

Addition and Subtraction

SPECIFIC OBJECTIVES

The students will

- recall the concept of addition and subtraction.
- learn to do addition of 5- and 6-digit numbers without and with carrying.
- know the properties of addition.
- be able to estimate the sum.
- learn to do subtraction of 5- and 6-digit numbers without and with carrying.
- know the properties of subtraction.
- be able to estimate the difference.
- learn to solve mixed problems in addition and subtraction.
- learn to solve word problems involving addition, subtraction or both.
- know the tricks to add/subtract easily.
- enjoy magic mind reader.
- refresh their mind using an interesting game.

CONTENTS EXPLAINED INSIDE THE CHAPTER

- Addition and Subtraction of 5- and 6-Digit Numbers (pages 96-99)
- Addition Stories (Word Problems) (pages 99-100)
- Properties of Addition (pages 101-102)
- Estimating Sum (pages 102-104)
- Subtraction of 5-Digit Numbers (pages 104-105)
- Checking Subtraction by Addition (pages 106-107)
- Subtraction Stories (Word Problems) (pages 107-108)
- Properties of Subtraction (pages 108-109)
- Estimating Difference (pages 109-111)
- Addition and Subtraction Together (pages 111-112)

TEACHING AIDS

A sheet of plane paper, a dot paper, pens of two colours, a pencil, a chalk, a blackboard, etc.

TEACHING STRATEGY

- Since students are already familiar with the process of addition as well as subtraction, the teacher should recall the concepts by involving them in completing the questions given in 'Let Us Recall'.
- Next, the teacher should explain operation of addition for 5- and 6-digit numbers (without and with carrying) as shown on pages 96–98. Then, she should ask them to do exercise 2.1.
- Further, she should talk about the situations from daily life where addition is being used. For text and exercise, she should go to pages 99–100.
- Now, she should discuss with them about the properties of addition as given on page 101. Then, she should ask them to do exercise 2.3.
- Thereafter, she should motivate them to estimate the total of some items. For text and exercise, she should go to pages 102–104.
- As students are able to do subtraction using the concepts gained earlier, So, the teacher should teach them the extension of 5- and 6-digit numbers as given on pages 104–107 of text. Then, she should instruct them to solve the questions of exercise 2.5.
- The teacher should talk about the situations from daily life where subtraction is being used. For text and exercise, she should go to the pages 107–108.
- Thereafter, she should develop their ideas about the properties of subtraction. She should also encourage them to estimate the difference of some items. For text and exercise, she should go to pages 108–111.
- The teacher should explain the method to solve mixed problems of addition and subtraction. She should also talk about the situations from daily life where both addition and subtraction are being used. For text and exercise, she should go to the pages 111–112.
- Further, the teacher should reinforce their concept by developing the idea of **compensation** for easier addition/subtraction. Then, she should involve them in doing the activity given in the Fun Zone.
- Next, she should explain them how to use magic mind reader given in puzzle and then ask them to try themselves for better understanding.
- At the end of the chapter, the teacher should ask the students to enjoy the game given under Maths Lab Activity.

EXPECTED LEARNING OUTCOMES

Students are able to

- do addition of numbers up to the sum 999999.
- understand and use the properties of addition.
- estimate the sum of the given items.
- do subtraction of 5- and 6-digit numbers.

- know the properties of subtraction.
- estimate the difference of some items.
- evaluate the result of mixed problems in addition and subtraction.
- tackle the daily life problems involving addition and subtraction of larger numbers.
- use the idea of compensation for doing addition or subtraction easily and quickly.
- refresh and sharpen their brain by playing addition game.