

**ST. ANDREWS SCOTS SCHOOL**

Adjacent Navniti Apartments,  
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**Session: 2025-2026**

**Class: IV**

**Subject: Mathematics**

**Topic: Unit -9 (Measurement)**

Warm up (pg-133)

Ex-1 Q.1(Book)

Q.2 a,d,f(Notebook)

Ex-2 Q.2,3,4,6,8 (Notebook)

Ex-3 Q.1 a,c; Q.2 a,c; Q.3 a,c ; Q.4 a,c(Notebook)

Ex-4 Q.1 a,b; Q.2 a,b ; Q.3 a,c (Notebook)

Ex-5 Q.1 b,c,e,g; Q.2 a,d,e,h; Q.4; Q.6; Q.7; Q.8(Notebook)

Worksheet

## Lesson-9 : Measurement

### Warm Up

1 m 80 cm	<input type="button" value="&lt;"/>	2 km
8000 g	<input type="button" value="="/>	8 kg
5 ℥	<input type="button" value="&gt;"/>	400 ml
2 kg 200 g	<input type="button" value="&lt;"/>	3 kg
2 m	<input type="button" value="="/>	200 cm
1100 ml	<input type="button" value="&gt;"/>	10 ℥
4 kg	<input type="button" value="="/>	4000 g
9 m 90 cm	<input type="button" value="&gt;"/>	9 m
300 ml	<input type="button" value="&lt;"/>	4 ℥
800 cm	<input type="button" value="="/>	8 m

>	=	<
P	Q	(I)
E	(L)	T
(O)	R	T
M	N	(V)
Z	(E)	W
(M)	C	O
S	(A)	E
(T)	X	P
Z	O	(H)
P	(S)	W

Message : I LOVE MATHS

### Exercise-1

- (a) km      (b) cm      (c) m      (d) cm      (e) cm
- (a)  $5 \text{ m } 25 \text{ cm} = 5 \times 100 \text{ cm} + 25 \text{ cm} = 500 \text{ cm} + 25 \text{ cm} = 525 \text{ cm}$   
 (b)  $62 \text{ cm } 4 \text{ mm} = 62 \times 10 \text{ mm} + 4 \text{ mm} = 620 \text{ mm} + 4 \text{ mm} = 624 \text{ mm}$   
 (c)  $13 \text{ dm } 5 \text{ cm} = 13 \times 10 \text{ cm} + 5 \text{ cm} = 130 \text{ cm} + 5 \text{ cm} = 135 \text{ cm}$   
 (d)  $9 \text{ m } 82 \text{ mm} = 9 \times 1000 \text{ mm} + 82 \text{ mm} = 9000 \text{ mm} + 82 \text{ mm} = 9082 \text{ mm}$   
 (e)  $4 \text{ m } 3 \text{ dm } 2 \text{ cm} = 4 \times 100 \text{ cm} + 3 \times 10 \text{ cm} + 2 \text{ cm}$   
 $= 400 \text{ cm} + 30 \text{ cm} + 2 \text{ cm} = 432 \text{ cm}$   
 (f)  $6 \text{ km } 42 \text{ m } 12 \text{ cm} = 6 \times 100000 \text{ cm} + 42 \times 100 \text{ cm} + 12 \text{ cm}$   
 $= 600000 \text{ cm} + 4200 \text{ cm} + 12 \text{ cm} = 604212 \text{ cm}$

### Exercise-2

- $50 \text{ mm} = (50 \div 10) \text{ cm} = 5 \text{ cm}$
- $142 \text{ mm} = (142 \div 10) \text{ cm} = 14 \text{ cm } 2 \text{ mm}$
- $625 \text{ cm} = (625 \div 100) \text{ m} = 6 \text{ m } 25 \text{ cm}$
- $5285 \text{ cm} = (5285 \div 100) \text{ m} = 52 \text{ m } 85 \text{ cm}$
- $921 \text{ dm} = (921 \div 10) \text{ m} = 92 \text{ m } 1 \text{ dm}$
- $827 \text{ dm} = (827 \div 10) \text{ m} = 82 \text{ m } 7 \text{ dm}$

- $8000 \text{ m} = (8000 \div 1000) \text{ km} = 8 \text{ km}$
- $9257 \text{ m} = (9257 \div 1000) \text{ km} = 9 \text{ km } 257 \text{ m}$
- $6578 \text{ m} = (6578 \div 1000) \text{ km} = 6 \text{ km } 578 \text{ m}$

### Exercise-3

1. (a)  $12 \text{ kg} = 12 \times 1000 \text{ g} = 12000 \text{ g}$   
(b)  $7 \text{ kg } 256 \text{ g} = 7 \times 1000 \text{ g} + 256 \text{ g} = 7000 \text{ g} + 256 \text{ g} = 7256 \text{ g}$   
(c)  $15 \text{ kg } 15 \text{ g} = 15 \times 1000 \text{ g} + 15 \text{ g} = 15000 \text{ g} + 15 \text{ g} = 15015 \text{ g}$
2. (a)  $19 \text{ g} = 19 \times 1000 \text{ mg} = 19000 \text{ mg}$   
(b)  $25 \text{ g } 25 \text{ mg} = 25 \times 1000 \text{ mg} + 25 \text{ mg} = 25000 \text{ mg} + 25 \text{ mg} = 25025 \text{ mg}$   
(c)  $82 \text{ g } 82 \text{ mg} = 82 \times 1000 \text{ mg} + 82 \text{ mg} = 82000 \text{ mg} + 82 \text{ mg} = 82082 \text{ mg}$
3. (a)  $2387 \text{ g} = (2387 \div 1000) \text{ kg} = 2 \text{ kg } 387 \text{ g}$   
(b)  $6700 \text{ g} = (6700 \div 1000) \text{ kg} = 6 \text{ kg } 700 \text{ g}$   
(c)  $8080 \text{ g} = (8080 \div 1000) \text{ kg} = 8 \text{ kg } 80 \text{ g}$
4. (a)  $4200 \text{ mg} = (4200 \div 1000) \text{ g} = 4 \text{ g } 200 \text{ mg}$   
(b)  $3255 \text{ mg} = (3255 \div 1000) \text{ g} = 3 \text{ g } 255 \text{ mg}$   
(c)  $7288 \text{ mg} = (7288 \div 1000) \text{ g} = 7 \text{ g } 288 \text{ mg}$

### Exercise-4

1. (a)  $15 \text{ k}\ell = 15 \times 1000 \ell = 15000 \ell$   
(b)  $8 \text{ k}\ell 8 \ell = 8 \times 1000 \ell + 8 \ell = 8000 \ell + 8 \ell = 8008 \ell$   
(c)  $12 \text{ k}\ell 265 \ell = 12 \times 1000 \ell + 265 \ell = 12000 \ell + 265 \ell = 12265 \ell$
2. (a)  $28 \ell = 28 \times 1000 \text{ m}\ell = 28000 \text{ m}\ell$   
(b)  $7 \ell 270 \text{ m}\ell = 7 \times 1000 \text{ m}\ell + 270 \text{ m}\ell = 7000 \text{ m}\ell + 270 \text{ m}\ell = 7270 \text{ m}\ell$   
(c)  $10 \ell 450 \text{ m}\ell = 10 \times 1000 \text{ m}\ell + 450 \text{ m}\ell = 10000 \text{ m}\ell + 450 \text{ m}\ell = 10450 \text{ m}\ell$
3. (a)  $62000 \ell = (62000 \div 1000) \text{ k}\ell = 62 \text{ k}\ell$   
(b)  $7280 \ell = (7280 \div 1000) \text{ k}\ell = 7 \text{ k}\ell 280 \ell$   
(c)  $15255 \ell = (15255 \div 1000) \text{ k}\ell = 15 \text{ k}\ell 255 \ell$

### Exercise-5

1. (a)  $25 \text{ cm} + 65 \text{ cm} = 90 \text{ cm}$

Write 90 under the cm column.

$$15 \text{ m} + 8 \text{ m} = 23 \text{ m}$$

Write 23 under the m column.

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 15 \quad 25 \\ + 8 \quad 65 \\ \hline 23 \quad 90 \end{array}$$

$$15 \text{ m } 25 \text{ cm} + 8 \text{ m } 65 \text{ cm}$$

$$= 23 \text{ m } 90 \text{ cm}$$

(c)  $175 \text{ m} + 675 \text{ m} = 850 \text{ m}$

Write 850 under the m column.

$$42 \text{ km} + 69 \text{ km} = 111 \text{ km}$$

Write 111 under the km column.

$$\begin{array}{r} \text{km} \quad \text{m} \\ 42 \quad 175 \\ + 69 \quad 675 \\ \hline 111 \quad 850 \end{array}$$

$$42 \text{ km } 175 \text{ m} + 69 \text{ km } 675 \text{ m}$$

$$= 111 \text{ km } 850 \text{ m}$$

(e)  $672 \text{ g} + 372 \text{ g} = 1044 \text{ g}$

$$= 1000 \text{ g} + 44 \text{ g} = 1 \text{ kg} + 44 \text{ g}$$

Write 44 under the g column  
and carry 1 to the kg column.

$$1 \text{ kg} + 54 \text{ kg} + 67 \text{ kg} = 122 \text{ kg}$$

Write 122 under the kg column.

$$\begin{array}{r} \text{kg} \quad \text{g} \\ \textcircled{1} \quad 672 \\ 54 \quad \quad 672 \\ + 67 \quad 372 \\ \hline 122 \quad 044 \end{array}$$

$$54 \text{ kg } 672 \text{ g} + 67 \text{ kg } 372 \text{ g}$$

$$= 122 \text{ kg } 44 \text{ g}$$

(b)  $250 \text{ g} + 127 \text{ g} = 377 \text{ g}$

Write 377 under the g column.

$$75 \text{ kg} + 62 \text{ kg} = 137 \text{ kg}$$

Write 137 under the kg column.

$$\begin{array}{r} \text{kg} \quad \text{g} \\ 75 \quad 250 \\ + 62 \quad 127 \\ \hline 137 \quad 377 \end{array}$$

$$75 \text{ kg } 250 \text{ g} + 62 \text{ kg } 127 \text{ g}$$

$$= 137 \text{ kg } 377 \text{ g}$$

(d)  $455 \text{ ml} + 285 \text{ ml} = 740 \text{ ml}$

Write 740 under the ml column.

$$8 \text{ l} + 16 \text{ l} = 24 \text{ l}$$

Write 24 under the l column.

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 8 \quad 455 \\ + 16 \quad 285 \\ \hline 24 \quad 740 \end{array}$$

$$8 \text{ l } 455 \text{ ml} + 16 \text{ l } 285 \text{ ml}$$

$$= 24 \text{ l } 740 \text{ ml}$$

(f)  $333 \text{ ml} + 666 \text{ ml} = 999 \text{ ml}$

Write 999 under the ml column.

$$33 \text{ l} + 66 \text{ l} = 99 \text{ l}$$

Write 99 under the l column.

$$\begin{array}{r} \text{l} \quad \text{ml} \\ 33 \quad 333 \\ + 66 \quad 666 \\ \hline 99 \quad 999 \end{array}$$

$$33 \text{ l } 333 \text{ ml} + 66 \text{ l } 666 \text{ ml}$$

$$= 99 \text{ l } 999 \text{ ml}$$

(g)  $256 \text{ m} + 128 \text{ m} = 384 \text{ m}$

Write 384 under the m column.

$$128 \text{ km} + 64 \text{ km} = 192 \text{ km}$$

Write 192 under the km column.

$$\begin{array}{r} \text{km} \quad \text{m} \\ 128 \quad 256 \\ + 64 \quad 128 \\ \hline 192 \quad 384 \end{array}$$

$$128 \text{ km } 256 \text{ m} + 64 \text{ km } 128 \text{ m}$$

$$= 192 \text{ km } 384 \text{ m}$$

(h)  $67 \text{ cm} + 27 \text{ cm} = 94 \text{ cm}$

Write 94 under the cm column.

$$85 \text{ m} + 37 \text{ m} = 122 \text{ m}$$

Write 122 under the m column.

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 85 \quad 67 \\ + 37 \quad 27 \\ \hline 122 \quad 94 \end{array}$$

$$85 \text{ m } 67 \text{ cm} + 37 \text{ m } 27 \text{ cm}$$

$$= 122 \text{ m } 94 \text{ cm}$$

2. (a) Since  $100 \text{ g} < 400 \text{ g}$ , we borrow 1 kg from 32 kg leaving behind 31 kg.

$$1 \text{ kg} + 100 \text{ g} = 1000 \text{ g} + 100 \text{ g} = 1100 \text{ g}$$

$$\text{Now, } 1100 \text{ g} - 400 \text{ g} = 700 \text{ g}$$

Write 700 under the g column.

$$31 \text{ kg} - 17 \text{ kg} = 14 \text{ kg}$$

Write 14 under the kg column.

$$32 \text{ kg } 100 \text{ g} - 17 \text{ kg } 400 \text{ g} = 14 \text{ kg } 700 \text{ g}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ \textcircled{31} \quad \textcircled{1100} \\ \cancel{32} \quad 100 \\ - 17 \quad 400 \\ \hline 14 \quad 700 \end{array}$$

(b) Since  $250 \text{ ml} < 650 \text{ ml}$ , we borrow 1 l from 10 l leaving behind 9 l.

$$1 \text{ l} + 250 \text{ ml} = 1000 \text{ ml} + 250 \text{ ml} = 1250 \text{ ml}$$

$$\text{Now, } 1250 \text{ ml} - 650 \text{ ml} = 600 \text{ ml}$$

Write 600 under the ml column.

$$9 \text{ l} - 5 \text{ l} = 4 \text{ l}$$

Write 4 under the l column.

$$10 \text{ l } 250 \text{ ml} - 5 \text{ l } 650 \text{ ml} = 4 \text{ l } 600 \text{ ml}$$

$$\begin{array}{r} \text{l} \quad \text{ml} \\ \textcircled{9} \quad \textcircled{1250} \\ \cancel{10} \quad 250 \\ - 5 \quad 650 \\ \hline 4 \quad 600 \end{array}$$

(c) Since  $625 \text{ m} < 800 \text{ m}$ , we borrow 1 km from 55 km leaving behind 54 km.

$$1 \text{ km} + 625 \text{ m} = 1000 \text{ m} + 625 \text{ m} = 1625 \text{ m}$$

$$\text{Now, } 1625 \text{ m} - 800 \text{ m} = 825 \text{ m}$$

Write 825 under the m column.

$$54 \text{ km} - 34 \text{ km} = 20 \text{ km}$$

Write 20 under the km column.

$$55 \text{ km } 625 \text{ m} - 34 \text{ km } 800 \text{ m} = 20 \text{ km } 825 \text{ m}$$

$$\begin{array}{r} \text{km} \quad \text{m} \\ \textcircled{54} \quad \textcircled{1625} \\ \cancel{55} \quad 625 \\ - 34 \quad 800 \\ \hline 20 \quad 825 \end{array}$$

(d)  $40 \text{ cm} - 25 \text{ cm} = 15 \text{ cm}$

Write 15 under the cm column.

$$27 \text{ m} - 19 \text{ m} = 8 \text{ m}$$

Write 8 under the m column.

$$27 \text{ m } 40 \text{ cm} - 19 \text{ m } 25 \text{ cm} = 8 \text{ m } 15 \text{ cm}$$

$$\begin{array}{r} \text{m} \quad \text{cm} \\ 27 \quad 40 \\ - 19 \quad 25 \\ \hline 8 \quad 15 \end{array}$$

(e) Since  $350 \text{ g} < 450 \text{ g}$ , we borrow 1 kg from 81 kg leaving behind 80 kg.

$$1 \text{ kg} + 350 \text{ g} = 1000 \text{ g} + 350 \text{ g} = 1350 \text{ g}$$

$$\text{Now, } 1350 \text{ g} - 450 \text{ g} = 900 \text{ g}$$

Write 900 under the g column.

$$80 \text{ kg} - 73 \text{ kg} = 7 \text{ kg}$$

Write 7 under the kg column.

$$81 \text{ kg } 350 \text{ g} - 73 \text{ kg } 450 \text{ g} = 7 \text{ kg } 900 \text{ g}$$

$$\begin{array}{r} \text{kg} \quad \text{g} \\ \textcircled{80} \quad \textcircled{1350} \\ \cancel{81} \quad 350 \\ - 73 \quad 450 \\ \hline 7 \quad 900 \end{array}$$

(h) Since  $700 \text{ m} < 825 \text{ m}$ , we borrow 1 km from 72 km leaving behind 71 km.

$$1 \text{ km} + 700 \text{ m} = 1000 \text{ m} + 700 \text{ m} = 1700 \text{ m}$$

$$\text{Now, } 1700 \text{ m} - 825 \text{ m} = 875 \text{ m}$$

Write 875 under the m column.

$$71 \text{ km} - 66 \text{ km} = 5 \text{ km}$$

Write 5 under the km column.

$$72 \text{ km } 700 \text{ m} - 66 \text{ km } 825 \text{ m} = 5 \text{ km } 875 \text{ m}$$

$$\begin{array}{r}
 \text{km} \quad \text{m} \\
 \textcircled{7} \text{ } \textcircled{1} \text{ } \textcircled{7} \text{ } \textcircled{0} \\
 \textcircled{7} \text{ } \textcircled{2} \text{ } \textcircled{7} \text{ } \textcircled{0} \\
 \hline
 - \text{ } \text{6} \text{ } \text{6} \text{ } \text{8} \text{ } \text{2} \text{5} \\
 \hline
 \text{5} \text{ } \text{8} \text{ } \text{7} \text{5}
 \end{array}$$

3. Quantity of juice left in the pack  $= 2 \ell 200 \text{ ml} - 750 \text{ ml}$

$$\begin{array}{r}
 \textcircled{1} \text{ } \textcircled{1} \text{ } \textcircled{10} \\
 \cancel{2} \text{ } \cancel{2} \text{ } \cancel{0} \text{ } 0 \text{ ml} \\
 - \text{ } \text{7} \text{ } \text{5} \text{ } \text{0} \text{ ml} \\
 \hline
 \text{1} \text{ } \text{4} \text{ } \text{5} \text{ } \text{0} \text{ ml}
 \end{array}
 \begin{array}{l}
 = 2200 \text{ ml} - 750 \text{ ml} \\
 = 1450 \text{ ml} = 1 \ell 450 \text{ ml}
 \end{array}$$

4. Total weight of vegetables bought

$$\begin{aligned}
 &= 2 \text{ kg } 400 \text{ g} + 1 \text{ kg } 550 \text{ g} \\
 &= 3 \text{ kg } 950 \text{ g}
 \end{aligned}$$

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 \textcircled{2} \text{ } \text{4} \text{0} \text{0} \\
 + \text{ } \text{1} \text{ } \text{5} \text{5} \text{0} \\
 \hline
 \text{3} \text{ } \text{9} \text{5} \text{0}
 \end{array}$$

5. Weight of apples left with the shopkeeper

$$\begin{aligned}
 &= 9 \text{ kg } 500 \text{ g} - 4 \text{ kg } 750 \text{ g} \\
 &= 4 \text{ kg } 750 \text{ g}
 \end{aligned}$$

$$\begin{array}{r}
 \text{kg} \quad \text{g} \\
 \textcircled{8} \text{ } \textcircled{1} \text{5} \text{0} \text{0} \\
 \cancel{9} \text{ } \text{5} \text{0} \text{0} \\
 - \text{ } \text{4} \text{ } \text{7} \text{5} \text{0} \\
 \hline
 \text{4} \text{ } \text{7} \text{5} \text{0}
 \end{array}$$

6. Total distance travelled by Jeet  $= 5 \text{ km } 250 \text{ m} + 3 \text{ km } 450 \text{ m} + 600 \text{ m}$

$$\begin{array}{r}
 \text{km} \quad \text{m} \\
 \textcircled{1} \\
 5 \text{ } 250 \\
 3 \text{ } 450 \\
 + \text{ } 0 \text{ } 600 \\
 \hline
 9 \text{ } 300
 \end{array}
 \begin{array}{l}
 = 9 \text{ km } 300 \text{ m}
 \end{array}$$

7. Length of the ribbon left  $= 32 \text{ m} - 18 \text{ m } 75 \text{ cm}$

$$= 13 \text{ m } 25 \text{ cm}$$

$$\begin{array}{r}
 \text{m} \quad \text{cm} \\
 \textcircled{3} \text{ } \textcircled{1} \text{0} \text{0} \\
 \cancel{3} \text{ } \text{2} \text{ } \text{0} \text{0} \\
 - \text{ } \text{1} \text{8} \text{ } \text{7} \text{5} \\
 \hline
 \text{1} \text{3} \text{ } \text{2} \text{5}
 \end{array}$$

8. Since,  $3 \text{ kg } 525 \text{ g} > 2 \text{ kg } 750 \text{ g}$ , therefore watermelon is heavier.

$$\begin{array}{l}
 \text{Difference in weights} \quad = 3 \text{ kg } 525 \text{ g} - 2 \text{ kg } 750 \text{ g} \\
 \quad \quad \quad \quad \quad \quad = 775 \text{ g}
 \end{array}
 \begin{array}{r}
 \text{kg} \quad \text{g} \\
 \textcircled{2} \text{ } \textcircled{1} \text{5} \text{2} \text{5} \\
 \cancel{3} \text{ } \text{5} \text{2} \text{5} \\
 - \text{ } \text{2} \text{ } \text{7} \text{5} \text{0} \\
 \hline
 \text{0} \text{ } \text{7} \text{7} \text{5}
 \end{array}$$

So, the weight of watermelon is 775 g more than that of papaya.