Chapter 11: Measurement

Auditory

The length of Babita's pencil = 15 centimetres

Notebook is 10 centimetres longer than the pencil.

Length of Babita's notebook = 15 + 10 = 25 centimetres

Babita's pencil is 15 cm and her notebook is 25 cm.

$$\begin{array}{r} 1 \quad 5 \\ + \quad 1 \quad 0 \\ \hline 2 \quad 5 \end{array}$$

Word Problems

9. **a.** Length of rope bought by Maria = 14 m 25 cm

   Length of rope bought by Nancy = 17 m 15 cm

   Total length of ropes bought by Nancy = 14 m 25 cm + 17 m 15 cm = 31 m 40 cm

   The total length of ropes bought by Nancy is 31m 40 cm.

	m		cm
	1		1
	1	4	2	5
+	1	7	1	5
	3	1	4	0

   b. Height of Rohit's jump = 197 cm = 1 m 97 cm

   Height of Indu's jump = 1 m 25 cm

   Difference in their jumps = 1 m 97 cm − 1 m 25 cm = 72 cm

   Rohit jumped 72 cm higher than Indu.

m		cm
1	9	7
− 1	2	5
	7	2

14. **a.** Weight of vegetables Jagdish bought = 7 kg 200 g

   Weight of rice Jagdish bought = 9 kg 395 g

   Total weight Jagdish carried from the market =

   7 kg 200 g + 9 kg 395 g = 16 kg and 595 g

   The total weight that Jagdish carried from the market is 16 kg 595 g.

kg		g	
	7	2	0	0
+	9	3	9	5
1	6	5	9	5

   b. Weight of Rohit = 54 kg 635 g

   Weight of Ash= 45 kg 487 g

   Difference in weight = 54 kg 635 g − 45 kg 487 g = 9 kg 148 g

   Ash weighs 9 kg 148 g less than Rohit.

kg		g	
			12	
4	14	5	2̶	15
5̶	4̶	6̶	3̶	5̶
− 4	5	4	8	7
0	9	1	4	8

19. **a.** Capacity of the water jar = 10 L 500 mL

   Water already in the jar = 7 L 350 mL

   Water that can still be poured into the jar =

   10 L 500 mL − 7 L 350 mL = 3 L 150 mL

   The water jar can hold 3 L 150 mL more water.

L		mL	
	10	4	10
1̶	0̶	5̶	0̶	0
−		7	3	5	0
	3	1	5	0

b. The quantity of pineapple juice bought by Sara = 500 mL

The quantity of lemon juice bought by Sara = 500 mL

Total quantity of juice Sara bought = 500 mL + 500 mL = 1000 mL = 1 L

Sara bought a total of 1 L of juice.

L		mL		
	¹			
		5	0	0
+		5	0	0
1		0	0	0

c. Total quantity of water in the tank = 500 L

Quantity of water consumed = 335 L 644 mL

Quantity of water left in the tank = 500 L − 335 L 644 mL = 165 L 356 mL

There is 165 L 356 mL of water left in the tank.

L			mL		
	9	9	9	9	
4	1̶0̶	1̶0̶	1̶0̶	1̶0̶	10
5	0	0	0	0	0
− 3	3	5	6	4	4
1	6	4	3	5	6

d. Quantity of milk in the jar = 1 L = 1000 mL

Quantity of milk poured into the glass = 475 mL

Quantity of milk left in the jar = 1000 mL − 475 mL = 525 mL

There is 525 mL of milk left in the jar.

mL		
	9	9
0	1̶0̶	1̶0̶	10
1̶	0̶	0̶	0̶
−	4	7	5
	5	2	5

Learning better

H. 1. Length of the first string = 12 m 68 cm

Length of the second string = 15 m 75 cm

Total length of the string = 12 m 68 cm + 15 m 75 cm
                           = 28 m 43 cm

The total length of the string is 28 m 43 cm.

m		cm	
¹	¹		
1	2	6	8
+ 1	5	7	5
2	8	4	3

2. Joseph's height when he started school = 82 cm

Joseph's current height = 1 m 72 cm = 172 cm

Difference in height = 172 cm − 82 cm = 90 cm

Joseph has grown 90 cm.

cm		
0	17	
1̶	7̶	2
−	8	2
	9	0

3. Height of the mountain = 4879 m

Height Sohan has climbed = 2259 m

Height left to climb = 4879 m − 2259 m = 2620 m

Sohan must climb 2620 m more to reach the top.

m			
4	8	7	9
− 2	2	5	9
2	**6**	**2**	**0**

4. Weight of wheat = 14 kg 750 g

Weight of rice = 11 kg 525 g

Total weight = 14 kg 750 g + 11 kg 525 g = 25 kg 1275 g = 26 kg 275 g

Uma must carry home 26 kg 275 g in total.

kg		g		
	1			
1	1	5	2	5
+ 1	4	7	5	0
2	**6**	**2**	**7**	**5**

5. Weight of gas cylinder when full = 29 kg 500 g

Weight of gas cylinder when empty = 14 kg 200 g

Weight of gas = 29 kg 500 g − 14 kg 200 g = 15 kg 300 g

The weight of the gas in the cylinder is 15 kg 300 g.

kg		g		
2	9	5	0	0
− 1	4	2	0	0
1	**5**	**3**	**0**	**0**

6. Capacity of first jug = 10 L 634 mL

Capacity of second jug = 17 L 735 mL

Total capacity = 10 L 634 mL + 17 L 735 mL =

27 L 1369 mL = 28 L 369 mL

Harsh can store a total of 28 L 369 mL of water.

L		mL		
	1			
1	0	6	3	4
+ 1	7	7	3	5
2	**8**	**3**	**6**	**9**

7. Capacity of the bucket = 10 L

Water already in the bucket = 7 L 870 mL

Water it can still hold = 10 L − 7 L 870 mL = 2 L 130 mL

The bucket can hold 2 L 130 mL more water.

L		mL		
	9	9		
0	10	10	10	
1	0	0	0	0
−		7	8	7	0
	2	**1**	**3**	**0**