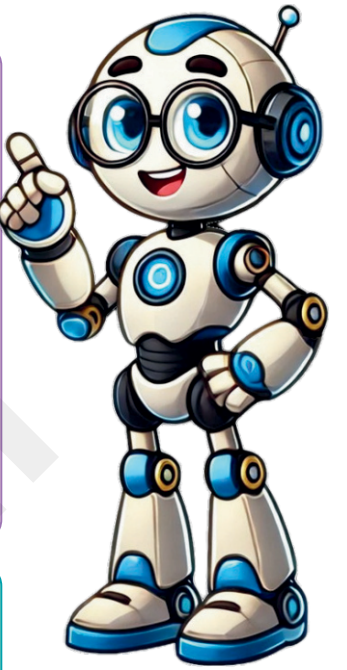
9 Measurement

We'll cover the following key points:

→Measurement of Length
→Word Problems of Length
→Measurement of Mass (Weight)
→Using decimals to express mass (weight)
→Measurement of Capacity (Volume)
→Estimating Measures
→Estimating Measures in Length, Weight and Volume (Capacity)
→Estimating Difference



EeeBee

Do you Remember fundamental concept in previous class.
In class 4th we learnt

→Units of Measurement
→Adding and Subtracting Measures
→Estimating Measures in Length, Weight and Volume (Capacity)

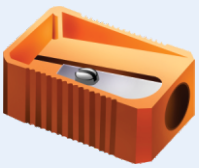
Still curious? Talk to me by scanning the QR code.

Learning Outcomes

By the end of this chapter, students will be able to:

- Understand the concept of measuring length, mass (weight), and capacity (volume) using appropriate standard units.
- Solve word problems involving the measurement of length in real-life scenarios.
- Use decimals to represent and calculate mass (weight) effectively.
- Measure and compare capacities (volumes) of different containers using standard units.
- Develop the ability to estimate lengths, weights, and capacities in everyday contexts.
- Accurately estimate and compare measurements of length, weight, and volume, identifying reasonable approximations.
- Solve problems involving estimating the difference between two measurements.
- Apply the knowledge of measurement in interpreting and solving practical word problems.

Fill in the boxes with appropriate measurements against each figure. Choose from mg, g, kg, ml, l, mm, cm, m, km.



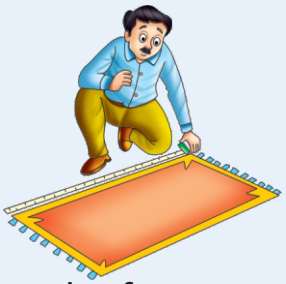
A sharpener

Weight of a boy

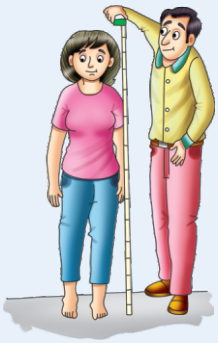
A cold drink

A bottle of mineral water

A pen



Length of a carpet



Height of woman

Weight of potato chips

Weight of apples

Measurement of Length

Take a Task  Watch Remedial 

In earlier classes, we have already studied the measurement of the length of objects, height of the wall, length and breadth of the playground, etc. in metres.

Metre is the basic unit of length. It is represented as m. Prefixes like kilo, hecto, deca, milli, centi, etc. are used to relate to the basic unit (metre). These other units are related to the basic unit by multiples of 10.

Place / **Value**	Thousands (× 1000)	Hundreds (× 100)	Tens (× 10)	Ones	Tenths $\left(\frac{1}{10}\right)$	Hundredths $\left(\frac{1}{100}\right)$	Thousandths $\left(\frac{1}{1000}\right)$
Prefix	kilo	hecto	deca		deci	centi	milli

Read the following carefully and observe relationship among the units :

Relating metre to other units

More than a metre

kilometre (km) — m ÷ 1000

hectometre (hm) — m ÷ 100

decametre (dam) — m ÷ 10

metre (m)

Less than a metre

decimetre (dm) — (m × 10)

centimetre (cm) — (m × 100)

millimetre (mm) — (m × 1000)

REMEMBER

1000 m = 1 km

100 m = 1 hm

10 m = 1 dam

1000 mm = 1 m

100 cm = 1 m

10 dm = 1 m

Conversion of lengths

Conversion of kilometres into Metres and Metres into Centimetres

We have 1 km = 10 hm = 10 × 10 dam = 10 × 10 × 10 m

∴ 1 km = 1000 m

Now, 2 km = 2 × 1000 m = 2000 m

8 km = 8 × 1000 m = 8000 m

Also, we have 1 m = 10 dam = 10 × 10 cm = 100 cm

∴ 1 m = 100 cm

Now, 5 m = 5 × 100 = 500 cm

$$\frac{2}{5}\ \text{m} = \frac{2}{5} \times 100 = 40\ \text{cm}$$

Further, to convert kilometres and metres into metres, we multiply the number of kilometres by 1000 and add them to the number of metres.

For example : $5\ \text{km}\ 200\ \text{m} = 5 \times 1000\ \text{m} + 200\ \text{m} = 5000\ \text{m} + 200\ \text{m}$

$= 5200\ \text{m}$

Further, to convert metres and centimetres into centimetres we multiply the number of metres by 100 and add them to the number of centimetres.

For example : (i) $2\ \text{m}\ 85\ \text{cm} = 2 \times 100\ \text{cm} + 85\ \text{cm} = 200\ \text{cm} + 85\ \text{cm}$

$= 285\ \text{cm}$

(ii) $15\ \text{m}\ 75\ \text{cm} = 15 \times 100\ \text{cm} + 75\ \text{cm} = 1500\ \text{cm} + 75\ \text{cm}$

$= 1575\ \text{cm}$

Using decimals to express length

Conversion of metres into kilometres (using decimal)

Decimals are used to express lengths in higher units.

Rupa's father travels a distance of 9 km 500 m from home to office.

9 km 500 m is the same as 9500 m (9 × 1000 m + 500 m).

Using decimals, 9 km 500 m can be written as 9.500 km.

$9\ \text{km}\ 500\ \text{m} = 9.500\ \text{km}$

9 km ← . → 500 m

Convension of centimetres into metres (using decimal)

We know that, $1\ \text{m} = 100\ \text{cm}$

or $100\ \text{cm} = 1\ \text{m}$

or $1\ \text{cm} = \frac{1}{100}\ \text{m} = 0.01$

Example : Convert 6 m 240 cm into metres

Solution : $6\ \text{m}\ 240\ \text{cm} = 6\ \text{m}\ \frac{240}{100}\ \text{m} = 6\ \text{m} + \frac{24}{100}\ \text{m}$

$= 6\ \text{m} + 2.40\ \text{m} = 8.40\ \text{m}$ or $8.4\ \text{m}$

Example : Convert 5 km 20 m into kilometres.

Solution : $5\ \text{km}\ 20\ \text{m} = 5\ \text{km} + \frac{20}{1000}\ \text{km} = 5\ \text{km} + 0.020\ \text{km} = 5.02\ \text{km}$

Example : There was 3.1 cm rainfall on Monday.

How much was that in mm?

Solution : $3.1 \times 10 = 31$ mm

Thus, The rainfall on Monday was 31 mm.

Example : My mother is 162 cm tall. Convert the height in m.

Solution : $162 \div 100 = \frac{162}{100} = 1.62$ m

Thus, my mother is 1.62 m tall.

Example : The wheel of a bicycle covers a distance of 3 m in 1 revolution.

How much distance would it cover in 700 revolutions?

Write your answer in km.

Solution : Distance covered in 700 revolutions $= 3 \times 700 = 2100$

$$2100 \text{ m} \div 1000 = \frac{2100}{1000} = 2.1 \text{ km}$$

Thus, the wheel would cover 2.1 km in 700 revolutions.

Example : To reach an island, Vihan travelled 6.5 km by a ship and 4 km 275 m by a boat. What is the total distance travelled by Vihan?

Solution : Distance travelled by ship = 6.5 km = 6.500 km

Distance travelled by boat = 4 km 275 m = 4.275 km

Total distance travelled = 6.500 + 4.275

```
  6 . 5 0 0
+ 4 . 2 7 5
-----------
 10 . 7 7 5
```

Thus, Vihan travelled a total distance of 10.775 km.

Mental Math

Critical Thinking

Fill in the blanks:

1. A stack of 10 erasers is 5 cm high. Each eraser is _____ mm thick.
2. A stack of 10 bedsheets is 85.5 cm high. One bedsheet is _____ mm thick.
3. A pile of 10 notebooks is 10 cm high. The thickness of 1 notebook is _____ mm.

Exercise 9.1

Knowledge Application

1. Fill in the blanks:

(a) 8.74 m = _____ m _____ cm (b) 5.8 km = _____ km _____ m

(c) 6.4 cm = _____ cm _____ mm (d) 5.21 km = _____ km _____ m

(e) 3.675 km = _____ m (f) 288 m = _____ km

(g) 8.75 m = _____ cm (h) 915 cm = _____ m

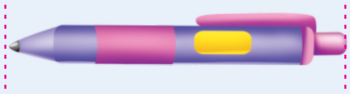
2. Use a centimetre scale to measure these pens in cm and mm:

(a) 

_____ cm _____ mm = _____ cm

(b) 

_____ cm _____ mm = _____ cm

(c) 

_____ cm _____ mm = _____ cm

(d) 

_____ cm _____ mm = _____ cm

3. Convert the following into kilometres and metres :

(a) 4255 m (b) 7856 m (c) 2887 m (d) 3085 m

4. Convert the following into metres and centimetres :

(a) 348 cm (b) 4416 cm (c) 958 cm (d) 705 cm

Word Problems

Example : Ramesh's pencil is 10.5 cm long whereas Rakesh pencil is 121 mm long. Whose pencil is longer and by how much ?

Solution : Length of Ramesh's pencil = 10.5 cm = 10.5 × 10 = 105 mm

Length of Rakesh's pencil = 121 mm

121 > 105, so Rakesh's pencil is longer.

To find how much, let us subtract 105 from 121.

$$\begin{array}{r} 121 \\ -\,105 \\ \hline 16 \end{array}$$

16 mm ÷ 10 = 1.6 cm

Therefore, Rakesh's pencil is longer than Ramesh's pencil by 1.6 cm.

REMEMBER

To compare measurements, convert them into the same units.

Example : The length and width of a box are such that scales with a thickness of 6 mm fit into it. How many scales can be kept in the box if the height of the box is 48 cm?

Solution : Height of the box = 48 cm = 48 × 10 = 480 mm

Thickness of a scale = 6 mm

Number of scales that can be kept in the box = 480 ÷ 6 = 80

Thus, 80 scales can be kept in the box.

Example : A shopkeeper had 60 m of silk. He sold 28 m 50 cm to a man. How much silk was left with him? Express the result in metres.

Solution : Total silk = 60 m

∴ Silk left with shopkeeper

= 60 m – 28 m 50 cm

= 31 m 50 cm

$= 31\text{ m} + \frac{50}{100}\text{ m} = 31\text{ m} + .5\text{m}$

= 31.5 m

	m	cm
	5 9	10
	6 0	0 0
–	2 8	5 0
	3 1	5 0

Thus, 31.5 m silk was left with the shopkeeper.

Exercise 9.2

Knowledge Application

Solve these word problems.

1. Richa is 1 m 25 cm tall. Her sister is 38 cm taller than her. What is the height of Richa's sister?
2. A rope 9 m 75 cm long is cut into two pieces. If one piece is 3.75 m long, find out the length of the other piece.
3. Ashok covers a distance of 50 cm with each step he takes. How many steps should he take to cover a distance of half a kilometre?
4. Kiran had to travel 20 km to attend a function. She had covered 17 km 50 m when the car broke down. How much distance remained to be covered?
5. John covered a distance of 180 km 550 m by train and 28 km 250 m by bus. How much distance did he cover altogether?
6. Two rolls of electric wires contain 80 m 20 cm and 86 m 56 cm of wire respectively. What is the total length of electric wire of both the rolls. Express the result in metres.

Project Work

Collaboration

Ask three of your friends to record the distance from their homes to the school.

Friends	Distance between home and school (in km and m)
You	

(a) Who lives the farthest from school? _____

(b) The difference in the distance of farthest and nearest reading? _____

(c) Sum of all the readings? _____

Measurement of Mass (Weight)

Different units commonly used for measuring weight are kilogram (kg), gram (g) and milligram (mg).

kilogram (kg) → more than a gram
(used for measuring heavy things)

gram (g) → basic unit of mass
(used for measuring light things)

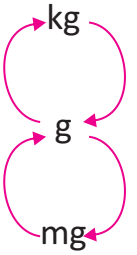
milligram (mg) → less than a gram
(used for measuring very light things)

Relation between different units of mass

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
kilogram (kg)	hectogram (hg)	decagram (dag)	gram (g)	decigram (dg)	centigram (cg)	milligram (mg)

This chart will help you to convert bigger units into smaller units and smaller units into bigger units.

To change from smaller units to bigger units ÷1000 ÷1000 DIVIDE.



×1000 ×1000 To change from bigger units to smaller units, MULTIPLY.

Conversion of weights

REMEMBER

1 kg = 1000 g

1 g = 1000 mg

Conversion of kilogram into gram

$1\text{ kg} = 10\text{ hg} = 10 \times 10\text{ dag} = 10 \times 10 \times 10\text{ g} = 1000\text{ g}$

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

Example : $3\text{ kg }275\text{ g} = 3 \times 1000\text{ g} + 275\text{ g} = 3000\text{ g} + 275\text{ g} = 3275\text{ g}$

Conversion of grams into kilograms

$1\text{ kg} = 1000\text{ g}$ or $1000\text{ g} = 1\text{ kg}$ or $1\text{ g} = \frac{1}{1000}\text{ kg} = 0.001\text{ kg}$

Example : (i) $6281\text{ g} = \frac{6281}{1000}\text{ kg} = 6.281\text{ kg}$

(ii) $293.28\text{ g} = \frac{293.28}{1000}\text{ kg} = 0.29328\text{ kg}$

Mental Math

Critical Thinking

Fill in the blanks:

1. 5 kg = _____ g
2. 13 g = _____ mg
3. 4000 mg = _____ g
4. 39 kg = _____ g
5. 8000 g = _____ kg
6. 15000 g = _____ kg

Using decimals to express mass (weight)

Decimals are used to express mass (weight) in higher units.

Rupali's mother buys tomatoes weighing 2 kg 750 g from a vegetable vendor.

2 kg 750 g is the same as 2750 g (2 × 1000 g + 750 g).

Using decimals, 2 kg 750 g can be written as 2 . 750 kg.

2 kg 750 g = 2 . 750 kg

2 kg ↙ ↘ 750 g

Example : A basket of apples weighs 7.5 kg. How much is that in g?

Solution : $7.5 \times 1000\text{ g} = 7500\text{ g}$

Hence, the basket of apples weighs 7500 g.

Example : A bag weighs 8055 g. How much is that in kg?

Solution : $8055 \div 1000\text{ kg} = \frac{8055}{1000} = 8.055\text{ kg}$

Hence, the bag weighs 8 .055 kg.

Example : The weight of three boys are 45 kg 500 g, 48 kg and 38 kg 200 g respectively. Find out their total weight in kg.

Solution : Total weight of three boys = 45 kg 500 g + 48 kg + 38 kg 200 g

$= 45\text{ kg} + \frac{500}{1000}\text{ kg} + 48\text{ kg} + 38\text{ kg} + \frac{200}{1000}\text{ kg}$

$= (45 + 0.5)\text{ kg} + 48\text{ kg} + (38 + 0.2)\text{ kg}$

$= 45.5\text{ kg} + 48\text{ kg} + 38.2\text{ kg} = 131.70\text{ kg}$

Hence, total weight of three boys is 131.70 kg.

Exercise 9.3

Knowledge Application

1. Fill in the blanks:

(a) 5.264 kg = _____ kg _____ g

(b) 9.008 kg = _____ kg _____ g

(c) 64.5 kg = _____ kg _____ g

(d) $8\frac{1}{2}$ kg = _____ g

(e) 0.350 kg = _____ g

(f) $6\frac{1}{2}$ kg = _____ g

2. Solve these word problems:

(a) Peter weighs 40 kg 250 g while Sam weighs 35 kg 200 g. Who weighs more and by how much?

(b) Radhika purchased 5 kg 250 g of potatoes, 3 kg 50 g of onions and half kg of tomatoes. What is the total weight of the vegetables she bought?

(c) 500 g of cashew nuts can be packed in a box. How many boxes of cashew nuts can be made from 8 kg of cashew nuts?

(d) The weight of a book is 1 kg 250 g and that of a text book is 1 kg 220 g. Find out their total weight in kg.

Project Work

Collaboration

1. Measure and record you and your family member's weight.

Name	Weight (in kg)

2. Find the difference between weights of heaviest and lightest weight in grams.

3. Find the sum of weights of you and your family members.

Measurement of Capacity (Volume)

Take a Task Watch Remedial

Different units commonly used for measuring capacity are litre (L) and millilitre (mL).

litre (L) → basic unit of capacity

(used for measuring quantity of liquid)

millilitre (mL) → less than a litre

(used for measuring small quantity of liquid)

Thousands	Hundreds	Tens	Ones	tenths	hundredths	thousandths
kilolitre (kL)	hectolitre (hL)	decalitre (daL)	litre (L)	decilitre (dL)	centilitre (cL)	millilitre (mL)

This chart will help you to convert bigger units into smaller units and smaller units into bigger units.

To change from smaller units to bigger units, DIVIDE

L

1000 1000

mL

To change from bigger units to smaller units, MULTIPLY.

REMEMBER

1 L = 1000 mL

We know that volume of a given region is expressed in cubic units.

Conversion of cubic metres into cubic centimetres

We can write 1cu.m = 1 m × 1 m × 1 m

= 100 cm × 100 cm × 100 cm = 1000000 cm

∴ 1 cu.m = 1000000 cm

Conversion of cubic centimetres into cubic metres

We can write 1 cu. cm = 1 cm × 1 cm × 1 cm

$= \frac{1}{100}\text{ m} \times \frac{1}{100}\text{ m} \times \frac{1}{100}\text{ m} = \frac{1}{1000000}\text{ cu. m}$

$\therefore$ 1 cu. cm $= \frac{1}{1000000}$ cu. m

Example : Volume of a cube is 216.48 cu. m. Convert this volume into cu. cm.

Solution : Volume of the cube = 216. 48 cu. m

= 216. 48 × 1000000 cu. cm

= $\frac{21648}{100}$ × 1000000 cu. cm

= 216480000 cu. cm

∴ 216.48 cu. m = 216480000 cu. cm

Example : A bucket can hold 18 L of water. How many mL is that?

Solution : 18 × 1000 = 18000 mL

Hence, the bucket can hold 18000 mL of water.

Example : A water tank holds 350000 mL of water. How many L of water is that?

Solution : 350000 ÷ 1000 = 350 L

Hence, the water tank can hold 350 L of water.

Example : 6.5 L of tea has to be poured into cups of 250 mL capacity each. How many cups can be filled?

Solution : 6.5 × 1000 = 6500 mL

Total quantity of tea = 6500 mL

Quantity of tea 1 cup holds = 250 mL

Number of cups = 6500 ÷ 250 = $\frac{6500}{250}$ = 26 cups

Hence, 26 cups can be filled with the tea.

Mental Math

Critical Thinking

A. Change to mL :

1. L = _____ mL
2. 7.458 L = _____ mL
3. 12.5 L = _____ mL
4. 0.352 L = _____ mL

B. Change to L :

1. 6265 mL = _____ L
2. 9005 mL = _____ L
3. 372 mL = _____ L
4. 8535 mL = _____ L

Exercise 9.4

Knowledge Application

1. Fill in the blanks:

(a) 9.450 L = _____ mL (b) 4005 mL = _____ L

(c) 3895 mL = _____ L (d) $5\frac{1}{4}$ L = _____ mL

(e) 65 L = _____ mL (f) 84.2 L = _____ mL

(g) $2\frac{1}{2}$ L = _____ L (h) 5.975 L = _____ mL

2. Solve these word problems:

(a) From a jug with 2 L water, 1750 mL water was taken out.

What quantity of water in mL was left in the jug?

(b) A doctor gave a cough syrup bottle to a patient. If the patient had to have 10 mL of the syrup every day, how much syrup did the patient consume in a week?

(c) A cat laps up 250 mL of milk at one time. How many times can the cat be fedwith $1\frac{1}{2}$ L of milk?

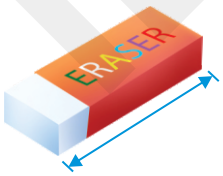
(d) A 2.5 L bottle of juice was bought for Pinki's birthday party. After the party, 250 mL of juice was left. How much juice did all the children have?

Estimating Measures

To get a rough idea of length, mass and capacity of objects, we use estimation.

Length

about 7 mm



about 6 cm

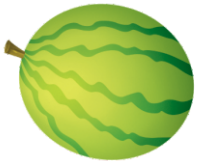
about 1 m

about 15 km

Mass (Weight)

about 1 mg

about 200 g



about 5 kg

about 5 mL

about 1 L

Estimating Measures in Length, Weight and Volume (Capacity)

We have learnt in the earlier chapter how to estimate sum and difference of numbers. Now, we shall use those rules for estimating measures in length, weight and volume.

Estimating Sum

Take a book. Let its length and breadth be 35 cm and 22 cm respectively. Can you estimate the sum of the length and breadth of the book ?

Clearly, we first round off both the length and breadth (in cm) to the nearest ten, and then add the rounded numbers.

	Estimated Sum	Actual Sum
Length : 35 cm	40	35
Breadth : 22 cm	+ 20	+ 22
	60	57

Thus, the estimated sum of the length and breadth of the book is 60 cm.

Clearly, the estimated sum (60 cm) differs from the actual sum (57 cm) by 3 cm (60 cm – 57 cm = 3 cm).

Similarly, we can estimate the sum to measure weight and volume.

Now, let us consider some examples to learn how to estimate these measurements.

Example : A man bought 18 kg wheat and 23 kg rice from the market Estimate the total weight.

Solution : First, we have to round off both the weights to the nearest ten and then add them.

		Estimated sum
18	rounded to the nearest ten →	20
23	rounded to the nearest ten →	+ 20
		40

Hence, the estimated total weight of wheat and rice is 40 kg.

Example : One bottle contains 275 mL mustard oil and another bottle contains 135 mL mustard oil. Estimate the total quantity of mustard oil in the two bottles.

Solution : Clearly, to estimate the total quantity of mustard oil, first we have to round off the quantity in each bottle to the nearest ten or hundred and then add.

(i) Rounding off to the nearest ten

		Estimated sum
275	rounded to the nearest ten →	280
135	rounded to the nearest ten →	+ 140
		420

Hence, the total estimated quantity of mustard oil in the two bottles is 420 mL (in terms of the nearest ten).

(ii) Rounding off to the nearest hundred

		Estimated sum
275	rounded to the nearest hundred →	280
135	rounded to the nearest hundred →	+ 140
		420

Hence, the total estimated quantity of mustard oil in the two bottles is 400 ml (in terms of the nearest hundred).

Estimating Difference

Let us consider some examples to learn how to estimate the difference in measuring length, weight and volume.

Example : A train has to travel a total distance of 574 km. It has already covered a distance of 255 km. Estimate the remaining distance that the train has to travel.

Solution : To estimate the remaining distance, first we have to round off both the total distance (in km) and distance travelled (in km) to the nearest ten or hundred, and then subtract.

Estimated Difference

(i) Rounding off to the nearest ten

Total distance : 574 km $\xrightarrow{\text{rounded to the nearest ten}}$ 570

Distance travelled : 255 km $\xrightarrow{\text{rounded to the nearest ten}}$ – 260

310

Hence, the estimated remaining distance is 310 km (in terms of the nearest ten).

(ii) Rounding off to the nearest hundred

Estimated Difference

Total distance : 574 km $\xrightarrow{\text{rounded to the nearest hundred}}$ 600

Distance travelled : 255 km $\xrightarrow{\text{rounded to the nearest hundred}}$ – 300

300

Hence, the estimated remaining distance is 300 km (in terms of the nearest hundred).

Example : A vessel contains 625 mL of milk and another vessel contains 455 mL of milk. Estimate the difference between the quantity of milk between the two vessels in terms of the nearest hundred.

Solution : To estimate the required difference, first we have to round off the quantity of milk (in ml) in each vessel to the nearest hundred, and then subtract.

625 mL

455 mL

Estimated Difference

625 $\xrightarrow{\text{rounded to the nearest hundred}}$ 600

455 $\xrightarrow{\text{rounded to the nearest hundred}}$ – 500

100

Hence, the estimated difference of the quantity of milk between the two vessels is 100 ml (in terms of the nearest hundred).

Exercise 9.5

Knowledge Application

1. The length and breadth of a door are respectively of 148 cm and 82 cm. Estimate the sum of the length and breadth of the door in terms of the nearest ten.

2. The lengths of two trains are 535 m and 465 m respectively. Estimate the sum of the lengths of the two trains in terms of the nearest ten.

3. A bag contains 62 kg sugar and another bag contains 85 kg sugar. Estimate the sum of the weights of sugar in the two bags.

4. A bottle contains 1335 mL of milk and another bottle contains 1215 mL of milk. Estimate the sum of the quantity of milk in the two bottles in terms of the nearest hundred.

Gap Analyzer™
Take a Test

1. Tick (✓) the correct answer.

(a) Which of the following items can be purchased measuring weight?

(i) Grapes ☐ (ii) Oil ☐

(iii) Ribbon ☐ (iv) Milk ☐

(b) 15L 210mL of oil is poured equally into 5 bottles. Find the amount of oil in each bottle.

(i) 42L 3mL ☐ (ii) 3L 42mL ☐

(iii) 3L 45mL ☐ (iv) None of these ☐

(c) Quantity of juice in a glass

(i) less than 1L ☐ (ii) about 1L ☐

(iii) more than 1L ☐ (iv) None of these ☐

2. Circle the correct option:

(a) 3L 225mL = 3.22mL / 3.225L

(b) 4g 5mg = 4.5g / 4005mg

(c) 4m 7cm = 4.07cm / 4.07m

(d) 4kg 542g = 4542kg / 4542g

(e) 17km = 17000m / 1700m

(f) 7m 5cm = 705cm / 750 cm

3. Convert as directed:

(a) 16467g to kg and g

(b) 2635m to km and m

(c) 2180mL to L and mL

(d) 280mL to CL

Custom Learning Path
Scan to Create Your Own Learning Path

Puzzle

Conceptual Learning

Search the words with the help box.

H	E	C	T	O	G	R	A	M	D
E	D	E	C	A	G	R	A	M	E
C	E	P	H	H	U	K	S	O	C
T	C	I	M	A	L	I	A	P	I
O	A	P	O	U	D	L	N	E	L
M	M	R	H	K	E	O	A	N	I
E	E	A	A	M	V	G	K	C	T
T	T	I	N	U	S	R	E	L	R
R	R	C	C	K	A	A	O	S	E
E	E	V	O	L	U	M	E	P	M

Help Box

KILOGRAM
DECAMETRE
HECTOMETRE
VOLUME
DECAGRAM
DECILITRE
LITRE
HECTOGRAM
METRE
GRAM

Mental Math

Critical Thinking

1. Tick (✓) the correct answer. To change km into cm, you need to multiply by:

   1 ☐ 10 ☐ 100 ☐ 1000 ☐ 100000 ☐

2. Tick (✓) the correct answer. To change mg into kg, you need to divide by:

   10 ☐ 100 ☐ 1000 ☐ 10000 ☐ 1000000 ☐

Fun Time Activity

Problem Solving

Complete the weight chart of 1 year old baby using the information given below.

- At the age of 3 months the baby weighed 1 kg 732g more than that of birth weight.
- At age of 6 months the baby weight 800g more than its weight in 3 months.
- At the age of 9 months, it weight 915g less than its weight in 1 year.

Age	Weight
Birth	3kg 250g
3 months	
6 months	
9 months	
1 year	9kg 600g