtracted.
 - For example: IX (1 subtracted from 10 = 9)

e.g – 369

Student will write $369 = 300 + (50 + 10) + (10 - 1)$
 $= CCC + LX + IX$
 $= CCCLXIX$

9. Students will summarize the chapter with the help of the following KWL chart.

I knew	Wanted to Know	I learnt
Place value	Ascending and Descending order of greater numbers	✓
Face value		
Ordering & comparing small numbers		
Rounding off	Estimation	✓
Rules for Roman Numbers	Forming Roman numbers	✓

Differentiated Learning :

For Remedials:

More practice of expanded and standard form will be done. Properties of integers and sums based on that will be done.

For bright students:

Sums with a greater difficulty level will be given for practice.

Resources & Reference Material Used:

NCERT Math text Book, **RD Sharma** (Reference book)

Videos for the Following:

Number System

Roman numbers

Estimation

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Inter Disciplinary Links: Apply the concept of large numbers in the day to day interactions.

Using internet or some encyclopedia, students will find information and express the numbers in Indian system of numeration.

- a) The distance between sun and the Earth.
- b) The length of the longest river.
- c) The height of the tallest mountain
- d) The speed of light.
- e) The diameter of earth.

With the above they can link Math with Science and Geography.

Assessment/Assignment:

Questions from the exercise will be given for practice

Worksheets based on the concepts will be given.

Class test on the topic will be conducted (10 Marks)