

Understanding Fractions

Let's Make
Fractions
our Friends!

Now, let's
not get all crazy
with this "friend" stuff,
Mr. Whole.



CLASS VI
MRS. PREETI DHIR

Made easy!

Oops!
My
fraction!

Hi! My
name is Whole!

Fractions

Introduction



Learning objectives



- The students will be able to identify fractions and divide into halves, one-thirds etc.
 - They will be able to compare them and use the concept in real life situations.
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Time Duration

- 45 minutes to 1 hour

Materials required

- **Chalk and duster**
- **Origami sheets**
- **Chocolate bar**
- **Count of number of boys and girls in school and in the class**
- **Math notebooks**
- **Videos/modules to be used as CAT**

Key Words

- Numerator
- Denominator
- Whole
- Proper
- Like
- Unlike
- Improper
- Equivalent
- Mixed

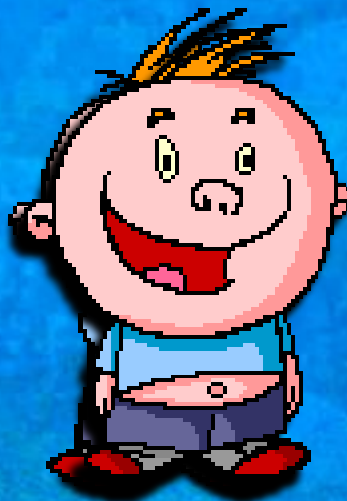


Yeah!! I know
all these.



★ ★ UnderSTANDING Fractions

I know you're not a big fan of fraction, but I have some good news when it comes to understanding them, they are not so boring.



I
wouldn't
call that good
news!

Really?

I knew you'd
come around!

★ Previous Knowledge testing ★

Some terms you
need to know:

numerator
denominator

Example: $\frac{4}{8}$



What is Numerator ? : Number of parts chosen

What is denominator? : Total number of parts

List the different types of fractions :

Unit, Proper, Improper, Like, Unlike



CURRICULUM STRANDS



- **A fraction is a part of a whole.**
 - **To generate and recognize equivalent fractions.**
 - **To be able to represent given information in the form of a fraction.**
 - **Relation between improper and mixed fractions.**
 - **Divide things in equal parts.**
 - **To be able to comprehend which part is bigger.**
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Part 1

Recognizing types
of Fractions

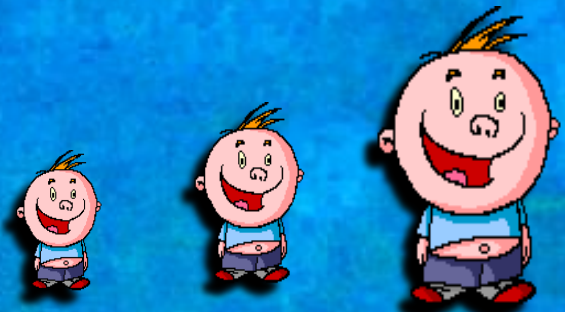
Teacher's activity

- She carries chocolates for all but they are not equal to the number of students in the class.
- Divides them in groups of six and gives four bars to each group.
- How many in a group did not get the chocolate? What is the fraction for the ones who got and the ones who did not get?
- Second time, One chocolates is given to each group. It has eight pieces.
- Divide it equally among group members.
- How much does each get?



PUPIL'S activity

- All are excited to see chocolates.
- In each group, 4 out of 6 get the chocolate.
- Fraction for the ones who get the chocolate is $\frac{4}{6}$
- Fraction for the ones who did not get it is $\frac{2}{6}$
- Both are like fractions, as denominators are the same.
- When one bar is given to a group, each gets $8 \div 6 = \frac{8}{6} = \frac{4}{3}$ (Improper fraction) = $1 \frac{1}{3}$ (Mixed fraction)





Part 2

FOLDING paper to
divide parts



Teacher's activity

- Gives origami sheets to each student.
- Tells each student to fold it into half, also displays it as a picture on the board.
- Fold again along the line of symmetry into one-fourth of the square.
- Fold again and find what fraction is obtained?
- open and mark the lines by drawing lines.

$1/1$
one Whole

$1/2$ one half

$1/2$ one half



$1/4$ one fourth

$1/4$ one fourth

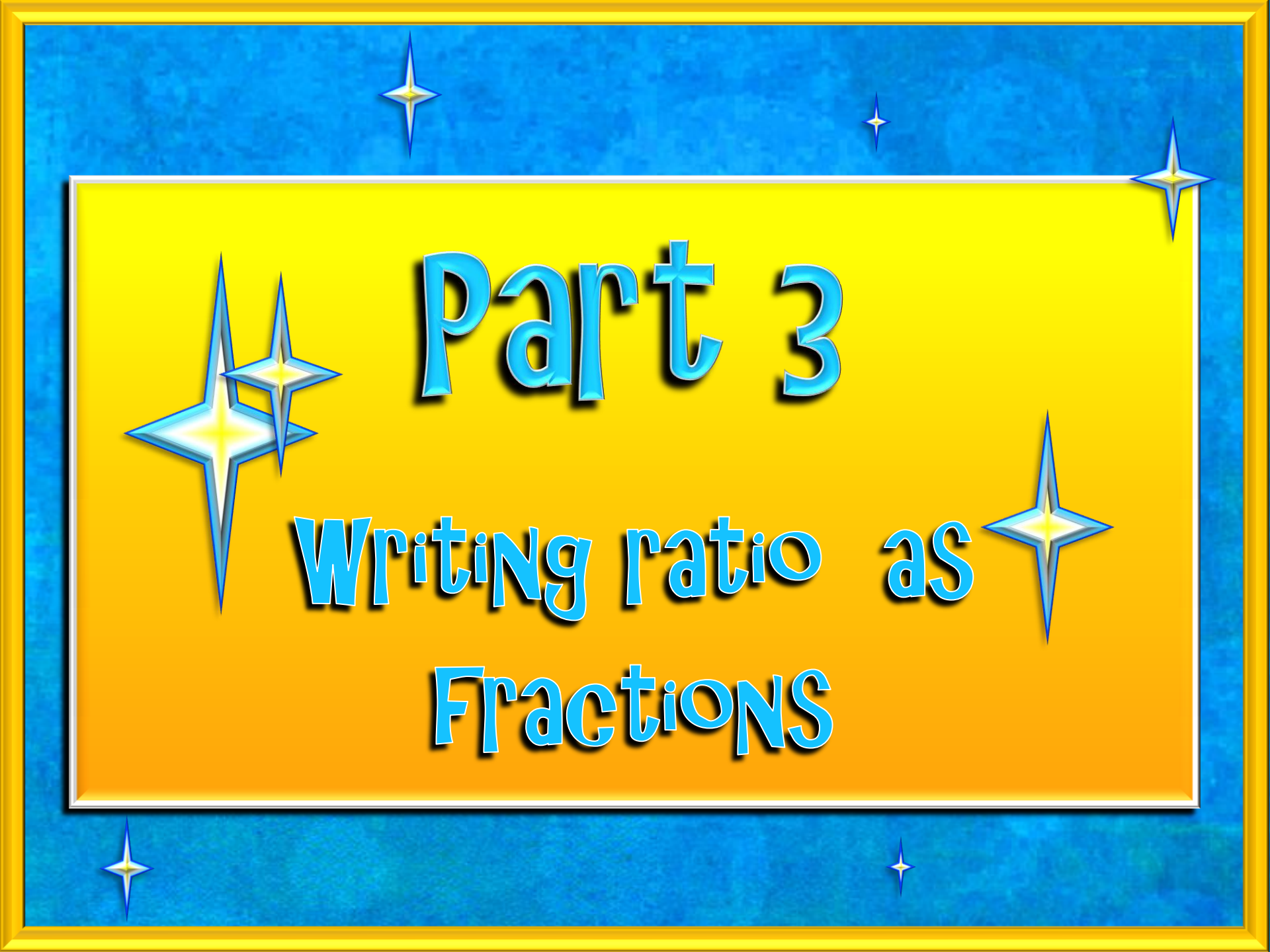
$1/4$ one fourth

$1/4$ one fourth

PUPIL'S activity

- All take sheets and observe them carefully.
- Sheets are small squares. (1 whole)
- On folding into half they get two rectangles. (2 x $\frac{1}{2}$)
- On folding again, they get four squares. (4 x $\frac{1}{4}$)
- On folding further, they get eight parts. (8 x $\frac{1}{8}$)
- They all are unlike fractions as denominators are not the same.(2, 4, 8)
- Line of symmetry is the line along which a figure or shape is divided into equal parts.
- The sheets sre to be pasted in the practical file.





Part 3

Writing ratio as

Fractions

Teacher's activity

- What is the number of students in your class?
- How many are boys?
- How many are girls?
- What is the number of students in your school?
- What is the number of boys?
- What is the number of girls?
- What is the fraction of boys to girls, girls to boys, boys to total students, girls to total students both in class and in school?



PUPIL'S activity

- They make a note of number of students in their class (25) and school (574)

- **CLASS**

- Boys : girls = $17/8$ (Improper)

- Girls : boys = $8 /17$ (proper)

- Girls : Total = $8/25$ (proper)

- Boys : Total = $17/25$ (proper)

- **SCHOOL**

- Boys : girls = $372 / 202$ (Improper)

- Girls : boys = $202 /372$ (proper)

- Girls : Total = $202/ 574$ (proper)

- Boys : Total = $372/ 574$ (proper)



ObSerVation

- Students were able to relate the concept to real life situations.
- They gained knowledge about own school by finding out the number of boys and girls.
- They will be able to divide things into equal parts in future.



HOME ASSIGNMENT

- On the way home/dorm look for things around you that can be divided along a line of symmetry.
- Find the fraction of male and female population in India.
- What fraction of marks did you obtain in various subjects in recent examination.

