

Multiplication

SPECIFIC OBJECTIVES

The students will

- recall the multiplication tables of 1–15.
- learn the multiplication tables of 16–20.
- be able to do long multiplication using multiplication facts 16–20.
- be able to find the product of two numbers using expanded notation.
- be able to multiply by numbers greater than 20.
- know the shortcut of multiplication by 10s, 100s and 1000s.
- understand the use of multiplication to solve daily life problems.
- understand the multiplication facts/properties.
- find the estimated product of two numbers by rounding to nearest tens, hundreds, thousands, etc.
- know the lattice method of multiplication.

CONTENTS EXPLAINED INSIDE THE CHAPTER

- Let Us Learn Tables (16–20) (pages 118–120)
- Long Multiplication Using Multiplication Facts 16–20 (page 121)
- Expanded Notation (pages 121–122)
- Multiplication by Numbers Greater than 20 (pages 122–123)
- Multiplying by 10, 100 and 1000 (page 123)
- Multiplication by Multiples of 10 (pages 123–124)
- Multiplying Two Multiples of 10 (pages 124–125)
- Multiplication Stories (pages 125–127)
- Multiplication Facts (pages 127–129)
- Estimating Product (page 129)

TEACHING AIDS

There is no need of special materials in this chapter.

TEACHING STRATEGY

- First, the teacher should recall the students about the concept of multiplication and multiplication tables (1–15) learnt earlier in the previous classes. Thereafter, she should instruct them to do part (A to H) given in 'Let Us Recall'.
- Next, she should teach them multiplication tables from 16–20 and then she should move to pages 118–120 for text and exercise.
- For doing “long multiplication using multiplication facts 16–20”, “expanded notation” and “multiplication by numbers greater than 20”, she should use the text and exercises given on pages 121–123 and ask them to practise these exercises.
- Next, she should teach them how to multiply a number by 10s, 100s, 1000s, etc. using shortcut method. Further, she should also discuss with them about the topics “multiplication by multiples of 10” and “multiplying two multiples of 10”. To do this, she can solve few problems using chalk and a blackboard. After that she should move to pages 123–125 for related text and exercises.
- Further, the teacher should discuss some situations from daily life in which multiplication of larger numbers would be required. The she should move to pages 125–127 for text and exercise.
- Again, she should discuss about the multiplication facts/properties through some examples as explained on pages 127–128 and then ask the students to do exercise 3.8 for providing more practice.
- Henceforth, she should teach them about how to find the estimated product of larger numbers by rounding to nearest tens, hundreds, thousands, etc.
After that, she should go to page 129 for text and exercise.
- Further, the teacher should involve the students to do the multiplication using lattice multiplication algorithm as explained under Fun Zone.
- To reinforce the idea of estimating the products, the teacher should instruct them to play the game as directed under the Maths Lab Activity.

EXPECTED LEARNING OUTCOMES

Students are able to

- read and write the multiplication tables up to 20.
- do long multiplication using multiplication facts 16–20.
- to find the product of a large number with one digit number using expanded notation.
- multiply bigger numbers by the numbers greater than 20.
- do the multiplication using shortcut method.
- tackle the problems involving multiplication in daily life.
- understand the multiplication facts/properties.

- find the estimated product of two large numbers.

After completing chapters 1–3, the teacher may evaluate the students using the materials given in Periodic Test–1 or prepare another similar sheet.