

MATHEMATICS – 2

SEMESTER

1

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Numbers (1–1000)



LESSON PLAN

SPECIFIC OBJECTIVES

The students will

- be able to read and write 3-digit numbers in words and figures.
- learn After, before and between from numbers 101 to 999.
- will recognise the digits at hundreds, tens and ones places of a given three-digit number.
- will understand the place value of a digit in the given number.
- know the expansion of 3-digit numbers.
- represent the numbers on abacus using beads.
- Compare and place in order the given 3-digit numbers.
- learn the formation of greatest and smallest 3-digit numbers using the given digits.
- be able to skip counting in tens, twenties, fifties and hundreds.
- be able to recognise a variety of birds by name.
- know the importance of teamwork.
- know some important 3-digit numbers.

CONTENTS EXPLAINED INSIDE THE CHAPTER

- Let's Count 101–1000 (Page–68)
- Numerals 101–200 (Pages 69–70)
- Numerals 201–300 (Pages 71–72)
- Numerals 301–400 (Pages 73–74)
- Numerals 401–500 (Pages 75–76)
- Numerals 501–600 (Pages 77–78)
- Numerals 601–700 (Pages 79–80)
- Numerals 701–800 (Pages 81–82)
- Numerals 801–900 (Pages 83–84)

- Numerals 901–1000 (Pages 85–86)
- After, Before and Between (Page 87)
- Place Value (Pages 88–89)
- Place Value of Digits (Pages 90–91)
- Abacus Time Again (Pages 91–93)
- Comparing Numbers (Pages 93–94)
- Ascending and Descending Order (Pages 94–95)
- Greatest and Smallest Numbers With Given Digits (Pages 96–99)
- Counting in Tens, Twenties, Fifties and Hundreds (Page 100)

TEACHING AIDS

Grid papers of size 10×10 , an abacus having three rods and beads, flash cards, a bangle, a chart paper, bindis of three different colours, a chalk and a blackboard.

TEACHING STRATEGY

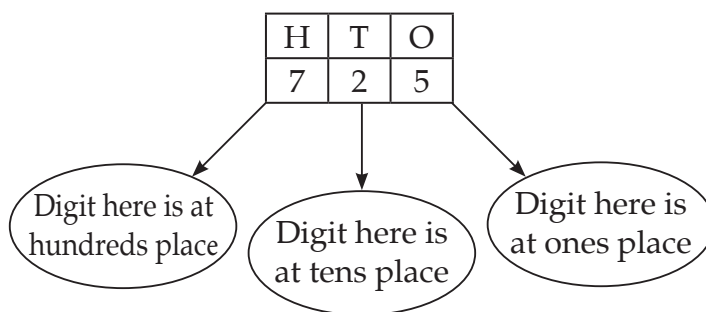
- The teacher should recall the numbers up to 99 taught in Class-I and then ask the students to solve the questions from part (A to J) given in 'Let Us Recall' on pages 66–67.
- The teacher should assist the students in writing numerals from 101–200 and their number names. The teacher should provide two sheets of 10×10 grid paper to each student with the instruction that they have to write counting numbers 101 to 200 forward and backward. Thereafter, she should go through the pages 68–70 for text and exercise 1.1.
- The teacher, in a similar manner, should discuss about numerals from 201–300, 301–400, 401–500, 501–600, 601–700, 701–800, 801–900 and 901–1000, respectively.

After that, she should go through the pages 71–86 for related text and exercises 1.2 to 1.9.

- Further, the teacher should recall After, Before and Between taught in Class-I and extend their learning for the same for 3- digit numbers and ask the students to do exercise 1.10.
- Again, the teacher should explain about the place value and digits at hundreds, tens and ones places of a given three-digit number. For this, the teacher should sketch a place value grid on the blackboard as shown below:

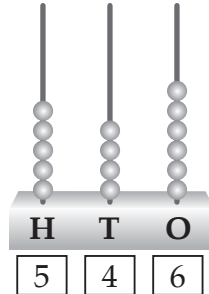
H	T	O

Then she may choose any three digit number, say, 725, and write it in the place value grid to explain the digits at Hundreds, Tens and Ones places as shown below.



After that, she should ask them to do exercise 1.11.

- Next, she should explain about place value of a digit in the given three-digit number and hence also the expanded form of the number using the blackboard. Then, she should go to pages 89–91 for related text and exercise.
- Next, she should use the abacus to show any 3-digit number, say, 546 with the help of beads as given below:



After that, she should go through the pages 91–93 for related text and exercise 1.14.

- Again, the teacher should teach comparing and ordering numbers to the students. For this, she should sketch a place-value grid on the blackboard and ask the students of the class to copy it in their notebooks shown below.

H	T	O

The, she should choose a few pairs of numbers and ask the students to enter these numbers according to place value of the digits. Next, she should ask them to compare the digits at the higher place first and then move towards lower places.

For example, 528 and 586

H	T	O
5	2	8
5	8	6

↑ ↑ ↙ ∴ 528 < 586
 Same 2 < 8

Similarly, she should ask them to compare 3 or more numbers and arrange those numbers from the smallest to the biggest in ascending order and from the biggest to the smallest in descending order.

Thereafter, she should go through the pages 93–95 for related text and exercises 1.15 and 1.16.

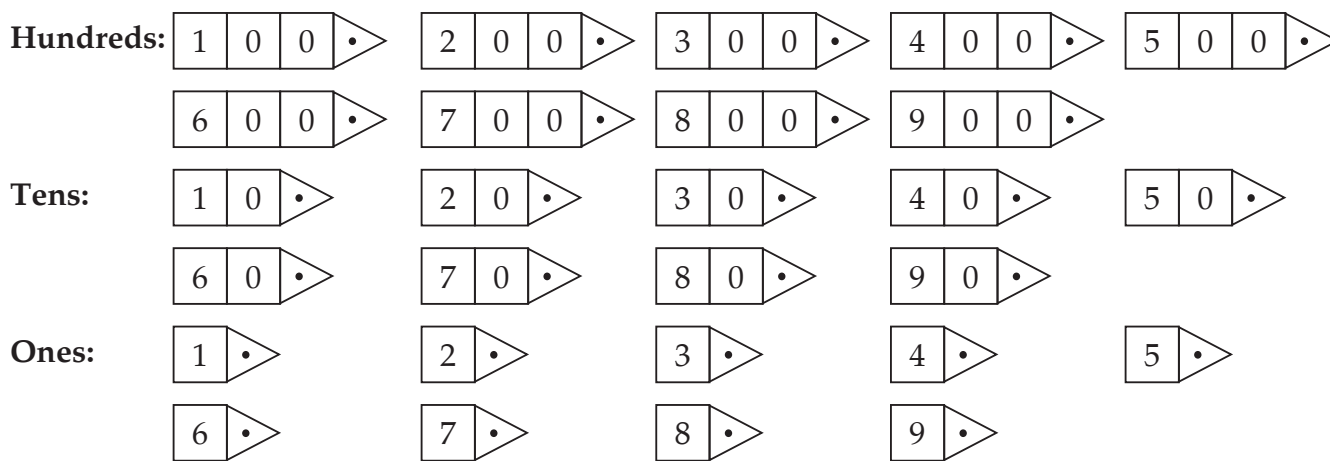
- After that, she should assist the students in forming greatest and smallest three-digit numbers, using the given digits, where repetition of digits may be allowed or not as given on pages 96 to 99 and ask the students to do these exercises for practice.
- Then, she may go to page 100 for counting in tens, twenties, fifties and hundreds.
- Also, she should ask the students to solve the puzzle in part (A) which integrates ordinals as well as bird kingdom. For the puzzle given in part (B), the teacher should ask the students to use skip counting.

- Then, she should go to page 102 and talk about the topic 'Health and Hygiene' and 'Teamwork' given in Part (A) of life skills, then, she should ask them to solve the exercise based on it. Also, she can put the data of her school and solve the similar questions. For Part (B), the teacher should talk about some important 3-digit numbers which are used in emergency call and then ask the students to fill the table.
- Finally, the teacher should demonstrate the lab activity given on pages 103–104 with the help of available aids.

SUGGESTED ACTIVITY

Aim: To understand place values and expanded notation of a 3-digit number

Materials: First, prepare a few sets of place-value cards as shown below.



Method: The teacher should divide the class into groups and provide one set of place-value cards to each group. Then, she should ask them to pick up 1 card for each of three places and put them one over other as shown below.

Suppose, they pick up

and put them as

Thus, the teacher should tell the students that

$$\begin{array}{c}
 \boxed{6} \boxed{3} \boxed{8} \blacktriangleright \\
 \text{Number}
 \end{array}
 =
 \begin{array}{c}
 \boxed{6} \boxed{0} \boxed{0} \blacktriangleright \\
 \text{Expanded form}
 \end{array}
 +
 \begin{array}{c}
 \boxed{3} \boxed{0} \blacktriangleright \\
 \text{Expanded form}
 \end{array}
 +
 \begin{array}{c}
 \boxed{8} \blacktriangleright \\
 \text{Expanded form}
 \end{array}$$

Outcome: The students will know the place value and expanded form of the number.

EXPECTED LEARNING OUTCOMES

Students are able to

- read and understand the 3-digit numbers in words as well as in figures.
- understand about the place value of a digit in a number.
- expand the numbers using the place value of the digits.
- represent the 3-digit numbers using abacus.

- compare and order the given numbers.
- form the greatest and smallest numbers using the given digits.
- know a number of birds.
- complete the job with team formation and understand the importance of team work.
- know some important 3-digit numbers for emergency call.