

SUBJECT : MATHEMATICS

CLASS : VI

TOPIC : KNOWING OUR NUMBERS

Pre-Content / Content / Post-Content	Learning Outcomes / Objectives	
	General	Specific
<u>PRE-CONTENT</u> - Numerals and Number name - Realize the importance of numbers <u>CONTENT</u> - Comparing and Ordering numbers - Forming greatest and smallest numbers - Place Value Chart and Expanded form - Indian and International Place Value Chart - Large numbers in Practice - Estimation - Roman numerals <u>POST-CONTENT</u> - Application based problems	Students will be able to ✓ recall numerals and number names of various numbers and identify the need of numbers ✓ find greater and smaller number from the given set of numbers ✓ form the greatest and smallest numbers with the given digit ✓ express the place value of a given number using place value chart ✓ understand Indian and International numeration system ✓ apply the knowledge of large numbers in real life ✓ express the given numbers in rounding off to their nearest tens, hundreds or thousands ✓ recognize Roman numerals and adhere to the rules of writing Hindu Arabic numerals in Roman and vice-versa ✓ solve application based problems	Students will be able to ✓ visualize the requirement of numbers in view of real world ✓ compare two numbers and arrange numbers in ascending or descending order ✓ form greatest and smallest numbers with or without repeating the digits ✓ convert the numbers in expanded form and write expanded notation using place values ✓ express numbers and number names in Indian and International system of numeration ✓ solve various problems of real life and execute different operations on them ✓ find the estimated results ✓ convert the numbers in Roman numerals and vice-versa ✓ develop problem solving ability and solve real life problems

Home Work /Assignments:

1. NCERT exercise/solved examples given as home task.
2. Extra practice questions.

Teacher's Activity	Student's Activity	Teacher's Observations and Remedial
Teacher will ask questions based on their previous knowledge to recall numerals and number names of various numbers. talk and show large numbers in the newspaper. help the students while forming smallest and greatest number and conduct the activity on largest number. (Annexure-1) draw the Indian Place value chart and make the students to write numbers in that table. tell students to write the numbers in the place value table and in expanded form. draw the International Place value chart and tells the students to write the numbers in that table. take the examples of rounding off numbers to the nearest tens, hundreds or thousands and conduct the activity on estimation. (Continued Annexure-1) give the rules to write in roman numbers and few examples to start. make the students to solve real life problems including large numbers.	Students will recall the learnt facts about various numbers and realize the need of numbers. arrange large numbers in ascending and descending order. perform the activity as per the instructions given, to create the largest number and write their observations. (Annexure-1) draw the Indian Place value chart and write the numbers in that table. write the same using the place value chart. draw the International Place value chart and write the numbers in that table. perform the activity as per the instructions given and learn to find the estimated results and write their observations. (Continued Annexure-1) learn the rules and try to write the numbers in roman numerals and vice-versa. solve real life problems using large numbers.	Teacher will write his/her observations after the completion of the topic.

Teaching Aids: Smart board, ICR, Place value chart, Number cards.

Methodology/Innovative Methods: Deductive Activity Method, Brainstorming.

Interdisciplinary Links: Linked with Art, Real Life.

Annexure-1

Subject	MATHEMATICS
Class	VI
Chapter/Unit	Knowing Our Numbers
Topic	Large Numbers and Estimation
Time	30 minutes
Nature of Activity	Group

What will I learn (Learning outcome)?

To create the largest 5-digit number using different digits and estimate it by rounding off to the nearest thousands.

Skills:- Creating , Visualizing, Comparing, Accuracy

What I have to do?

To create the largest 5-digit number using different digits and estimate it by rounding off to the nearest thousands by playway method.

What do I require?

Number cards and Place value mat.

What do I need to know?

Place Value System, Comparison and Concept of Estimation.

➤ **Teacher's Activity**

Teacher will

- enable students to recall place value system, comparison and concept of estimation.
- make pairs of the students (say student A and student B) and will explain the steps of the activity.

How will I proceed?➤ **Student's Activity**

- Shuffle all the number cards (0 to 9).

Number Cards**Place Value Mat**

- Without observing the digits, student A takes out 5 cards randomly from the deck of cards and place them on the place value mat as per his/her choice.
- Student B follows the same procedure and gets the number.
- Now, both the students will compare their numbers and whoever gets the larger number, will be the winner.
- Then, the activity will be extended where student A and student B will round off the numbers obtained to the nearest thousand.
- Again, both the students will compare their estimated numbers and whoever gets the larger number, will be the winner.

What have I observed?

- A 5-digit number obtained by student A is _____.
- A 5-digit number obtained by student B is _____.
- Who obtained the larger number? _____
- Estimated number obtained by student A (to the nearest thousands) _____.
- Estimated number obtained by student B (to the nearest thousands) _____.
- Who was the winner after rounding off to the nearest thousands?

What have I learnt?

To create the _____ 5-digit number using different digits and estimate it by rounding off to the nearest _____.

What am I curious to know?

Create the largest 7-digit number using different digits and estimate it by rounding off to the nearest ten thousands.

Let me evaluate myself

1. Compare the following using appropriate sign:

- (a) 99,999 _____ 10,000
- (b) 10,001 _____ ten thousand one
- (c) 34,567 _____ 34,576
- (d) 45,689 _____ 45,689
- (e) Five thousand eleven _____ 5,001

2. Estimate each of the following using general rule:

- (a) 67,845 – 56,790

(b) 3451×29

3. A mobile number consists of ten digits. The first four digits of the number are 9, 9, 8 and 7; the last three digits are 3, 5 and 5 and the remaining digits are distinct. Make the mobile number, the greatest possible number and what are these digits?

4. A factory produced 59,805 bulbs in the month of April and 74,008 bulbs in the month of May. Estimate the increase in the production of the bulbs by rounding off each to the nearest thousands.

5. Find the difference between the greatest 5-digit number and smallest 5-digit number that can be written by using only one digit twice from 6, 3, 0, 2.
