

SUBJECT : MATHEMATICS

CLASS : VI

TOPIC : FRACTIONS

Pre-Content/Content/Post-Content	Learning Outcomes/Objectives	
	General	Specific
	Students will be able to	Students will be able to
<u>PRE-CONTENT</u>		
Define Fractions	✓ recall the knowledge of fractions	✓ recall fractions
<u>CONTENT</u>		
Types of Fractions	✓ classify fractions	✓ classify fractions into different types like mixed, proper, improper, unit, like and unlike fractions
Equivalent Fractions	✓ define and classify equivalent fractions	✓ identify equivalent fractions and find equivalent fractions
Comparing and Ordering fractions	✓ compare and arrange fractions	✓ compare all types of fractions after reducing them to the lowest form and arrange them in ascending or descending order
- Operations on Fraction -Addition -Subtraction	✓ apply different operations on fractions	✓ understand basic operations on fractions and apply the method of simplification in solving various questions
<u>POST-CONTENT</u>		
Exposure to various application based problems	✓ analyze, correlate, apply and simplify application based real life problems	✓ analyze the problem and apply basic operations and conversions to solve application based problems

Home Work /Assignments:

1. NCERT exercise/solved examples given as home task.
2. Extra practice questions.

Teacher's Activity	Student's Activity	Teacher's observation and Remedial
Teacher will help the students to recall the definition of fraction. explain the process of applying operations on fractional numbers with the help of examples. solve few examples showing equivalent fractions and conduct the activity on it. (Annexure-7) solve few examples comparing all types of fractions after reducing them to the lowest form. explain the process of applying operations on fractional numbers. give various application based problems.	Students will define fractions and answer the questions posed by the teacher relating to fractions. understand the method and apply the same in further textbook questions. learn about equivalent fractions and perform the activity as per the instructions given, to find equivalent fractions of a given fraction and write their observations. (Annexure-7) learn about comparison of fractions. solve the textbook exercises after understanding the process of addition and subtraction. apply the learnt methods in solving various problems.	Teacher will write his/her observations after the completion of the topic.

Teaching Aids: Smart board, ICR, Cut-outs.

Methodology/Innovative Methods: Discussion, Brainstorming, Activity Oriented.

Interdisciplinary Links: Linked with Art, Real life.

H.O.D

Coordinator

Vice-Principal

Principal

Annexure-7

Subject	MATHEMATICS
Class	VI
Chapter/Unit	Fractions
Topic	Equivalent Fractions
Time	30 minutes
Nature of Activity	Individual

What will I learn (Learning outcome)?

To compute fractions equivalent to a given fraction by folding and shading.

Skills:- Critical Thinking, Problem Solving, Psychomotor Coordination, Examining

What I have to do?

To compute fractions equivalent to a given fraction.

What do I require?

White chart paper, cardboard, pair of scissors, sketch pens, geometry box and adhesive.

What do I need to know?

Concept of Fractions

➤ **Teacher's Activity**

Teacher will enable the students to recall the concept of fractions and will explain the steps of the activity.

How will I proceed?➤ **Student's Activity**

1. Let's find fractions equivalent to $\frac{1}{2}$.
2. Draw four rectangles of dimensions 16 cm by 2 cm on the white chart paper and cut these out.
3. Fold all the strips into two equal parts.
4. Unfold one of them, colour one part and paste the strip on the cardboard as shown in Fig.1.

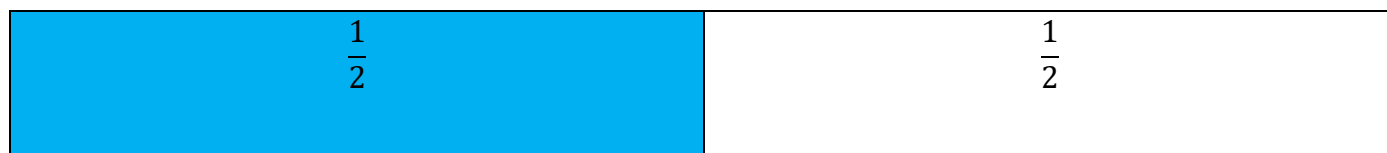


Fig.1

5. Now, take another strip, fold it again, unfold it and colour its two equal parts as shown in Fig.2.

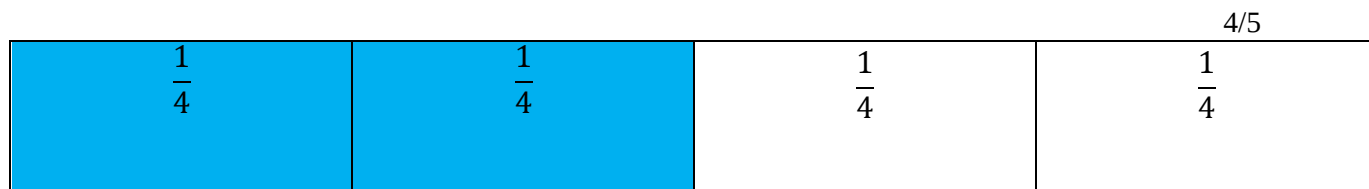


Fig.2

- Paste it on the cardboard below the first strip as shown in Fig.2.
- Then, take third strip. Fold it twice. Unfold it and colour its four equal parts as shown in Fig.3.

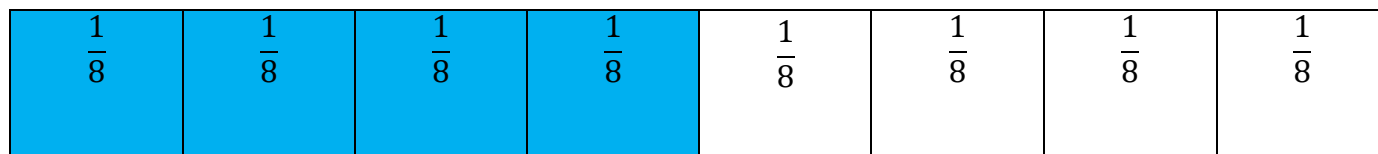


Fig.3

- Paste it on the cardboard just below the second strip as shown in Fig.3.
- Continue the process for the fourth strip and paste it on the cardboard as shown in Fig.4.

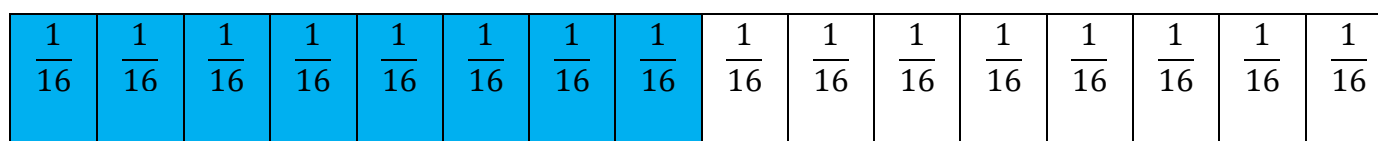


Fig.4

What have I observed?

- In Fig.1, coloured portion represents the fraction _____.
- In Fig.2, coloured portion represents the fraction _____.
- In Fig.3, coloured portion represents the fraction _____.
- In Fig.4, coloured portion represents the fraction _____.
- Thus, $\frac{1}{2} = \frac{1}{4} = \frac{1}{8} = \frac{1}{16}$.

What have I learnt?

To compute _____ fractions by folding and shading.

What am I curious to know?

Find first three equivalent fractions of $\frac{1}{3}$ using paper strips.

Let me evaluate myself

- Find any five equivalent fractions of $\frac{7}{12}$.

- _____
- _____
- _____
- _____
- _____

2. Replace $\square$ in each of the following by the correct number:

(a) $\frac{10}{30} = \frac{1}{\square}$

(c) $\frac{2}{3} = \frac{28}{\square}$

(b) $\frac{18}{24} = \frac{\square}{4}$

(d) $\frac{7}{35} = \frac{\square}{5}$

3. Find equivalent fraction of $\frac{105}{60}$ with numerator 35.

4. Check whether the given fractions $\frac{4}{5}$, $\frac{8}{10}$ are equivalent.

5. Find equivalent fraction of $\frac{54}{78}$ with denominator 13.
