

Addition

I. Write in columns and find the sum:

1. $3873 + 2731$

TH	H	T	O	
	1	1		
	3	8	7	3
+	2	7	3	1
	6	6	0	4

Ans: 6604

2. $1005 + 271 + 3413$

TH	H	T	O	
	1	0	0	5
+	2	7	1	
	3	4	1	3
	4	6	8	9

Ans: 4689

3. $812 + 711 + 8946$

TH	H	T	O	
	8	1	2	
+	7	1	1	
	8	9	4	6
	10	4	6	9

Ans: 10469

II. Add horizontally and find the sum

1. $783 + 4212$

Step1: TH H T O TH H T O TH H T O

$$783 + 4212 = 5$$

Step2: TH H T O TH H T O TH H T O

$$783 + 4212 = 95$$

Step3: TH H T O TH H T O TH H T O

$$783 + 4212 = 995$$

Step4: TH H T O TH H T O TH H T O

$$0783 + 4212 = 4995$$

Ans: 4995

2. $8914 + 1289$

Step1:

TH	H	T	O	TH	H	T	O		TH	H	T	O	
8	9	1	4	+	1	2	8	9	=				3

Step2:

TH	H	T	O	TH	H	T	O		TH	H	T	O	
8	9	1	4	+	1	2	8	9	=				0 3

Step3:

TH	H	T	O	TH	H	T	O		TH	H	T	O	
8	9	1	4	+	1	2	8	9	=				2, 0 3

Step4:

TH	H	T	O	TH	H	T	O		TH	H	T	O		
1	8	9	1	4	+	1	2	8	9	=	10	2	0	3

Ans: 10203

III. Solve these word problems

1. A train ran 7745 km. Another train ran 1855 km more than the first train. How many km did the other train run.

Sol:

Distance covered by the first train = 7 7 4 5

Distance covered by the other train } = $\frac{1855}{9600}$ km
 more than first train }

Distance covered by another train = 9600 km

2. There are 3895 men, 2927 women and 2409 children in a village. Find the total population of the village.

Sol:

No. of Men in a village = 3 8 9 5
 No. of women in a village = 2 9 2 7 +
 No. of children in a village = 2 4 0 9
 Total No. of population of the village = $\frac{9231}{}$
 Ans: Total No. of population of the village = 9231

Subtraction

Class work

I. Subtract:

1. 846 from 1000

0 9 9 10
~~1 0 0 0~~

(-) $\frac{846}{154}$ Ans: 54

2. 1496 from 2504

2 5 0 4

(-) $\frac{1496}{1008}$ Ans: 1008

II. Word Problem

1. Raju had ₹78.15 with him. If he buys a notebook costs ₹46.25. Find the amount left with him.

Sol:

	₹	P	
Amount Raju had	=	7 8 . 1 5	
Cost of the notebook	=	4 6 . 2 5	

The Amount left with him = ?

$$\begin{array}{r} \text{₹} \quad \text{P} \\ 7 \overset{7}{\cancel{8}} \cdot \overset{11}{\cancel{1}} 5 \\ (-) 46 \cdot 25 \\ \hline 31 \cdot 90 \end{array}$$

The Amount left with him = ₹31.90

2. The population of a city is 4,75,173. Of the no. of Males is 2,58,745. Find the no. of females in the city.

Sol:

$$\text{Total No. of population in the city} = 4 \overset{6}{\cancel{7}} \overset{14}{\cancel{5}} \overset{11}{\cancel{1}} \overset{6}{\cancel{1}} \overset{13}{\cancel{7}} \overset{3}{\cancel{3}}$$

$$\text{No. of Males in the city} \quad (-) = 2 \ 5 \ 8 \ 7 \ 4 \ 5$$

$$\text{No. of females in the city} \quad = \underline{2,164,28}$$

Ans: No. of females in the city = 2,164,28

MULTIPLICATION

I. Find the product:

1. 272×56

$$\begin{array}{r} \text{Sol:} \quad 2 \ 7 \ 2 \\ \quad \quad \times \quad 5 \ 6 \\ \hline \quad \quad 1 \ 6 \ 3 \ 2 \\ + \quad 1 \ 3 \ 6 \ 0 \ 0 \\ \hline 1 \ 5 \ 2 \ 3 \ 2 \end{array}$$

Ans: 15232

2. 807×43

$$\begin{array}{r} \text{Sol:} \quad 8 \ 0 \ 7 \\ \quad \quad \times \quad 4 \ 3 \\ \hline \quad \quad 2 \ 4 \ 2 \ 1 \\ + \quad 3 \ 2 \ 2 \ 8 \ 0 \\ \hline 3 \ 4 \ 7 \ 0 \ 1 \end{array}$$

Ans: 34701

3. 8017×286

$$\begin{array}{r} \text{Sol:} \quad 8 \ 0 \ 1 \ 7 \\ \quad \quad \times \quad 2 \ 8 \ 6 \\ \hline \quad \quad 4 \ 8 \ 1 \ 0 \ 2 \\ + \quad 6 \ 4 \ 1 \ 3 \ 6 \ 0 \\ \hline 1 \ 6 \ 0 \ 3 \ 4 \ 0 \ 0 \\ \hline 2 \ 2 \ 9 \ 2 \ 8 \ 6 \ 2 \end{array}$$

Ans: 2292862

II. Multiply by expanding bigger number

1. 792×6

Sol: $700 + 90 + 2$

$$6 \left[\begin{array}{|c|c|c|} \hline 700 \times 6 & 90 \times 6 & 2 \times 6 \\ \hline \end{array} \right] \\ = 4200 + 540 + 12$$

$$\begin{array}{r}
 4200 \\
 540 \\
 + \quad 12 \\
 \hline
 4752
 \end{array}$$

Ans: 4752

2. 809×7

Sol: $800 + 0 + 9$

800×7	0×7	9×7
----------------	--------------	--------------

$= 5600 + 0 + 63$

$$\begin{array}{r}
 5600 \\
 0 \\
 + \quad 63 \\
 \hline
 5663
 \end{array}$$

Ans: 5663

III. Word Problem

1. A mathematics book for class IV has 216 pages. How many pages will 45 copies of the same book have?

Sol:

No. of pages in one copy = 216

No. of pages in 45 copies = ?

$$= 216$$

$$\begin{array}{r}
 X \quad 45 \\
 \hline
 \end{array}$$

$$\begin{array}{r}
 1080 \\
 + 8640 \\
 \hline
 9720
 \end{array}$$

No. of pages in 45 copies = 9720

2. A truck can carry 124 bags of rice in a trip. One day it made 25 trips with a full load. How many bags did it carry on that day?

Sol:

No. of bags in one trip = 124

No. of bags in 25 trips = ?

$$\begin{array}{r}
 = 124 \\
 X \quad 25 \\
 \hline
 620 \\
 + 2480 \\
 \hline
 3100
 \end{array}$$

Ans: No. of bags in 25 trips = 3100

DIVISION

I. Find the remainder and Quotient

1. $87 \div 4$

$$\begin{array}{r}
 21 \\
 4 \overline{) 87} \\
 \underline{8} \\
 7 \\
 \underline{(-) 4} \\
 3
 \end{array}$$

Q = 21

R = 3

2. $8046 \div 17$

$$\begin{array}{r}
 473 \\
 17 \overline{) 8046} \\
 \underline{(-) 68} \\
 124 \\
 \underline{(-) 119} \\
 56 \\
 \underline{(-) 51} \\
 5
 \end{array}$$

Q = 473

R = 5

II. Word problem:

1. A dozen chairs cost ₹3660. What is the cost of one chair.

Sol:

Cost of 12 chairs = ₹ 3 6 6 0

[Note: 1 dozen = 12 chairs]

Cost of one chair = ?
 = $3660 \div 12$

$$\begin{array}{r}
 305 \\
 12 \overline{) 3660} \\
 \underline{- 36} \\
 60 \\
 \underline{- 60} \\
 0
 \end{array}$$

Ans: Cost of one chair = ₹ 305

2. A box contains 35 pens. How many boxes will be needed to pack 9065 pens.

Sol: No. of pins in one box = 35

No. of boxes needed to pack 9065 pins = ?

= $9065 \div 35$

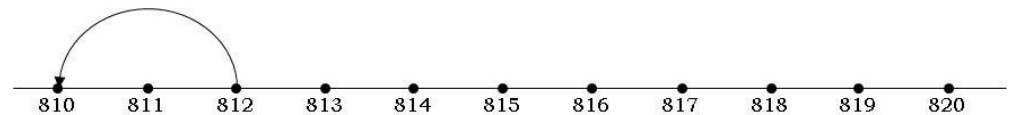
$$\begin{array}{r}
 259 \\
 35 \overline{) 9065} \\
 \underline{- 70} \\
 206 \\
 \underline{- 175} \\
 315 \\
 \underline{- 315} \\
 0
 \end{array}$$

Ans: No. of boxes needed to pack 9065 pins = 259

Rounding Off

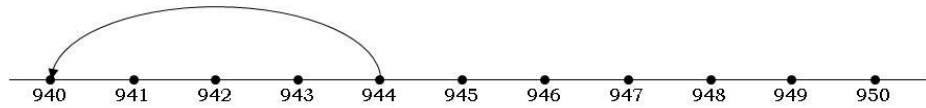
I. Round off to the nearest 10's

1. 812



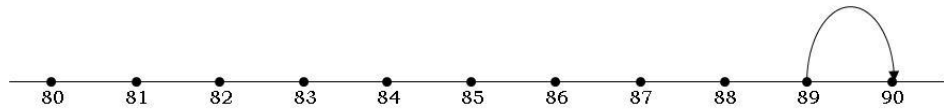
Ans: 810

2. 944



Ans: 940

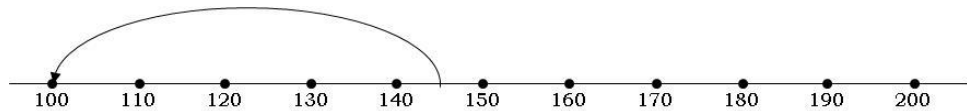
3. 89



Ans: 90

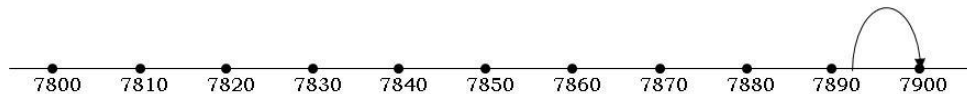
II. Round off to the nearest 100's

1. 146



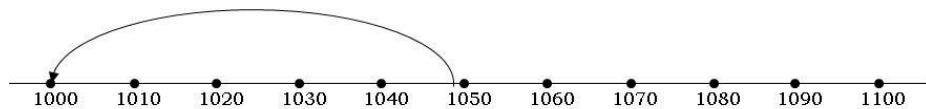
Ans: 100

2. 7892



Ans: 7900

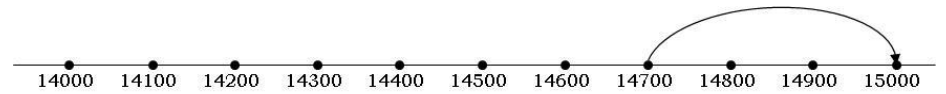
3. 1049



Ans: 1000

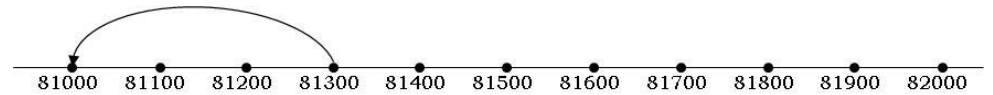
III. Round off to the nearest 1000's

1. 14762



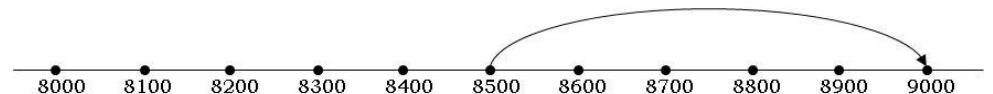
Ans: 15000

2. 81261



Ans: 81,000

3. 8500



Ans: 8500

Chapter 3 A Trip to Bhopal

Pg. no 23 (In cw)

Class	No. of Children
I	33
II	32
III	42
IV	50
V	<u>53</u>
Total	<u>210</u>

* So there are 210 total of children going Ans: 210

* If there are 4 buses. How many children will get seats _____?

Total No. of children = 210

4 buses = ?

1 bus = 52

4 buses = 52

$$\begin{array}{r} \text{X } 4 \\ \hline 208 \end{array}$$

Ans: 208

* Will there be any children left without seats?

Ans: Yes (210 - 208 = 2)

Pg No. 24 (In C.W)

* If each mini bus can take 35 students. How many mini buses are needed?

Sol:

No. of students in 1 mini bus = 35 students

No. of mini buses needed for
210 students = ?

210 ÷ 35

= 6

Ans: So 6 mini buses are needed

Pg: 26 (In C.W)

$$\begin{array}{r} 52 \\ \hline 4 \overline{) 210} \\ \underline{(-) 20} \\ 10 \\ \underline{(-) 8} \\ 2 \text{ (left)} \end{array}$$

* If the length of the bridge is 756.82m. Find how many buses can stand in a line on the bridge each of length 5m long?

Sol:

Length of the bridge = 756.82 m

Length of each bus = 5m

No. of buses that can stand
in line on the bridge = $756.82 \div 5$
= 151.364
= 151.36

151 buses can stand in a line on the bridge.

* The water level below the bridge is about 40 metres. In rainy season it is about 15metres below the bridge. Find the difference in the water level.

Sol:

Actual water level below the bridge = 40 m

In rainy season water level below the bridge = 15 m

Difference in water level = 40 - 15

= 25 m

Ans: 25 m

Pg. No 27 (Sums to be done in text book)

* 2 x 15 mins = 30 mins

* late by 30 mins

$$\begin{array}{r} 151.364 \\ \hline 5 \overline{) 756.82} \\ \underline{(-) 5} \\ 25 \\ \underline{(-) 25} \\ 6 \\ \underline{- 5} \\ 18 \\ \underline{- 15} \\ 32 \\ \underline{- 30} \\ 20 \\ \underline{- 20} \\ 0 \end{array}$$

(In c.w)

* If the cost of 100 litres of diesel is ₹ 3500. Find the cost of 1 litre of diesel.

Cost of 1000 litres	=	₹ 3500	100	$\begin{array}{r} 35 \\ \overline{) 3500} \\ - 300 \\ \hline 500 \\ - 500 \\ \hline 0 \end{array}$
Cost of 1 litre	=	3500 ÷ 100		
	=	35		

Ans: So the cost of 1 litre of diesel = ₹ 35

*** Text book**

(A man takes 15mins to come out of the toilet)

* Pg No. 28 (Text explanation)

* Pg No. 29 (Sums to be done in textbook)

* How many more deer are there than bisons? (117 - 37 = 80)

* 177

* 12 O'clock

* 11 O'clock

Pg. No: 30 (In CW)

* If each child receives 1 orange, 1 banana, and 5 biscuits and 38 children do not take bananas. Find how many oranges, biscuits and bananas were distributed?

Sol: The total No. of students = 210

No. of oranges = 210 x 1 = 210

No. of biscuits = 210 x 5 = 1050

No. of bananas	=	(210 - 38) x 1
	=	172 x 1
	=	172

Pg No. 30 (In C.W)

A. No of toffees given to each friend	=	4
No of toffees given to 4 friends	=	16
No of toffees left with him	=	3
Total No. of toffees	=	16 + 3 = 19

B. What numbers can be formed using the digits 3, 5 and 7?

- Ans:** 3 5 7
5 3 7
7 3 5
7 5 3
3 7 5
5 7 3

E. A small ant climbs 3 cm in 1 minute but steps down 2cm. How much time will it take to climb 2 cm?

Sol:

Time taken by a small ant to climb 1cm	=	1 min
Time taken by a small ant to climb 2cm	=	2 x 1 min
	=	2 mins

Pg No: 32 (Textbook Explanation)

Pg No: 33 (Sums to be done in Textbook) (Teacher's Reference)

$$1. * ₹ 50 + ₹ 30 = ₹ 80$$

↓
↓
 Motor boat oar boat

* 20 mins + 45 mins = 65 mins = 1 hr 05 mins

2. 1 child = ₹ 30

$$\begin{aligned}
 ? &= ₹ 450 \\
 &= \frac{450}{30} = 15
 \end{aligned}$$

No. of children = 15

$$\begin{array}{r}
 15 \\
 \hline
 30 \overline{) 450} \\
 \underline{- 30} \\
 150 \\
 \underline{- 150} \\
 0
 \end{array}$$

3. Paddle Boat

1 trip = 30 mins

2 trips = 30 mins x 2 = 60 mins (60 mins = 1 hr)

4. 1 hr = 60 mins

Half an hour = 30 mins

Boat takes less than 30 mins = Motor Boat (20 mins)

5. Boat with oars ①

6. Paddle Boat = ₹ 15 ⇒ 30 mins

Motor Boat	= ₹ 25 ⇒ 20 mins
₹ 40	50 mins

Ans: Paddle Boat and Motor Boat

Time to Return (Pg No. 33) In text Book

* 6 O'clock

HOTS: (In CW)

1. A number becomes double if it is increased by 8. What is the number?

Sol: Let the number be x

$$x + 8 = 2x$$

$$8 = 2x - x$$

$$8 = x$$

Ans: The number is 8

2. Think of a number which can be divided by 2,3 and 5 and comes between 25 and 50.

Sol:

Number divided by 2 between 25 and 50 = 26, 28, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48

Number divided by 3 between 25 and 50 = 27, 30, 33, 36, 39, 42, 45, 48

Number divided by 5 between 25 and 50 = 30, 35, 40, 45

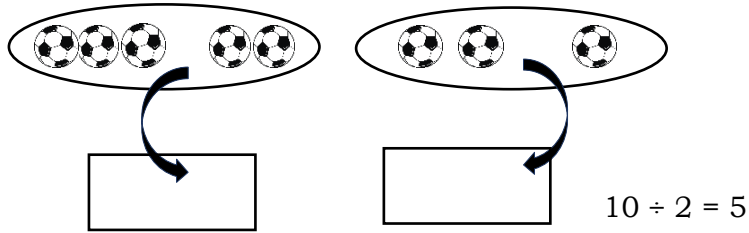
Ans: The number divided by 2, 3, 5 between 25 and 50 is 30.

Teacher’s Resource

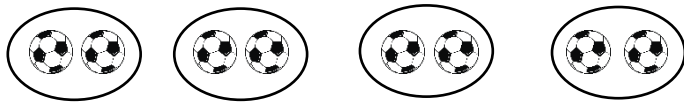
Introduction:

Division is equal sharing (or) equal grouping.

Equal Sharing



Equal Grouping:



$8 \div 2 = 4$

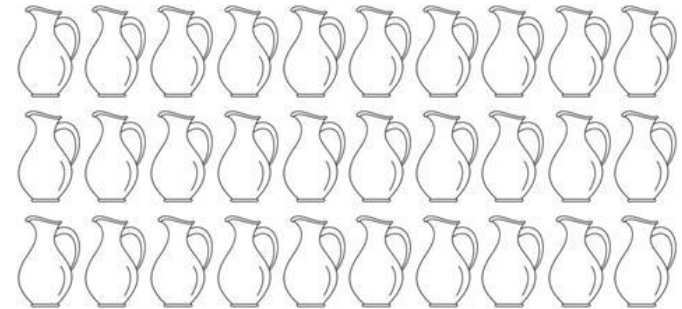
Pg 120 (Explanation) & sums to be done in text book)

$18 = \underline{2} \times \underline{9}$ so there are 2 row with 9 plants

$18 = \underline{1} \times \underline{18}$ so there are 1 row with 18 plants

Pg 121: Teacher’s Explanation

* Draw a shelf to keep 30 jars and find out how many jars you will keep in each row?



$$\begin{array}{r} 10 \\ 3 \overline{) 30} \\ - 30 \\ \hline 10 \end{array}$$

Total No. of jars = 30

3 rows = $30 \div 3$

Ans: In 1 row 10 jars will be placed

So, there are 3 rows with 10 jars each.

Teacher’s Resource

Easy Tricks

(Ref pg no. 122)

	Add	
$2 \times 1 = \textcircled{2}$	$7 \times 1 = 7$	$5 \times 1 = \textcircled{5}$
$2 \times 2 = 4$	$7 \times 2 = 14$	$5 \times 2 = 10$
$2 \times 3 = 6$	$7 \times 3 = 21$	$5 \times 3 = 15$
$2 \times 4 = 8$	$7 \times 4 = 28$	$5 \times 4 = 20$
$2 \times 5 = 10$	$7 \times 5 = 35$	$5 \times 5 = 25$

$$2 \times 6 = 12 \quad 7 \times 6 = 42 \quad 5 \times 6 = 30$$

$$2 \times 7 = 14 \quad 7 \times 7 = 49 \quad 5 \times 7 = 35$$

$$2 \times 8 = 16 \quad 7 \times 8 = 56 \quad 5 \times 8 = 40$$

$$2 \times 9 = 18 \quad 7 \times 9 = 63 \quad 5 \times 9 = 45$$

$$2 \times 10 = 20 \quad 7 \times 10 = 70 \quad 5 \times 10 = 50$$

Pg 123 (In text book)

How many legs? 4 8 12 16 20 24 28 32

How many cats? 1 2 3 4 5 6 7 8

So 28 legs mean 7 cats

* **Pg 123 (In c.w)**

Billo has kept his chickens in a box. He counted 28 legs. How many chickens are there?

1 chicken = 2 legs

No of legs counted = 28

No of chickens in the box = ?

$28 \div 2 = 14$

$$\begin{array}{r} 14 \\ \hline 2 \overline{) 28} \\ \underline{- 2} \\ 08 \\ \underline{- 8} \\ 0 \end{array}$$

Ans :Billo has kept 14 chickens in a box

* Leela has not gone to school for 21 days For how many weeks was she away from school?

1 week = 7 days

21 days = $21 \div 7$

$$\begin{array}{r} 3 \\ \hline 7 \overline{) 21} \\ \underline{- 21} \\ 0 \end{array}$$

= 3 weeks

Teacher's Resource

How many days?	7	14	21
How many weeks?	1	2	3

Pg 124 (In text book)

Frog ★ $27 \div 3 = \underline{9}$ jumps

★ 12

★ 14

Rabbit ★ 5

★ 40

★ 11

Pg 124 (In c.w)

1. $28 \div 2$

$$\begin{array}{r} 14 \\ \hline 2 \overline{) 28} \\ \underline{- 2} \\ 08 \\ \underline{- 8} \\ 0 \end{array} \quad \begin{array}{l} Q = 14 \\ R = 0 \end{array}$$

2. $48 \div 4$

$$\begin{array}{r} 12 \\ 4 \overline{) 48} \\ \underline{- 4} \\ 8 \\ \underline{- 8} \\ 0 \end{array} \quad \begin{array}{l} Q = 12 \\ R = 0 \end{array}$$

3. $110 \div 10$

$$\begin{array}{r} 11 \\ 10 \overline{) 110} \\ \underline{- 10} \\ 10 \\ \underline{- 10} \\ 0 \end{array} \quad \begin{array}{l} Q = 11 \\ R = 0 \end{array}$$

Pg No. 125 (In text Book)

* $84 - 28 = \underline{56}$ (second necklace)

* $56 - 28 = \underline{28}$ (third necklace)

* $4 (112 \div 28 = 4)$

* Yes

$$\begin{array}{r} 7 \ 14 \\ \cancel{8} \ \cancel{4} \\ \underline{- 2 \ 8} \\ 5 \ 6 \\ \hline 4 \ 16 \\ \cancel{8} \ \cancel{0} \\ \underline{- 2 \ 8} \\ 2 \ 8 \end{array}$$

Pg no. 126 (In cw)

1. One carton can hold 85 soap bars. Shally wants to pack 338 soap bars. How many cartons does she need for packing all of them.

Sol:

No. of soaps held by one carton = 85 soaps

Carton need for packing 338 soaps = ?

$$\begin{array}{r} 3 \\ 85 \overline{) 338} \\ \underline{- 255} \\ 83 \end{array} \quad \begin{array}{l} 1. 85 \times 3 = 255 \\ 3+1=4 \\ 2. 85 \times 4 = 340 \end{array}$$

83 → 1 box

Ans. ∴ 4 cartons needed to pack all the soap bars

2. Manpreet wants 1500 sacks of cement for making a house. A truck carries 250 sacks at a time. How many trip will the truck make?

Sol: Total No. of sacks = 1500

No. of sacks in 1 truck = 250

$1500 \div 250$

6 trips → 1500 sacks

1 trip → 250 sacks

6 trip → 1500 sacks

$$\begin{array}{r} 6 \\ 250 \overline{) 1500} \\ \underline{- 1500} \\ 0 \end{array}$$

$$\begin{array}{r} 1 \\ 250 \times 3 \\ \hline 750 \\ 3 \\ 250 \times 6 \\ \hline 1500 \end{array}$$

Ans: The truck will take 6 trips

* A driver charges Rs. 500 for a trip. How much will Manpreet pay the driver for all the trips?

1 trip = ₹ 500

6 trip = ₹ 500

$$\begin{array}{r} \\ \times 6 \\ \hline ₹ \ 3000 \end{array}$$

Ans: Manpreet pays ₹ 3000 to the driver

Pg no:126 (In Textbook)

①

$$\begin{array}{r}
 1 \text{ box} \longrightarrow 4 \text{ laddoos} \quad 23 \\
 23 \text{ boxes} \longrightarrow \quad \quad \quad \times 4 \\
 \hline
 92
 \end{array}$$

(Teacher's Explanation)

* No, [Because 92780, so the sweets are not enough]

* 12

* 1 box \longrightarrow 12 laddoos

60 laddoos \longrightarrow ?

$$\begin{array}{r}
 5 \\
 12 \overline{) 60} \\
 \underline{- 60} \\
 0
 \end{array}$$

5 boxes are needed

Practice time (In c.w)

1. Neelu bought 15 story books to her class. Today 45 students are present. How many children will need to share one book?

Sol:

No. of story books Neelu brought to the class = 15

No. of students Present = 45

$$45 \div 15$$

$$\begin{array}{r}
 3 \\
 15 \overline{) 45} \\
 \underline{- 45} \\
 0
 \end{array}$$

Ans: 3 children need to share one book

2. A family of 8 people need 60 Kg wheat for a month. How much wheat does the family need for a week?

Sol:

1 month \longrightarrow 60 Kg

1 week \longrightarrow ?

$$1 \text{ month} = 4 \text{ weeks}$$

$$60 \div 4$$

$$1 \text{ week} = 15 \text{ kg}$$

$$\begin{array}{r}
 15 \\
 4 \overline{) 60} \\
 \underline{- 4} \\
 20 \\
 \underline{- 20} \\
 0
 \end{array}$$

Ans: 15 Kg of Wheat is used for a week.

3. There are 350 bricks in a hand- cart. Binod found the weight of a brick to be 2 Kg. What will be the weight of all the bricks?

Weight of 1 brick = 2 Kg

Weight of 350 bricks = ?

①

350

x 2

700

Ans: Total weight of 350 bricks is 700 Kg.

Pg: 128 [Teacher's Explanation]

Pg 129 [Teacher's Explanation]

[Answers to be written in text book]

Ans = 15

[left with ₹ 15]

2. $5 + 6 + ? =$ ____ rupees

$$5 + 6 + 3 = 14 \text{ rupees}$$

C.W

19. Now use your own method to divide ₹ 70 equally among 5 people if you want you can start by giving ₹ 2 to each or you can even start with Rs. 11 to each.

Sol:

Let us start with Rs.11 to each first, I gave Rs.11 to each

$$\begin{array}{r} 11 + 3 \\ \hline 5 \overline{) 610} \\ \underline{55} \\ 15 \\ \underline{15} \\ 0 \end{array}$$

Pg: 129 In text book

Can you start with Rs. 15 to each?

No, we can't start with Rs. 15 as (Rs. 15 x 5 = 75)

Which is more than 70.

(In CW)

1. Try Doing These

$$1. \quad 2 \overline{) 84} \quad (40 + 2)$$

$$\begin{array}{r} \\ \underline{-80} \\ 4 \\ \underline{-4} \\ 0 \end{array}$$

Each should get Rs 40 + Rs 2
= Rs. 42

2. $90 \div 6$

$$6 \overline{) 90} \quad (10+5)$$

$$\begin{array}{r} \\ \underline{-60} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

Each should get Rs.10 + Rs.5
= Rs. 15

3. $2 \overline{) 232} \quad (100+10+6)$

$$\begin{array}{r} \\ \underline{-200} \\ 32 \\ \underline{-20} \\ 12 \\ \underline{-12} \\ 0 \end{array}$$

i) Pg. 130

1 Meera made 204 candles to sell in the market. She makes packets of 6. How many packets will she make? If she packs them in packet of 12, then how many packet will she make?

Sol:

No. of candles = 204

No. of packets at the rate of 6 per packet = ?

No. of packets she will make = $204 \div 6$

$$6 \overline{) 204}$$

$$\begin{array}{r} 34 \\ \underline{-18} \\ 24 \\ \underline{-24} \\ 0 \end{array}$$

She needs to make 34 packets. If she makes 12 candles per packet.

$$\begin{array}{r}
 17 \\
 12 \overline{)204} \\
 \underline{-12} \\
 84 \\
 \underline{-84} \\
 0
 \end{array}$$

17 packets are needed at the rate of 12 per packet.

Pg. 131: Teacher's Explanation [Text book]

1. How many Rakhi's are there in all?

$$\begin{aligned}
 \text{Ans: No. of Rakhi's} &= 8 \times 6 \\
 &= 48
 \end{aligned}$$

2. What is the cost of one packet of sugar?

$$\begin{aligned}
 \text{Ans. Cost of 1 packet} &= 110 \div 10 \\
 &= \frac{110}{10} = 11 \text{ rupees}
 \end{aligned}$$

3. How many students are there in each row?

$$\begin{aligned}
 \text{Ans. No. of students in each row} &= \frac{35}{7} \\
 &= 5 \text{ students}
 \end{aligned}$$

4. How much is the cost of four rail tickets?

$$\text{Ans. Cost of 4 rail tickets} = 4 \times 62$$

$$= \text{Rs. } 248$$

5. How many metres of cloth was bought for ₹ 140?

Ans. Length of cloth bought for Rs. 140

$$\begin{aligned}
 &= \text{Rs } 140 \div 20 \\
 &= \frac{140}{20} = 7\text{m}
 \end{aligned}$$

Class Work

Ch – 2 LONG AND SHORT

Relation between Units

Conversion

- 1 m = 100 cm
- 1 km = 1000m
- ½ km = 500 m
- ¾ km = 750 m
- ¼ km = 250 m

I. Change to centimetres:

1. 3m

$$\begin{aligned}
 \text{Sol: } 1\text{m} &= 100 \text{ cm} \\
 3\text{m} &= 3 \times 100 \\
 &= 300\text{cm}
 \end{aligned}$$

Ans: 300cm

2. 5m 50cm

$$\begin{aligned}
 \text{Sol: } 1\text{m} &= 100\text{cm} \\
 5\text{m} &= 5 \times 100\text{cm}
 \end{aligned}$$

$$= 500\text{cm}$$

$$5\text{m } 50\text{cm} = 500\text{cm} + 50\text{cm}$$

Ans: 550cm

3. 8m 75cm

Sol: 1m = 100cm

$$8\text{m} = 8 \times 100$$

$$= 800\text{cm}$$

$$8\text{m } 75\text{cm} = 800\text{cm} + 75\text{cm}$$

Ans: 875cm

II. Express in metres and centimetres

1. 500 cm

2. 1638 cm

Sol: 1 m = 100 cm

Sol: 1 m = 100 cm

$$500 \text{ cm} = \frac{500}{100}$$

$$1638 \text{ cm} = \frac{1638}{100}$$

Ans: 5 m

Ans = 16 m 38 cm

3. 4005 cm

Sol: 1m = 100 cm

$$4005 \text{ cm} = \frac{4005}{100}$$

Ans: 40 m 05 cm

III. Express in metres:

1. 11km

2. 9km 750m

Sol: 1km = 1000m Sol: 1km = 1000m

$$11\text{km} = 11 \times 1000 \quad 9\text{km} = 9 \times 1000$$

$$\text{Ans} = 11000\text{m}$$

$$= 9000\text{m}$$

$$9\text{km } 750\text{m} = 9000\text{m} + 750\text{m}$$

Ans: 9750m

3. $7\frac{1}{2}$ km

Sol: 1 km = 1000 m

$$\frac{1}{2} \text{ km} = 500\text{m}$$

$$7\text{km} + \frac{1}{2} \text{ km}$$

$$7 \text{ km} = 7 \times 1000\text{m}$$

$$= 7000 \text{ m}$$

$$7\frac{1}{2} \text{ km} = 7000\text{m} + 500\text{m}$$

Ans: 7500 m

IV. Change to kilometres and metres

1. 3000 m

2. 3156 m

Sol: 1 km = 1000m

Sol: 1km = 1000m

$$3000\text{m} = \frac{3000}{1000}$$

$$3156 \text{ m} = \frac{3156}{1000}$$

Ans: 3 km

Ans: = 3km 156m

3. 6005 m

Sol: 1 km = 1000 m

$$6005 \text{ m} = \frac{6005}{1000}$$

Ans = 6 km 005 m

V. Word problem

1. Misha's house is 4 km 750m from her school. On Monday the school bus broke down after 3km 555m. How much distance is left for the bus to cover?

Sol:

Distance from house to school = 4km 750m

Distance covered by bus = 3km 555m

Distance left to reach school = ?

$$\begin{array}{r} \text{km} \quad \text{m} \\ 4 \quad 750 \\ (-) 3 \quad 555 \\ \hline 1 \quad 195 \end{array}$$

Ans: Distance left to reach school = 1km 195m

2. Mother joined strings length 2m 5cm. 1m 80cm and 1m 95cm to make a long string. What is the length of the string she made?

Sol:

$$\begin{array}{r} \text{m} \quad \text{cm} \\ \text{Length of three strings} = 2 \quad 05 \\ 1 \quad 80 \\ (+) 1 \quad 95 \\ \hline 5 \quad 80 \end{array}$$

Ans: Total length of the string she made = 5m 80cm

Chapter 2

LONG AND SHORT

Pg No – 13

1. Teacher's Explanation

2. In Textbook

Dots 0 and m are farthest from each other and distance between them is 0 m=10cm

3. In Textbook

Dots O and D are nearest to each other and Distance between them OD = 1 cm

Pg no -14

The shorter line (in textbook)

1. Ans: Birbal drew a longer line than the line drawn by Akbar.
2. Draw the line longer than the line drawn by Birbal.

Try these ()

Pg no. 15 (in textbook)

1. Yes
2. Yes, I have grown taller
3. Students corner
4. Yes most of them
5. Find out and fill the table below ()

6. In classwork

Ans: Height of that tall person = 272 cm

Height of Jhumpa = $\frac{1}{2}$ (height of person)

$$\begin{aligned}
 &= \frac{1}{2} (272) \\
 &= 272 \div 2 \\
 &= 136 \text{ cm}
 \end{aligned}$$

$$\begin{array}{r}
 136 \\
 2 \overline{) 272} \\
 \underline{2} \\
 07 \\
 \underline{-6} \\
 12 \\
 \underline{-12} \\
 0
 \end{array}$$

∴ Jhumpa is 136 cm tall

Imagine (In textbook)

1. My class room's door is 252 cm high so he cannot pass through the door without bending
2. No, my house's roof is 300 cm and he is shorter than this.

The long and short of your family

Student's corner

1. Pg no -16 (In textbook)

- a. 3 metres
- b. 6 m
- c. 15 m
- d. yes

2.

- a. 1 ½ km
- b. 3 km

Pg no.17 (In class work)

1 (a) Length of the track of a stadium = 400 m

$$\begin{aligned}
 \text{So, 10 rounds of a stadium track} &= 10 \times 400 \text{ m} \\
 &= 4000 \text{ m}
 \end{aligned}$$

Now 1000 m = 1 km

So 4000 m = 4 km

∴ 10 rounds of a stadium track = 4 km

b. Given

$$1 \text{ round} = 400 \text{ metres}$$

$$? = 40000 \text{ metres [} \because 1 \text{ km} = 1000 \text{ mtrs}$$

$$40 \text{ km} = 40 \times 1000$$

$$= 40000 \text{ metres]$$

$$\begin{aligned}
 ? &= \frac{40000}{400} \times 1 \\
 &= \frac{400}{1}
 \end{aligned}$$

$$? = 100 \text{ rounds}$$

Ans: So I have to complete 100 rounds

Long Jump (In classwork)

$$\begin{aligned}
 1. \text{ a) Gurjeet's jump} &= \text{Dhanush's jump} - 20 \text{ cm} \\
 &= 3\text{m } 40\text{cm} - 20 \text{ cm} \\
 &\Rightarrow 3\text{m } 40\text{cm} \\
 &= \underline{3\text{m } 20\text{cm}}
 \end{aligned}$$

$$\text{Gopi's jump} = \text{Gurjeet's jump} - 5\text{cm}$$

$$3\text{m } 20\text{cm} - 5\text{cm}$$

$$\begin{array}{r} 1\ 10 \\ \Rightarrow 3\ \text{m } \cancel{20}\ \text{cm} \\ - \quad \quad 5\ \text{cm} \\ \hline = 3\ \text{m } 15\ \text{cm} \end{array}$$

Ans: Gurjeet's jump = 3m 20cm

Gopi's jump = 3m 15cm

(In textbook)

b) I can jump 1 m 30 cm long

c) 7 metres

d) 10 metres

Pg no. 18 (class work)

1. Men's high jump world record = 2m 45cm
 Chandra pal's jump = 2m 17cm
 Difference in their jump = 2m 45 cm - 2m 17cm

$$\begin{array}{r} 3\ 15 \\ 2\text{m } \cancel{45}\ \text{cm} \\ - \quad 2\ \text{m } 17\ \text{cm} \\ \hline 0\ 28\ \text{cm} \end{array}$$

∴ Chandra Pal require 28 cm more to equal the men's world record for him.

2. Bobby A high jump = 1m 91cm

= 191cm

Required height = 2m - 1m 91cm

$$\begin{aligned} &= 200\ \text{cm} - 191\ \text{cm} \\ &= 9\ \text{cm} \quad [1\ \text{m} = 100\ \text{cm}] \end{aligned}$$

∴ Bobby should jump 9 cm higher to reach 2 metres

1 metre = 100 cm

Half metre = $\frac{100}{2}$ = 50cm

3. (In textbook)

b. 7 and half metres

4. (In classwork)

Women's long jump world record = 7 m 52 cm

Women's high jump world record = 2 m 9 cm

Difference between them = 7m 52cm - 2m 9cm

$$\begin{array}{r} 4\ 12 \\ = 7\ \text{m } \cancel{52}\ \text{cm} \\ - \quad 2\ \text{m } \quad 9\ \text{cm} \\ \hline 5\ \text{m } 43\ \text{cm} \end{array}$$

The difference between longest jump and

highest jump of women's world record = 5m 43cm

5. Mike.P long jump world record = 8m 95cm

To complete 9 metres

Mike.P has to jump = 9m - 8m 95cm

Ans: 5 cm

$$\begin{array}{r} 8\ 9\ 10 \\ \cancel{8}\ \text{m } \cancel{95}\ \text{cm} \\ - \quad 8\ \text{m } 95\ \text{cm} \\ \hline 0\ 5\ \text{cm} \end{array}$$

6. (In Textbook) C.Jarier.S

Pg no.19

(In textbook)

$$\begin{aligned}
 1. \text{ He had run} &= 4 \times 500 \text{ m} \\
 &= 2000\text{m} = 2\text{km}
 \end{aligned}$$

1. In Classwork

Length of the boundary of the park = 400m

No. of rounds required to complete 2km i.e. 2000 m

$$= \frac{2000}{400} = 5 \text{ rounds}$$

∴ Devi Prasad has to run 5 rounds of park

$$\begin{aligned}
 3. \text{ Distance covered in one round} &= 400 \text{ m} \\
 \text{Distance covered in 8 rounds} &= 8 \times 400 \text{ m} \\
 &= 3200 \text{ m (1km = 1000m)} \\
 &= 3\text{km } 200\text{m}
 \end{aligned}$$

∴ That day he ran 3km 200m

How many rooms high? (In classwork)

a. My classroom is about 3 metres high

b. Height of the Qutub Minar = 72 m

No. of rooms required = $\frac{\text{Height of QutubMinar}}{\text{Height of one room}}$

$$= \frac{72 \text{ m}}{3 \text{ m}} = 24 \text{ m}$$

$$\begin{array}{r}
 24 \\
 \hline
 3 \overline{) 72} \\
 \underline{- 6} \\
 12 \\
 \underline{- 12} \\
 0
 \end{array}$$

∴ 24 rooms one on top of the other will equal Qutab Minar

c. Made a guess on the basis of the height of my classroom

Pg no: 20 (In classwork)

1. The distance of Kozhikode from Thalassery = 24km + 46km
(Since both are in opposite direction)

$$\begin{array}{r}
 \boxed{1} \\
 24
 \end{array}$$

$$+ 46$$

$$\hline 70 \text{ Km}$$

Ans: The distance of Kozhikode from Thalassery = 70 Km

2. Distance walked by momum everyday to reach school

= Distance walked up to the pond + Distance walked through the pond + Distance ran across green field + Distance in crossing the road

$$\begin{aligned}
 &= 400\text{m} + 150\text{m} + 350\text{m} + 40\text{m} \\
 &= 940 \text{ metres}
 \end{aligned}$$

Ans:

$$\begin{array}{r}
 1 \\
 400 \\
 150 \\
 350 \\
 40 \\
 \hline
 940
 \end{array}$$

a) Distance walked by momum everyday to reach school = 940 metres

b) No, It is not more than 1 km, as 1km = 1000m

Pg No 21

Find out how far your friends live from school and fill the table. Write in metres or kilometres. (Student's Corner)

Guess and find out (In Textbook)

1. It depends on its size. It may be 50 metres, 100 metres etc.

2. It depends upon its size. It may be 500 metre, to 1000 metres etc. Yes it can be more than a kilometre in length.

3. It may be about 100 metres

Pg no: 22 Students corner

CHAPTER 7

JUGS AND MUGS

Pg no – 70 (In Text book)

1. 25 litres (approximation)

2. 10 litres (approximation)

Pg No- 71 (In Textbook)

10 times hundred millilitres is 1000 millilitres = 1 litre

Now you write it $10 \times 100 \text{ ml} = 1000 \text{ ml} = 1 \text{ l}$

Pg no -72 (In Textbook)

$1000 \times 1 \text{ ml} = 1000 \text{ ml}$

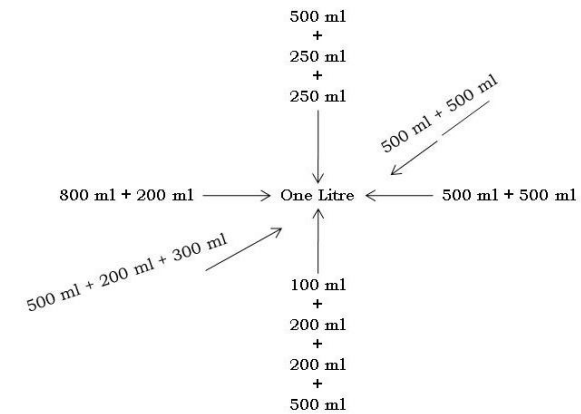
Pg no 73 (In textbook)

Who can have 1 litre kheer

1. Yes, I like kheer. We also call it “Kheer” at home.

2. I can have only 250 ml of kheer

3. No, I cannot drink 1 l water at one time.



Pg no 74 (Student's corner)

Look Around

My Litre bottle

Pg no: 75 Teacher should do the activity and explain

Look What Adithyan is saying (In Textbook)

1. 500 ml

2. 200 ml

Ramu's Measuring Bottle (In Classwork)

★Ramu took the 250 ml coconut oil bottle and filled it with water

★He poured this water into a big empty bottle and marked as 250 ml.

★ He repeated the process again and marked as 500 ml.

Since $250+250 = 500\text{ml}$

★Again he repeated and marked as 750ml as $500+250=750\text{ml}$

★Finally he repeated the process and marked as 1 litre as $750+250=1000\text{ml}$ which is equal to 1 litre.

★Thus he got a measuring bottle clearly marked 250 ml, 500ml, 750ml and 1 litre.

Pg No: 76

My Measuring bottle (In Classwork)

To make a measuring bottle

★Take two empty bottle – one of a large size and another of 200 ml.

★Fill the 200 ml bottle with water and pour the entire water into the large bottle and mark the level as 200 ml.

★ Repeat the process again and now mark the level as 400 ml Since $200+200=400\text{ml}$.

★ Follow the same process and mark the levels as 600 ml ($400+200 = 600\text{ml}$)

★ On repetition, mark the level as 800 ml ($600+200=800\text{ml}$)

★ Finally mark the level as 1000ml ($800+200 = 1000\text{ml} = 1\text{litre}$)

Thus, I have obtained my measuring bottle.

Guess and Check

(Teacher should do an activity and explain)

Pg no. 77 (In classwork)

1. 1 injection = 5 ml.

No of injection needed in a day = 3

Medicine injected in one day = $3 \times 5 \text{ ml} = 15 \text{ ml}$

Medicine injected in 5 days = $5 \times 15 \text{ ml} = 75 \text{ ml}$

2. How much do we use at a time? (In Textbook)

Ans.

Cough Syrup - We use about 5 ml at a time.

Hair oil - We use about 10 ml at a time.

Shampoo - We use about 7 ml at a time.

3. List things we use more than one litre at a time. (In textbook)

Ans.★ Water for cleaning clothes.

★ Water for flushing toilet.

★ Water for watering the plants.

Pg no.78 (Classwork)

1. Total water in Amina's bottle = 1 litre = 1000 ml

Water consumed by Amina = 250 ml

Water consumed by Govind = 150 ml

Total water consumed = 250 ml + 150 ml

= 400 ml

Water left in Amina's bottle = 1000 ml – 400 ml

= 600 ml

$$\begin{array}{r} \boxed{1} \\ 250 \\ + 150 \\ \hline 400 \\ \begin{array}{r} 010 \\ \cancel{1000} \end{array} \\ - 400 \\ \hline 600 \end{array}$$

2. Milk used for making one glass of tea = 20 ml

Milk used for making 100 glasses = $100 \times 20 \text{ ml}$

$$= 2000 \text{ ml}$$

3. Medicine contained in the bottle = 200 ml

Since the medicine is to be taken for 10 days.

$$\begin{aligned} \text{Therefore, the medicine to be taken per day} &= \frac{200 \text{ ml}}{10} \\ &= 20 \text{ ml.} \end{aligned}$$

4. Pg No.79 (In textbook)

Water Water

1. Total water used by them 165 litres.
2. How many litres of water does your family use in a day?

Activity	Water used in Buckets	Water used in litres
Cooking and drinking	3	45 l
Washing clothes	5	75 l
Cleaning pots, pans	3	45 l
Bathing	6	90 l
Flushing toilets	3	45 l
Watering plants	2	30 l
Washing vehicles	2	30 l

Total water used = 360 l

Drops and Drops make an ocean (In textbook)

1. No
2. about 5 l to 10 l
3. In one hour, about 1 l water is in the bottle

Pg no. 80 (In classwork)

a. If in one hour 1 l water is wasted. So, in 1 day or 24 hours, water wasted = $1 \text{ l} \times 24 = 24 \text{ l}$

b. If in one day 24 l of water is wasted

Then, in one week or 7 days water wasted = $24 \text{ l} \times 7 = 168 \text{ l}$

c. In one month which has 30 days, water wasted = $24 \text{ l} \times 30 = 720 \text{ l}$

d. If 24 l of water wasted, in one day, then amount of water wasted in one year = $24 \text{ l} \times 365 = 8760 \text{ l}$ (Note 1 year = 365 days)

2. Ans $5 - 3 = 2$

The man first measured 5 litres and then took out 3 litres such that ($5 - 3 = 2$). The remaining milk is 2 litres. The same process was repeated to get another 2 litres of milk. In this way, they got 4 litres of milk.

Ch - 7 JUGS AND MUGS

Units :

Relation between units

$$1 \text{ l} = 1000 \text{ ml}$$

$$\frac{1}{2} \text{ l} = 500 \text{ ml}$$

$$\frac{1}{4} \text{ l} = 250 \text{ ml}$$

$$\frac{3}{4} \text{ l} = 750 \text{ ml}$$

I. Change to millilitres

1. 6 l

Sol: $1 \text{ l} = 1000 \text{ ml}$

$$6 \text{ l} = 6 \times 1000$$

Ans = 6000 ml

2. 2 l 370 ml

Sol: $1 \text{ l} = 1000 \text{ ml}$

$$2 \text{ l} = 2 \times 1000$$

= 2000 ml

$$2\ 1\ 370\ \text{ml} = 2000\ \text{ml} + 370\ \text{ml}$$

$$\text{Ans: } 2370\ \text{ml}$$

$$3. 4\ \frac{3}{4}\ \text{l}$$

$$\text{Sol: } 1\ \text{l} = 1000\ \text{ml}$$

$$\frac{3}{4}\ \text{l} = 750\ \text{ml}$$

$$4\ \text{l} = 4 \times 1000$$

$$= 4000\ \text{ml}$$

$$4\ \text{l} + \frac{3}{4}\ \text{l} = 4000\ \text{ml} + 750\ \text{ml}$$

$$\text{Ans} = 4750\ \text{ml}$$

II. Express as litres and millilitres

$$1. 4500\ \text{ml}$$

$$2. 90075\ \text{ml}$$

$$\text{Sol: } 1\ \text{l} = 1000\ \text{ml}$$

$$\text{Sol: } 1\ \text{l} = 1000\ \text{ml}$$

$$4500\ \text{ml} = \frac{4500}{1000}$$

$$90075\ \text{ml} = \frac{90075}{1000}$$

$$\text{Ans} = 4\ 500\ \text{ml}$$

$$\text{Ans} = 90\ 075\ \text{ml}$$

III. Word Problem

1. Amir drank 350 ml water Rohit drank 175 ml water. How much water in all did they drink?

$$\text{Quantity of water Amir drank} = 350\ \text{ml}$$

$$\text{Quantity of water Rohit drank} = 175\ \text{ml}$$

$$= 350 + 175$$

$$1$$

$$3\ 5\ 0\ \text{ml}$$

$$(+)\ \underline{1\ 7\ 5\ \text{ml}}$$

$$\underline{5\ 2\ 5\ \text{ml}}$$

Quantity of water they drank in all = 525 ml

2. My water bottle had 1 L water. After I drank 175 ml water, How much of water is left in the bottle?

$$\text{Amount of water in the bottle} = 1\ \text{l} = 1000\ \text{ml}$$

$$\text{Amount of water I drank} = 175\ \text{ml}$$

$$\text{Amount of water left} = 1000 - 175$$

Ans: 825 ml water was left in the bottle

$$\begin{array}{r} 0\ 9\ 9\ 10 \\ \cancel{1}\ \cancel{0}\ \cancel{0}\ \cancel{0} \\ (-) \quad \underline{1\ 7\ 5} \\ \hline \quad \underline{8\ 2\ 5} \end{array}$$

CH - 12

HOW HEAVY ? HOW LIGHT?

Relation Between Units \longrightarrow

$$1\ \text{g} = 1000\ \text{mg}$$

$$1\ \text{kg} = 1000\ \text{g}$$

$$\frac{1}{2}\ \text{kg} = 500\ \text{g}$$

$$\frac{1}{4}\ \text{kg} = 250\ \text{g}$$

$$\frac{3}{4}\ \text{kg} = 750\ \text{g}$$

I. Change to grams

$$1. 3\ \text{Kg}$$

$$\text{Sol: } 1\ \text{kg} = 1000\ \text{g}$$

$$3\ \text{kg} = 3 \times 1000$$

$$= 3000\ \text{g}$$

2. 4 kg 15 g

Sol: 1 kg = 1000 g

$$4 \text{ kg} = 4 \times 1000$$

$$= 4000 \text{ g}$$

$$4 \text{ kg } 15 \text{ g} = 4000 \text{ g} + 15 \text{ g}$$

Ans = 4015 g

3. 10 $\frac{1}{4}$ kg

Sol: 1 Kg = 1000 g

$$10 \text{ kg} = 10 \times 1000$$

$$= 10000 \text{ g}$$

$$\frac{1}{4} \text{ kg} = 250 \text{ g}$$

$$10 \frac{1}{4} \text{ kg} = 10000 \text{ g} + 250 \text{ g}$$

Ans = 10250 g

Ans = 6732 mg

3. 3 g 408 mg

Sol: 1 g = 1000 mg

$$3 \text{ g} = 3 \times 1000$$

$$= 3000 \text{ mg}$$

$$3 \text{ g } 408 \text{ mg} = 3000 \text{ mg} + 408 \text{ mg}$$

Ans = 3408 mg

II. Change to kilograms

1. 19000 g

Sol: 1 kg = 1000 g

$$19000 \text{ g} = \frac{19000}{1000}$$

Ans = 19 Kg

2. 77008 g

Sol: 1 kg = 1000 g

$$77008 \text{ g} = \frac{77008}{1000}$$

Ans = 77 kg 008 g

IV. Express as grams

1. 9172 mg

Sol: 1 g = 1000mg

$$9172 \text{ mg} = \frac{9172}{1000}$$

Ans = 9 g 172 mg

3. 7489 g

1 kg = 1000 g

$$7489 \text{ g} = \frac{7489}{1000}$$

Ans = 7 Kg 489 g

2. 6018 mg

Sol: 1 g = 1000 mg

$$6018 \text{ mg} = \frac{6018}{1000}$$

Ans = 6 g 018 mg

III. Express as Milligrams

1. 10 g

Sol: 1 g = 1000 mg

$$10 \text{ g} = 10 \times 1000$$

Ans = 10000 mg

2. 6 g 732 mg

Sol: 1 g = 1000 mg

$$6 \text{ g} = 6 \times 1000$$

$$= 6000 \text{ mg}$$

$$6 \text{ g } 732 \text{ mg} = 6000 \text{ mg} + 732 \text{ mg}$$

3. 27055 mg

Sol: 1 g = 1000 mg

$$27055 = \frac{27055}{1000}$$

Ans = 27 g 055 mg

V. Word problem

1. Mr. Jai made fruit salad. He used 1 kg oranges, $\frac{1}{4}$ kg apples, 1 kg strawberries and $\frac{3}{4}$ kg bananas. What is the total weight of fruits used?

Sol:

Weight of oranges	=	1 kg	=	11	=	1000 g
Weight of apples	=	$\frac{1}{4}$ kg	=	250g		
Weight of strawberries	=	1 kg	=	1000g		
Weight of bananas	=	$\frac{3}{4}$ kg	= +	750g		
Ans: Total weight of fruit used	=			3000 g		

2. The cost of a kilogram of potatoes is ₹32. What is the cost of 500g of potatoes?

Sol:

Cost of 1 kg potatoes	=	₹32
Cost of 500 g potatoes	=	?

$$1 \text{ kg} = 32$$

$$500 \text{ g} = ? \text{ (Half of ₹32)}$$

$$= 32 \div 2$$

$$= ₹16$$

Ans: 500 g of potatoes cost ₹16

CHAPTER - 12

HOW HEAVY? HOW LIGHT?

Pg - 133 (Teacher's Explanation)

Pg- 134 (Classwork)

Ans : Weights of things

Things loaded	Weight	No. of items	Total Weight
A sack of wheat	100 kg	5	$5 \times 100 = 500 \text{ kg}$
A sack of rice	35 kg	3	$3 \times 35 = 105 \text{ kg}$
Water tank	50 kg	1	$1 \times 50 = 50 \text{ kg}$
Almirah	70 kg	1	$1 \times 70 = 70 \text{ kg}$
A table	10 kg	3	$3 \times 10 = 30 \text{ kg}$
A chair	5 kg	4	$4 \times 5 = 20 \text{ kg}$
A mattress	20 kg	2	$2 \times 20 = 40 \text{ kg}$
Bamboo ladder	10 kg	1	$1 \times 10 = 10 \text{ kg}$
Pots and Pans	10 kg	1	$1 \times 10 = 10 \text{ kg}$
Total			= 835 kg

Thus, the total weight loaded on the cart is 835 kg.

2. Weight to be removed = $835 - 700 = 135 \text{ kg}$ 8 3 5

Weight of 3 sacks of rice = 105 kg - 7 0 0

Weight of 3 tables = 30 kg 1 3 5

\therefore Total = $105 + 30 = 135 \text{ kg}$

So, 3 sacks of rice and three tables may be removed so that weight of load is not more than 700 kg

Pg 134

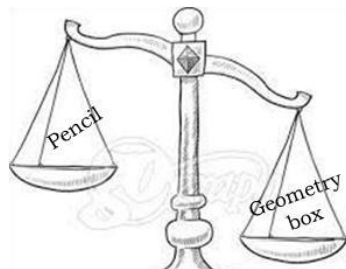
To make one own balance (In textbook)

To make a balance we need a stick, two coconut shell and a thick thread. Shells are tied on both the ends of stick using thread. A hole is made in the middle of the stick to hold it



Pg no 135 Activity in textbook

1. Ans: The pan containing the geometry box will go down.



What is heavier (In classwork)

Ans: The Pairs are : Pan of these go down

(i) Glass and fork : Glass is heavier

(ii) Book and paper : Book is heavier

(iii) Football and tennis ball : Football is heavier

(iv) Handkerchief and shoes : Shoes are heavier

What is the Heaviest? (In Textbook)

Lightest	In -between weight	Heaviest
Paper	Eraser	Ball
Orange	Papaya	Watermelon
Scarf	Towel	Leather coat

Pen	Box	Bag
Lemon	Cauliflower	Pumpkin
Tie	Shirt	Coat

2. No

Pg 136 (In Textbook) (Teacher's Explanation)

1. 100 grams (show the soap to the children)

2. Now stick a strip of paper and write 100g on it.

3. 200 grams

Pg 137 (In textbook)

Which pan of the balance will go down? Show by drawing an arrow.

1. 25 g 35 g

$\frac{40 \text{ g}}{65 \text{ g}}$ $\frac{40 \text{ g}}{75 \text{ g}}$

2. $\frac{75 \text{ g}}{150 \text{ g}}$ 35

$\frac{75 \text{ g}}{150 \text{ g}}$ $\frac{140}{175 \text{ g}}$

3. 105 g 150

$\frac{200 \text{ g}}{305 \text{ g}}$ $\frac{250}{400 \text{ g}}$

4. $\frac{1}{1}55 \text{ g}$

$\frac{245 \text{ g}}{700 \text{ g}}$ $\frac{254 \text{ g}}{600 \text{ g}}$
 $\frac{1000}{854 \text{ g}}$

5. $\frac{1}{1}20 \text{ g}$

$\frac{196 \text{ g}}{216 \text{ g}}$ $\frac{197 \text{ g}}{197 \text{ g}}$

6. 1

$$\begin{array}{r} 36 \text{ g} \\ 75 \text{ g} \\ \hline 111 \text{ g} \end{array} \qquad \begin{array}{r} 63 \text{ g} \\ 100 \text{ g} \\ \hline 163 \text{ g} \end{array}$$

2. Left pan of balance 4 in figure contains weights equal to 1 kg.
3. There are 1000 grams in 1 kg.

Pg no. 138 (In text book)

1.

In grams	In Kilograms
Chilli powder	Wheat
Saffron	Sugar
Spices	Watermelon
Biscuits	Vegetables
Chocolates	Pulses

2. Ans: Both has equal weight.

Pg no: 139

Dinesan went shopping (**In Textbook**)

Items	Weight
Rice	5 kg
Sugar	1 kg
Mustard seeds	10 kg
Wheat	3 kg
Dal	500 g
Tea	250g
Pepper	25 g

Car and Tractor (In Textbook)

1. Pan containing tractor goes down. So the tractor is heavier than car.
2. The bus is heaviest.
3. An aeroplane.

Pg No 140, 141, 142 (Story Explanation) (Classwork)

The elephant was removed from the boat after marking the water level on the boat. Vaidika's daughter then requested the king to put gold on the boat till the water level touched the mark on the boat. When elephant was on the boat. Now the king was not left with any alternative. He had to give gold equal to elephant's weight to Vaidika.

Pg no. 143

How much the chair weighs (In Textbook)

Ans: First note your weight on weighing machine. Then hold the chair and stand again on the weighing machine. The Difference between the two weights is the weight of chair.

Broken Stones (In Textbook)

Explanation

Pg 144

- a. Ans: By placing a bundle of wood and a stone weighing 2 kg in one pan and by placing a stone weighing 6 kg in the other pan.
- b. Ans: By placing a bundle of firewood and a stone weighing 2 kg in one pan and a stone weighing 5 kg in the other pan.
- c. Ans: By placing firewood in one pan and two stones of weight 2 kg and 5 kg in the other Pan.

Pg no. 145 Post office (In textbook)

1. Yes
2. Posting letters / Parcels and purchasing postal items.
3. 50 Paise
4. ₹ 2.50

Pg 145, 146

Look at the Postal rates given in the chart (Classwork)

1. Ans: Charges for sending a letter weighing 50grams:

Charges for 1 st 20 grams or less	=	Rs. 5.00
Charges for next 20 grams	=	Rs. 2.00
Charges for next 10 grams	=	Rs. 2.00
Total charges	=	Rs 9.00

2. Ans: Charges for the book weighing 200 grams.

Charges for parcel weighing 50 grams = Rs. 5.00

Charges for next 150 grams at the rate of Rs. 3.00

For every additional 50 grams = Rs 3 x 3.00 = Rs. 9.00

Total charges = Rs. 14.00

3. The weighing machine showing the weight of parcel = 225 gram

Postal charges

For first 50 grams	=	₹ 5
For next 50 grams	=	₹ 3
For next 50 grams	=	₹ 3
For next 50 grams	=	₹ 3

For next 25 grams = ₹ 3

Total Postal charges = 5 + 3 + 3 + 3 + 3 = ₹ 17

So, the cost for sending a parcel of 225 g is ₹ 17

Pg. 146 How many stamps (classwork)

Ans: There are many ways to make ₹ 25 stamps using stamp of ₹ 1, ₹ 2, ₹ 5 and ₹ 10. Some of these are as follows.

- i) 25 x ₹ 1 = ₹ 25
- ii) 12 x ₹ 2 + 1 x ₹ 1 = ₹ 24 + ₹ 1 = ₹ 25
- iii) 5 x ₹ 5 = ₹ 25
- iv) 2 x ₹ 10 + 1 x ₹ 5 = ₹ 20 + ₹ 5 = ₹ 25
- v) 2 x ₹ 10 + 2 x ₹ 2 + 1 x ₹ 1 = ₹ 20 + 4 + 1 = ₹ 25
- vi) 1 x ₹ 10 + 3 x ₹ 5 = ₹ 10 + ₹ 15 = ₹ 25
- vii) 2 x ₹ 10 + 5 x ₹ 1 = ₹ 20 + ₹ 5 = ₹ 25

The heaviest Parcel that could be sent using ₹ 25 stamp is of weight.

50 g	(1 st ₹ 5)
300 g	(for next ₹ 20 at rate of ₹ 3)
350 g	(Total weight)

Our Weight Together (classwork)

The moment the crow opened his beak, the frog escaped. The crow wanted to give (650 + 145)g = 795gm.

Pg 147 (text book)

(Approximation) Am 1 fit or fat ? 1 feet = 12 inches

Name	Age	Height	Weight
Tina	8	4 feet, 1 inches	21 kg
Rahul	8	4 feet , 4 inches	20 kg
Chetna	9	5 feet , 2 inches	19 kg
Chirag	7	4 feet , 10 inches	17 kg
Ankit	10	4 feet , 8 inches	24 kg

Pg no. 148

How many oranges (In Textbook)

In first balance –

$$1 \text{ mango} + 1 \text{ orange} = 3 \text{ oranges}$$

$$\therefore 1 \text{ mango} = 3 \text{ oranges} - 1 \text{ oranges}$$

$$= 2 \text{ oranges}$$

In second balance

$$2 \text{ papayas} = 2 \text{ oranges} + 1 \text{ mango}$$

$$= 2 \text{ oranges} + 2 \text{ oranges}$$

$$= 4 \text{ oranges}$$

$$1 \text{ papaya} = 4/2 \text{ oranges}$$

$$= 2 \text{ oranges}$$

In third balance (Ref balance 1 and 2)

$$1 \text{ papaya} + 1 \text{ mango} = 2 \text{ oranges} + 2 \text{ oranges}$$

$$= 4 \text{ oranges}$$

Hence, 4 oranges will balance one papaya and together with one mango in third balance.

Find the marble (In classwork)

Let A, B and C be the three marbles. One of them is heavier or lighter than the other's

Case 1: Put marbles A and B in different Pans

If A=B, then C is heavier or lighter

Case 2 : Put marbles A and C in different pans

If A=C, then B is heavier or lighter

(a) If A<C, then B=C and A is lighter than B and C.