2   Addition

LESSON PLAN

SPECIFIC OBJECTIVES

The students will
◗ recall the addition of 3-digit numbers.
◗ learn the addition of 4-digit numbers (without carrying).
◗ know the addition of 4-digit numbers (with carrying) using the short form and expanded form.
◗ understand the addition of 4-digit numbers in day-to-day life.
◗ know the properties of addition.
◗ be able to find the estimated sum of two 4-digit numbers by rounding to nearest ten, hundred, thousand, etc.
◗ be able to identify the magic square having large numbers.

CONTENTS EXPLAINED INSIDE THE CHAPTER
◗ Addition of 4-Digit Numbers (without carrying) (pages 99–100)
◗ Addition of 4-Digit Numbers (with carrying) (pages 100–102)
◗ Addition Stories (pages 102–104)
◗ Properties of Addition (pages 104–105)
◗ Estimating Sum (pages 105–107)

TEACHING AIDS
◗ A sheet of paper, a pencil, a chalk and a spinner.

TEACHING STRATEGY
◗ The teacher should recall the students about the addition of 3-digit numbers learnt earlier in class II and then ask them to do part (A to D) given in 'Let Us Recall'.
◗ Further, she should explain them how to add 4-digit numbers, following the same process as used for 3-digit numbers. First, she should ask them to add the numbers without carrying and then she should go to pages 99–100 for text and exercise.

◗ Again, she should teach them the addition of 4-digit numbers with carrying as given on pages 100–102. She must be careful about common error done by the students.

◗ Now, the teacher should interact with the students regarding daily life situations for addition. For text and exercise, she should go to pages 102–104.

◗ Thereafter, the teacher should divide the class into groups of 2–4 students, and should start to teach them the properties of addition.

◗ First, the teacher ask the students to write few pairs of numbers on the blackboard and ask them to add alternately. Check whether the results are same. For example, 2468 and 6953

Students–A		Students–B
① ① ①		① ① ①
2 4 6 8		6 9 5 3
+ 6 9 5 3		+ 2 4 6 8
9 4 2 1	←— same result —→	9 4 2 1

◗ Thus, she can discuss for order property of addition. Again, she can give them three numbers for adding in different groups. For example, 1234, 485, 1968

Student A: (1234 + 485) + 1968 = 1719 + 1968 = 3687 ⎫
Student B: 1234 + (485 + 1968) = 1234 + 2453 = 3687 ⎬ Same result
Student C: (1234 + 1968) + 485 = 3202 + 485 = 3687 ⎭

◗ Thus, she can confirm them that this is the grouping property of addition. Similarly, she will show that when 0 is added to a number or a number is added to zero, the sum is the number itself. After that, she can go to the pages 104–105 for text and exercise.

◗ Further, the teacher should introduce them about to find the estimated sum of given two 4-digit numbers by rounding to nearest ten, hundred, thousand, etc. For text and exercise, she should go through the pages 105–107.

◗ Finally, she should involve the students in enjoying the Math Lab Activity and develop their thinking skills.

EXPECTED LEARNING OUTCOMES

Students are able to

◗ perform the addition of 4-digit numbers (without carrying/with carrying) while the sum is up to 9999.

◗ handle the situation from daily life involving addition.

◗ use the properties of addition for finding the missing numbers in addition fact.

◗ find the estimated sum of the given 4-digit numbers.

◗ solve the problems of magic squares mentally.