

Pre-Content/content Post-Content	Learning outcomes/Objectives	
	General	Specific
<u>PRE CONTENT</u>	Students will be able to	Students will be able to
Recall number system	recall natural numbers, whole numbers, integers and fractions	recall the number system and define Rational numbers
<u>CONTENT</u>		
Properties of Rational numbers	explore the properties of rational number	explore various properties of rational numbers. apply the properties to solve various problems
Representation of rational numbers on the number line	locate rational numbers on the number line	represent rational numbers on the number line
Rational numbers between two rational numbers	identify more rational numbers between any two given rational numbers	explore and identify more rational numbers between any two given rational numbers
<u>POST CONTENT</u>		
To work out extra practice questions	solve problems on higher order thinking skills	Acquire problem solving skills by performing calculations to solve various problems

Home Work /Assignments

- 1.NCERT Exercise /solved examples given as home task
- 2.Extra questions from the help book

Teacher's Activity	Student's Activity	Teacher's observation and Remedial
Teacher will ask oral questions based on their previous knowledge about number systems discuss properties and explain how to apply operations on rational numbers and instruct them to perform the activity on addition of rational numbers ANNEXURE I demonstrate the representation of rational numbers on the number line demonstrate the method of finding more rational numbers between any two given rational numbers followed by the exercise give extra practice questions from the help book	Students will be able to get involved in the thinking and discussion and try to answer the questions as per their previous knowledge give examples to justify the properties and perform the activity as per the given instructions and write the observations. ANNEXURE I draw the number line and represent the given rational numbers on it solve and find more rational numbers solve the given questions	Teacher will write her/his observations after completion of the topic

Teaching Aids: Smart boards, ICR

Methodology/Innovative Methods: : Discussion, Deduction, Question-Answer method, Activity , problem solving.

Interdisciplinary Links: real life problems:like pure mathematics

Coordinator

HOD

Vice-Principal

Principal

ANNEXURE I

Subject	MATHEMATICS
Class	VIII
Chapter/Unit	RATIONAL NUMBERS
Topic	ADDITION OF RATIONAL NUMBERS
Time	30 minutes
Nature of Activity	Individual

What will I learn(Learning outcome)?

To add rational numbers with same denominator.

Skills:- Visualizing, Creating , Accuracy, Precision

What I have to do?

To understand the concept of addition of rational numbers with same denominator.

What do I require?

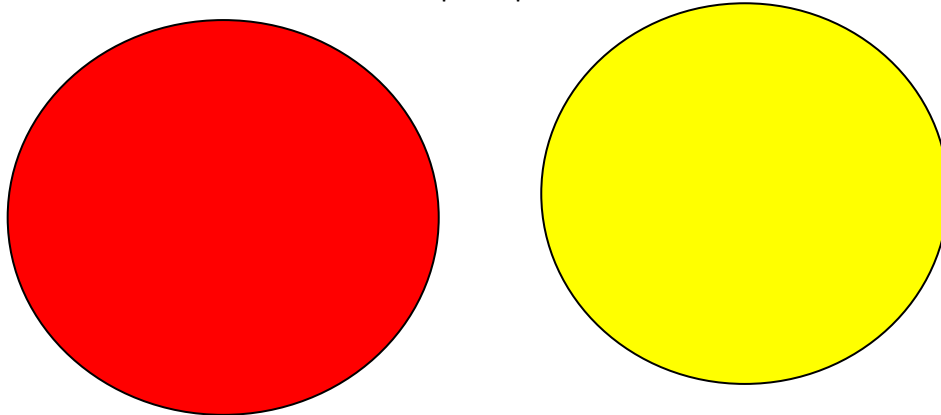
Sheets of coloured chart paper, glue, sketch pen, and a pair of scissors.

What do I need to know?➤ **Teacher's activity**

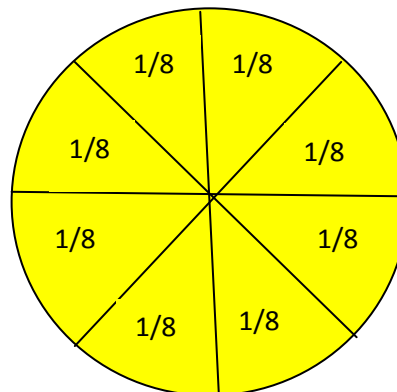
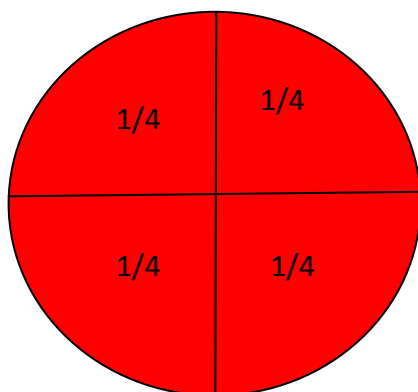
The teacher will discuss fractions and rational numbers.

How will I proceed?➤ **Students activity**

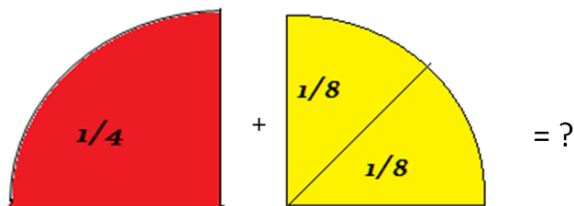
1. Draw two circles of **same radius** on two different coloured sheets of chart paper as shown and cut them with the help of a pair of scissors.



2. Divide **red circle** into four equal parts and **yellow circle** into eight equal parts as shown. Write rational number on each part and cut them with the help of a pair of scissors.



3. Now take one red cut-out and two yellow cut-outs and place the yellow cut-outs over the red cut-out

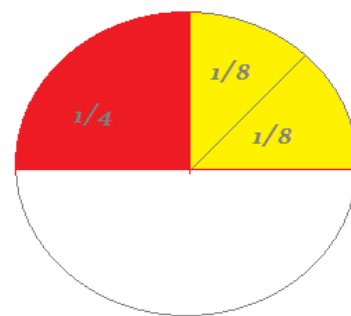


What have I observed?

Two yellow cut-outs are equal to _____ red cut-out.

That means $2[1/8] =$ _____.

Now : $1/8 + 1/8 =$ _____



What have I learnt?

To add rational numbers with _____ denominator.

What am I curious to know?

To add $1/8 + 1/8 + 1/8 + 1/8$

Let me evaluate myself

1. Arrange the numbers $1/4$, $13/16$, $5/8$ in the descending order.

2. A mother and her two daughters got a room constructed for Rs. 62,000. The elder daughter contributes $\frac{3}{8}$ of her mother's contribution while the younger daughter contributes $\frac{1}{2}$ of her mother's share. How much do the three contribute individually?

3. From a rope 40 metres long, pieces of equal size are cut. If the length of one piece is $\frac{10}{3}$ metre, find the number of such pieces.

4. Plot $\frac{4}{5}, \frac{6}{5}, \frac{7}{5}, -\frac{2}{5}, -\frac{3}{5}$ on the same number line.
