

DELHI MODERN PUBLIC SCHOOL, PAMPORE

Class:3rd

Subject: Maths

Study Material: Term-I

Chapter no.6

Topic: Fractions

About Fraction

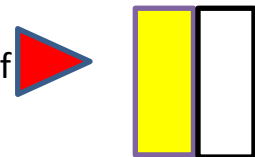
A broken number that represents a part or parts of a whole is known as a **Fraction**.

A whole can be a **region** or a **collection**. For example:

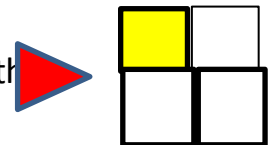
A cake is a region because it is an object. We can cut it and take one or more parts of it.

Fractions Of a Region:

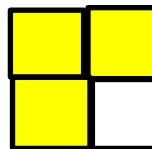
a) When a region is divided into two equal parts , each part is half $\frac{1}{2}$ or **half** of the whole.



b) When a region is divided into four equal parts , each part is one-fourth $\frac{1}{4}$ or **one-fourth** or **quarter**.



c) If we take three parts out of four ,



$\frac{3}{4}$ or **three-fourths** .

d) $\frac{1}{2}$, $\frac{1}{4}$, $\frac{3}{4}$, $\frac{2}{3}$ all represent fractions .

Writing Fractions:

A fraction is represented by : $\frac{\text{Number of pink parts}}{\text{Total number of equal parts}}$ \Rightarrow Numerator
 \Rightarrow Denominator

In a fraction, the number above the horizontal line is the **numerator** and the number below the horizontal line is the **denominator**. The horizontal line between the numerator and denominator is called the **bar** or **division line**.

Day 1:

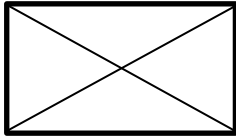
INNINGS 6.1

Q1: Tick (✓) the objects which are divided into equal parts. (on book)

Sol: a, d, f, h, i

Q2: Divide the given rectangle into quarters in three different ways: (on Notebook).

Sol:



Q4: Circle the shape with a red crayon if $\frac{1}{2}$ of it is coloured. (on book)

Sol: a, d, e.

Do Q3 by yourself. (on book)

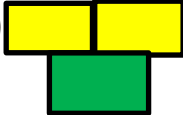
Day 2:

Q5: Colour to show $\frac{1}{3}$ in green and $\frac{2}{3}$ in yellow. (on Notebook)

b)



c)



Do remaining parts by yourself.

Q6: Write the fractions for the shaded portions. (on book)

Sol: b) $\frac{7}{10}$ e) $\frac{1}{4}$ g) $\frac{2}{5}$ h) $\frac{5}{5}$

Do remaining parts by yourself.

Q7: Match the following: (on book)

- a) apple
- b) Capri
- c) cake
- d) flower

Do Q8 by yourself. (on book)

Day 3:

INNINGS 6.2

Q2: Write fractions for shaded and unshaded parts: (on book)

	Shaded	Unshaded
a)	$\frac{2}{6}$	$\frac{4}{6}$
b)	$\frac{7}{10}$	$\frac{3}{10}$

C)	$\frac{1}{4}$	$\frac{3}{4}$
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Do Q1 by yourself. (on book)

INNINGS 6.3

Do Q1,Q2,Q3 by yourself.(on book)

Q4: Solve the following questions: (on Notebook)

a) $\frac{1}{3}$ of 24 c) $\frac{1}{4}$ of 40
 Sol: $24 \div 3 = 8$. Sol: $40 \div 4 = 10$

e) $\frac{1}{3}$ of 45 g) $\frac{1}{4}$ of 44
 Sol: $45 \div 3 = 15$ Sol: $44 \div 4 = 11$

Do b ,d, f by yourself.

Day 4:

Q4: Solve the following questions: (on Notebook)

h) $\frac{1}{2}$ of 26 j) $\frac{1}{3}$ of 63
 Sol: $26 \div 2 = 13$ Sol: $63 \div 3 = 21$

l) $\frac{1}{3}$ of 39 n) $\frac{1}{4}$ of 84
 Sol: $39 \div 3 = 13$ Sol: $84 \div 4 = 21$

Do l, k, m, o by Yourself.

INNINGS 6.4

Q1: (on book)

Sol:

Figure	a)	b)	c)	d)
Number of unshaded parts (numerator)	2	5	8	1
Number of parts in all (denominator)	5	9	14	4
Fraction for unshaded parts	$\frac{2}{5}$	$\frac{5}{9}$	$\frac{8}{14}$	$\frac{1}{4}$

Day 5:

INNINGS 6.5

a)

Sol: Total fraction of apples = $7/7 = 1$

Fraction of apples eaten = $3/7$

Therefore, Fraction of apples left = $1 - \frac{3}{7}$
 $= \frac{7-3}{7}$
 $= \frac{4}{7}$

b)

Sol: Total fraction of students in the class = $\frac{25}{25} = 1$

Fraction of students present = $\frac{20}{25}$

Therefore, fraction of students absent = Total – fraction of students of students present

$$\begin{aligned} &= 1 - \frac{20}{25} \\ &= \frac{25 - 20}{25} \\ &= \frac{5}{25} \end{aligned}$$

c)

Sol: Total number of monkeys = 16

Fraction of monkeys on tree = $\frac{1}{4}$

Therefore, no. of monkeys on tree = Total monkeys x Fraction of monkeys on tree

$$\begin{aligned} &= 16 \times \frac{1}{4} \\ &= 16 \div 4 \\ &= 4 \end{aligned}$$

Do remaining parts by yourself.

Tips:

- When there is no shaded part , the numerator is zero.
- There can be no fraction with zero as the denominator.
- If the numerator and the denominator are (except zero) , then the fraction represents whole or 1.