

MATHEMATICS-4

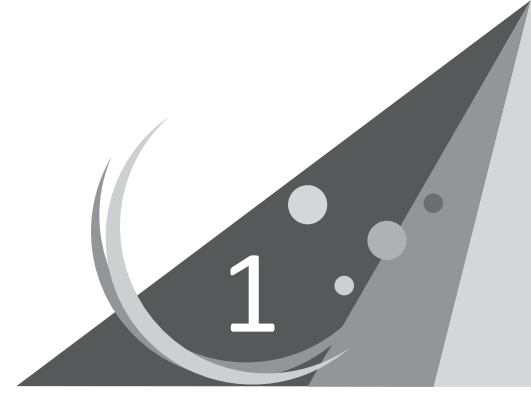
SEMESTER

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Numbers (5–6 digits)



LESSON PLAN

SPECIFIC OBJECTIVES

The students will

- recapitulate the number concept up to 4-digits.
- extend the numbers up to 5- and 6-digits in Indian and International system of numeration.
- know the place value of a digit in a 5- or 6-digit number in Indian and International system of numeration.
- be able to read and write 5- and 6-digit numbers in words and figures in Indian and International system of numeration.
- learn how to expand a bigger number.
- be able to represent 5- and 6-digit numerals using an abacus.
- be able to obtain the successor and predecessor of a 5- and 6-digit number.
- be able to compare and arrange the given numbers of 5- and 6-digits.
- know the number formation using the given digits.
- learn rounding off the numbers.
- extend the knowledge of Roman Numerals.
- know what a palindrome is
- understand the importance of 5- and 6-digit numbers in daily life.

CONTENTS EXPLAINED INSIDE THE CHAPTER

- Five-Digit Numbers (pages 80–82)
- Six-Digit Numbers (pages 82–84)
- Place Value of Digits of a 5- and 6-Digit Numbers (pages 84–85)
- Place Value Chart (page 86)
- Number Names of Five and Six-Digit Numbers (page 87)

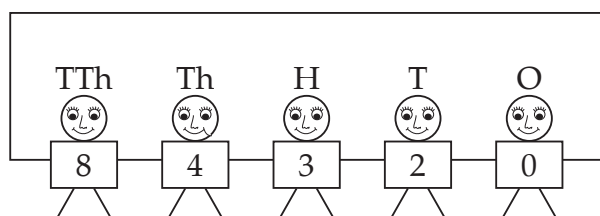
- Five and Six-Digit Numbers in Expanded Form (pages 88–89)
- Representing Five and Six-Digit Numbers Using Abacus (pages 89–90)
- Successor and Predecessor (pages 90–92)
- Comparison of Numbers (pages 92–93)
- Ascending and Descending order (pages 93–94)
- Largest and smallest Numbers using Given Digits (pages 94–96)
- Rounding Off Numbers (pages 96–98)
- International System of Numeration (pages 98–99)
(Five & Six-Digit Numbers)
- Place value of Digits of a 6-Digit Number (pages 99–100)
(International System of Numeration)
- Place Value Chart (page 100)
- Number Names of Six-Digit Numbers (pages 101–102)
- Roman Numerals (pages 102–103)

TEACHING AIDS

An abacus, matchsticks, a grid paper/graph paper, flash cards, old newspapers or magazines, etc.

TEACHING STRATEGY

- For initiating the chapter, students need to recall the concepts that they learnt earlier in the previous classes. Here, the teacher should encourage them to complete ‘Let Us Recall’ exercise.
- The teacher should extend their number concept for 5-and 6-digit numbers in **Indian system of numeration** by introducing the places of **ten thousands** and **lakhs** under the periods of ‘Thousands’ and ‘Lakhs’ respectively. For text and exercises, she should go through the pages 80–84.
- Next, she should talk about the place value of a digit in a much bigger number and about how to write a 5- and 6-digit number in the place value chart. Also, she should assist them in reading and writing number names of 5- and 6-digit numbers under **Indian system of numeration**. Further, she should explain them how to express the given numbers in expanded form and short form. Thereafter, she should use the six pin abacus and involve the students in displaying the bigger numbers on the abacus.
Finally, she should go to pages 84–90 for text and exercises.
- Again, she should recall them **successor** and **predecessor** of a number. Then, she should go to pages 90–92 for text and exercise.
- To learn the comparison of numbers as well as order of numbers up to 9999, the teacher should recall the rules once more and ask them to follow the same for comparing and arranging the bigger numbers also. Here, they may use the Maths Lab Activity to reinforce the concept. For text and exercise, she should go to pages 92–94.
- Further, the teacher should discuss with them about the formation of numbers. She should prepare the flash cards and invite 5 or 6 students near the blackboard to display bigger numbers so formed by making them stand in a row. For example, the largest 5-digit number formed using the digits 2, 0, 4, 3 and 8 can be shown as:



Then, she should go to the pages 94–96 for related text and exercise.

- Thereafter, the teacher should teach them rounding off the numbers to nearest tens, hundreds, thousands, ten-thousands, etc. and explain their applications in day-to-day life. Also, she should go to pages 96–98 for text and exercise.
- Now, the teacher should discuss with them about the number concept for 5- and 6-digit numbers in **International system of numeration** by introducing the place of **hundred thousands** under the thousands period. Also, she should talk about the place value of a digit in a 6-digit number and about how to write a 5- and 6-digit number in the place value chart under **International system of numeration**. Further, she should assist them in reading and writing number names of 6-digit numbers under **International system of numeration**. Thereafter, she should go through the pages 98–102 for related text and exercise.
- Henceforth, the teacher should teach them the extension of concept of Roman numerals as they have been already introduced in the previous class. She should go to pages 102–103 for text and exercise.
- She should encourage them to form a palindrome by giving an idea about it. Then, she should ask them to enjoy the Fun Zone.
- Finally, the teacher should motivate them to complete the project work. She may show them some examples using old newspapers and magazines.

EXPECTED LEARNING OUTCOMES

Students are able to

- explain the numbers up to 9999.
- read and understand 5- and 6-digit numbers.
- understand the place value of a digit in the larger numbers.
- write the bigger numbers in expanded and short forms.
- show the bigger numbers using the abacus.
- get the successor and predecessor of the bigger number.
- do skip counting in two's, tens's, hundred's, etc.
- identify the bigger/smaller numbers between two numbers mentally.
- arrange the given numbers in ascending or descending order.
- form the largest or the smallest number of 5- or 6-digits using the given digits.
- round off the numbers to the nearest 10s, 100s, 1000s and 10000s.
- read and write 5- and 6-digit numbers under International System of Numeration.
- understand the Roman numerals up to 100.
- recognise and form a palindrome.