## Division

# SPECIFIC OBJECTIVES

#### The students will

- O recall the concept of division.
- O learn division using multiplication facts of 16–20.
  - O learn how to do long division of large numbers by numbers up to 20 without/with remainder.
- O learn how to divide a larger number by 2- and 3-digit numbers.
  - O understand the shortcut methods of dividing a number by 10s, 100s and 1000s.
- O know the application of division in daily life situations.
- O understand the division facts/properties.
- O learn how to estimate the quotients.
- o be able to simplify expressions using multiple operations together.
  - O be able to solve challenging questions in which mixed operations are involved.

## CONTENTS EXPLAINED INSIDE THE CHAPTER

- O Division Using Multiplication Facts of 16–20 (pages 136–137)
- O Long Division (Without Remainder) (page 137)
- O Long Division (With Remainder) (page 138)
- O Division by a Two Digit number Greater than 20 (page 139)
- O Division by a Three Digit Number (pages 139–140)
- O Division by 10, 100 and 1000 (pages 140–141)
- O Division Stories (pages 141–143)
- O Division Facts (page 144)
- O Estimating Quotient (pages 144–145)
- O Simplification of Expressions with Two or More Operations (DMAS) (pages 145–146)

#### TEACHING AIDS

Pencil colours, a pen, a paper and a worsheet

#### TEACHING STRATEGY

- O At the beginning of the chapter, the teacher should recall the concept of division learnt earlier in class III. Thereafter, she should ask the students to do 'Let Us Recall' exercise.
- O Then, the teacher should recall multiplication table of any number from 16–20 and make division facts for each multiplication fact on the blackboard interacting with the students. For text and exercise, she should go to pages 136–137.
- O Next, the teacher should explain how to perform long division (without and with remainder) of large numbers by numbers 16–20 by going to pages 137–138 and instruct them to solve the questions given in exercise 4.2. She should also focus on common error committed by the students.
- O Thereafter, she should teach them about how to divide a large number by any two-digit numbers greater than 20 or by any three-digit number. For text and exercise, she should go through the pages 139–140.
- O Further, she should develop their idea of shortcut methods for dividing a number by 10s, 100s and 1000s. Thereafter, she should talk with them about the daily life situations in which division is used. For text and exercises, the teacher should go to pages 140–143.
- O Now, she should also talk about the division facts/properties given on page 144 and instruct them to do exercise 4.6.
- O Next, the teacher should discuss with them about the estimated quotient of any two numbers by rounding them to nearest tens, hundreds or by any suitable rounding. For text and exercise, she should go through the pages 144–145.
- O Henceforth, she should assist them in simplifying expressions with two or more operations (DMAS) as given on pages 145–146 and encourage them to do exercise 4.8 for providing more practice.
- O To solve the task, the teacher should help them to find out the rule involved in first row.
- O Again, the teacher should encourage them to crack the challenge given in the puzzle. Also, she should ask them to do the job given under Maths Lab Activity.

### EXPECTED LEARNING OUTCOMES

Students are able to

- O do the division using multiplication facts of 16–20.
- O do division of large numbers by 2- and 3-digit numbers without/with remainder.
- O use the shortcut methods for dividing a number by 10s, 100s and 1000s.
- O tackles the problems from daily life situations involving division.
- O understand the division facts/properties.
- O find the estimated quotient.
- O do the four basic operations together.