## Instruction for teacher:

O Make a copy of the blank Bingo sheet for each child. Sheets may be made in a square or a rectangular shape. Here is a sample of square Bingo sheet for 16 numbers.
O Instruct the students to fill in their sheets with numbers from 1 to 16. Ensure that they use a pen or a marker, so, they cannot change their numbers during the game.
O Make sure that each child has filled in his/her sheet.
O Play the game by calling out pairs of numbers and instructing the students to put a cross ' $X$ ' on the HCF of two numbers.
O Make sure to note down the numbers and their HCF as you call them out, so, you can use it to cross-check the students' Bingo cards when they have done his job.
O Give the students time to calculate the HCF each pair as you play the game. You might prepare the list of numbers beforehand so that you do not end up with the same HCFs for multiple pairs.
O The first student to cross out all four numbers in a row or a column wins the game.
O You can have multiple winners by creating categories like '1st row', '2nd row', 'blackout' (the first to cross out all 16 squares), etc.

After completing chapters 1-3, the teacher may use the materials of Periodic Test-1 to evaluate the students.

## Fractions



## LESSON PLAN

## SPECIFIC OBJECTIVES

The students will
O recall different types of fractions learnt earlier.
O know the equivalent fractions and learn to reduce the fractions to their simplest form.
O understand comparing and ordering of fractions.
O learn addition/subtraction of different fractions, viz., like/unlike/mixed fractions.
O know how to multiply a fraction by a whole number or by another fraction.
O learn about reciprocal/multiplicative inverse of a fraction.
O know the division of a fraction and a whole/fraction.
O understand the application of fractions in daily activity.

## CONTENTS EXPLAINED INSIDE THE CHAPTER

O Types of Fractions (pages 139-143)
O Comparing and Ordering of Fractions (pages 143-146)
O Addition and Subtraction of Fractions (pages 146-150)
O Multiplication of Fractions (pages 150-153)
O Reciprocal of a Fraction (page 153-154)
O Division of Fractions (pages 154-157)

## TEACHING AIDS

Drawing sheets, a tracing paper, sketch pens, a geometry box, paper, a pencil, a chalk, a blackboard, etc.

## TEACHING STRATEGY

O Though the students have learnt about fractions yet the teacher should recall the concepts before moving next. To do this, she should instruct them to do 'Let Us Recall' exercise.

O Then, the teacher should talk with them about the type of fractions including equivalent fractions. Also, she should develop the idea to reduce a fraction in its simplest form. For text and exercise, she should go to pages 139-143.
O Next, the teacher should explain to them how to compare and order the given fractions. For better understanding, she should demonstrate a few samples using figures as given in the text. For text and exercise, she should go to pages 143-146.
O Thereafter, the teacher should encourage the students to add/subtract different types of fractions as they have already learnt in the previous classes. To develop the interest for using these operations, she may involve them in Maths Lab Activity. For text and exercise, she should go to pages 146-150.
O Further, the teacher should explain to them about the multiplication of fractions. First, she should teach them how to multiply a whole number and a fraction and then the multiplication of two fractions. She should focus on common error that is committed by students generally. For text and exercise, she should go to pages 150-153.
O For the division of fractions, the teacher should explain the concept of the reciprocal of a fraction. Sometimes, the reciprocal is also known as a multiplicative inverse.
O Then, she should discuss dividing a whole number by a fraction, a fraction by a whole number and a fraction by another fraction. For text and exercise, the teacher should go to pages 153-157.
O By going through "THINK AND ANSWER" questions, the teacher should involve them in performing the job given under puzzle.

## EXPECTED LEARNING OUTCOMES

Students are able to
O recognise different types of fractions like proper, improper, mixed, etc.
O check whether the given fractions are equivalent or not.
O convert a fraction to its lowest term.
O compare and arrange the fractions in a particular order.
O add/subtract two or more fractions conveniently.
O multiply/divide the fractions by wholes/ fractions.
$O$ find out the reciprocal of a fraction.
O tackle the situations involving the operations of fractions in daily life.

## SUGGESTED PUZZLE

After completing the topic addition and subtraction of fractions, the teacher may use this puzzle to reinforce the students' knowledge.

| $\frac{1}{3}$ | + | $\frac{1}{4}$ | - | $\frac{5}{24}$ | $=$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| - |  | + |  | - |  | + |
| $\frac{1}{4}$ | - | $\frac{1}{12}$ | + | $\frac{1}{8}$ | $=$ |  |
| + |  | - |  | + |  | - |
| $\frac{7}{24}$ | + | $\frac{1}{8}$ | - | $\frac{1}{6}$ | $=$ |  |
| $=$ |  | $=$ |  | $=$ |  | $=$ |
|  | - |  | + |  | $=$ |  |

